



Epidemiology and viral strains characterization of Equine infectious anaemia circulating in Europe

Aymeric Hans, Delphine Gaudaire, Elodie Morilland, Fanny Lecouturier,
Caroline Leroux, Claire Laugier, Stéphan Zientara

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International Union of Microbiological Societies 2011 Congress

Meetings of the Three Divisions of the International Union of
Microbiological Societies 2011



IUMS 2011
Sapporo

The Unlimited World of Microbes

XV International Congress of Virology
FINAL PROGRAM

11-16 September 2011

Sapporo Convention Center
Sapporo Business Innovation Center

Host: Federation of Microbiological Societies of Japan
Joint Host: Science Council of Japan



International Union of Microbiological Societies 2011 Congress

(IUMS 2011 Congress)

Date

Tuesday, September 6 to Friday, September 16, 2011 (11 days)

► 6-10 September 2011

XIII International Congress of Bacteriology and Applied Microbiology

XIII International Congress of Mycology

► 11-16 September 2011

XV International Congress of Virology

Main Theme

"The Unlimited World of Microbes"

The Congress will deal with a broad range of issues and subjects from basic research to actual application in the fields of bacteriology and applied microbiology, mycology and virology, covering individual issues and also addressing multi-disciplinary areas and areas of joint interest.

The Congress will also address matters of research and technology development that are required to ensure the health of humankind and the planet and support harmonious development.

Venues

Sapporo Convention Center

Sapporo Business Innovation Center

Organizer

International Union of Microbiological Societies (IUMS)

Host

Federation of Microbiological Societies of Japan

Member organizations (as of July 2011)

Japan Applied Microbiology Society

Japan Bifidus Foundation

Japanese Society for Bacteriology

Japanese Society for Host Defense Research

Japanese Society of Food Microbiology

Japanese Society of Microbial Ecology

Japanese Society of Mushroom Science and Biotechnology

Japan Society for Bioscience, Biotechnology, and Agrochemistry

Japan Society for Culture Collections

Japan Society for Lactic Acid Bacteria

The Brewing Society of Japan

The Japanese Association for Infectious Diseases

The Japanese Society for AIDS Research

The Japanese Society for Clinical Microbiology

The Japanese Society for Medical Mycology

The Japanese Society for Virology

The Japanese Society of Parasitology

The Mycological Society of Japan

The Phytopathological Society of Japan

The Society for Actinomycetes Japan

The Society for Antibacterial and Antifungal Agents, Japan

The Society for Biotechnology, Japan

Joint Host

Science Council of Japan

Support

Japan Tourism Agency, Ministry of Land, Infrastructure, Transport and Tourism

Ministry of Agriculture, Forestry and Fisheries

Ministry of Economy, Trade and Industry

Ministry of Education, Culture, Sports, Science and Technology

Ministry of Foreign Affairs of Japan

Ministry of Health, Labour and Welfare

Hokkaido Government

City of Sapporo



IUMS 2011
Sapporo

The Unlimited World of Microbes

XV International Congress of Virology

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**Sapporo Convention Center
Sapporo Business Innovation Center**

**Host: Federation of Microbiological Societies of Japan
Joint Host: Science Council of Japan**

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Greetings

Dear Colleagues,

We would like to welcome you to the IUMS Congresses 2011, which will be held in the beautiful city of Sapporo (in Hokkaido, the northernmost island of Japan) from the 6 – 16 September 2011, and hosted by the Federation of Microbiological Societies of Japan.

There will be three congresses: the XIII International Congress of Bacteriology and Applied Microbiology (6-10 September, 2011), the XIII International Congress of Mycology (6-10 September, 2011) and the XV Congress of Virology (11-16 September, 2011). There will also be outreach activities to the general public which will be held in order to publicise the importance of microbial science and technologies and their relationship to our everyday life. We expect them to provide a deeper understanding of our activities and increase the public's familiarity with them.

IUMS Congresses are international conferences that bring together a wide range of experience and perspectives. Some microbes are a threat to humankind, but on the other hand many of them are essential for human life on Earth. Over many years we have accumulated a vast knowledge of microbes. Current research is showing us that microbes have 'unlimited capabilities' thus our congresses logo was set as "Unlimited World of Microbes".

IUMS 2011 will be a magnificent opportunity not only to share ideas and experiences but also to establish and improve friendships among colleagues from all over the world.

Finally, we welcome you all again to the exciting congresses and to the beautiful city of Sapporo, the capital of Hokkaido, and to the beautiful Fall season of the North island.



Fusao Tomita
Chairperson
National Organizing
Committee for
IUMS 2011 Congress



Daniel O Sordelli
President
IUMS

Program at a Glance

[Sunday, 11 September]

		9:00	10:00	12:00	13:00	13:30	14:30	16:00	17:00	18:00
Sapporo Convention Center	Room A [Main Hall A/B]	The Japanese Society for Virology General Assembly / Council Meeting						Opening Special Lecture		
	Room D+E [Mid-sized Hall AB]	Outreach Program* Open Forum "The Unlimited World of Microbes" *Japanese Interpretation Only				Outreach Program* Open Forum "The Unlimited World of Microbes" *Japanese Interpretation Only				
	Room C [204]	SUGIURA Memorial Incentive Award for Young Virologists, The Japanese Society for Virology, 2011							Virology Division Opening Ceremony	
	Room F [Hall S]									
	Room H [206]									
	Room I [207]	IUMS General Assembly								
	Poster Room									
Welcome Reception 18:30-20:00 at Conference Hall										

[Monday, 12 September]

	9:00	10:00	10:15	11:25	13:00	14:30	16:00	16:30	18:00
Sapporo Convention Center	Room A [Main Hall A/B]	VI-PL1 Systems Virology	VI-PL2 Virus Pathogenesis	VI-SY1 Virus and Host Responses		VI-SY7 Orthomyxoviruses: Structure, Replication and Assembly		VI-SY12 Herpes (Simplex) Viruses	
	Room D+E [Mid-sized Hall AB]			VI-SY2 Host Factors for Virus Replication		VI-SY8 Epstein - Barr Virus		VI-SY13 HTLV and Animal Retroviruses	
	Room C [204]			VI-SY3 Virus Receptors		VI-SY9 Parvoviruses		VI-SY14 Baculoviruses	
	Room F [Hall S]			VI-SY4 Viruses as Oncolytic Agents		VI-SY10 Bunyaviruses		VI-SY15 Plant Virus-Vector Interactions	
	Room H [206]			VI-SY5 Vaccines				VI-SY16 Filoviruses	
	Room I [207]			VI-SY6 Bioinformatics (Bridge between Divisions)		VI-SY11 Alpha- and Rubiviruses		VI-SY17 Arenaviruses	
	Poster Room	Poster Session 1							

Program at a Glance

[Tuesday, 13 September]

		9:00	10:00	11:25	13:00	14:30	16:00	16:30	18:00
Sapporo Convention Center	Room A [Main Hall A/B]		VI-PL3 Virology in Post Genome Era		VI-SY18 Viruses and Innate Immunity		VI-SY21 HIV/SIV Molecular Biology		
	Room D+E [Mid-sized Hall AB]			VI-PL4 Genome Virology		JSV Luncheon Seminar	VI-SY22 Paramyxoviruses		
	Room C [204]				VI-SY19 Gene Therapy	JSV Luncheon Seminar	VI-SY23 Host Response and Resistance in Plant Viruses		
	Room F [Hall S]				VI-SY20 Virus Taxonomy	JSV Luncheon Seminar	VI-SY24 Calici- and Astroviruses	VI-SY26 Virus Suppression of RNA Silencing	
	Room H [206]						VI-SY25 Transmission and Epidemiology of Arboviral Diseases		
	Room I [207]								
	Poster Room		10:15 Poster Session 1	Poster Discussion 1	Poster Session 1				

[Wednesday, 14 September]

		9:00	11:00	11:30	12:30	13:00	14:30	16:00	16:30	18:00
Sapporo Convention Center	Room A [Main Hall A/B]		VI-PL5 Nobel Lecture I	VI-PL6 Nobel Lecture II						
	Room D+E [Mid-sized Hall AB]						VI-SY27 Hepatitis B VI-SY28 Circoviruses and Anelloviruses			
	Room C [204]						VI-SY29 Plant Virus Replication and Translation	VI-SY33 Virus Movement in Plants		
	Room F [Hall S]						VI-SY30 Papillomaviruses	VI-SY34 Viruses and Cancer		
	Room H [206]						VI-SY31 Reo, Rota and Orbiviruses			
	Room I [207]						VI-SY32 Viral Zoonoses			
	Poster Room		Poster Session 1							

Program at a Glance

[Thursday, 15 September]

		9:00	10:00	11:25	13:00	14:30	16:00	16:30	18:00
Sapporo Convention Center	Room A [Main Hall A/B]		VI-PL7 Structural Virology		VI-SY35 Antiviral Drugs		VI-SY41 HIV/SIV Pathogenesis		
	Room D+E [Mid-sized Hall AB]				VI-SY36 Viral Glycoproteins	JSV Luncheon Seminar	VI-SY42 Cytomegaloviruses		
	Room C [204]				VI-SY37 Positive Strand RNA Viruses: Replication	JSV Luncheon Seminar	VI-SY43 Viroid and Satellite Viruses	VI-SY47 Picornaviruses	
	Room F [Hall S]				VI-SY38 Viral Diagnosis	JSV Luncheon Seminar	VI-SY44 Rhabdoviruses	VI-SY48 Prions and BSE	
	Room H [206]				VI-SY39 Structure and Assembly: Non-Enveloped Viruses		VI-SY45 Flaviviruses	VI-SY49 Plant Virus Expression Vectors	
	Room I [207]				VI-SY40 RNA Recombination		VI-SY46 Emerging Viruses in Vegetable and Fruit Crops		
	Poster Room		10:15 Poster Session 2	Poster Discussion 2	Poster Session 2				
Virology Banquet 18:30-20:30 at Kirin Brewery Garden									

[Friday, 16 September]

		9:00	10:00	10:15	11:25	13:00	14:30	16:00	16:30	18:00
Sapporo Convention Center	Room A [Main Hall A/B]		VI-PL8 Virus and Functional Non-coding RNA	VI-PL9 Virus Host Interaction	VI-SY50 Virus Eradication		VI-SY54 Hepatitis C			
	Room D+E [Mid-sized Hall AB]				VI-SY51 Immune Responses to Virus Infection		VI-SY55 Orthomyxoviruses: Pathogenesis			
	Room C [204]				VI-SY52 Emerging Viruses		VI-SY56 Adenoviruses	VI-SY60 Virus Ecology and Tropical Virus Diseases		
	Room F [Hall S]				VI-SY53 Virus Evolution		VI-SY57 Plant DNA Viruses			
	Room H [206]						VI-SY58 Virus Entry, Trafficking and Membrane Fusion	VI-SY61 Hantaviruses and West Nile Virus		
	Room I [207]						VI-SY59 Phage	VI-SY62 Fungal Viruses		
	Poster Room		Poster Session 2							

Access

Sapporo Convention Center

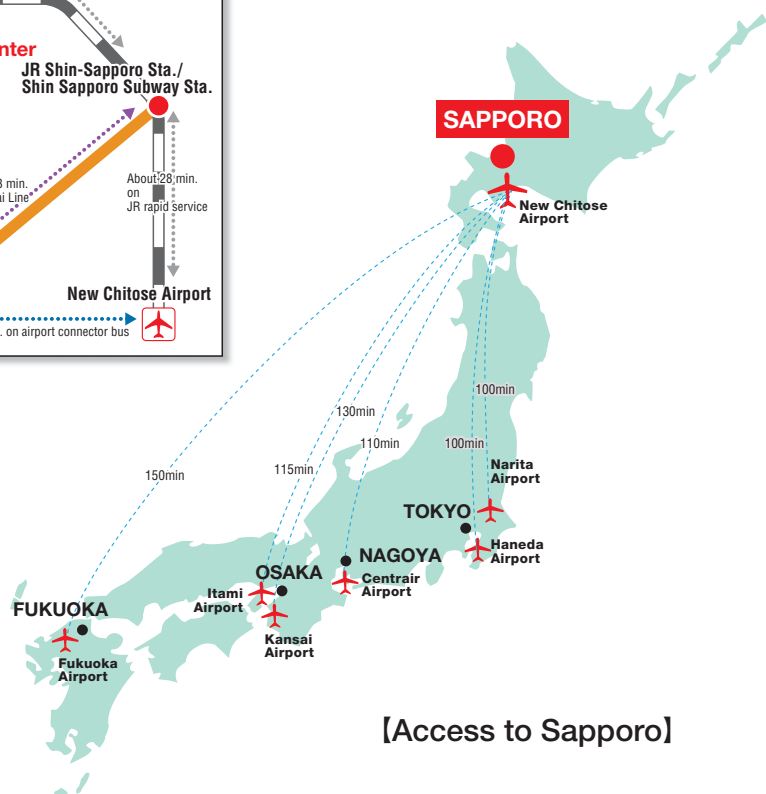
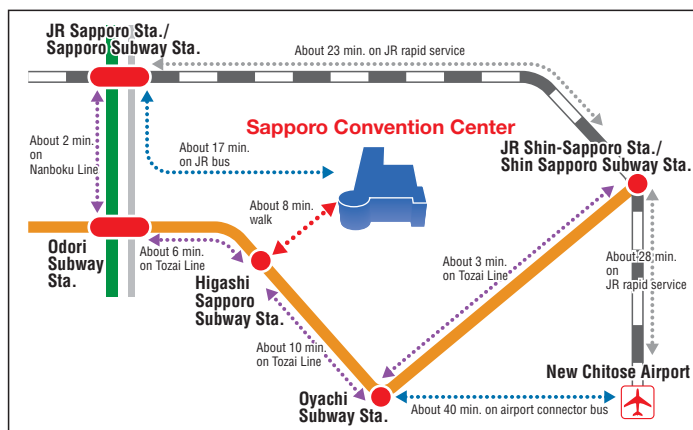
6-jo 1-chome, Higashi-Sapporo, Shiroishi-ku, Sapporo, 003-0006 Japan

Sapporo Business Innovation Center

5-jo 1-chome, Higashi-Sapporo, Shiroishi-ku, Sapporo, 003-0005 Japan



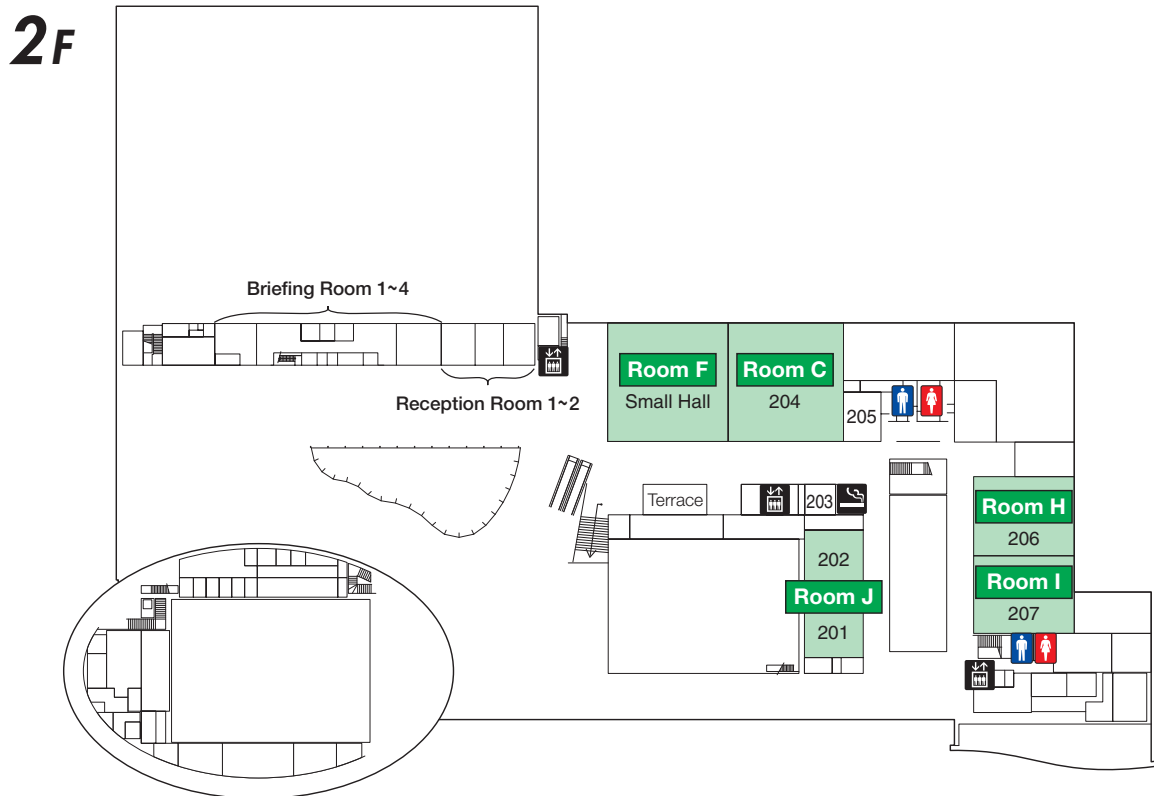
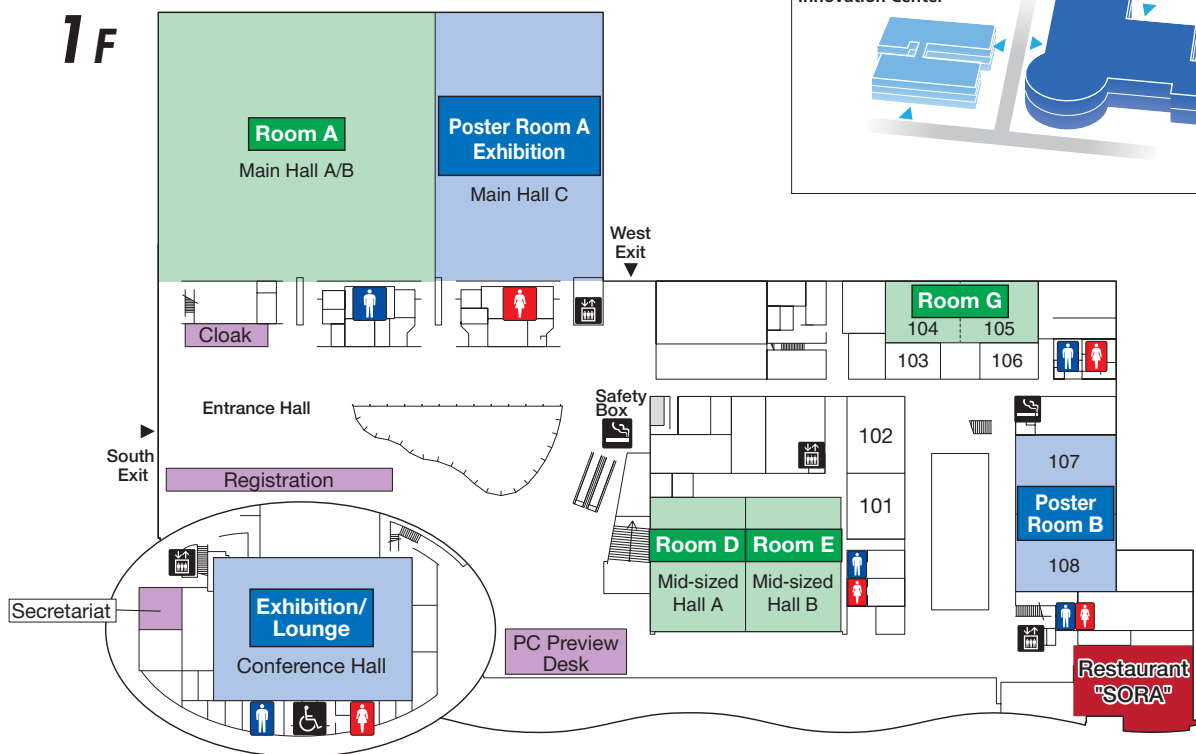
[Transportation to Sapporo Convention Center]



[Access to Sapporo]

Floor Plan

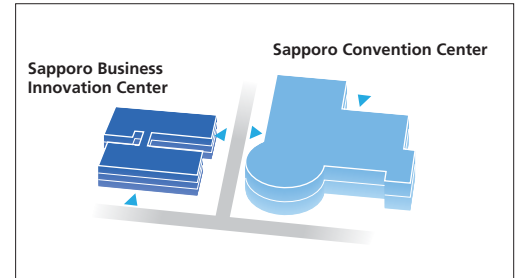
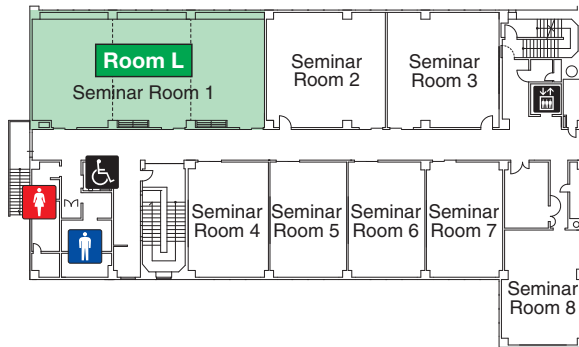
Sapporo Convention Center



Sapporo Business Innovation Center

3F

Skill Training Building



2F

Skill Training Building

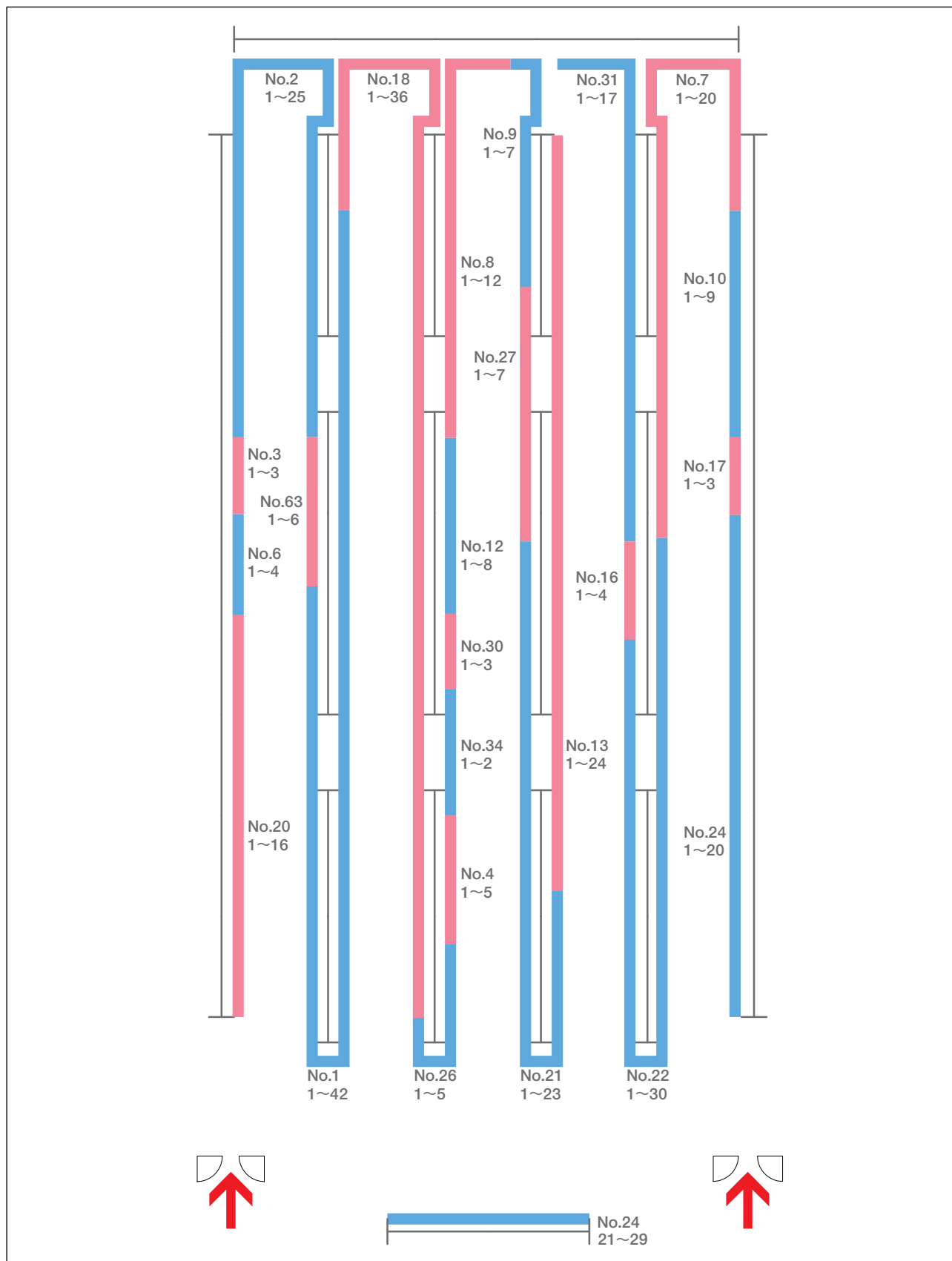


Industrial Development Building

- Presentations
- Posters or Exhibition

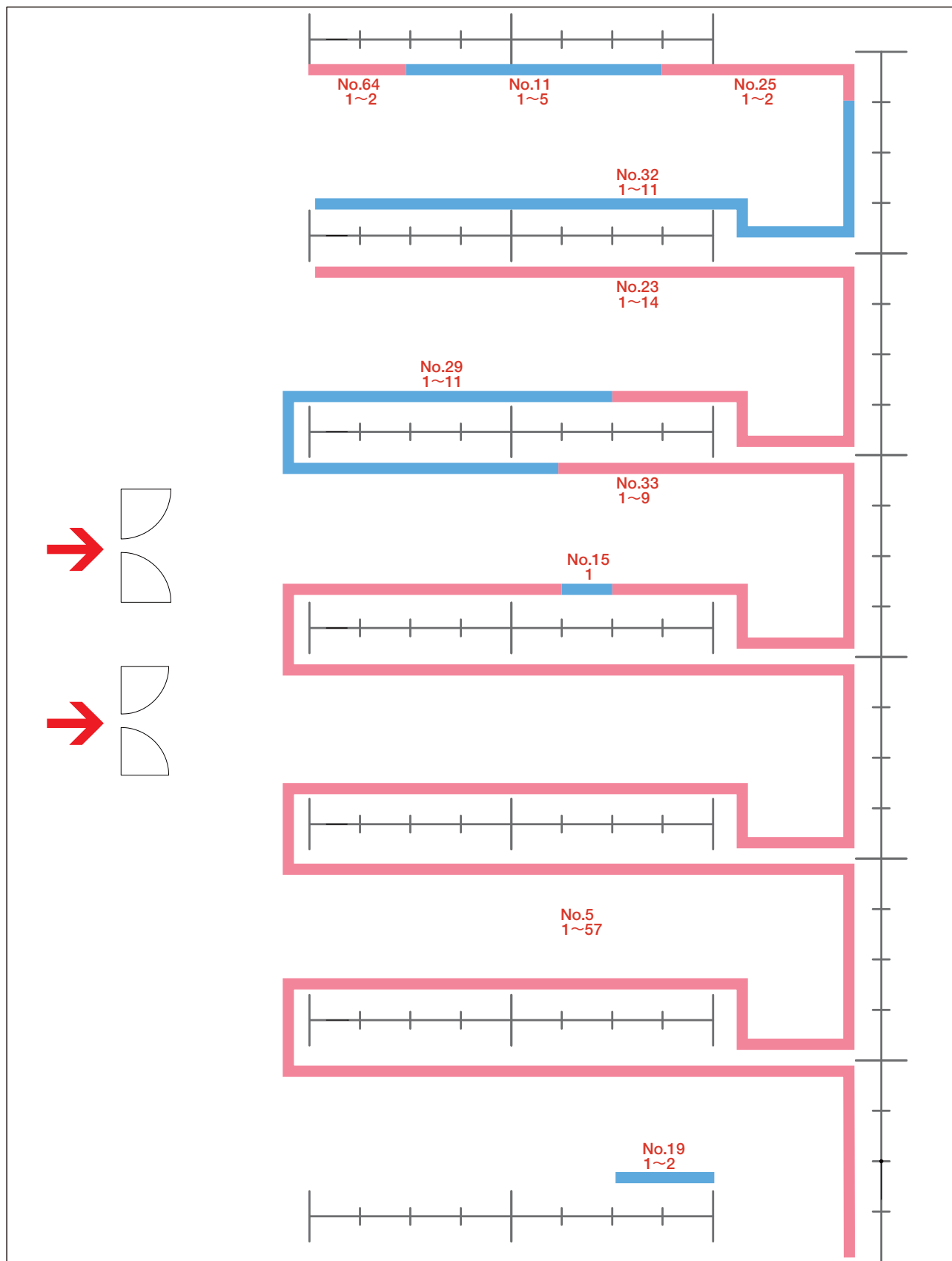
Poster Layout

Poster Room A (Main Hall C, 1st floor, Sapporo Convention Center)
[11-16 September / Poster 1]



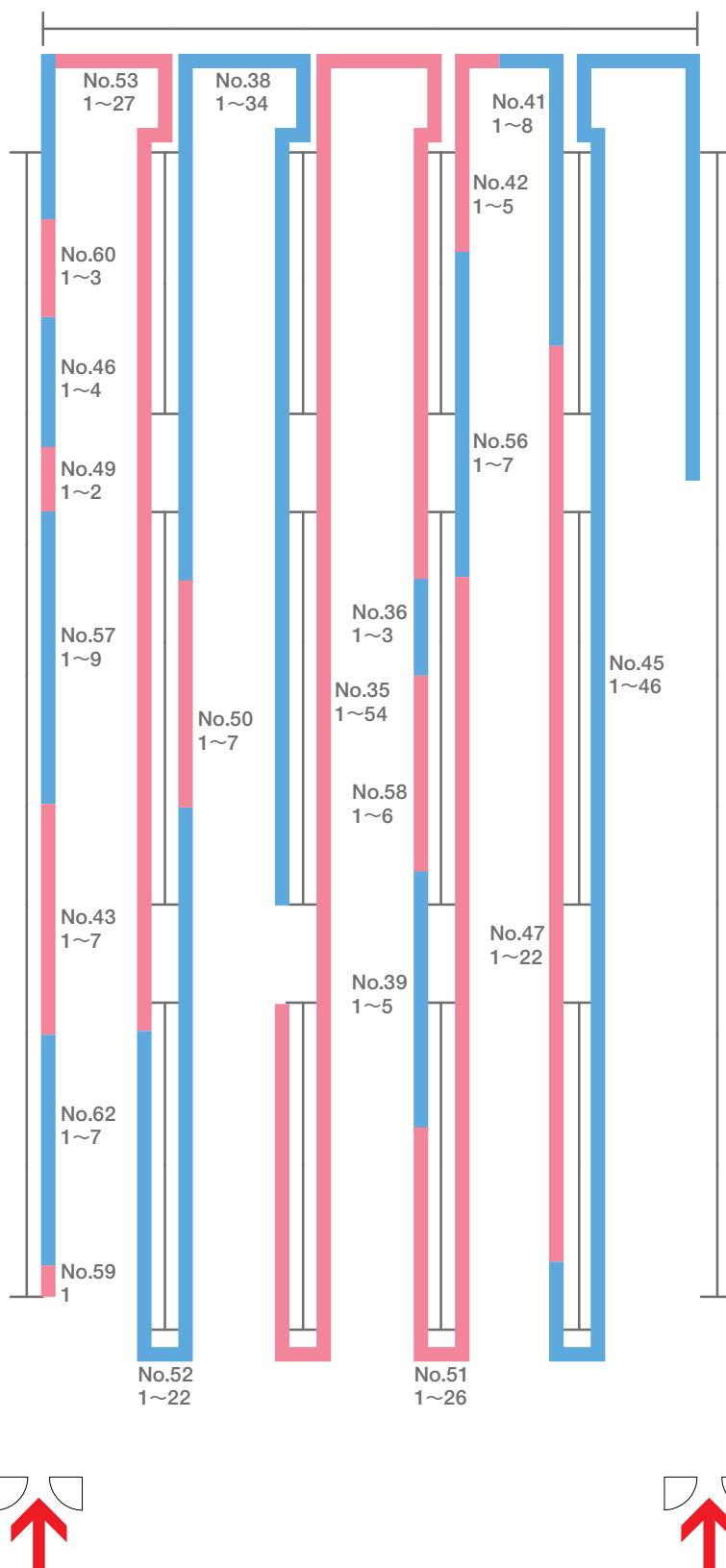
Poster Layout

Poster Room B (107/108, 1st floor, Sapporo Convention Center)
[11-16 September / Poster 1]



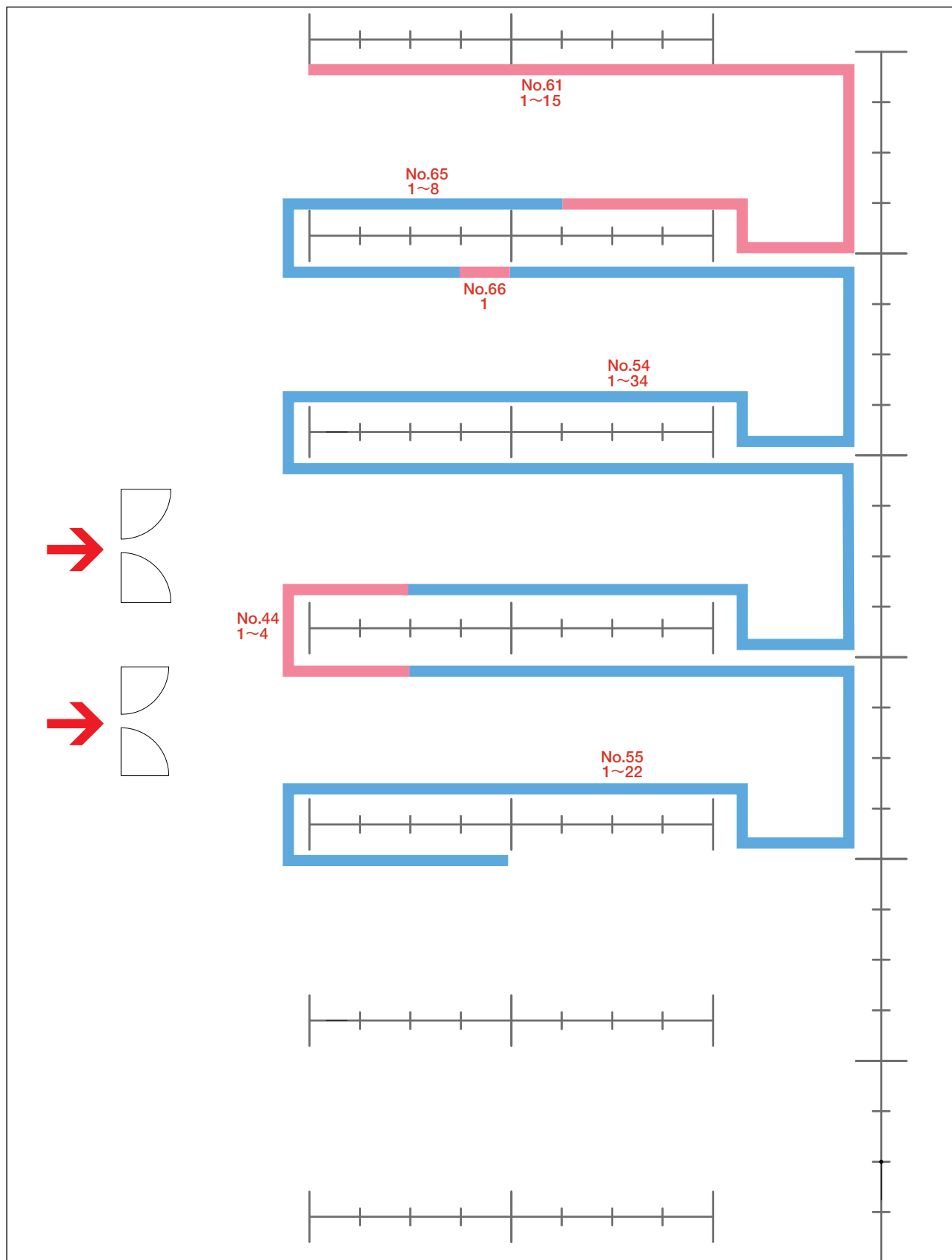
Poster Layout

Poster Room A (Main Hall C, 1st floor, Sapporo Convention Center)
[11-16 September / Poster 1]



Poster Layout

Poster Room B (107/108, 1st floor, Sapporo Convention Center)
[11-16 September / Poster 1]



Information for Conveners and Speakers

Information for Scientific Sessions

Guidelines for Conveners

- Conveners should take a seat in the front row of the room specially reserved for the next session's conveners, at least 15 minutes prior to the session that he/she is scheduled to chair.
- As there will be no announcement or cue, please proceed to take the stage promptly at the appointed time and initiate the session. We request for your cooperation to ensure that your session proceeds according to the prescribed time limit/schedule.

Guidelines for Oral Speakers

Presentation

Speakers should take a seat in the front row of the room specially reserved for the next speaker, at least 15 minutes prior to his/her presentation time.

Allocated presentation time

For BAM and Mycology Speakers:

Presentation time will be determined by each session's Convener according to the program schedule. Time allocation has already delivered to each speaker for most of sessions. We request for your cooperation to the Convener's time schedule.

For Virology Speakers:

<For Plenary Speakers>

Presentation time will be determined by each session's Convener according to the program schedule. Time allocation has already delivered to each speaker. We request for your cooperation to the Convener's time schedule.

<For Symposia Speakers>

You are requested to keep the time of your presentation approximately 15 minutes including Q&A. Please adhere to the schedule to ensure smooth proceedings, according to Conveners moderation. However, the time of presentation may change depend on the progression.

PC Preview Desk

Speakers in Sapporo Convention Center are required to upload their presentation at the PC Preview Desk at least 1 hour before the start of the presentation.

AV Assistants will be available to help you.

Location:

PC Preview Desk: Lounge in front of Conference Hall, 1st floor, Sapporo Convention Center

Open Hours

7:30 - 18:00

*On 10 and 16 September, the PC Preview Desks will close at 16:00.

Speakers in Sapporo Business Innovation Center are requested to bring your presentation data directly to the

AV area located in the front of your session room.

- Only presentations using a Windows or Mac PC are acceptable. OHP or slides are not acceptable.
- Please bring your presentation data (on your PC, USB flash memory or CD-Rom) to the PC Preview Desk.
- At the PC Preview Desk please provide staff with your session name.
- Even if you intend to use your own PC, please come to the PC Preview Desk to check that your presentation functions correctly.
- Please make sure to check the files with anti-virus software before your submission to the Desk.

Presentation Format

Please ensure that your presentation will function on the specifications given below.

OS: Windows (Windows7) or Mac (MacOS10.4 or later)

Software: Windows: MS PowerPoint 2003 / 2007 / 2010

Mac: PowerPoint 2004 / 2008 / 2011

Fonts: Times New Roman, Arial, Arial Black, Arial Narrow, Century, Century Gothic, Courier, Courier New, Georgia

Moving Image: Windows: Windows Media Player

Mac: Quick Time Player

- If your PowerPoint presentation includes moving images, please bring your own PC to make your presentation, and the back-up data, too.
- The Secretariat will prepare a Mini D-sub 15 pin PC cable connector.
If your PC is not compatible with this cable connector, please bring an adaptor to connect your PC to the Mini D-sub 15 pin PC cable connector.
- If you use sound data, please let us know at the PC Preview Desk.

Information for Poster Sessions

Guidelines for Poster Presenters

Poster Session

Posters will be on display:

BAM & Mycology

Poster Room A: Main Hall C, 1st floor, Sapporo Convention Center

Poster Room B: Gymnastic Room, 2nd floor, Sapporo Business Innovation Center

Virology

Poster Room A: Main Hall C, 1st floor, Sapporo Convention Center

Poster Room B: 107 / 108, 1st floor, Sapporo Convention Center

Schedule

BAM & Mycology

Poster 1	6 September
Poster Mounting	8:00 - 10:00
Poster Session	10:00 - 18:00
Poster Discussion	15:30 - 16:00
Poster Removal	18:00 - 19:00

Poster 2	7 September
Poster Mounting	8:00 - 9:00
Poster Session	9:00 - 18:00
Poster Discussion	16:00 - 16:30
Poster Removal	18:00 - 19:00

Poster 3	8 September
Poster Mounting	8:00 - 9:00
Poster Session	9:00 - 18:00
Poster Discussion	16:00 - 16:30
Poster Removal	18:00 - 19:00

Poster 4	9 September
Poster Mounting	8:00 - 9:00
Poster Session	9:00 - 18:00
Poster Discussion	16:00 - 16:30
Poster Removal	18:00 - 19:00

Poster 5	10 September
Poster Mounting	8:00 - 9:00
Poster Session	9:00 - 17:30
Poster Discussion	14:00 - 14:30
Poster Removal	18:00 - 19:00

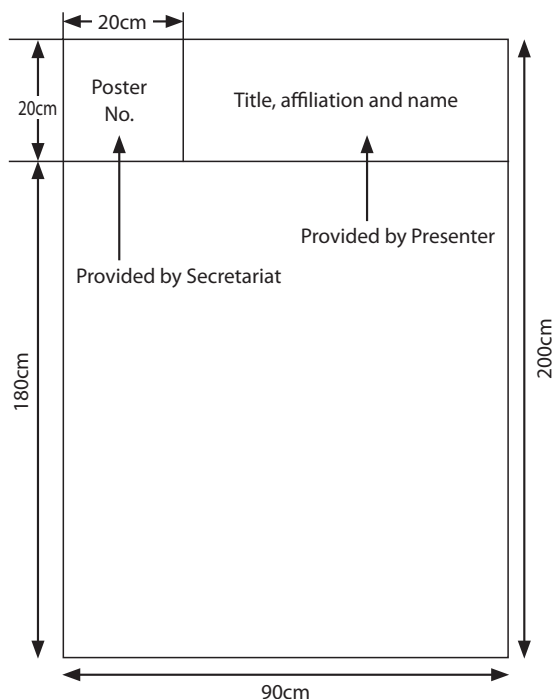
Virology

Poster 1	12-14 September		
Poster Mounting	12 September		8:00 - 9:00
Poster Session	12, 13 and 14 September		9:00 - 18:00
Poster Discussion	13 September		10:15 - 11:15
Poster Removal	14 September		18:00 - 19:00

Poster 2	15-16 September		
Poster Mounting	15 September		8:00 - 9:00
Poster Session	15 and 16 September		9:00 - 18:00
Poster Discussion	15 September		10:15 - 11:15
Poster Removal	16 September		18:00 - 19:00

- There will be no presentations initiated by the session convener. Please wait in front of your own poster panel at the Discussion time.
- All poster boards will be assigned with a number which corresponds to the abstract number. This same number will be cross-referenced in the author index in the Program Book at the end.
- Authors should mount their poster on the designated board on the day of their own session, according to the schedule shown above.
- Please use push-pins to affix your poster presentation to the board firmly. The Secretariat will provide equipment and items required for affixing the posters.
- Any poster left after the scheduled removal time will be disposed of by the Secretariat.

Poster Specifications



About the Congress

Certificate of Attendance

A certificate of attendance is included in your Congress Bag.

Disclaimer

The IUMS 2011 Congress Organizers will not be liable for personal injury or safety of any participant, or loss or damage of private property of the registered participants during the congress.

Secretariat

The Secretariat is located behind the Registration area, on the 1st floor of Sapporo Convention Center.

Registration Desk

The Registration Desk is located near the main entrance, on the 1st floor of Sapporo Convention Center.

Open Hours:

5 September	14:00 - 18:00
6-10 September	7:30 - 16:30
11 September	9:00 - 18:00
12-16 September	8:00 - 16:00

Exhibition

The Exhibition is situated in the Entrance Hall and Main Hall C on the 1st floor of Sapporo Convention Center and will be open as follows;

BAM & Mycology

6 September	10:00 -17:00
7 September	10:00 -17:00
8 September	10:00 -17:00
9 September	10:00 -15:00

Virology

12 September	10:00 -17:00
13 September	10:00 -17:00
14 September	10:00 -17:00
15 September	10:00 -17:00
16 September	10:00 -15:00

Poster

Location:

The Poster Rooms are located;

BAM & Mycology

- Poster Room A: Main Hall C, 1st floor, Sapporo Convention Center
- Poster Room B: Gymnastic Room, 2nd floor, Sapporo Business Innovation Center

Virology

- Poster Room A: Main Hall C, 1st floor, Sapporo Convention Center
- Poster Room B: 107/108 1st floor, Sapporo Convention Center

Poster Session & Poster Discussion

BAM & Mycology

	Session	Discussion
Poster 1	6 September 10:00 - 18:00	6 September 15:30 - 16:00
Poster 2	7 September 9:00 - 18:00	7 September 16:00 - 16:30
Poster 3	8 September 9:00 - 18:00	8 September 16:00 - 16:30
Poster 4	9 September 9:00 - 18:00	9 September 16:00 - 16:30
Poster 5	10 September 9:00 - 17:30	10 September 14:00 - 14:30

Virology

	Session	Discussion
Poster 1	12 - 14 September 9:00 - 18:00	13 September 10:15 - 11:15
Poster 2	15 - 16 September 9:00 - 18:00	15 September 10:15 - 11:15

PC Preview Desk

Speakers in Sapporo Convention Center are required to upload their presentation at the PC Preview Desk at least 1 hour before the start of the presentation.

Location:

PC Preview Desk: Lounge in front of Conference Hall, 1st floor, Sapporo Convention Center

Open Hours

7:30 - 18:00

*On 10 and 16 September, the PC Preview Desks will close at 16:00.

Speakers in Sapporo Business Innovation Center are requested to bring your presentation data directly to the AV area located in the front of your session room.

Internet Lounge

Internet connection is available free of charge in the Entrance Hall at Sapporo Convention Center and in the Lounge, 2nd floor, Industrial Development Building at Sapporo Business Innovation Center.

Please note that printers or equipment other than internet connection are not available. You may use your own PC to access the Internet.

Lost and Found

Items found will be consigned to the General Inquiries Desk next to the Registration Desk on the 1st floor at Sapporo Convention Center. For assistance in locating lost property, please contact General Inquiries.

Messages

Messages may be left and picked up at the General Inquiries next to Registration Desk.

Name Badge

Congress participants are requested to wear their name badges at all times for identification purposes and admission to the scientific and social programs. Should you lose your badge, you may ask for a replacement at the General Inquiries Desk. Please note that you must present identification cards.

Official Language

The official language of the conference is English.

No translations will be provided except the Outreach Program.

Congress Venue

Sapporo Convention Center

1-1-1 Higashi-Sapporo 6-jo, Shiroishi-ku, Sapporo, Japan 003-0006

Sapporo Business Innovation Center

1-1-1 Higashi-Sapporo 5-jo, Shiroishi-ku, Sapporo, Japan 003-0005

Sapporo's newly built Sapporo Convention Center comes fully equipped with the latest in services and technology, well able to support a variety of conventions in this city so richly blessed by the beauty of the four seasons.

The design of the convention space was people-centered, based on the concept of People Resonating with Understanding.

Access

Access from the closest station (Higashi-Sapporo Subway Station, Tozai Line)

Visitors traveling by subway from Sapporo Station or from the Odori area: about 23 minutes from Sapporo Subway Station: about 21 minutes from Odori Subway Station

From Sapporo Subway Station, take the Nanboku Line to Odori Station. Change to the subway Tozai Line, and get off at Higashi-Sapporo Station. Exit out of Exit 1, and head to your right. Turn right at the second traffic light (look for the Hokkaido Energetic car park), and head straight along the road. You will find the Sapporo Convention Center in front of you within an 8-min. walk.

Visitors traveling via subway from the Shin-Sapporo area

About 21 minutes from Shin-Sapporo

From Shin-Sapporo Subway Station, take the Tozai Line, and get off at Higashi-Sapporo Station. Exit out of Exit 2, and head to your left. Cross the street at the second traffic light (look for the large Nippon Express billboard), and head straight along the road. You will find the Convention Center in front of you within an 8-min. walk.

Social Program

Opening Ceremony

BAM & Mycology 6 September 9:30 -10:30

Virology 11 September 16:30 -17:00

Venue: Room A, 1st floor, Sapporo Convention Center

Commemorative Ceremony

Date: Saturday, 10 September 17:40-18:11

Venue: Room A, 1st floor, Sapporo Convention Center

Dress: Business attire or National dress

- Please note that the Commemorative Ceremony will be honored with the presence of Their Majesties the Emperor and Empress of Japan.
- For security reasons, please kindly be seated by 17:10, after completing registration procedures.
- Congestion is expected at the security check. Please kindly arrive at the venue early.
- Participants are requested to attend this ceremony after the scientific program.

Welcome Reception

Greet old friends and meet new colleagues from around the world at this reception to kickoff IUMS 2011 Congress.

BAM & Mycology 6 September 18:30 -20:00

Virology 11 September 18:30 -20:00

Venue: Conference Hall, 1st floor, Sapporo Convention Center

Banquet

A casual party will allow all to cement the relationships formed at the congress.

Advance reservations are required.

BAM & Mycology 8 September 19:00 - 21:00

Venue: Royton Sapporo

Fee: JPY 10,000

Virology 15 September 18:30 - 20:30

Venue: Kirin Brewery Garden

Fee: JPY 10,000

Experience Japanese Culture

This program will provide hands-on experiences as well as demonstrations of traditional Japanese arts.
Advance reservations are required.

Venue: Sapporo Convention Center

*Flower Arrangement on 9 September; Sapporo Business Innovation Center

**Tea Ceremony on 10 September; Hotel Okura Sapporo

Meeting Place: City Information Desk at the Entrance Hall, on the 1st floor, Sapporo Convention Center

*Please come to the desk 15 minutes before the program starts.

Fee: JPY 1,000 for each program

Program Schedule:

Program	Date	Time
Kimono Wearing	7, 9, 12 & 14 September	(1)13:30-14:30 (2)15:00-16:00
Tea Ceremony	8, 13 & 15 September	(1)13:30-14:15 (2)14:30-15:15
	10 September	(1)13:30-15:30 (2)14:30-16:30 Including travel-time to the hotel.
Flower Arrangement	7, 9, 12 & 14 September	13:30-15:00
Calligraphy	8, 13 & 15 September	13:30-16:00

Sapporo Walking Tour

This program is a casual, easy walk planned especially for IUMS 2011 participants to enjoy the famous sights of Sapporo. Advance reservations are required.

Date: 7 & 8 September 13:15-16:00
 12 & 13 September 13:15-16:00

Meeting Place: The open space at the bottom of Sapporo TV Tower
 (Odori Nishi 1-chome, Chuo-ku)

*1-minute walk from Exit 27 at Odori Subway Station

**Please come to the desk 15 minutes before the program starts.

Course: Sapporo TV Tower ► Sapporo Clock Tower ► Former Hokkaido Government Office Building ► JR Sapporo Station area ► the "Tanukikoji" Shopping Arcade

About Sapporo

City of Sapporo

Welcome to Sapporo, the capital of Hokkaido. Sapporo is blessed with a splendid natural environment that is highlighted by four distinct seasons and an abundance of greenery within the cityscape.

The city is best known as host of the 1972 Olympic Winter Games and the city's name is synonymous with the Sapporo Beer brand. The name is derived from the language of the Ainu, the indigenous people of Hokkaido. Possible derivatives include "Sari-Poro-Pet" (River lined with large reed bed) or "Sat-Poro-Pet" (Large dried-up river). The city was established in 1922.

The central part of Sapporo was formed 6,000 years ago by deposits of earth carried by the Toyohira River from Jozankei and was frequently flooded in the 19th century, when the river banks were not yet built. There is abundant ground water away from the riverbed due to the river underflows and with this good quality water, life is easy on this fertile land, which was used for agriculture, including the cultivation of fruit trees. The very reason why beer factories and sake companies were built in the center of Sapporo during the first period of the development of Hokkaido is that it was easy to draw water from the underflows of the river, water which was fit for sake brewing.

Woods and Wildlife

An annual survey indicated that Sapporo's greenery and abundance of nature was a great source of pride for local residents. Woodlands occupy approximately sixty four percent of the total area of the city. In addition, Sapporo overflows with greenery with a total of approximately 2,700 park areas within the city.

Sapporo is unique among cities of similar sizes as it has a variety of wild animals living close by and sharing the bountiful natural environment with humans in an urban setting.

Ainu Culture

The Ainu people, who foster a unique culture, live indigenously in Hokkaido including the Sapporo area. They believe that there is a "spirit" in all living things, natural phenomena and manmade tools. The presence of these "spirits," who were sent from the divine world, influences the Ainu's outlook on the world. Values in the Ainu culture include giving thanks to nature, loving human beings and living in peace. The Ainu language differs from standard Japanese and is unique to the Ainu ethnic group. Various geographic names from the Ainu remain in Hokkaido. For example, Sapporo's name was taken from the Ainu language, meaning "river lined with large reed bed" or "large dried-up river."

Sake

Thanks to its delicious water from melting snow and its cold climate, Hokkaido is indisputably a land of good rice wine. Master sake brewers pass their traditional skills from generation to generation.

Historical Buildings

Hokkaido's development progressed in the Meiji era (1868 – 1912) and it was also during this period that western influence spread extensively throughout Japan. Rather than the traditional Japanese architectural styles of other cultural centers such as Kyoto, visitors will notice the distinctly western style architecture of the historical buildings in the city. Many famous buildings will interest history buffs, such as the "Akarenga," former Hokkaido Government Offices, affectionately known as "Red Brick," Sapporo Clock Tower (originally part of Sapporo Agricultural College), Hokkaido University buildings and more.

Susukino District - Center of Sapporo's Nightlife

The "Times Square" of Sapporo is lit late into the night with over 4,000 establishments, including restaurants, clubs, bars and "karaoke boxes." It is home to Japan's largest entertainment district north of Tokyo.

Contact: Hokkaido-Sapporo Tourist Information Center

Tel: 011-213-5088 (Hours: 8:30-20:00) (Inquiries in English, Korean and Chinese accepted)



General Information

Currency and Money Exchange

Currency in Japan is the Yen (¥/JPY). Exchange at the airport is recommended for your convenience. Most foreign currencies and travelers' checks can be exchanged at authorized foreign exchange banks and hotels where you stay. However we highly recommend purchasing travelers' checks or cash in Yen, U.S. dollars or Euros before leaving your home countries. A passport may be required for currency exchange services.

Banks

Banks are open from Monday to Friday, 9:00-15:00 (Closed on Saturdays, Sundays and national holidays). Automatic teller machines (ATMs) are commonly available throughout Japan, however, not all ATMs accept foreign debit or credit cards. We recommend that you check with your card company for applicable ATM locations in Sapporo. ATM withdrawal hours: 9:00 - 20:00 daily.

Credit Cards

American Express, Diners Club, Visa and MasterCard are widely accepted at hotels, department stores, shops and restaurants.

Climate and Clothing

In September in Sapporo, the average temperature is low 7.5°C and high 16.2°C. The climate is mainly dry and pleasant, with maybe a few rainy days. Please note, however, that it can be temperamental, so it may feel cold in the early morning and at night as the weather becomes cooler, feeling more like autumn. Salmon swim up the Toyohira River, which runs through the city center, to spawn. With the start of the fall harvest season, many autumn festivals are held.

Recommended clothing: light jackets, light sweaters and similar.

Electricity

Voltage in Japan is 100V and the frequency is either 50Hz or 60Hz depending on the area (Sapporo is 50Hz). The socket is type A, which has two flat plug holes. If you plan to bring any electric appliances that are not convertible, transformers and/or plug adaptors will be necessary.

Time zone

Japan Standard Time is 9 hours ahead of Greenwich Mean Time.

Insurance

The IUMS 2011 Sapporo Congress Organizers can accept no responsibility for accidents or damage to the private property of participants. Please make your own arrangements for health insurance and any other necessary insurance.

Shopping

Shops and other sales outlets in Japan are generally open on Saturdays, Sundays and national holidays as well as weekdays from 10:00 to 20:00. Department stores, however, are closed on one weekday, differing by store, and certain specialty shops may not open on Sundays and national holidays. Major credit cards are accepted in many places.

Taxes

5% consumption tax is included in the price marked, but all major department stores in Sapporo will refund the tax to foreign visitors if total purchases amount to more than JPY10,001 on that day. Exemptions include food, beverages, tobacco, pharmaceuticals, cosmetics, film and batteries. When you have completed your shopping, take the purchased goods and receipts to the tax refund counter in the store. There are forms to fill out (you will need your passport). Upon completion, a record of your purchase is placed on the visa page of your passport and you are given the tax refund on the spot. When you leave Japan, make sure to have your purchases with you; you may be asked by Customs to show them (pack them in your carry-on luggage).

Restaurants

Unlike traditional Japanese cuisine, Sapporo dishes rely on their simplicity and natural flavors of the ingredients. Crab, scallops and salmon are local specialties and restaurants specializing in these delicacies are common in the city. There are also many restaurants specializing in Western cuisines. Most restaurants are also open on Sundays and holidays. Major credit cards are accepted in many restaurants.

Tipping

In Japan, tips are not necessary anywhere, even at hotels and restaurants or when using taxis.

Internet

Most hotels in Sapporo offer Internet access and there are some cyber-cafes in the city.

Telephone Service

The international dialing code from abroad is + 81 for Japan.

For international calls, dial: 001 + 010 + country code + area code + personal number.

Mobile Telephones

You can use your mobile phone in Japan in SoftBank Mobile or DOCOMO's 3G (3rd Generation) service area. All you have to do is bring your own SIM card and insert it to a rental phone or your own 3G handset. Please make sure to verify with your mobile phone service provider in your country prior to your departure. Rental phone service is available upon arrival at Narita Airport or Kansai Airport, but not in Sapporo city.

Reference: Japan's mobile provider websites:

NTT DoCoMo: <http://roaming.nttdocomo.co.jp/en/index.html>

Softbank: <http://www.softbank-rental.jp/>

JAL ABC: http://www.jalabc.com/rental/domestic_eng/index.html

Those who plan to bring a "smart phone" device such as iPhone or Blackberry will need to check with their provider in their home country to check whether your current plan includes coverage for 1/ receiving and making telephone calls specifically when in Japan and, separately, 2/ Internet and e-mail services when in Japan. Depending on your device model and on your provider, optional plans for services in Japan may be available. We recommend that you telephone or visit your provider's store prior to your departure.

Transportation

Public Transportation

The city of Sapporo is served by an extensive public transport system consisting of 3 subway lines, JR (Japan Railway) lines, a streetcars route and a substantial bus service.

Major JR routes provide access into the city and connections to New Chitose Airport, as well as the suburbs and surrounding areas of Sapporo. The three subway lines, serving a total of 46 stations throughout Sapporo, link the main business, commercial and entertainment areas as well as the central railway station, to all parts of the city. Regular streetcars and buses cover routes not serviced by the subways and convenient shuttle buses link shopping areas and event venues around the city. Various one-day or pre-paid passes covering all these services are available, making traveling within Sapporo even cheaper and more convenient.

On foot

Although Sapporo's population surpasses 1.8 million, the city center is compact and most central facilities are within walking distance. In summer, a pleasant stroll through Odori Park links many hotels and conference venues with the business and commercial areas. Extensive underground shopping malls and walkways connect major buildings with subway stations and provide shelter in Sapporo's more severe winter weather.

Quiet, Clean Subways

Unique rubber tires make Sapporo's subway system one of the quietest and cleanest in Japan, if not the world. Services start from early morning and continue until midnight. One-day passes are available for 800 yen and "multi-purpose" pre-paid cards connecting the subway with streetcar and bus routes are available for 1000 yen. "Donichika Kippu" is a one-day pass, only usable on Saturdays and Sundays, sold for 500 yen.

Convenient Streetcars

Streetcars operate regular return trips on an almost circular route between South 1 West 4, and Susukino, via the Mt. Moiwa area. Get on at any of the 21 stops enroute and pay a flat rate of 170 yen as you get off. A discount rate of 150 yen is available in the mornings before 7:00am.

Extensive Bus Services

Although certain knowledge of the local geography might help when using buses, this simple and cheap way to travel enables you to see more of the city. Simply board the bus through the rear door, take a ticket from the machine and pay your fare as you get off. A numbered fare display at the front of the bus allows you to calculate your fare from the number on your ticket.

Abundant Taxis

Wave and they will stop. Base fares start around 650 yen, increasing in 90 yen increments every 309 meters or so. Fares are displayed on a meter in the front of the cab. Rates increase by 20% after 22:00. Tipping is not customary.

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Committee Meetings and Other IUMS Affiliated Events

Tuesday, 6 September

9:00-10:30	ICSP Subcommittees on the Taxonomy of <i>Halobacteriaceae</i> and <i>Halomonadaceae</i>
14:00-18:30	International Journal of Systematic and Evolutionary Microbiology Editorial Board Meeting

Wednesday, 7 September

11:00-13:00	ICSP Subcommittee on Taxonomy of <i>Flavobacterium</i> and <i>Cytophaga</i> -like Bacteria
14:00-16:00	ICSP Subcommittee on Taxonomy of <i>Aeromonadaceae</i> , <i>Vibrionaceae</i> and related organisms
16:00-19:00	Japanese Society for Bacteriology Board Meeting

Thursday, 8 September

9:00-11:00	Japanese Society for Bacteriology Council Meeting
12:30-14:00	IUMS BAM Division Council Meeting
14:00-15:30	Japanese Society for Bacteriology General Assembly
15:30-16:30	Japanese Society for Bacteriology Asakawa Award Lecture
14:00-16:00	Japan Society for Culture Collections Annual Meeting
14:15-15:00	The Society for Actinomycete Japan Plenary Meeting
16:30-18:30	Japan Society for Culture Collections Workshop for Practice of Culture Collections
19:30-21:00	ICTV EC43 Get-together

Friday, 9 September

8:30-10:30	Asian Federation of Societies for Lactic Acid Bacteria IEBC Meeting
9:00-17:00	ICTV Executive Committee Meeting
12:30-14:00	IUMS Mycology Division Council Meeting
16:30-18:30	ICSP Subcommittee on Taxonomy on the Suborder Micrococccineae

Saturday, 10 September

7:00- 9:00	ICSP Subcommittee for the Taxonomy of <i>Enterobacteriaceae</i>
9:00-16:00	IUMS Executive Board Meeting
9:00-17:00	ICTV Executive Committee Meeting

Sunday, 11 September

9:00-10:00	IUMS Executive Board Meeting (TBD)
9:00-17:00	ICTV Executive Committee Meeting
10:00-12:00	IUMS General Assembly
10:00-12:00	The Japanese Society for Virology Board Meeting
12:00-15:00	IUMS Virology Division Executive Committee Meeting
13:00-14:30	The Japanese Society for Virology General Assembly / Council Meeting
15:00-16:00	IUMS Handover Meeting

Monday, 12 September

13:00-14:30	IUMS Virology Division 1st Council Meeting
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Tuesday, 13 September

12:55-14:25	IUMS Virology Division 2nd Council Meeting
13:00-18:00	Workshop of Human Adenovirus

Wednesday, 14 September

12:45-14:15	ICTV Plenary Meeting
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Sponsored Session

Luncheon Seminar

Thursday, 8 September

13:00-14:00 Room A

JSB Luncheon Seminar

Convener: Yasuyoshi Ike

Sponsored by SHIONOGI & CO., LTD

URGENT NEED FOR PROMOTION OF RESEARCHES ON MOLECULAR MECHANISMS OF EMERGING MULTI-DRUG RESISTANCE

Speaker: Yoshichika Arakawa

Friday, 9 September

13:00-14:00 Room D

JSB Luncheon Seminar

Convener: Shuolin Song

Sponsored by Roche Diagnostics K.K.

METAGENOME, OUR SECOND GENOME

Speaker: Shuolin Song

13:00-13:50 Room F

MY5 Luncheon Seminar

Respiratory Mycoses-Pulmonary Aspergillosis: Pathogenesis and Treatment

Sponsored by Astellas Pharma Inc.

Convener: Yoshihito Niki

CHRONIC PULMONARY ASPERGILLOSIS

~NEW TREATMENT EVIDENCE AND EMERGENCE OF AZOLE-RESISTANT *ASPERGILLUS FUMIGATUS* IN JAPAN~

Speaker: Koichi Izumikawa

PULMONARY ASPERGILLOSIS: PATHOGENESIS AND TREATMENT

Speaker: David W Denning

13:00-14:00 Room H

IFD1 Luncheon Seminar

Antibiotic Resistant Organisms: Pediatrician's Perspective

Sponsored by Meiji Seika Pharma Co., Ltd.

Convener: Kazunobu Ouchi

ANTIMICROBIAL RESISTANCE OF COMMUNITY ACQUIRED PATHOGENS IN PEDIATRIC FIELD

Speaker: Satoshi Iwata

Saturday, 10 September

11:00-12:00 Room H

IFD4 Luncheon Seminar

Antibiotic Choice in an Era of Multi-Resistance

Sponsored by SHIONOGI & CO., LTD.

Convener: Koichi Izumikawa

CHOOSING AN ANTIBIOTIC IN AN ERA OF MULTIRESISTANCE

Speaker: David M Livermore

Tuesday, 13 September**13:10-14:10 Room D+E****JSV Luncheon Seminar****Clinical impact of quadrivalent HPV vaccine on all HPV-associated diseases**

Sponsored by MSD K.K.

Convener: Shoichi Onodera

Speaker: Kei Kawana

13:10-14:10 Room C**JSV Luncheon Seminar****Antiviral resistance monitoring in human influenza in Japan, Myanmar and Lebanon**

Sponsored by DAIICHI SANKYO CO., LTD.

Convener: Hiroshi Suzuki

Speaker: Reiko Saito

13:10-14:10 Room F**JSV Luncheon Seminar****HPV genotyping by Pyrosequencing– Sentinel-base pyrosequencing and multiple sequencing primers method for genotyping of high-risk human papillomaviruses**

Sponsored by QIAGEN K.K.

Convener: Stephane Perrey

Speaker: Baback Gharizadeh

Thursday, 15 September**13:10-14:10 Room D+E****JSV Luncheon Seminar****A new strategy for the treatment of respiratory virus infection - Possibilities of macrolides -**

Sponsored by Taisho Toyama Pharmaceutical Co., Ltd.

Convener: Toshihiro Nukiwa

Speakers: Mutsuo Yamaya

Hiroshi Kido

13:10-14:10 Room C**JSV Luncheon Seminar****New mechanisms of vaccine adjuvant: innate immunity and beyond**

Sponsored by Takeda Pharmaceutical Co., Ltd.

Convener: Yoshihiro Sakoda

Speaker: Ken J Ishii

13:10-14:10 Room F**JSV Luncheon Seminar****Use of Pyrosequencing for Genotyping HCV and Identifying Mycobacteria species in a Diagnostic Laboratory**

Sponsored by QIAGEN K.K.

Convener: Stephane Perrey

Speaker: Jaber Aslanzadeh

Evening Seminar

Friday, 9 September

17:35-18:25 Room F

**MY8 Evening Seminar
Diagnostics for Fungal Infection**

Sponsored by Pfizer Inc.

Convener: Katsuhiko Kamei

UTILITY OF SERODIAGNOSTIC TESTS IN FUNGAL INFECTIONS

Speaker: Koichiro Yoshida

DIAGNOSING INVASIVE FUNGAL DISEASE IN CRITICALLY ILL PATIENTS

Speaker: David A Stevens

Sponsored Symposium

Thursday, 8 September

11:00-13:00 Room B

**AM8 Symposium
Advanced Biotechnologies on Amino Acid Fermentation**

Sponsored by Ajinomoto Co., Inc

Conveners: Hisashi Yasueda

Hiroshi Takagi

FROM GENOME TO PRODUCERS IN GLUTAMIC ACID BACTERIA

Speaker: Masato Ikeda

BACTERIAL AMINO ACID EFFLUX TRANSPORTERS: IDENTIFICATION, PROPERTIES AND APPLICATION IN BIOTECHNOLOGY

Speaker: Natalia P Zakataeva

SYSTEMS AND SYNTHETIC BIOLOGY APPROACHES TO AMINO ACID-PRODUCING *CORYNEBACTERIUM GLUTAMICUM*

Speaker: Volker F Wendisch

A NEW FRONTIER OF AMINO ACID FERMENTATION: *METABOLIC PATHWAY DESIGN AND ADVANCED FERMENTATION TECHNOLOGY*

Speaker: Hiroyuki Kojima

Friday, 9 September

14:00-16:00 Room C

**IFD2 Symposium
Topics in Food-Borne Diseases**

Sponsored by DAIICHI SANKYO CO., LTD.

Convener: Haruo Watanabe

GUILLAIN-BARRE SYNDROME SUBSEQUENT TO *CAMPYLOBACTER JEJUNI* ENTERITIS:

The First Proof of Molecular Mimicry in Autoimmune Disease

Speaker: Nobuhiro Yuki

NEW PARASITIC FOOD BORNE DISEASES IN JAPAN

Speaker: Takahiro Ohnishi

NOROVIRUS AS GASTROINTESTINAL FLU

Speaker: Kazuhiko Katayama

16:30-18:30 Room C

IFD3 Symposium

Threat of Community-Acquired Antibiotic Resistant Pathogens

Sponsored by Taisho Toyama Pharmaceutical Co., Ltd.

Conveners: Tatsuo Yamamoto

David M Livermore

THE THREAT OF COMMUNITY-ACQUIRED ANTIBIOTIC RESISTANT PATHOGENS

Speaker: Tse H Koh

ESBL PRODUCERS IN COMMUNITY-ACQUIRED INFECTION

Speaker: David M Livermore

COMMUNITY-ACQUIRED METHICILLIN-RESISTANT *STAPHYLOCOCCUS AUREUS* (CA-MRSA) AS AN EMERGING THREAT

Speaker: Tatsuo Yamamoto

CURRENT SITUATION OF ANTIMICROBIAL RESISTANT *STREPTOCOCCUS PNEUMONIAE* IN JAPAN

Speaker: Muneki Hotomi

Saturday, 10 September

12:00-14:00 Room D

IFD5 Symposium

Emerging and Re-Emerging Infectious Diseases

Sponsored by Pfizer Japan Inc.

Conveners: Kazunori Oishi

Heiman FL Wertheim

ROLE OF APOPTOTIC PLATELET CLEARANCE IN THROMBOCYTOPENIA IN DENGUE, A REEMERGING INFECTIOUS DISEASE

Speaker: Kazunori Oishi

IMMUNE CORRELATES OF PROTECTION AND PATHOLOGY IN CHIKUNGUNYA

Speaker: Lisa F.P Ng

EMERGING AND DE-EMERGING INFECTIOUS DISEASES IN FOOD MICROBIOLOGY. IMPACT OF ENVIRONMENTAL FACTORS AND FOOD TECHNOLOGY

Speaker: Niels P Skovgaard

STREPTOCOCCUS SUIS, AN EMERGING HUMAN PATHOGEN

Speaker: Heiman FL Wertheim

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2008	Istanbul

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Scientific Program

XV International Congress of Virology



Opening Special Lecture

Sunday, 11 September	17:00-18:00 Room A
Opening Special Lecture	
VI-OL	VIROLOGY AND NOBEL PRIZES - THE ADVANCE OF A DISCIPLINE Erling C.J Norrby <i>Center for the History of Science, The Royal Swedish Academy of Sciences, Sweden</i>

Plenary Lecture

Monday, 12 September	9:00-10:00 Room A
VI-PL1 Systems Virology	
Conveners: Robert Lamb <i>USA</i> Yoshihiro Kawaoka <i>USA</i>	
VI-PL1-1	SYSTEMS BIOLOGY APPROACHES TO VIRAL PATHOGENESIS AND IMMUNITY: WHERE ARE GOOGLE AND IBM? Michael G Katze <i>Microbiology, University of Washington, USA</i>
VI-PL1-2	VIRUSES IN THE SEA: A VAST RESERVIOR OF GENETIC DIVERSITY AND DRIVERS OF GLOBAL PROCESSES Curtis A Suttle <i>Earth & Ocean Sciences, Microbiology & Immunology and Botany, University of British Columbia, Canada</i>

Monday, 12 September	10:15-11:15 Room A
VI-PL2 Virus Pathogenesis	
Conveners: Heinz Zeichhardt <i>Germany</i> Yoshiyuki Nagai <i>Japan</i>	
VI-PL2-1	MECHANISMS OF BLOODSTREAM SPREAD OF REOVIRUS Terence S Dermody <i>Pediatrics and Microbiology and Immunology, Vanderbilt University School of Medicine, USA</i>
VI-PL2-2	HIV-2 INFECTION: A MODEL FOR PROTECTIVE IMMUNITY? Sarah L Rowland-Jones <i>Nuffield Department of Clinical Medicine, Oxford University, UK</i>

Tuesday, 13 September	9:00-10:00 Room A
VI-PL3 Virology in Post Genome Era	
Conveners: Diane E Griffin <i>USA</i> Kyosuke Nagata <i>Japan</i>	
VI-PL3-1	BLUETONGUE VIRUS IN POST-GENOMIC ERA Polly Roy <i>Department of Infectious & Tropical Diseases, London School of Hygiene & Tropical Medicine, UK</i>
VI-PL3-2	DISCOVERING NEW HOST FACTORS INVOLVED IN VIRAL REPLICATION USING HIGH-THROUGHPUT RNAI SCREENING Sara Cherry <i>University of Pennsylvania, USA</i>

Tuesday, 13 September		11:25-11:55 Room D+E
VI-PL4 Genome Virology		
Convener: Peter Staeheli Germany		
VI-PL4-1	VIRUSES WITHIN US: THE NOVEL INTERACTION OF RNA VIRUSES AND HOST GENOMES Keizo Tomonaga Department of Viral Oncology, Institute for Virus Research, Kyoto University, Japan	
Wednesday, 14 September		9:00-11:00 Room A
VI-PL5 Nobel Lecture I		
Conveners: Alexandra Trkola Switzerland Naoki Yamamoto Singapore		
VI-PL5-1	SEARCH FOR INFECTIOUS AGENTS CAUSING HUMAN CANCERS Harald zur Hausen Deutsches Krebsforschungszentrum, Germany	
VI-PL5-2	30 YEARS OF HIV SCIENCE: ACHIEVEMENTS & FUTURE CHALLENGES Françoise Barré-Sinoussi Institut Pasteur, France	
Wednesday, 14 September		11:30-12:30 Room A
VI-PL6 Nobel Lecture II		
Convener: Akio Nomoto Japan		
VI-PL6-1	VIRUSES AS VECTORS FOR HUMAN HEALTH David Baltimore Division of Biology, California Institute of Technology, USA	
Thursday, 15 September		9:00-10:00 Room A
VI-PL7 Structural Virology		
Conveners: B.V.Venkataram Pasad USA Zene Matsuda China		
VI-PL7-1	STRUCTURES OF LASV NP - A DSRNA-SPECIFIC EXONUCLEASE AND A GATING MECHANISM FOR RNA BINDING Erica Ollmann Saphire ¹ , Kathryn M Hastie ¹ , Juan C De La Torre ¹ , Virgil L Woods ² , Ian J Macrae ³ , Michelle Zandonatti ¹ , Liam B King ¹ , Nhi Ngo ¹ , Tong Liu ² , Christopher Kimberlin ¹ ¹ Immunology and Microbial Science, The Scripps Research Institute, USA, ² Dept. of Medicine, University of California, ³ Dept. of Molecular Biology, The Scripps Research Institute	
VI-PL7-2	STRUCTURAL AND FUNCTIONAL ANALYSES OF INFLUENZA VIRUS RNA REPLICATION Juan Ortin ¹ , Patricia Resa-Infante ¹ , Nuria Jorba ¹ , Rocio Coloma ¹ , Maria Angeles Recuero-Checa ² , Noelia Zamarreno ¹ , Rocio Arranz ¹ , Jose M Valpuesta ¹ , Jose L Carrascosa ¹ , Jaime Martin-Benito ¹ , Oscar Llorca ² ¹ Centro Nacional De Biotecnologia (Csic), Spain, ² Centro De Investigaciones Biologicas (Csic)	

Friday, 16 September		9:00-10:00 Room A
VI-PL8 Virus and Functional Non-coding RNA		
Conveners: Paul Ahlquist USA Mikiko C Siomi Japan		
VI-PL8-1	MECHANISMS OF RNA-BASED ANTIVIRAL IMMUNITY IN PLANTS AND ANIMALS Shou-Wei Ding University of California, USA	
VI-PL8-2	ANTIVIRAL IMMUNITY IN DROSOPHILA: SYSTEMIC RNAI AND VIRAL SUPPRESSORES Raul Andino, Arabinda Nayak, Michel Tassetto, Mark Kunitomi Department of Microbiology and Immunology, University of California, USA	
Friday, 16 September		10:15-11:15 Room A
VI-PL9 Virus Host Interaction		
Conveners: Geoffrey L Smith UK Chieko Kai Japan		
VI-PL9-1	ALPHAV-BETA3-INTEGRIN COORDINATES THE IMMEDIATE CELL RESPONSE TO HERPES SIMPLEX VIRUS Gabriella Campadelli-Fiume Experimental Pathology, University of Bologna, Italy	
VI-PL9-2	NUCLEIC ACIDS SENSING BY INNATE IMMUNITY Shizuo Akira Laboratory of Host Defense, Wpi Immunology Frontier Research Center, Osaka University, Japan	

Symposium

Monday, 12 September		11:25-12:55 Room A
VI-SY1	Virus and Host Responses	
Convener: Klaus Frueh		USA
VI-SY1-1	ENTEROVIRUS-INDUCED MIR-146A CONTRIBUTES TO INHIBITION OF HOST INTERFERON RESPONSES BY TARGETING THE INTERFERON-ASSOCIATED PROTEINS, IRAK1 AND TRAF6 Bing-Ching Ho ¹ , Sung-Liang Yu ^{1,2,3} , Chuan-Liang Kao ^{1,3} , Sui-Yuan Chang ^{1,3} , Chun-Nan Lee ^{1,3} <i>¹Department of Clinical Laboratory Sciences and Medical Biotechnology, College of Medicine, National Taiwan University, Taiwan, ²NTU Center for Genomic Medicine, College of Medicine, National Taiwan University, ³Department of Laboratory Medicine, National Taiwan University Hospital</i>	
VI-SY1-2	MATRIX PROTEIN-SPECIFIC IMMUNOGLOBULIN A ANTIBODY NEUTRALIZES MEASLES VIRUS REPLICATION INSIDE EPITHELIAL CELLS Huimin Yan <i>Mucosal Immunity Research Group, The State Key Laboratory of Virology, Wuhan Institute of Virology, Chinese Academy of Sciences, China</i>	
VI-SY1-3	UBE2L6 DOWN-REGULATES INFLUENZA VIRUS REPLICATION Yoshitaka Shimota ^{1,2,3,4} , Toshikatsu Shibata ³ , Yutaka Sasaki ^{4,5} , Makoto Saito ^{4,5} , Kazumichi Kuroda ³ , Torahiko Tanaka ⁶ , Seiji Hongo ¹ , Satoshi Hayakawa ³ , Kazufumi Shimizu ^{3,4,5} <i>¹Department of Infectious Disease, Yamagata University Faculty of Medicine, Japan, ²Yamagata University Global COE Program, Yamagata University Faculty of Medicine, ³Division of Microbiology, Nihon University of Medicine, ⁴Open Research Center for Genome and Infections Disease Control, Nihon University of Medicine, ⁵Division of Obstetrics, Nihon University of Medicine, ⁶Division of Biochemistry, Nihon University of Medicine</i>	
VI-SY1-4	HEPATIC INFLAMMATORY AND APOPTOTIC GENE SIGNATURES OF DENGUE VIRUS INFECTION IDENTIFIED BY A SYSTEMS BIOLOGY APPROACH Angela L Rasmussen ¹ , Alec J Hirsch ² , Alexei L Krasnoselsky ¹ , Jessica Smith ² , David Purdy ¹ , Victoria S Carter ¹ , Jay A Nelson ² , Michael G Katze ¹ <i>¹Microbiology, University of Washington, USA, ²Molecular Microbiology and Immunology, Oregon Health Sciences University</i>	
Monday, 12 September		11:25-12:55 Room D+E
VI-SY2	Host Factors for Virus Replication	
Conveners: Amelia Nieto		Spain
Tetsuro Okuno		Japan
VI-SY2-1	HOST HEAT SHOCK PROTEIN 70 REGULATES PROPER ASSEMBLY OF THE REPLICASE COMPLEX OF A POSITIVE-STRAND RNA PLANT VIRUS Akira Mine ¹ , Takako Taniguchi ² , Masanori Kaido ¹ , Kazuyuki Mise ¹ , Hisaaki Taniguchi ² , Tetsuro Okuno ¹ <i>¹Graduate School of Agriculture, Kyoto University, Japan, ²Institute for Enzyme Research, University of Tokushima</i>	
VI-SY2-2	A NOVEL ROLE FOR HSP90 IN THE INITIATION OF PLANT VIRUS REPLICATION THROUGH SPECIFIC INTERACTION WITH VIRAL RNA Ying-Wen Huang ¹ , Chung-Chi Hu ¹ , Ming-Ru Liou ¹ , Ching-Hsiu Tsai ¹ , Na-Sheng Lin ² , Yau-Heiu Hsu ¹ <i>¹Graduate Institute of Biotechnology, National Chung Hsing University, Taiwan, ²Institute of Plant and Microbial Biology, Academia Sinica</i>	
VI-SY2-3	INVOLVEMENT OF PSF IN THE RECOGNITION OF HDV RNA PROMOTERS BY RNA POLYMERASE II Martin Pelchat <i>Biochemistry, Microbiology and Immunology, University of Ottawa, Canada</i>	

- VI-SY2-4 A DNA REPAIR PROTEIN NBS1 REGULATES MLV INTEGRATION SITE SELECTION**
Yasuteru Sakurai¹, Fumiaki Sato², Takeshi Fujiwara², Chizuko Hirano², Gozoh Tsujimoto³, Kenshi Komatsu⁴, Masao Matsuoka¹
¹Laboratory of Virus Control, Institute for Virus Research, Kyoto University, Japan, ²Department of Nanobio Drug Discovery, Graduate School of Pharmaceutical Sciences, Kyoto University, ³Department of Genomic Drug Discovery Science, Graduate School of Pharmaceutical Sciences, Kyoto University, ⁴Department of Genome Repair Dynamics, Radiation Biology Center, Kyoto University
- VI-SY2-5 HCLE PROTEIN INTERACTS WITH INFLUENZA VIRUS POLYMERASE AND IS NECESSARY FOR EFFICIENT VIRAL REPLICATION**
Amelia Nieto^{1,2}, Susana De Lucas^{1,2}, Alicia Perez-Gonzalez^{1,2}, Maite Perez-Cidoncha^{1,2}, Juan Ortin^{1,2}, Ariel Rodriguez^{1,2}
¹Centro Nacional de Biotecnología C.S.I.C. Madrid, Spain, ²Ciber de Enfermedades Respiratorias
- VI-SY2-6 MODIFICATION OF VIRAL GENOMIC RNA BY A TERMINAL REALIGN-AND-ELONGATION PROCESS ON INTERNAL TEMPLATE MOTIFS**
Peter Staeheli, Arnold Martin, Nadja Hoefs, Josefine Todewaldt, Urs Schneider
Virology, University of Freiburg, Germany

Monday, 12 September

11:25-12:55 Room C

VI-SY3 Virus Receptors

Conveners: Hisashi Arase *Japan*
Ayato Takada *Japan*

- VI-SY3-1 PORCINE AS AN INTERMEDIATE HOST OF INFLUENZA VIRUSES: PREDOMINANT NEU5AC2-6GAL COULD BE A SELECTIVE PRESSURE FOR INFLUENZA VARIANTS IN FAVOR OF HUMAN-TYPE RECEPTOR**
Yasuo Suzuki¹, Nongluk Sriwilaijaroen^{1,2}, Sachiko Kondo^{3,4}, Hirokazu Yagi³, Nobuhiro Takemae^{5,6}, Takehiko Saito^{5,6}, Hiroaki Hiramatsu¹, Koichi Kato^{3,4}
¹College of Life and Health Sciences, Chubu University, Japan, ²University Thammasat Univ., ³Nagoya City University, ⁴GLYENCE Co. Ltd., ⁵Thailand-Japan Zoonotic Dis. Collaboration Center, ⁶National Inst. Animal Health, NARO
- VI-SY3-2 STRUCTURAL BASIS OF VIRULENCE-ASSOCIATED D225G SUBSTITUTION RESULTING IN SIMILAR BINDING SPECIFICITY SHIFT IN 1918 AND 2009 PANDEMIC INFLUENZA HEMAGGLUTININ**
Yi Shi¹, Wei Zhang^{1,2}, Jianxun Qi¹, Qing Li¹, George Fu Gao^{1,2,3,4}
¹CAS Key Laboratory of Pathogenic Microbiology and Immunology, Institute of Microbiology, Chinese Academy of Sciences, China, ²Graduate University, Chinese Academy of Sciences, ³China-Japan Joint Laboratory of Molecular Microbiology and Molecular Immunology, Institute of Microbiology, Chinese Academy of Sciences, ⁴Research Network of Immunity and Health (rNIH), Beijing Institutes of Life Science, Chinese Academy of Sciences
- VI-SY3-3 COXSACKIEVIRUS A24 VARIANT USES O-LINKED GLYCOCONJUGATES WITH TERMINAL SIALIC ACID AS CELLULAR RECEPTORS ON HUMAN OCULAR CELLS**
Nitesh Mistry¹, Hirotoshi Inoue¹, Fariba Jamshidi¹, Rickard Storm¹, Yorihiro Nishimura², Hiroyuki Shimizu², Satoshi Koike³, Niklas Arnberg¹
¹Dept. of Virology, Umea Universitet, Sweden, ²Department of Virology II, National Institute of infectious Diseases, ³Tokyo Metropolitan Institute of Medicine Science
- VI-SY3-4 DEN2 STRAIN DERIVED FROM DHF PATIENT UTILIZES SDC2 FOR INFECTION IN ERYTHROID CELLS**
Kenta Okamoto¹, Muhareva Rawekiensya¹, Daisuke Kimura², Katsuyuki Yui², Mohammed Alimul Islam³, Futoshi Hasebe¹, Kouichi Morita¹
¹Department of Virology, Institute of Tropical Medicine, Japan, ²Department of Molecular Microbiology and Immunology, Nagasaki University, ³Department of Microbiology and Hygiene, Faculty of Veterinary Science, Bangladesh Agricultural University

VI-SY3-5 THE GD1A GLYCAN IS A CELLULAR RECEPTOR FOR ADENOVIRUSES CAUSING EPIDEMIC KERATOCONJUNCTIVITIS

Niklas Arnberg¹, Emma Nilsson¹, Rickard Storm¹, Johannes Bauer²,
 Susanne MC Johansson¹, Aivar Lookene³, Lars Frangsmyr¹, Simon Rinaldi⁴,
 Hugh J Willison⁴, Fatima Pedrosa Domellof⁵, Thilo Stehle²

¹Department of Clinical Microbiology, Umea University, Sweden, ²Interfaculty Institute of Biochemistry, University of Tuebingen, ³Department of Chemistry, Tallin University of Technology, ⁴Institute of Infection, Immunity and Inflammation, University of Glasgow, ⁵Departments of Clinical Sciences and Integrative Medical Biology, Umea University

VI-SY3-6 NEWLY IDENTIFIED VARICELLA-ZOSTER VIRUS (VZV) ENTRY RECEPTOR EXPRESSED IN HEMATOPOIETIC CELLS

Tadahiro Suenaga¹, Fuminori Arisawa¹, Yasuko Mori^{3,4}, Hisashi Arase^{1,2}

¹Department of Immunochimistry, Research Institute for Microbial Diseases, Osaka University, Japan, ²Immunochimistry, WPI Immunology Frontier Research Center, Osaka University, ³Division of Clinical Virology, Kobe University Graduate School of Medicine, ⁴Laboratory of Virology and Vaccinology, Department of Biomedical Research, National Institute of Biomedical Innovation

Monday, 12 September

11:25-12:55 Room F

VI-SY4 Viruses as Oncolytic Agents

Convener: Tomoki Todo Japan

VI-SY4-1 MUTATIONS IN THE GLYCOPROTEIN OF VESICULAR STOMATITIS VIRUS AFFECT CYTOPATHOGENICITY: POTENTIAL FOR ONCOLYTIC VIROTHERAPY

Valerie Janelle^{1,2}, Frederick Brassard², Pascal Lapierre¹, Laurent Poliquin^{1,2},
 Alain Lamarre^{1,2}

¹Immunovirology, INRS-Institut Armand-Frappier, Canada, ²Biomed Research Center, Department of Biology, UQAM

VI-SY4-2 MICRORNA REGULATION OF GLYCOPROTEIN B5R IN ONCOLYTIC VACCINIA VIRUS REDUCES VIRAL PATHOGENICITY WITHOUT IMPAIRING ITS ANTITUMOR EFFICACY

Mina Hikichi¹, Minoru Kidokoro², Hisatoshi Shida³, Hideaki Tahara¹,
 Takafumi Nakamura^{1,4}

¹Core Facility for Therapeutic Vectors, Institute of Medical Science, University of Tokyo, Japan, ²National Institute of Infectious Diseases, ³Institute for Genetic Medicine, Hokkaido University, ⁴PRESTO, Japan Science and Technology Agency

VI-SY4-3 ALTERED VIRAL TROPISM ON STEM CELLS AND SCID PATHOGENESIS BY S1 MUTATION OF ONCOLYTIC REOVIRUS

Manbok Kim¹, Garant Katy², Patrick Lee², Young-Seok Kim³, Randal N Johnston⁴

¹Kinomics-Based Anticancer Research Center, Korea Research Institute of Bioscience and Biotechnology, Korea, South, ²Dalhousie University, Dept of Microbiol & Immunol, ³Department of Radiation Oncology, Asan Medical Center, University of Ulsan, College of Medicine, ⁴University of Calgary, Dept of Biochem & Molec Biol

VI-SY4-4 TUMOUR VASCULATURE IS CRITICAL FOR VACCINIA VIRUS THERAPY OF PERITONEAL CARCINOMATOSIS

Kathryn Ottolino-Perry¹, Nan Tang², Renee Head², Calvin Ng², Fernando Angarita¹,
 Sergio Acuna¹, Ralph Dacosta³, J Andrea McCart^{1,2,4}

¹Institute of Medical Science, University of Toronto, Canada, ²Division of Experimental Therapeutics, Toronto General Research Institute, University Health Network, ³Department of Medical Biophysics, Ontario Cancer Institute, University Health Network, ⁴Division of General Surgery, Department of Surgery, Mount Sinai Hospital and University of Toronto

Monday, 12 September

11:25-12:55 Room H

VI-SY5 Vaccines

Convener: Duane J Gubler Singapore

VI-SY5-1 NEUTRALIZING EPITOPES OF INFLUENZA VIRUS HEMAGGLUTININ: TARGET FOR THE DEVELOPMENT OF A UNIVERSAL VACCINE AGAINST H5N1 LINEAGES

Fang He, Mookkan Prabakaran, Jimmy Kwang

Animal Health Biotechnology, Temasek Life Sciences Laboratory, Singapore

- VI-SY5-2 ELECTROPORATION OF LOW DOSES OF AN HIV-1 DNA VACCINE BASED ON AN ALPHAVIRUS REPLICON VECTOR EFFECTIVELY PRIMES CD8+ T CELLS PRIOR TO A HETEROLOGOUS BOOST**
Maria L Knudsen¹, Karl Ljungberg¹, Daniel X Johansson¹, Maria Kakoulidou¹, Tomas Hanke², Peter Liljestrom¹
¹Department of Microbiology, Tumor and Cell Biology, Karolinska Institutet, Sweden, ²MRC Human Immunology Unit, Weatherall Institute of Molecular Medicine, The John Radcliffe
- VI-SY5-3 SIDE-BY-SIDE COMPARISON OF A GENE-BASED SMALLPOX VACCINE (4POX) WITH MODIFIED VACCINIA ANKARA (MVA) IN NONHUMAN PRIMATES**
Joseph W Golden¹, Jay W Hooper¹, T.C Wu², Peter Loudon³
¹Molecular Virology, United States Army Medical Research Institute of Infectious Diseases, USA, ²Johns Hopkins University, ³Pfizer
- VI-SY5-4 CONTROLLING HENIPAVIRUS DISEASE AND TRANSMISSION THROUGH VACCINATION AND THERAPEUTICS**
Jackie A Pallister¹, Deborah J Middleton¹, Reuben Klein¹, Manabu Yamada², Jessica M Haining¹, Rachel L Robinson¹, Yan-Ru Feng³, Zhu Zhongyu^{4,5}, Dimitar S Dimitrov⁴, Christopher C Broder³, Lin-Fa Wang¹
¹Australian Animal Health Laboratory, CSIRO Livestock Industries, Australia, ²National Institute of Animal Health, ³Uniformed Services University, ⁴Protein Interactions Group, CCRNP, CCR, NCI-Frederick, National Institutes of Health, ⁵BRP, SAIC-Frederick, Inc.
- VI-SY5-5 DEVELOPMENT OF CHIKUNGUNYA VIRUS WITH A PROGRAMMED, ATTENUATED, CELL TYPE-RESTRICTED PHENOTYPE**
Ilya Frolov¹, Dal Young Kim¹, Svetlana Atasheva¹, Niall J Foy¹, Eryu Wang², Elena I Frolova¹, Scott C Weaver²
¹Microbiology, University of Alabama at Birmingham, USA, ²Pathology, University of Texas Medical Branch at Galveston
- VI-SY5-6 RECOMBINANT EBOLAVIRUS ANTIGENS ARE SAFE AND POTENT IMMUNOGENS FOR INDUCING CELLULAR AND HUMORAL IMMUNITY IN RODENTS AND NON-HUMAN PRIMATES AND PROVIDE PROTECTION AGAINST LETHAL LIVE VIRUS CHALLENGE**
Axel T Lehrer¹, Michael M Lieberman², Tom Humphreys³, Stephen Margosiak¹, Gary S Bignami¹, Teri-Ann S Wong¹, John M Dye⁴, Mary Kate Hart⁴, Ricardo Carrion⁵, Andrea Marzi⁶, Heinz Feldmann⁶
¹Panthera Biopharma, LLC, USA, ²Lieberman Consulting, ³University of Hawaii, ⁴US Army Medical Research Institute for Infectious Diseases, ⁵Texas Biomedical Research Institute, ⁶Laboratory of Virology, Division of Intramural Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health

Monday, 12 September

11:25-12:55 Room I

VI-SY6 Bioinformatics (Bridge between Divisions)

Conveners: Kimihito Ito *Japan*
 Takashi Gojobori *Japan*

- VI-SY6-1 THE CONFLUENCE OF INFORMATICS, GENOMICS AND BIOINFORMATICS APPROACHES WITH ADENOVIRUS BIOLOGY PROVIDES THE HIGH-RESOLUTION UNDERSTANDING OF NOVEL TYPES AND EMERGENT/RE-EMERGENT PATHOGENS**
Donald Seto¹, James Chodosh², David Dyer³, Morris S Jones⁴
¹Bioinformatics and Computational Biology, George Mason University, USA, ²Dept. of Ophthalmology Howe Laboratory, Massachusetts Eye and Ear Infirmary, ³Dept. of Microbiology and Immunology, University of Oklahoma Health Sciences, ⁴Viral and Rickettsial Disease Laboratory, California Dept. of Public Health
- VI-SY6-2 PAIRWISE SEQUENCE COMPARISON (PASC): A WEB TOOL FOR VIRUS CLASSIFICATION**
Yiming Bao, Vyacheslav Chetvernin, Yuri Kapustin, Tatiana Tatusova
 National Center for Biotechnology Information, National Institutes of Health, USA
- VI-SY6-3 A NOVEL BIOINFORMATICS STUDY OF INFLUENZA VIRUS GENOMES FOCUSING ON SEQUENCE DIFFERENCES BETWEEN STRAINS ISOLATED FROM DIFFERENT HOST SOURCES**
Yuki Iwasaki, Toshimichi Ikemura, Kennosuke Wada, Masae Itoh, Takashi Abe
 Nagahama Institute of Bio-Science and Technology, Japan

VI-SY6-4 VIRUSES SELECTIVELY MUTATE THEIR CD8+ T CELL EPITOPES - A LARGE SCALE IMMUNOMIC ANALYSIS

Yoram Louzoun, Tal Vider Shalit
Mathematics, Israel

VI-SY6-5 DETAILED ANALYSIS OF THE GENETIC BOTTLENECKS IN SINGLE-CELL INFECTIONS OF TOMATO MOSAIC VIRUS

Shuhei Miyashita^{1,2}, Kazuhiro Ishibashi², Hirohisa Kishino³, Masayuki Ishikawa²
¹Presto, Japan Science and Technology Agency (JST), Japan, ²National Institute of Agrobiological Sciences (NIAS), ³University of Tokyo

VI-SY6-6 UNDERESTIMATION OF THE PERSISTENCE OF HUMAN INFLUENZA A (H3N2) VIRUSES

Weifeng Shi¹, Michael J Carr², Linda M Dunford², Chaodong Zhu³, Fumin Lei³, Jun Yin¹, William W Hall², Desmond G Higgins¹
¹The Conway Institute, University College Dublin, Ireland, ²National Virus Reference Laboratory, University College Dublin, ³Institute of Zoology, Chinese Academy of Sciences

VI-SY6-7 GNARLED-TRUNK EVOLUTIONARY MODEL OF INFLUENZA A VIRUS HEMAGGLUTININ

Kimihiro Ito^{1,2}, Manabu Igarashi¹, Yutaka Miyazaki³, Teiji Murakami⁴, Sayaka Iida¹, Hiroshi Kida^{4,5,6,7}, Ayato Takada^{8,9}
¹Department of Bioinformatics, Hokkaido University Research Center for Zoonosis Control, Japan, ²PRESTO, Japan Science and Technology Agency (JST), ³Faculty of Liberal Arts and Sciences, Osaka University of Economics and Law, ⁴Hokkaido University Research Center for Zoonosis Control, ⁵Department of Disease Control, Graduate School of Veterinary Medicine, ⁶OIE Reference Laboratory for Highly Pathogenic Avian Influenza, ⁷SORST, Japan Science and Technology Agency (JST), ⁸Department of Global Epidemiology, Hokkaido University Research Center for Zoonosis Control, ⁹School of Veterinary Medicine, the University of Zambia

Monday, 12 September

14:30-16:00 Room A

VI-SY7 Orthomyxoviruses: Structure, Replication and Assembly

Conveners: Wendy S Barclay *UK*
Adolfo Garcia-Sastre *USA*

VI-SY7-1 INFLUENZA B VIRUS RNA POLYMERASE RECOGNIZES THE CAP STRUCTURE IN A MANNER DIFFERENT FROM OTHER CAP BINDING PROTEINS

Chitose Wakai¹, Kiyohisa Mizumoto^{2,3}, Kyosuke Nagata¹
¹Department of Infection Biology, Graduate School of Comprehensive Human Sciences, University of Tsukuba, Japan, ²Department of Biochemistry, School of Pharmaceutical Sciences, Kitasato University, ³Laboratory of Virology, Microbial Chemistry Research Center

VI-SY7-2 IDENTIFICATION OF A NOVEL CELLULAR PROTEIN INVOLVED IN INFLUENZA VIRUS GENOME TRAFFICKING

Atsushi Kawaguchi^{1,2,3}, Ken Matsumoto^{4,5}, Kyosuke Nagata¹
¹Department of Infection Biology, Graduate School of Comprehensive Human Sciences, University of Tsukuba, Japan, ²Graduate School of Infection Control Science, Kitasato University, ³JSPS Research Fellow, ⁴Laboratory of Cellular Biochemistry, RIKEN, ⁵PRESTO, Japan Sci. and Tech. Agency

VI-SY7-3 INFLUENZA A VIRUS INDUCES THE ACETYLATION OF HOST MICROTUBULES TO PROMOTE POLARIZED TRAFFICKING OF VIRAL COMPONENTS

Matloob Husain
Infectious Diseases Program, Lovelace Respiratory Research Institute, USA

VI-SY7-4 SPECIFIC RESIDUES IN THE 2009 SWINE-ORIGIN H1N1 INFLUENZA MATRIX PROTEIN DETERMINE SPHERICAL VIRION MORPHOLOGY AND EFFICIENCY OF VIRAL GROWTH

Kristy M Bialas, Emily Desmet, Toru Takimoto
Microbiology and Immunology, University of Rochester Medical Center, USA

VI-SY7-5 INFLUENZA VIRUS BUDDING IS NOT RESTRICTED BY HUMAN TETHERIN EXPRESSION BUT INFLUENZA VIRUS VIRUS-LIKE PARTICLES ARE TETHERIN RESTRICTED

Rie Watanabe¹, George P Leser², Robert A Lamb²
¹Veterinary Medicine, Tokyo University of Agriculture and Technology, Japan, ²Howard Hughes Medical Institute, Department of Molecular Biosciences, Northwestern University

VI-SY7-6 INFLUENZA POLYMERASE ACTIVITY IN PIG CELLS

Olivier Moncorge, Anna Cauldwell, Jason Long, Holly Shelton, Wendy S Barclay
Virology, Imperial College London, UK

Monday, 12 September

14:30-16:00 Room D+E

VI-SY8 Epstein - Barr Virus

Convener: Kenzo Takada Japan

VI-SY8-1 EX VIVO MODEL FOR EPSTEIN-BARR VIRUS PRIMARY INFECTION USING HUMAN TONSIL TISSUE EXPLANTS

Hiroshi Kimura¹, Kensei Gotoh², Seiji Maruo³, Kenzo Takada³, Seiko Iwata¹, Fumi Goshima¹, Yukihiro Nishiyama¹, Yoshinori Ito²

¹Department of Virology, Nagoya University Graduate School of Medicine, Japan, ²Department of Pediatrics, Nagoya University Graduate School of Medicine, ³Department of Tumor Virology, Institute for Genetic Medicine, Hokkaido University

VI-SY8-2 EPSTEIN-BARR VIRUS NUCLEAR ANTIGENS 3C AND 3A MAINTAIN LYMPHOBLASTOID CELL GROWTH BY REPRESSING P16 (INK4A) AND P14 (ARF) EXPRESSION

Seiji Maruo¹, Bo Zhao², Eric Johannsen², Elliott Kieff², James Zou², Kenzo Takada¹

¹Institute for Genetic Medicine, Hokkaido University, Japan, ²Brigham and Women's Hospital and Harvard Medical School

VI-SY8-3 LATENT EXPRESSION OF BNLF2A AND BNLF2B IN EBV-INFECTED CELLS AND THEIR ONCOGENIC ROLES

Hironori Yoshiyama¹, Asuka Nanbo², Masahisa Jinushi¹, Kenzo Takada³

¹Research Center for Infection-Associated Cancer, Institute for Genetic Medicine, Hokkaido University, Japan, ²Department of Immunology, Graduate School of Pharmaceutical Sciences, Hokkaido University, ³Department of Tumor Virology, Institute for Genetic Medicine, Hokkaido University

VI-SY8-4 INVOLVEMENT OF JUN DIMERIZATION PROTEIN 2 (JDP2) IN THE MAINTENANCE OF EPSTEIN-BARR VIRUS LATENCY

Takayuki Murata, Tatsuya Tsurumi

Division of Virology, Aichi Cancer Center Research Institute, Japan

VI-SY8-5 EBV-ENCODED MICRO RNAS PROMOTE CELL CYCLE PROGRESSION AND PREVENT APOPTOSIS OF PRIMARY HUMAN B CELLS

Eri Seto¹, Andreas Moosmann², Sebastian Groemminger³, Nicole Walz⁴, Adam Grundhoff⁴, Wolfgang Hammerschmidt⁵

¹Department of Molecular Immunology and Inflammation, Research Institute, National Center for Global Health and Medicine, Japan, ²Clinical Cooperation Group Molecular Oncology, Ludwig Maximilians-University Munich and Helmholtz Zentrum Muenchen, German Research Center for Environment and Health, ³Institute for Clinical and Molecular Biology, Helmholtz Zentrum Muenchen, German Research Center for Environment and Health, ⁴Heinrich-Pette-Institute for Experimental Virology and Immunology, ⁵Department of Gene Vectors, Helmholtz Zentrum Muenchen, German Research Center for Environmental Health

VI-SY8-6 ANATOMY OF EPSTEIN-BARR VIRUS GENOME MANUFACTURING PLANT

Atsuko Sugimoto^{1,2}, Yukihiro Nishiyama², Tatsuya Tsurumi¹

¹Division of Virology, Aichi Cancer Center Research Institute, Japan, ²Department of Virology, Nagoya University Graduate School of Medicine

Monday, 12 September 14:30-16:00 Room C

VI-SY9 Parvoviruses

Conveners: Arun Srivastava *USA*
Keiya Ozawa *Japan*

VI-SY9-1 ISOLATION AND CHARACTERIZATION OF CANINE PARVOVIRUS TYPE 2C (CPV-2C) FROM SYMPTOMATIC VACCINATED DOGS

Rodrigo E Puentes¹, Natasha Eliopulos¹, Ruben Perez², Gabriela Franco¹, Katia Sosa², Pablo Bianchi², Agustin Furtado¹, Silvia Hubner³, Paulo Esteves⁴

¹Microbiological Science, Facultad de Veterinaria - Universidad de la Republica Oriental del Uruguay, Uruguay, ²Genetic section, Facultad de Ciencias - Universidad de la Republica Oriental del Uruguay,

³Faculdade de Veterinaria - Universidade Federal de Pelotas - RS, ⁴EMBRAPA - Empresa Brasileira de Pesquisas Agropecuarias - SC

VI-SY9-2 CPG DISTRIBUTION IN PARVOVIRUSES AND THE METHYLATION PATTERN OF PPV

Zoltan Zadori, Zsuzsa Veres, Renata Toth

Veterinary Medical Research Institute, Hungarian Academy of Sciences, Hungary

VI-SY9-3 COMPLETE NUCLEOTIDE SEQUENCE ANALYSIS OF A KOREAN STRAIN OF HEPATOPANCREATIC PARVOVIRUS (HPV) FROM FENNEROPENAEUS CHINENSIS

Tae-Jin Choi¹, Subbiah Jeeva¹, Ju Hee Jung¹, Yong Seok Lee²

¹Department of Microbiology, Pukyong National University, Korea, South, ²Department of Parasitology, Inje University

VI-SY9-4 PARVOVIRUS B19 (B19V) INFECTION AMONG PATIENTS WITH SICKLE-CELL DISEASE, THALASSEMIA AND HEALTHY BLOOD DONORS: SEROPREVALENCE, DISEASE BURDEN AND PHYLOGENETIC ANALYSIS

Svetoslav N Slavov¹, Simone Kashima^{1,2}, Ana Cristina S Pinto¹, Dimas T Covas^{1,3}

¹Regional Blood Center of Ribeirão Preto, Faculty of Medicine in Ribeirão Preto, University of São Paulo, Brazil, ²Faculty of Pharmaceutical Sciences in Ribeirão Preto, University of São Paulo-USP, ³Faculty of Medicine in Ribeirão Preto-FMRP, University of São Paulo-USP

VI-SY9-5 PARVOVIRUS B19 IGM ANTIBODY IN CHILDREN WITH MACULOPAPULAR RASH AND FEVER IN SOUTHERN NIGERIA

Johnson A Adeniji¹, Adedayo O Faneye¹, Judith M Heubeshen²

¹Department of Virology, Department of Virology, College of Medicine University of Ibadan, Nigeria, ²Institute of Immunology, Laboratoire Nationale/Centre de recherche Public-Sante

Monday, 12 September 14:30-16:00 Room F

VI-SY10 Bunyaviruses

Conveners: Richard Elliott *UK*
Stuart T Nichol *USA*

VI-SY10-1 EUROPEAN MOUNTAIN ASH RINGSPOT ASSOCIATED VIRUS (EMARAV): GENOME ORGANISATION AND BIOLOGICAL PROPERTIES OF A NOVEL MULTIPARTITE NEGATIVE STRAND RNA PLANT VIRUS

Hans-Peter Muehlbach, Nicole Mielke-Ehret, Nanette Schlattermund, Joscha Thoma, Inga Ludenberg, Belinda Ikogho, Mathias Klode

Department of Biology, University of Hamburg, Germany

VI-SY10-2 ATTENUATION OF BUNYAMWERA VIRUS REPLICATION BY TARGETED MUTAGENESIS OF GENOMIC UTRS AND EVOLUTION OF VIRAL POLYMERASE TO REGAIN FITNESS

Beryl Mazel-Sanchez, Richard M Elliott

School of Biology, University of St Andrews, UK

VI-SY10-3 HANTAVIRUS NUCLEOCAPSID PROTEIN (N) FACILITATES BOTH TRANSCRIPTION AND TRANSLATION INITIATION OF VIRAL MRNA

Mohammad A Mir, Erdong Cheng, Marry Ashley Rimmer, Absarul Haque,

Islam T.M Hussein, Sheema Fnu

Microbiology, Molecular Genetics and Immunology, University of Kansas School of Medicine, USA

VI-SY10-4 INDUCTION OF CASPASE ACTIVATION AND CLEAVAGE OF THE VIRAL NUCLEOCAPSID PROTEIN IN DIFFERENT CELL TYPES DURING CRIMEAN-CONGO HAEMORRHAGIC FEVER VIRUS INFECTION

Helen Karlberg^{1,2}, Yee-Joo Tan³, Ali Mirazimi^{1,2}

¹Swedish Institute for Communicable Disease Control, Sweden, ²MTC/ karolinska Institute, ³Department of Microbiology, Yong Loo Lin School of Medicine, National University of Singapore

VI-SY10-5 NSS-MEDIATED PKR DEGRADATION SUPPORTS THE DEVELOPMENT OF NEUTRALIZING ANTIBODIES BY RIFT VALLEY FEVER VIRUS MP-12 VACCINE STRAIN

Tetsuro Ikegami^{1,3,4}, Olga Lihoradova¹, Birte Kalveram¹, Terence Hill², Chien-Te K Tseng^{2,3,4}

¹Department of Pathology, University of Texas Medical Branch, USA, ²Department of Microbiology and Immunology, University of Texas Medical Branch, ³The Sealy Center for Vaccine Development, University of Texas Medical Branch, ⁴The Center for Biodefense and Emerging Infectious Diseases, University of Texas Medical Branch

Monday, 12 September

14:30-16:00 Room I

VI-SY11 Alpha- and Rubiviruses

Convener: Diane E Griffin

USA

VI-SY11-1 ALPHAVIRUS CLEARANCE FROM THE CENTRAL NERVOUS SYSTEM

Diane E Griffin, Talibah U Metcalf

Molecular Microbiology and Immunology, Johns Hopkins Bloomberg School of Public Health, USA

VI-SY11-2 CONSERVATION OF RNA PACKAGING SIGNALS IN EVOLUTIONARILY DIVERSE ALPHAVIRUSES

Andrew E Firth¹, Dal Young Kim², Svetlana Atasheva², Elena I Frolova², Ilya Frolov²

¹Department of Pathology, University of Cambridge, UK, ²Department of Microbiology, University of Alabama at Birmingham

VI-SY11-3 PLASMID-BASED SHRNA EXPRESSION TARGETING CHIKUNGUNYA E1 AND NSP1 GENES EFFECTIVELY INHIBITS CHIKUNGUNYA VIRUS REPLICATION

Justin Jang Hann Chu, Shirley Lam, Mary Ng, Karen Caiyun Chen

Microbiology, National University of Singapore, Singapore

VI-SY11-4 THE PLASMA MEMBRANE IS THE GENOME REPLICATION SITE FOR RUBELLA VIRUS

Yoshio Mori, Kiyoko Okamoto, Masafumi Sakata, Noriyuki Otsuki, Hitoshi Abo, Makoto Takeda

Department of Virology 3, National Institute of Infectious Diseases, Japan

VI-SY11-5 REGULATION OF PROGRAMMED CELL DEATH BY THE RUBELLA VIRUS CAPSID PROTEIN

Steven D Willows¹, Carolina S Ilkow¹, **Tom C Hobman**^{1,2}

¹Cell Biology, University of Alberta, Canada, ²Li Ka Shing Institute of Virology

VI-SY11-6 THE NEW WORLD AND OLD WORLD ALPHAVIRUSES DEVELOPED FUNDAMENTALLY DIFFERENT MECHANISMS OF INTERFERENCE WITH ANTIVIRAL RESPONSE

Elena I Frolova, Sergey Kulemzin, Ivan Akhrymuk, Ilya Frolov

Microbiology, University of Alabama at Birmingham, USA

Monday, 12 September

16:30-18:00 Room A

VI-SY12 Herpes (Simplex) Viruses

Conveners: Yasushi Kawaguchi

Japan

Tomoki Todo

Japan

VI-SY12-1 REGULATION OF HERPES B VIRUS DNA POLYMERASE EXPRESSION BY MICROPROCESSOR

Anthony Griffiths^{1,2}, Melanie A Amen^{1,2}, Mallory E Harden¹

¹Virology and Immunology, Texas Biomedical Research Institute, USA, ²Graduate Program in Microbiology and Immunology, University of Texas Health Science Center San Antonio

- VI-SY12-2 PHOSPHOPROTEOMIC ANALYSIS REVEALS AN HSV-1 KINASE-MEDIATED PHOSPHORYLATION EVENT INVOLVED SPECIFICALLY IN THE REGULATION OF VIRAL NEUROVIRULENCE**
Akihisa Kato¹, Masaaki Oyama¹, Hiroko Kozuka-Hata², Takahiko Imai², Yasushi Kawaguchi¹
¹Division of Viral Infection, Department of Infectious Disease Control, International Research Center for Infectious Diseases, The Institute of Medical Science, The University of Tokyo, Japan, ²Medical Proteomics Laboratory, The Institute of Medical Science, The University of Tokyo
- VI-SY12-3 PREDNISOLONE SUPPRESSES HUMAN HERPES SIMPLEX VIRUS (HSV)-1 REPLICATION IN VITRO**
Tsunehisu Nagamori, Shin Koyano
 Department of Pediatrics, Asahikawa Medical University, Japan
- VI-SY12-4 ANTIHERPES ACTIVITY OF THE CARDENOLIDES GLUCOEVATROMONOSIDE AND CONVALLATOXIN**
Caroline Rigotto¹, Annelise de Carvalho¹, Jessica W Bertol², Wolfgang Kreis³, Celia RM Barardi², Fernao C Braga⁴, Claudia MO Simoes¹
¹Department of Pharmaceutical Sciences, Federal University of Santa Catarina, Brazil, ²Department of Microbiology, Immunology and Parasitology, Federal University of Santa Catarina, ³Friedrich Alexander Universitat, Erlangen Nurnberg, ⁴Departament of Pharmaceuticals Products, Federal University of Minas Gerais
- VI-SY12-5 NON-MUSCLE MYOSIN HEAVY CHAIN IIB ASSOCIATES WITH HERPES SIMPLEX VIRUS 1 ENVELOPE GLYCOPROTEIN B AND MEDIATES VIRAL ENTRY**
Jun Arai^{1,2}, Yasushi Kawaguchi¹
¹International Research Center for Infectious Diseases, The Institute of Medical Science, University of Tokyo, USA, ²Present adress; Department of Biochemistry, University of Utah
- VI-SY12-6 THE ANALYSIS OF THE HOST SIDE FACTOR PARTICIPATING IN LATENT INFECTION PSEUDORABIES VIRUS REACTIVATION BY THE DNA ARRAY**
Seiichi Tanaka, Kazuaki Mannen
 Research Promotion Project, Oita University, Japan

Monday, 12 September

16:30-18:00 Room D+E

VI-SY13 HTLV and Animal Retroviruses

Conveners: Jonathan P Stoye UK
Toshiki Watanabe Japan

- VI-SY13-1 SIMIAN RETROVIRUS-4-ASSOCIATED INFECTIOUS THROMBOCYTOPENIA IN JAPANESE MACAQUES**
Tomoyuki Yoshida, Munehiro Okamoto, Hirofumi Akari, Juri Suzuki, Takako Miyabe-Nishiwaki, Toshiyuki Hayakawa, Hiroo Imai, Atsushi Matsui, Akino Watanebe, Akihisa Kaneko, Hirohisa Hirai
 Center for Human Evolution Modeling Research, Primate Research Institute (PRI), Kyoto University, Japan
- VI-SY13-2 INFECTION OF DEFECTIVE VIRUS CORRELATED WITH THE INDUCTION OF CD25 POSITIVE CD4 T-CELL DURING EARLY PHASE OF INFECTION IN HUMANIZED MOUSE MODEL**
Takaharu Ueno, Kenta Tezuka, Runze Xun, Mami Tei, Masakazu Tanaka, Norihiro Takenouchi, Jun-Ichi Fujisawa
 Dept. of Microbiology, Kansai Medical University, Japan
- VI-SY13-3 UBIQUITIN-SPECIFIC PEPTIDASE 20 TARGETS HTLV-1 TAX AND NEGATIVELY REGULATES NF- κ B PATHWAY**
Junichiro Yasunaga¹, Frank C Lin¹, Xiongbin Lu², Kuan-Teh Jeang¹
¹Laboratory of Molecular Microbiology, NIAID, NIH, Japan, ²University of Texas MD Anderson Cancer Center

VI-SY13-4 OPPOSITE EFFECT OF VALPROATE ON TAX AND HBZ EXPRESSION IN T-LYMPHOCYTES FROM HTLV-1 ASYMPTOMATIC CARRIERS AND HAM/TSP PATIENTS

Raymond Cesaire¹, Gildas Belrose¹, Antoine Gross², Stephane Olindo³, Agnes Lezin¹, Maryvonne Dueymes¹, Didier Smadja³, Yuetsu Tanaka⁴, Luc Willems⁵, Jean-Michel Mesnard², Jean-Marie Peloponese²

¹Virology and Immunology Department and EA 4537, University Hospital of Fort-de-France, France, ²CEAPBS, CNRS UMR 5236, University of Montpellier 1 and 2, ³Department of Neurology and EA 4537, University Hospital of Fort-de-France, ⁴Department of Immunology, Graduate School and Faculty of Medicine, University of the Ryukyus, ⁵Cellular and Molecular Biology, Agro-Bio Tech

VI-SY13-5 NOVEL ESCAPE MUTANTS SUGGEST AN EXTENSIVE TRIM5 α BINDING SITE SPANNING THE ENTIRE OUTER SURFACE OF THE MURINE LEUKAEMIA VIRUS CAPSID PROTEIN

Sadayuki Okura¹, David C Goldstone², Melvyn W Yap¹, Kate Holden-Dye¹, Ian A Taylor², Jonathan P Stoye¹

¹Division of Virology, MRC National Institute for Medical Research, UK, ²Division of Molecular Structure, MRC National Institute for Medical Research

Monday, 12 September

16:30-18:00 Room C

VI-SY14 Baculoviruses

Convener: Peter J Krell

Canada

VI-SY14-1 REGIONS OF ACMNPV LATE EXPRESSION FACTOR 3 INVOLVED IN PROTEIN-PROTEIN INTERACTIONS

Eric B Carstens, Kelsey Downie, Gbolagade Adetola
Microbiology and Immunology, Queen's University, Canada

VI-SY14-2 TARGETING OF P143 GENE BY MIRNA IS CRUCIAL FOR THE PROPER INFECTION OF BACULOVIRUS IN INSECT CELLS

Yu-Chan Chao, Yueh-Lung Wu, Carol P Wu
Institute of Molecular Biology, Academia Sinica, Taiwan

VI-SY14-3 CO-LOCALIZATION OF THE NUCLEOPOLYHEDROVIRUS ACMNPV ME53 WITH GP64 AND VP39 AT THE INFECTED CELL MEMBRANE

Jondavid G de Jong¹, David A Theilman², Basil M Arif³, Peter J Krell¹
¹Molecular and Cellular Biology, University of Guelph, Canada, ²Pacific Agri-Food Research Centre, Agriculture and Agri-Food, ³Great Lakes Forestry Research Centre, Canadian Forest Service

VI-SY14-4 EFFECTS OF THE HETEROLOGOUS V-CHIA AND V-CATH EXPRESSION IN ANTICARSIA GEMMATALIS LARVAE INFECTED BY ANTICARSIA GEMMATALIS MULTIPLE NUCLEOPOLYHEDROVIRUS(AGMNPV) RECOMBINANTS

Anabele A Lima¹, Bergmann M Ribeiro²
¹Brasilia University Medical School - Graduate Program in Molecular Pathology, University of Brasilia, Brazil, ²Department of Cell Biology, University of Brasilia

VI-SY14-5 COMPARATIVE GENOME SEQUENCE ANALYSIS OF ANTHERAEA PERNYI NUCLEOPOLYHEDROVIRUS ISOLATES

Jun Kobayashi^{1,2}, Kuni Sasaki¹, Yasuhiro Tsuda¹, Mio Katsuki¹, Hiroshi Mitsutake², Yuanjiao Huang³, Xueying Wang⁴
¹Faculty of Agriculture, Yamaguchi University, Japan, ²The United Graduate School of Agricultural Sciences, Tottori University, ³Guangxi Medical University, ⁴Shenyang Agricultural University

VI-SY14-6 INDUCTION OF IFN BY INOCULATION OF RECOMBINANT BACULOVIRUS IN MOUSE EMBRYONIC FIBROBLASTS SUPPRESSES TRANSGENE EXPRESSION

Akinori Ninomiya, Takayuki Abe, Yoshiharu Matsuura
Department of Molecular Virology, Research Institute for Microbial Diseases, Osaka University, Japan

Monday, 12 September		16:30-18:00 Room F
VI-SY15 Plant Virus-Vector Interactions		
Conveners: Anna E Whitfield USA Shinya Tsuda Japan		
VI-SY15-1	DOES CANNIBALISM IN ACYRTHOSIPHON PISUM TRANSMIT PLANT VIRUSES HORIZONTALLY? Hussein Alkhedir, Petr Karlovsky, Stefan Vidal Georg-August-University, Department of Crop Sciences, Germany	
VI-SY15-2	VECTOR TRANSMISSION OF A NOVEL TYMOVIRUS ISOLATED FROM MILKWEED (ASCLEPIAS VIRIDIS) IN THE TALLGRASS PRAIRIE PRESERVE OF OKLAHOMA Akhtar Ali, Michelle Miller, Hussain Shah Department of Biological Science, The University of Tulsa, USA	
VI-SY15-3	THE ATTACHMENT OF MELON NECROTIC SPOT VIRUS PARTICLES TO THE ZOOSPORES OF OLPIDIUM BORNOVANUS IS INVOLVED IN COMPATIBILITY WITH FUNGAL VECTOR AND FUNGAL TRANSMISSIBILITY Takehiro Ohki ¹ , Tomofumi Mochizuki ² , Ayami Kanda ³ , Takahide Sasaya ¹ , Shinya Tsuda ¹ ¹ National Agriculture and Food Research Organization, Japan, ² Graduate School of Life and Environmental Science, Osaka Prefecture University, ³ Kochi university	
VI-SY15-4	EVIDENCE OF RECOVERY TO TSVW INFECTION IN INFECTED INDIVIDUALS OF FRANKLINIELLA OCCIDENTALIS Massimo Turina ¹ , Giulia Mautino ² , Marina Ciuffo ¹ , Luciana Tavella ² ¹ IVV-CNR Torino, Italy, ² DIVAPRA- University of Torino	
VI-SY15-5	TRITROPHIC INTERACTIONS BETWEEN TOSPOVIRUS, THRIPS AND ARABIDOPSIS Hiroshi Abe ¹ , Yasuhiro Tomitaka ² , Shigemi Seo ³ , Tamito Sakurai ⁴ , Soichi Kugimiya ⁵ , Takeshi Shimoda ² , Shinya Tsuda ² , Masatomo Kobayashi ¹ ¹ RIKEN Bioresource Center, Japan, ² National Agricultural Research Center, ³ National Institute of Agrobiological Sciences, ⁴ National Agricultural Research Center for Tohoku Region, ⁵ National Institute for Agro-Environmental Sciences	
VI-SY15-6	ANALYSIS OF THE FRANKLINIELLA OCCIDENTALIS PROTEOME AND IDENTIFICATION OF DIFFERENTIALLY EXPRESSED PROTEINS IN RESPONSE TO TOMATO SPOTTED WILT VIRUS INFECTION Anna E Whitfield, Ismael E Badillo-Vargas, Dorith Rotenberg Plant Pathology, Kansas State University, USA	
Monday, 12 September		16:30-18:00 Room H
VI-SY16 Filoviruses		
Convener: Ayato Takada Japan		
VI-SY16-1	EBOLAVIRUS IS INTERNALIZED INTO HOST CELLS VIA MACROPINOCYTOSIS IN A VIRAL GLYCOPROTEIN-DEPENDENT MANNER Asuka Nanbo ¹ , Masaki Imai ² , Shinji Watanabe ³ , Gabriele Neumann ² , Peter Halfmann ² , Yoshihiro Kawaoka ^{2,3,4,5,6} ¹ Graduate School of Pharmaceutical Sciences, Hokkaido University, Japan, ² Influenza Research Institute, Department of Pathological Sciences, University of Wisconsin-Madison, ³ ERATO Infection-Induced Host Responses Project, Japan Science and Technology Agency, ⁴ Division of Zoonosis, Department of Microbiology and Infectious Diseases, Graduate School of Medicine, Kobe University, ⁵ Division of Virology, Department of Microbiology and Immunology, Institute of Medical Science, University of Tokyo, ⁶ International Research Center for Infectious Diseases, Institute of Medical Science, University of Tokyo	
VI-SY16-2	CATHEPSIN B & L ARE NOT NECESSARY FOR EBOLA VIRUS REPLICATION Andrea Marzi ¹ , Thomas Reinheckel ^{2,3} , Heinz Feldmann ¹ ¹ Laboratory of Virology, Division of Intramural Research, National Institute of Allergy and Infectious Diseases, National Institute of Health, USA, ² Institute of Molecular Medicine and Cell Research, Albert-Ludwigs-University, ³ Center for Biological Signaling Studies (BIOSS), Albert-Ludwigs-University	

VI-SY16-3 ENZYME-LINKED IMMUNOSORBENT ASSAY FOR THE DETECTION OF FILOVIRUS SPECIES-SPECIFIC ANTIBODIES

Eri Nakayama¹, Ayaka Yokoyama¹, Hiroko Miyamoto¹, Manabu Igarashi², Noriko Kishida³, Keita Matsuno¹, Andrea Marzi⁴, Heinz Feldmann⁴, Kimihito Ito², Masayuki Saijo⁵, Ayato Takada¹

¹Department of Global Epidemiology, Hokkaido University Research Center for Zoonosis Control, Japan,

²Department of Bioinformatics, Hokkaido University Research Center for Zoonosis Control, ³Laboratory of Influenza Virus Surveillance, Center for Influenza Virus Research, National Institute of Infectious Diseases,

⁴Laboratory of Virology, Division of Intramural Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rocky Mountain Laboratories, ⁵Department of Virology 1, National Institute of Infectious Diseases

VI-SY16-4 THE DETECTION OF RESTON EBOLAVIRUS ANTIBODIES IN WILD BATS IN THE PHILIPPINES

Satoshi Taniguchi^{1,2}, Shumpei Watanabe^{1,3}, Koichiro Iha^{1,2}, Shuetsu Fukushi¹, Tetsuya Mizutani^{1,3}, Masayuki Saijo¹, Ichiro Kurane¹, Shigeru Kyuwa², Hiroomi Akashi³, Yasuhiro Yoshikawa², Shigeru Morikawa^{1,2}

¹Department of Virology 1, National Institute of Infectious Diseases, Japan, ²Department of Biomedical Science, Graduate School of Agricultural and Life Sciences, University of Tokyo, ³Department of Veterinary Microbiology, Graduate School of Agricultural and Life Sciences, University of Tokyo

VI-SY16-5 INACTIVATED OR LIVE-ATTENUATED BIVALENT VACCINES THAT CONFER PROTECTION AGAINST RABIES AND EBOLA VIRUSES

Matthias J Matthias¹, Joseph E Blaney², Christoph Wirblich¹, Amy B Papaneri², Reed F Johnson², Carey J Meyers¹, Michael R Holbrook^{3,4}, Alexander N Freiberg^{4,5}, John G Bernbaum³, Peter B Jahrling^{1,3}, Jason Paragas¹

¹Microbiology and Immunology, Thomas Jefferson University, USA, ²Emerging Viral Pathogens Section, NIAID, NIH, ³Integrated Research Facility, NIAID, NIH, ⁴Department of Pathology, University of Texas Medical Branch, ⁵Galveston National Laboratory, University of Texas Medical Branch

VI-SY16-6 PRODUCTIVE REPLICATION OF EBOLA VIRUS IS REGULATED BY THE C-ABL1 TYROSINE KINASE

Mayra Garcia¹, Arik Cooper¹, Wei Shi¹, William Bornmann², Daniel Kalman³, Gary J Nabel¹

¹Vaccine Research Center, NIAD, NIH, USA, ²Organic Chemistry Section, M.D. Anderson Cancer Center, University of Texas, ³Department of Pathology and Laboratory Medicine, Emory University

Monday, 12 September

16:30-18:15 Room I

VI-SY17 Arenaviruses

Conveners: Sean PJ Whelan USA
Shigeru Morikawa Japan

VI-SY17-1 IMPACT OF Z PROTEIN L-DOMAIN ON LCMV PROPAGATION

Shuzo Urata, Juan C de la Torre

Dept. of Emerging Infectious Disease, Institute of Tropical Medicine, Nagasaki University, Japan

VI-SY17-2 IDENTIFICATION AND CHARACTERIZATION OF A UNIQUE LASSA VIRUS STRAIN FROM MALI

David Safronetz, Heinz Feldmann

Laboratory of Virology, NIAID/NIH, USA

VI-SY17-3 SURVEILLANCE AND PHYLOGENETIC ANALYSIS OF A NOVEL ARENAVIRUS IN ZAMBIA

Akihiro Ishii^{1,2}, Yuka Thomas^{1,2}, Ladslav Moonga², Ichiro Nakamura^{1,2}, Aiko Ohnuma¹, Bernard Hang'Ombe², Ayato Takada^{1,2,3}, Aaron Mweene², Hirofumi Sawa^{1,2,3}

¹Research Center for Zoonosis Control, Hokkaido University, Japan, ²School of Veterinary Medicine, University of Zambia, ³Global COE Program for Zoonosis Control, Hokkaido University

VI-SY17-4 ARENAVIRUS NUCLEOPROTEIN CHIMERAS IDENTIFY MINIMAL AMINO ACID RESIDUES THAT IMPART ANTI-INTERFERON ACTIVITY IN THE NUCLEOPROTEIN OF TACARIBE VIRUS

Oscar A Negrete, Carol Kozina, Dianna Maar, Brooke Harmon, Joanne Volponi, Catherine Branda, Bryan Carson

Sandia National Laboratories, USA

VI-SY17-5 STUDIES ON THE RECEPTOR USAGE OF LUJO VIRUS, A NOVEL PATHOGENIC ARENAVIRUS

Mike Flint, Laura K McMullan, Eric Bergeron, Cesar G Albarino, Christina F Spiropoulou
Viral Special Pathogens Branch, Centers for Disease Control and Prevention, USA

VI-SY17-6 STRUCTURAL AND FUNCTIONAL REQUIREMENTS FOR THE INITIATION OF VESICULAR STOMATITIS VIRUS RNA SYNTHESIS

Sean P. J Whelan¹, Philip J Kranzusch¹, Bo Liang¹, Benjamin Morin¹, Amal A Rahmeh¹, Geri Tekes¹, Andreas Schenck², Thomas Walz^{2,3}

¹*Microbiology & Molecular Genetics, Harvard Medical School, USA*, ²*Department of Cell Biology, Harvard Medical School*, ³*Howard Hughes Medical Institute*

Tuesday, 13 September		11:25-12:55 Room A
VI-SY18 Viruses and Innate Immunity		
Conveners: Thomas Stamminger <i>Germany</i> Takashi Fujita <i>Japan</i>		
VI-SY18-1	THE VIRAL NUCLEOPROTEIN DETERMINES INFLUENZA A VIRUS ESCAPE FROM MXA RESTRICTION Otto A Haller, Petra Zimmermann, Benjamin Maenz, Martin Schwemmle, Georg Kochs <i>Department of Virology, Institute for Medical Microbiology & Hygiene, University Medical Center Freiburg, University of Freiburg, Germany</i>	
VI-SY18-2	INHIBITION OF TYPE I INTERFERON PRODUCTION BY INFLUENZA VIRAL NS1 AND HOST CELLULAR HNRNP K Masaki Mibayashi ¹ , Adolfo Garcia-Sastre ^{1,2,3} ¹ Department of Microbiology, Mount Sinai School of Medicine, USA, ² Department of Medicine, Division of Infectious Diseases, Mount Sinai School of Medicine, ³ Global Health and Emerging Pathogens Institute, Mount Sinai School of Medicine	
VI-SY18-3	REGULATION OF ACTIN DYNAMICS BY INNATE IMMUNE EFFECTOR PROTEIN KINASE R CONTROL OF GELSOLIN ACTIVITY Bryan R Williams ¹ , Anthony J Sadler ¹ , Aaron T Irving ¹ , Hiroyuki Morimoto ² ¹ Center for Cancer Research, Monash Institute of Medical Research, Australia, ² Department of Anatomy School of Medicine University of Occupational and Environmental Health Fukuoka	
VI-SY18-4	VIRAL REPLICATION AND ITS DETECTION BY RIG-I-LIKE RECEPTORS: FORMATION OF RIG-I GRANULES AND SIGNAL TRANSDUCTION THROUGH MITOCHONDRION Takashi Fujita <i>Department of Molecular Genetics, Institute for Virus Research, Kyoto University, Japan</i>	
VI-SY18-5	INHIBITION OF APOPTOSIS AND NUCLEAR FACTOR-KAPPA B ACTIVATION BY VACCINIA VIRUS PROTEIN N1 OCCUR VIA DISTINCT BINDING SURFACES AND MAKE DIFFERENT CONTRIBUTIONS TO VIRULENCE Geoffrey L Smith ¹ , Carlos Maluquer de Motes ¹ , Samantha Cooray ¹ , Keiran McGourty ¹ , Stephen C Graham ² , Hongwei Ren ¹ , Mohammad W Bahar ² , David I Stuart ^{2,3} , Jonathan M Grimes ² ¹ Department of Virology, Faculty of Medicine, Imperial College London, UK, ² The Division of Structural Biology, Wellcome Trust Centre for Human Genetics, University of Oxford, ³ 3 Science Division, Diamond Light Source Ltd., Diamond House, Harwell Science and Innovation Campus	
VI-SY18-6	INTERACTION BETWEEN HOST AND VIRUS DURING ACTIVATION OF INNATE IMMUNITY Souichi Shiratori ^{1,2} , Masahiro Imamura ² , Akinori Takaoka ¹ ¹ Division of Signaling in Cancer and Immunology, Institute for Genetic Medicine, Hokkaido University, Japan, ² Department of Hematology and Oncology, Hokkaido University Graduate School of Medicine	

Tuesday, 13 September		11:25-13:10 Room C
VI-SY19 Gene Therapy		
Conveners: Akihiro Iida <i>Japan</i> Dorothee von Laer <i>Germany</i>		
VI-SY19-1	APPLICATION OF HUMAN HERPESVIRUS-6 (HHV-6) FOR THE GENE THERAPY VECTOR Akihiro Shimizu, Nobuyuki Kobayashi, Kazuhiro Kondo <i>Department of Virology, The Jikei University School of Medicine, Japan</i>	
VI-SY19-2	THE P5 PROMOTER OF ADENO-ASSOCIATED VIRUS FOR AAVS1-SPECIFIC INTEGRATION Masashi Urabe, Satsuki Miyata, Akira Onishi, Tomonori Tsukahara, Hiroaki Mizukami, Akihiro Kume, Keiya Ozawa <i>Division of Genetic Therapeutics, Jichi Medical University, Japan</i>	
VI-SY19-3	DEVELOPMENT OF AN ARTIFICIAL CONTROLLABLE SENDAI VIRUS-BASED GENE EXPRESSION SYSTEM AND ITS APPLICATION TO THE FIELD OF REGENERATIVE MEDICINE Hirosaki Ban ¹ , Noemi Fusaki ^{1,2} , Yasuji Ueda ¹ , Akihiro Iida ¹ , Makoto Inoue ¹ , Mamoru Hasegawa ¹ ¹ DNAVEC Corporation, Japan, ² PRESTO, Japan Science and Technology Agency	

- VI-SY19-4 GALV-ENV PSEUDOTYPED RCR VECTOR IMPROVES THE EFFICIENCY OF VIRAL REPLICATION IN HUMAN GLIOMA CANCER MODEL**
Ayoung Song¹, Moonkyung Kang², Yeon-Soo Kim^{1,2}
¹Dept. of Smart Foods and Drugs, Inje University, Korea, South, ²Indang Institute of Molecular Biology, Inje University
- VI-SY19-5 RELATIONSHIP BETWEEN NEUTRALIZING ANTIBODY AND TRANSGENE EXPRESSION IN NON-HUMAN PRIMATES FOLLOWING IV ADMINISTRATION OF AAV8 VECTORS**
Hiroaki Mizukami¹, Jun Mimuro², Akira Ishiwata², Hiroya Yagi¹, Tsukasa Ohmori², Seiji Madoiwa², Tomonori Tsukahara¹, Masashi Urabe¹, Akihiro Kume¹, Yoichi Sakata², Keiya Ozawa¹
¹Div. Genetic Therapeutics, Jichi Medical University, Japan, ²Div. Cell and Molecular Medicine
- VI-SY19-6 HIV-1 PROTEASE-ACTIVABLE CASP3 AS A THERAPEUTIC GENE AGAINST HIV-1 INFECTION**
Emiko Urano, Kosuke Miyauchi, Reiko Ichikawa, Mari Takizawa, Jun Komano
 National Institute of Infectious Diseases, AIDS Research Center, Japan
- VI-SY19-7 MEMBRANE-ANCHORED AND SECRETED ANTIVIRAL C-PEPTIDES FOR GENE THERAPY OF HIV INFECTION**
Dorothee von Laer¹, Janine Kimpel¹, Lisa Egerer¹, Sebastian Newrzela¹, Jan van Lunzen², Boris Fehse²
¹Division for Virology, Innsbruck Medical University, Austria, ²University Hospital Eppendorf

Tuesday, 13 September

11:25-12:55 Room F

VI-SY20 Virus Taxonomy

Conveners: Andrew J Davison *UK*
 Alexander E Gorbalenya *Netherlands*

- VI-SY20-1 LIGAMENVIRALES, A PROPOSED NEW ORDER OF LINEAR DOUBLE-STRANDED DNA VIRUSES**
David Prangishvili, Mart Krupovic
 Department of Microbiology, Institut Pasteur, France
- VI-SY20-2 NEWLY-ESTABLISHED GROUPS FOR ALGAL VIRUSES**
Keizo Nagasaki, Yuji Tomaru
 National Research Institute of Fisheries and Environments of Inland Sea, Fisheries Research Agency, Japan
- VI-SY20-3 COMPLETE NUCLEOTIDE SEQUENCE AND GENOME ORGANIZATION OF A MEMBER OF A PROPOSED NEW GENUS OF PLANT VIRUSES IN THE FAMILY POTYVIRIDAE**
Ahmad Hosseini¹, Mina Koohi Habibi², Keramat Izadpanah³, Gholamhossein Mosahebi², Concepcion Rubies Autonell⁴, Claudio Ratti⁴
¹Department of Plant Protection, Vali-E-Asr University of Rafsanjan, Iran, ²Department of Plant Protection, University College of Agriculture and Natural Resources, University of Tehran, ³Department of Plant Protection, College of Agriculture, Shiraz University, ⁴DiSTA, Patologia Vegetale, Università di Bologna
- VI-SY20-4 BIOLOGICAL AND MOLECULAR CHARACTERIZATION OF A NEW ISOLATE OF CUCUMBER GREEN MOTTLE MOSAIC VIRUS (CGMMV) IN INDONESIA**
Budi S Daryono¹, Tri Joko², Alin L Liana¹, Utari Saraswati¹
¹Faculty of Biology, Gadjah Mada University, Indonesia, ²Faculty of Agriculture, Gadjah Mada University
- VI-SY20-5 COVARIATION OF NUCLEOTIDE RESIDUES IN THE EVOLUTION OF VIRAL TAXA**
Ulrich Melcher
 Biochemistry & Molecular Biology, Oklahoma State University, USA
- VI-SY20-6 TOWARD GENETIC-BASED TAXONOMY: PARTITIONING THE GENETIC DIVERSITY OF PICORNAVIRUSES**
Alexander E Gorbalenya, Chris Lauber
 Department of Medical Microbiology, Leiden University Medical Center, Netherlands

Tuesday, 13 September		14:30-16:00 Room A
VI-SY21	HIV/SIV Molecular Biology	
Conveners: Eric Freed		USA
Malcolm A Martin		USA
VI-SY21-1	HIV-1 LATENCY COULD BE INDUCED BY T-CELL DEACTIVATING SIGNALING PATHWAYS Kyung-Chang Kim^{1,2}, Hyeon Guk Kim¹, Tae-Young Roh³, Jihwan Park³, Joo-Shil Lee¹, Sang-Yun Choi², Sungsoon Kim¹, Byeong-Sun Choi¹ ¹ Division of AIDS, Korea National Institute of Health, Korea, South, ² School of Life Science, Korea University, ³ Division of Molecular and Life Science, Pohang University of Science and Technology	
VI-SY21-2	DIRECT AND FUNCTIONAL ENGAGEMENT OF CLATHRIN BY HIV-1 AND OTHER PRIMATE LENTIVIRUSES Heinrich Gottlinger, Sergei Popov, Elena Popova <i>Program in Gene Function and Expression, UMass Medical School, USA</i>	
VI-SY21-3	THE HEMATOPOIETIC CELL-SPECIFIC RHO GTPASE INHIBITOR ARHGDI5/D4GDI LIMITS HIV-1 REPLICATION Tadashi Watanabe¹, Emiko Urano², Kosuke Miyauchi², Reiko Ichikawa², Makiko Hamatake², Kei Sato¹, Hirotaka Ebina¹, Yoshio Koyanagi¹, Jun Komano² ¹ Laboratory of Viral Pathogenesis, Institute for Virus Research, Kyoto University, Japan, ² AIDS Research Center, National Institute of Infectious Diseases	
VI-SY21-4	SUPPRESSOR OF CYTOKINE SIGNALING 1 IS A POSSIBLE CAUSE OF THE CELL LINE DEPENDENCY OF THE RHESUS MACAQUE TRIM5α-MEDIATED LATE RESTRICTION Sayaka Sukegawa¹, Ryuta Sakuma¹, Seiga Ohmine², Yasuhiro Ikeda², Shoji Yamaoka¹ ¹ Molecular Virology, Tokyo Medical and Dental University, Japan, ² Molecular Medicine, Mayo Clinic	
VI-SY21-5	A TALE OF TWO HIV-1 MATURATION INHIBITORS - BEVIRIMAT (BVM) AND PF-46396: INSIGHTS INTO GAG ASSEMBLY AND VIRION MATURATION Kayoko Waki¹, Scott Butler², Eric O Freed¹ ¹ Virus-Cell Interaction Section, HIV Drug Resistance Program, NCI-Frederick, USA, ² Pfizer Global Research and Development	
VI-SY21-6	V3 REGION-REGULATED CONFORMATIONS OF HIV-1 GP120 OUTER DOMAIN BRING INSIGHTS INTO STRUCTURAL MECHANISMS OF IMMUNE EVASION Masaru Yokoyama¹, Satoshi Naganawa², Kazuhisa Yoshimura³, Shuzo Matsushita³, Hironori Sato¹ ¹ Pathogen Genomics Center, National Institute of Infectious Diseases, Japan, ² Department of Microbiology and Cell Biology, Tokyo Metropolitan Institute of Medical Science, ³ Center for AIDS Research, Kumamoto University	

Tuesday, 13 September		14:30-16:00 Room D+E
VI-SY22	Paramyxoviruses	
Convener: Amiya K Banerjee		USA
VI-SY22-1	MEASLES VIRUS V PROTEIN INHIBITS NLRP3 INFLAMMASOME-MEDIATED IL-1B SECRETION Noritaka Komune, Takeshi Ichinohe, Yusuke Yanagi <i>Department of Virology, Faculty of Medicine, Kyushu University, Japan</i>	
VI-SY22-2	A NEW PAEDIATRIC EX-VIVO/IN-VITRO BRONCHIAL EPITHELIUM MODEL OF RESPIRATORY SYNCYTIAL VIRUS INFECTION DISPLAYS HALLMARKS OF SEVERE AND FATAL CASES Remi Villenave ¹ , Surendran Thavagnanam ^{1,2} , Severine Sarlang ¹ , Grzegorz Skibinski ¹ , Liam G Heaney ¹ , James P Mckaigne ² , Peter V Coyle ³ , Michael D Shields ^{1,2} , Ultan F Power ¹ <i>¹Centre for Infection & Immunity, Queens University Belfast, UK, ²The Royal Belfast Hospital for Sick Children, ³The Regional Virus Laboratory, Belfast Trust</i>	
VI-SY22-3	NIPAH VIRUS INFECTION OF HUMAN MONOCYTE DERIVED DENDRITIC CELLS Manisha Gupta ¹ , Michael Lo ² , Christina F Spiropoulou ¹ <i>¹Viral Special Pathogens Branch, Centers for Disease Control and Prevention, USA, ²Measles, Mumps, Rubella, and Herpesvirus Laboratory Branch, Centers for Disease Control and prevention</i>	

VI-SY22-4 INVESTIGATION OF PUTATIVE LATE DOMAIN MOTIFS IN CANINE DISTEMPER VIRUS MATRIX PROTEIN (CDV-M)

Sarah Hinkelmann¹, Florian Klauschies¹, Veronika von Messling², Georg Herrler¹, Ludwig Haas¹

¹Institute of Virology, University for Veterinary Medicine Hannover, Foundation, Germany, ²INRS-Institut Armand-Frappier, University of Quebec

VI-SY22-5 E89K MUTATION IN MATRIX PROTEIN OF MEASLES VIRUS AFFECTS CELL DEATH IN B95A CELLS

Jianbao Dong¹, Wei Zhu², Akatsuki Saito², Yoshitaka Goto², Takeshi Haga²

¹JSPS Research Fellow DC (The United Graduate School of Veterinary Science, Yamaguchi University), Japan, ²Department of Veterinary Microbiology, University of Miyazaki

VI-SY22-6 THE MEASLES VIRUS V PROTEIN BINDS TO P65 (RELA) TO SUPPRESS NF-KAPPA B ACTIVITY

Kerstin M Schuhmann¹, Christian K Pfaller², Karl-Klaus Conzelmann¹

¹Max von Pettenkofer Institute & Gene Center, Ludwig Maximilians-University Munich, Germany, ²Department of Molecular, Cellular and Developmental Biology, University of California

Tuesday, 13 September

14:30-16:00 Room C

VI-SY23 Host Response and Resistance in Plant Viruses

Conveners: Peter Moffett *Canada*
Hideki Takahashi *Japan*

VI-SY23-1 THE ROLE OF ARGONAUTE PROTEINS IN CONSTITUTIVE AND INDUCED ANTI-VIRAL RESPONSES

Peter Moffett
Université de Sherbrooke, Canada

VI-SY23-2 TOWARD UNDERSTANDING THE MECHANISM FOR RECOGNITION OF TOBAMOVIRUS COAT PROTEINS BY L AND N' RESISTANCE PROTEINS

Kappei Kobayashi¹, Reiko Tomita², Hui Chen¹, Hiroyuki Mizumoto³, Go Atsumi², Akinori Kiba³, Naoto Yamaoka¹, Yasufumi Hikichi³, Masamichi Nishiguchi¹, Ken-Taro Sekine²

¹Faculty of Agriculture, Ehime University, Japan, ²Iwate Biotechnology Research Center, ³Faculty of Agriculture, Kochi University

VI-SY23-3 ACCUMULATION OF VIRAL PRODUCTS DURING THE SYMPTOMATIC AND RECOVERY PHASES IN NICOTIANA BENTHAMIANA PLANTS INFECTED WITH TOMATO RINGSPOT VIRUS ISOLATES DIFFERING IN THEIR VIRULENCE

Basudev Ghoshal^{1,2}, Helene Sanfacon¹

¹Agriculture and Agri-Food Canada, Pacific Agri-Food Research Centre, Canada, ²Department of Botany, University of British Columbia

VI-SY23-4 INHIBITORY ROLE OF A PLANT RING FINGER PROTEIN ON THE TOBACCO MOSAIC VIRUS INFECTION

Yasuyuki Yamaji, Koji Hamada, Tatsushi Adachi, Nami Minato, Chihiro Miura, Ryo Iwai, Misako Himeno, Shigetou Namba, Tadaaki Hibi

Graduate School of Agricultural and Life Sciences, The University of Tokyo, Japan

VI-SY23-5 TRANSIENT OVEREXPRESSION OF THE TOBACCO TRANSCRIPTIONAL REPRESSOR NTERF3 GENE AND ITS HOMOLOGUES INDUCES HYPERSENSITIVE RESPONSE-LIKE CELL DEATH IN TOBACCO

Takuya Ogata, Yasuhiko Matsushita

Gene Research Center, Tokyo University of Agriculture and Technology, Japan

VI-SY23-6 CROSS-PROTECTION EFFECTIVENESS OF ATTENUATED VARIANTS OF TURNIP MOSAIC VIRUS WITH MUTATIONS IN A CONSERVED MOTIF OF THE N-TERMINAL REGION OF HC-PRO

Shyi-Dong Yeh¹, Chin-Chih Chen², Joseph A. J Raja¹, Chun-Huei Huang²

¹Department of Plant Pathology, National Chung Hsing University, Taiwan, ²Division of Plant Pathology, Taiwan Agricultural Research Institute

Tuesday, 13 September		14:30-16:00 Room F
VI-SY24 Calici- and Astroviruses		
Conveners: Ian Goodfellow UK Stacey Schultz-Cherry USA		
VI-SY24-1	IDENTIFICATION OF A NOVEL ASTROVIRUS ENTEROTOXIN: POTENTIAL ZONOTIC RISK? Stacey L Schultz-Cherry ¹ , Pamela Freiden ¹ , Andrew Burnham ¹ , Lindsey A Moser ² , Matthew D Koci ³ ¹ Infectious Disease, St. Jude Children's Research Hospital, USA, ² Medical Microbiology and Immunology, University of Wisconsin-Madison, ³ Poultry Science, North Carolina State University	
VI-SY24-2	GENETIC DIVERSITY AND MOLECULAR EVOLUTION OF HUMAN ASTROVIRUS Nina V Tikunova ¹ , Igor V Babkin ¹ , Artem Yu Tikunov ² , Sergei V Netesov ² ¹ Department of Molecular Immunology, Institute of Chemical Biology and Fundamental Medicine, SB RAS, Russia, ² Novosibirsk State University	
VI-SY24-3	INTERPLAY OF RNA, VPG, AND CAPSID PROTEINS UPON SELF-ASSEMBLY OF NOROVIRAL VLP IN VITRO Akira Nakanishi ¹ , Shoichiro Tange ¹ , Tomoichiro Oka ² , Kazuhiko Katayama ² ¹ Dept. Aging Intervention, Sec. Gene Therapy, National Center for Geriatrics and Gerontology, Japan, ² National Institute of Infectious Diseases, Dept. Virology I	
VI-SY24-4	STRUCTURE OF ANTIBODY BOUND TO HUMAN NOROVIRUS REVEALS THE FLEXIBILITY OF THE CAPSID Motohiro Miki ^{1,2} , Grant S Hansman ^{2,3} , Jason S Mclellan ³ , Peter D Kwong ³ , Makoto Yamazaki ¹ , Fumio Gondaira ¹ , Kazuhiko Katayama ² ¹ DENKA SEIKEN CO.,LTD., Japan, ² Department of Virology II, National Institute of Infectious Diseases, ³ Vaccine Research Center, National Institute of Allergy and Infectious Diseases, National Institutes of Health	
VI-SY24-5	STRUCTURAL ANALYSIS OF HBGA BINDING SPECIFICITY IN A NOROVIRUS GII.4 EPIDEMIC VARIANT: IMPLICATIONS FOR EPOCHAL EVOLUTION Sreejesh Shanker ¹ , Jae-Mun Choi ¹ , Bhanumati Sankaran ³ , Robert L Atmar ² , Mary K Estes ² , Bidadi V Prasad ^{1,2} ¹ Verna Marrs Mclean Department of Biochemistry and Molecular Biology, Baylor College of Medicine, Houston, Texas, USA, ² Molecular Virology and Microbiology, Baylor College of Medicine, ³ Berkeley Center for Structural Biology, Lawrence Berkeley National Laboratory	

Tuesday, 13 September		14:30-16:00 Room H
VI-SY25	Transmission and Epidemiology of Arboviral Diseases	
Conveners: Ichiro Kurane		<i>Japan</i>
Ikuo Takashima		<i>Japan</i>
VI-SY25-1	STRUCTURAL PROTEINS DETERMINE NON-VIRAEMIC TRANSMISSION IN TICKS WHEREAS NON-STRUCTURAL IMPACT THE CYTOPATHIC ACTIVITY OF TICK-BORNE ENCEPHALITIS VIRUS	
Tamara S Gritsun ¹ , Maxim A Khasnatinov ² , Andrew Tuplin ³ , Maria Kazimirova ⁴ , Niluka Goonavardane ¹ , Mirco Slovak ⁴ , Boris Klempa ⁵ , Ian M Jones ¹ , Milan Labuda ⁵ , Ernest A Gould ⁶		
¹ School of Biological Sciences, University of Reading, UK, ² Institute of Epidemiology, ³ School of Life Sciences, University of Warwick, ⁴ Institute of Zoology, ⁵ Institute of Virology, ⁶ Emerging Viruses		
VI-SY25-2	INVESTIGATIONS ON CACAO SWOLLEN SHOOT VIRUS (CSSV) SEED TRANSMISSION THROUGH CROSS POLLINATION	
George A Ameyaw ¹ , Andy Wetten ² , Henry Dzahini-Obiatey ¹ , Owusu Domfeh ¹		
¹ Plant Pathology Division, Cocoa Research Institute of Ghana, Ghana, ² University of Reading		
VI-SY25-3	CRIMEAN-CONGO HEMORRHAGIC FEVER (CCHF) AND WEST NILE FEVER (WNV) IN THE RUSSIAN FEDERATION	
Dmitri K Lvov ¹ , Alexander M Butenko ¹ , Viktor F Larichev ¹ , Sergei V Alkhovsky ¹ , Alexei G Prilipov ¹ , Valeri A Antonov ² , Petr G Deryabin ¹ , Anatoli V Lipnitsky ²		
¹ D.I.Ivanovski Institute of Virology, Ministry of Health and Social Development, Russia, ² Volgograd Anti-Plaque Research Institute		

- VI-SY25-4 PHYLOGENETIC RECONSTRUCTION OF DENGUE VIRUS TYPE 2 IN COLOMBIA**
Jairo A Mendez^{1,4}, Jose A Usme-Ciro², Lissethe C Pardo¹, Cristina Domingo³, Gloria J Rey-Benito¹, Juan A Sanchez⁴, Antonio Tenorio⁵, Juan C Gallego-Gomez²
¹Virology Lab, National Institute of Health, Colombia, ²Viral Vector Core and Gene Therapy, Neurosciences Group, Sede de Investigación Universitaria, Universidad de Antioquia, ³Robert Koch Institute, ⁴Departamento de Ciencias Biológicas-Facultad de Ciencias, Laboratorio BIOMMAR, Universidad de LOS Andes, ⁵Laboratorio de Arbovirus y Enfermedades Virales Importadas, Centro Nacional de Microbiología, Instituto de Salud Carlos III
- VI-SY25-5 WIDESPREAD TRANSMISSION OF DISTINCT GENETIC LINEAGES OF MURRAY VALLEY ENCEPHALITIS VIRUS IN AUSTRALIA, 2008-2009**
John S Mackenzie¹, David T Williams^{1,2}, Sinead M Diviney^{1,2}, Aziz Niazi^{1,2}, Belinda Herring³, Cheryl A Johansen⁴
¹Faculty of Health, Curtin University, Australia, ²School of Biomedical Sciences, Curtin University, ³Discipline of Infectious Diseases and Immunology, University of Sydney, ⁴Arbovirus Surveillance and Research Laboratory, School of Biomedical, Biomolecular and Chemical Sciences, University of Western
- VI-SY25-6 VIROLOGICAL AND IMMUNOLOGICAL INVESTIGATION ON MECHANISM OF INCREASING DENGUE HEMORRHAGIC FEVER-TAIWAN'S EXPERIENCES**
Chwan-Chuen King¹, Tsai-Ying Yen¹, Day-Yu Chao², Chuan-Liang Kao³, Shu-Fang Chuang³, Zheng-Rong Tiger Li¹, Betty Wu-Hsieh⁴, Chia-Chi Ku⁴, Tzai-Hung Wen⁵, Kun-Hsieh Tsai¹, Jeff GJ Chang⁶
¹Public Health, Institute of Epidemiology and Preventive Medicine, National Taiwan University, Taiwan, ²National Chung Hsing University, ³Department of Clinical Laboratory Sciences and Medical Biotechnology, National Taiwan University, ⁴Department of Immunology, National Taiwan University, ⁵National Taiwan University, ⁶Center for Diseases Control

Tuesday, 13 September

16:30-18:00 Room F

VI-SY26 Virus Suppression of RNA Silencing

Conveners: Jozsef Burgyan *Italy*
 Juan Antonio Garcia *Spain*

- VI-SY26-1 ARGONAUTE TARGETING VIRAL SUPPRESSORS OF RNA SILENCING**
Jozsef Burgyan
Istituto di Virologia Vegetale, CNR, Italy
- VI-SY26-2 RNA SILENCING SUPPRESSORS AND P1 PROTEINS IN POTYVIRAL INFECTIONS**
Juan Antonio Garcia, Alberto Carbonell, Varvara Maliogka, Gabriela Dujovny, Carmen Simon-Mateo, Adrian Valli
Centro Nacional de Biotecnología (CNB-CSIC), Spain
- VI-SY26-3 AN RGS-CAM-MEDIATED COUNTERMEASURE FOR RNAI-BASED ANTIVIRAL IMMUNITY IN TOBACCO**
Kenji Nakahara¹, Chikara Masuta¹, Syouta Yamada¹, Hanako Shimura¹, Tomoko S Wada¹, Ayano Meguro¹, Kae Sueda¹, Kazunori Goto¹, Manabu Igarashi², Richard W Carthew³, Ichiro Uyeda¹
¹Research Faculty of Agriculture, Hokkaido University, Japan, ²Department of Global Epidemiology, Hokkaido University Research Center for Zoonosis Control, ³Department of Molecular Biosciences, Northwestern University
- VI-SY26-4 ESCAPE FROM HOST RNA SILENCING BY A DSRNA VIRUS REPLICATING WITHIN THE RIGID VIRION STRUCTURE**
Misako Himeno, Kazuya Ishikawa, Tatsushi Adachi, Yusuke Takinami, Nami Minato, Yutaro Neriya, Takuya Shiraishi, Kensaku Maejima, Shigetou Namba
Laboratory of Plant Pathology, Division of Agricultural and Life Sciences, The University of Tokyo, Japan
- VI-SY26-5 ROLE OF RICE RNA-DEPENDENT RNA POLYMERASE 1 (OSRDR1) IN RNA SILENCING AND ANTIVIRAL PATHWAY**
Masamichi Nishiguchi, Hui Chen, Kappei Kobayashi, Naoto Yamaoka
Faculty of Agriculture, Ehime University, Japan
- VI-SY26-6 CHARACTERIZATION OF WUHAN NODAVIRAL SGRNA3 AND PROTEIN B2**
Xi Zhou, Yang Qiu, Jiamin Zhang, Congyi Zheng, Yuanyang Hu
State Key Laboratory of Virology, College of Life Sciences, Wuhan University, China

Wednesday, 14 September	14:30-16:00 Room D+E
VI-SY27	Hepatitis B

Conveners: Yasuhito Tanaka *Japan*
 Koji Ishii *Japan*

VI-SY27-1 AID SUPPRESSES HEPATITIS B VIRUS REPLICATION AND INDUCES HYPERMUTATION IN VIRUS GENOME

Guoxin Liang¹, Kouichi Kitamura¹, Weixin Fu¹, Guangyan Liu¹, Zhe Wang¹,
 Tasuku Honjo², Masamichi Muramatsu¹

¹Department of Molecular Genetics, Kanazawa University Graduate School of Medical Science, Japan,

²Department of Immunology and Genomic Medicine, Kyoto University Graduate School of Medicine

VI-SY27-2 THE PREVALENCE AND DIVERSITY OF HBSAG SUBTYPES AND VIRUS HEPATITIS B SUBGENOTYPES AMONG FIVE ABORIGINAL POPULATIONS OF SIBERIA, RUSSIA

Galina Kochneva¹, Victor Manuilov², Ludmila Osipova³, Elena Chub⁴, Sergey Netesov⁵

¹Biological, Novosibirsk State University, Russia, ²Medical, Joint Stock Company Helicon, ³Genetic, Institute of Cytology and Genetics of SB RAS, ⁴Hepatic, Joint Stock Company Vector-Best, ⁵Hepatic, State Research Center of Virology and Biotechnology Vector

VI-SY27-3 THE ROLE OF LONG PERSISTENCE OF HBV AND MUTATIONS WITHIN ENH II AND BCP OTHER THAN A1762T/G1764A IN THE DEVELOPMENT OF SEVERE LIVER DISEASES IN SUBGENOTYPE B3

Didik S Heriyanto^{1,2}, Yoshihiko Yano¹, Takako Utsumi^{1,3}, Maria Inge Lusida³,
 Soetjipto³, Catharina Triwikatmani⁴, Neneng Ratnasari⁴, Sutanto Maduseno⁴,
 Putut Bayu Purnama⁴, Siti Nurdjanah⁴, Yoshitake Hayashi¹

¹Center for Infectious Disease, Graduate School of Medicine, Kobe University, Japan, ²Department of Anatomical Pathology, Faculty of Medicine, Gadjah Mada University, ³Indonesia-Japan Collaborative Research Center for Emerging and Re-emerging Infectious Diseases, Institute of Tropical Disease, Airlangga University, ⁴Gastroenterohepatology Subdivision, Department of Internal Medicine, Faculty of Medicine, Gadjah Mada University / Dr. Sardjito Hospital

VI-SY27-4 THE PREVALENCE AND SIGNIFICANCE OF OCCULT HEPATITIS B VIRUS INFECTION IN HIV-POSITIVE INDIVIDUALS IN INDONESIA

Takako Utsumi¹, Yoshihiko Yano¹, Maria Inge Lusida², Nasronudin², Mochamad Amin²,
 Soetjipto², Hak Hotta¹, Yoshitake Hayashi¹

¹Center for Infectious Diseases, Kobe University Graduate School of Medicine, Indonesia, ²Indonesia-Japan Collaborative Research Center for Emerging and Re-emerging Infectious Diseases, Institute of Tropical Disease, Airlangga University

Wednesday, 14 September	14:30-16:00 Room D+E
VI-SY28	Circoviruses and Anelloviruses

Conveners: Jimmy Kwang *Singapore*
 Hans Nauwynck *Belgium*

VI-SY28-1 TAXONOMY OF ANELLOVIRIDAE AND CIRCOVIRIDAE: PAST, PRESENT, FUTURE

Philippe Biagini
 UMR CNRS 6578 Equipe Emergence et Co-Evolution Virale, Etablissement Francais du Sang Alpes-Mediterranee et Universite de la Mediterranee, France

VI-SY28-2 EXCEPTIONAL OUTCOME OF AN INFECTION WITH A PCV2B STRAIN IN MID-GESTATIONAL PORCINE FOETUSES

Dipongkor Saha¹, Uladzimir U Karniychuk¹, Marc Geldhof¹, Richard Decatelle²,
 Jan Van Doorsselaere³, Hans J Nauwynck¹

¹Virology, Parasitology and Immunology, Laboratory of Virology, Faculty of Veterinary Medicine, Ghent University, Belgium, ²Department of Pathology, Bacteriology and Poultry Diseases, Faculty of Veterinary Medicine, Ghent University, ³Department of Health Care and Biotechnology, KATHO Catholic University College of South-West Flanders

VI-SY28-3 THE ORF3 PROTEIN OF PORCINE CIRCOVIRUS TYPE 2 INTERACTS WITH PORCINE UBIQUITIN E3 LIGASE PIRH2 AND MEDIATES THE DEREGULATION OF P53 HOMEOSTASIS IN VIRAL INFECTION

Jimmy Kwang^{1,2}

¹Animal Health Biotechnology, Temasek Life Sciences Laboratory, Singapore, ²Department of Microbiology, National University of Singapore

Wednesday, 14 September

14:30-16:00 Room C

VI-SY29 Plant Virus Replication and Translation

Conveners: Peter Nagy USA
W. Allen Miller USA

VI-SY29-1 STRUCTURAL BASIS FOR INTERACTION OF UNCAPPED PLANT VIRAL RNAs WITH TRANSLATION INITIATION FACTORS

W. Allen Miller^{1,2}, Jelena J Kraft², Zhaohui Wang¹, Marc Parisien³, Krzysztof Treder¹

¹Plant Pathology, Iowa State University, USA, ²Biochemistry, Biophysics & Molecular Biology, Iowa State University, ³Biochemistry & Molecular Biology, University of Chicago

VI-SY29-2 TURNIP MOSAIC VIRUS ALTERS THE SECRETORY PATHWAY AND REMODELS THE HOST CELL ENDOMEMBRANE NETWORK

Jean-Francois Laliberte, Romain Grangeon, Jun Jiang, Maxime Agbeci

INRS-Institut Armand-Frappier, Canada

VI-SY29-3 A RIBOSOMAL PROTEIN REGULATES POTATO VIRUS A INFECTION

Anders J Hafren, Katri J Eskelin, Kristiina M Makinen

Food and Environmental Sciences, University of Helsinki, Finland

VI-SY29-4 POLY(A)-BINDING PROTEIN STIMULATES CAP-INDEPENDENT TRANSLATION OF UNCAPPED/NONPOLYADENYLATED VIRAL RNA VIA BINDING TO THE 3' UNTRANSLATED REGION

Hiro-Okii Iwakawa^{1,2}, Yuri Tajima¹, Takako Taniguchi³, Masanori Kaido¹, Kazuyuki Mise¹, Hisaaki Taniguchi³, Tetsuro Okuno¹

¹Laboratory of Plant Pathology, Graduate School of Agriculture, Kyoto University, Japan, ²Institute of Molecular and Cellular Biosciences, The University of Tokyo, ³Institute for Enzyme Research, The University of Tokushima

VI-SY29-5 A PLANT SMALL GTP-BINDING PROTEIN ARL8 PLAYS A CRUCIAL ROLE IN TOBAMOVIRUS RNA REPLICATION

Masaki Nishikiori, Tetsuo Meshi, Masayuki Ishikawa

National Institute of Agrobiological Sciences, Japan

VI-SY29-6 THE FUNCTION OF SUBVERTED HOST RNA BINDING PROTEINS IN TOMBUSVIRUS RNA REPLICATION IN YEAST

Peter Nagy, Zhenghe Li, Zsuzsanna Sasvari, Nikolay Kovalev, Tyng-Shyan Huang

Plant Pathology, University of Kentucky, USA

Wednesday, 14 September

14:30-16:00 Room F

VI-SY30 Papillomaviruses

Convener: Kei Kawana Japan

VI-SY30-1 WHOLE GENOME ANALYSIS OF BPV-12 (BAA1 PUTATIVE TYPE) AND A DELETION CIRCULAR GENOME WAS DETECTED

Wei Zhu¹, Jianbao Dong^{1,2}, Erika Shimizu³, Yoshitaka Goto¹, Takeshi Haga¹

¹Department of Veterinary Microbiology, University of Miyazaki, Japan, ²JSPS Research Fellow DC (The United Graduate School of Veterinary Science, Yamaguchi University), ³Miyazaki Prefecture Tsuno Meat Inspection Center

- VI-SY30-2 E6 AND E7 VARIANTS OF HUMAN PAPILLOMAVIRUS TYPE 16 AND 52 IN JAPAN, THE PHILIPPINES, AND VIETNAM**
 Kaori Matsushita¹, Azumi Ishizaki¹, Huyen TT Hoang^{1,3,4}, Dorothy M Agdamag¹, Toshiyuki Sasagawa², Vuong Thi Tran^{1,3}, Cuong Hung Nguyen^{1,3}, Van Thanh Ta⁴, Thuc Van Pham³, Xiuqiong Bi¹, Hiroshi Ichimura¹
¹Department of Viral Infection and International Health, Graduate School of Medical Science, Kanazawa University, Japan, ²Department of Reproductive and Perinatal Medicine, Kanazawa Medical University, ³Hai Phong University, ⁴Hanoi Medical University
- VI-SY30-3 HPV 16 E1 PROTEIN IS NOT REQUIRED FOR THE MAINTENANCE REPLICATION OF VIRAL GENOME**
 Nagayasu Egawa, Shinichi Ohno, Takashi Yugawa, Mako Narisawa-Saito, Tohru Kiyono
 Division of Virology, National Cancer Center Research Institute, Japan
- VI-SY30-4 ANALYSIS OF HPV GENOME REPLICATION**
 Ayano Satsuka, Naoko Kajitani, Akifumi Kawate, Hiroyuki Sakai
 Lab. Gene Anal., Dept. Viral Oncol., Inst. Virus Res., Kyoto Univ., Japan
- VI-SY30-5 HPV 18 E1^{E4}, A VIRAL GENE PRODUCT ENCODED BY THE EARLY GENE REGION OF HPV GENOME, INTERACTS WITH VIMENTIN INTERMEDIATE FILAMENTS IN VITRO AND IN VIVO**
 Naoko Kajitani^{1,2}, Ayano Satsuka^{1,3,4}, Akifumi Kawate^{1,5}, Hiroyuki Sakai¹
¹Dept. Viral Oncol., Inst. Virus Res., Kyoto Univ., Japan, ²Grad. Sch. Biostudies., Kyoto Univ., ³Cent. Emerging Virus Res., Kyoto Univ., ⁴Dept. Genetic Biochemistry, Kyoto Univ., ⁵Grad. Sch. Med., Kyoto Univ.
- VI-SY30-6 CD1D, AN MHC-LIKE MOLECULE BRIDGING INNATE AND ADAPTIVE IMMUNITY, IS DOWNREGULATED BY THE HUMAN PAPILLOMAVIRUS (HPV) E5 PROTEIN: A POSSIBLE MECHANISM FOR IMMUNE EVASION BY HPV**
 Shiho Miura¹, Kei Kawana¹, Tomoyuki Fujii¹, Danny J Schust², Tetsu Yano¹, Shiro Kozuma¹, Yuji Taketani¹
¹Department of Obstetrics and Gynecology, Faculty of Medicine, University of Tokyo, Japan, ²Department of Obstetrics and Gynecology, University of Missouri School of Medicine

Wednesday, 14 September

14:30-16:00 Room H

VI-SY31 Reo, Rota and Orbiviruses

Conveners: Terence S Dermody *USA*
 Koki Taniguchi *Japan*

- VI-SY31-1 MECHANISM OF PRIMARY REPLICATION COMPLEX ASSEMBLY OF BLUETONGUE VIRUS**
 Eiko Matsuo, Sofia Lourenco, Polly Roy
 Faculty of Infectious and Tropical Diseases, London School of Hygiene & Tropical Medicine, UK
- VI-SY31-2 REARRANGEMENTS OF MYCOREOVIRUS 1 S1, S2, AND S3 INDUCED BY A MULTIFUNCTIONAL PROTEIN P29 ENCODED BY THE PROTOTYPIC HYPOVIRUS CHV1-EP713**
 Toru Tanaka¹, Nobuhiro Suzuki¹, Lying Sun²
¹Institute of Plant Science and Bioresources, Okayama University, Japan, ²Institute of Virology and Biotechnology, Zhejiang Academy of Agricultural Sciences
- VI-SY31-3 THE INHIBITORY ACTIVITIES OF BOVINE LACTOPHORIN AGAINST ROTAVIRUS INFECTIONS**
 Mizuho Inagaki¹, Tomio Yabe¹, Tohru Suzuki², Takeshi Takahashi³, Tsukasa Matsuda⁴, Osamu Nakagomi⁵, Toyoko Nakagomi⁵, Yoshihiro Kanamaru¹
¹Faculty of Applied Life Science, Gifu University, Japan, ²United Graduate School of Agricultural Science, Gifu University, ³Food Science Institute, Division of Research and Development, Meiji dairies Co., Ltd., ⁴Department of Applied Molecular Biosciences, Graduate School of Bioagricultural Sciences, Nagoya University, ⁵Department of Molecular Microbiology and Immunology, Graduate School of Biomedical Sciences and Global Center of Excellence, Nagasaki University

VI-SY31-4 GENOMIC MUTATIONS DETECTED IN VIRULENT HUMAN ROTAVIRUS STRAINS DURING MULTIPLE SERIAL PASSAGES IN VARIOUS CELL CULTURES**Takeshi Tsugawa^{1,2}, Yasutaka Hoshino³**¹Department of Pediatrics, Iwamizawa Municipal General Hospital, Japan, ²Department of Pediatrics, Sapporo Medical University, ³Rotavirus Vaccine Development Section, Laboratory of Infectious Diseases, NIAID, NIH**VI-SY31-5 ANTIGENEMIA DURING ROTAVIRUS DIARRHEA DOES NOT REPRESENT VIREMIA****Kamruddin Ahmed¹, Gulendam Bozdayi², Marcelo T Mitui³, Selim Ahmed⁴, Luthful Kabir⁴, Dalgic Buket⁵, Ilknur Bostanci⁶, Akira Nishizono³, Osamu Nakagomi⁷**¹Research Promotion Project, Oita University, Japan, ²Department of Clinical Microbiology, Faculty of Medicine, Gazi University, ³Department of Microbiology, Faculty of Medicine, Oita University, ⁴Department of Pediatrics, Institute of Child and Mother Health, ⁵Department of Pediatric Gastroenterology, Faculty of Medicine, Gazi University, ⁶Department of Pediatrics, Ministry of Health Ankara Educational and Research Hospital, ⁷Division of Molecular Epidemiology, Nagasaki University of Graduate School of Biomedical Sciences

Wednesday, 14 September

14:30-16:00 Room I

VI-SY32 Viral Zoonoses**Conveners: Noël Tordo** *France*
Akio Yamada *Japan***VI-SY32-1 DYNAMICS OF PUUMALA VIRUS IN BANK VOLES FROM ENDEMIC AND NON ENDEMIC REGIONS FOR HEMORRHAGIC FEVER WITH RENAL SYNDROME (HFRS) IN FRANCE****Mathilde Couteaudier¹, Jean-Baptiste Pons², Nadège Mollard¹, Franck Boue³, D Augot⁴, Dominique Pontier², Philippe Marianneau^{1,5}, Franck Sauvage², Noël Tordo¹**¹Virology, Natl. Ref. Centre for Viral Hemorrhagic Fevers / UBIVE, Institut Pasteur, France, ²UMR- CNRS 5558 Université de Lyon, ³Natl. Lab for Rabies and Wildlife Diseases Research, Anses, ⁴E 2533-USC Anses, ⁵Virology Unit, Ansesr**VI-SY32-2 THE ROLE OF INFLUENZA VIRUS NEURAMINIDASE IN EMERGENCE OF NOVEL PANDEMIC VIRUSES****Deena R Blumenkrantz, Kim L Roberts, Holly A Shelton, Neeltje V Doremalen, Wendy S Barclay***Section of Virology, Division of Infectious Diseases, Department of Medicine, Imperial College London, UK***VI-SY32-3 A HIGHLY PATHOGENIC AVIAN INFLUENZA VIRUS (H5N1) THAT INVADED JAPAN THROUGH WATERFOWL MIGRATION****Masahiro Kajihara¹, Keita Matsuno¹, Edgar Simulundu¹, Mieko Muramatsu¹, Osamu Noyori¹, Rashid Manzoor¹, Manabu Igarashi², Masatoshi Okamatsu³, Yoshihiro Sakoda³, Hiroshi Kida^{1,3,4,5}, Ayato Takada^{1,6}**¹Department of Global Epidemiology, Hokkaido University Research Center for Zoonosis Control, Japan, ²Department of Bioinformatics, Hokkaido University Research Center for Zoonosis Control, ³Department of Disease Control, Graduate School of Veterinary Medicine, Hokkaido University, ⁴OIE Reference Laboratory for Animal Influenza, ⁵Japan Science and Technology Agency Basic Research Programs, ⁶School of Veterinary Medicine, the University of Zambia**VI-SY32-4 PREPAREDNESS FOR THE CONTROL OF ZOONOSES IN ZAMBIA: THE CASE OF AVIAN INFLUENZA****Aaron S Mweene¹, Ayato Takada^{2,3}, Chihiro Sugimoto^{2,3}, Hirofumi Sawa^{2,3}, Edgar Simulundu³, Yuka Suzuki-Thomas^{2,3}, Bernard Hang'Ombe¹, Boniface Namangala¹, Emiko Nakagawa^{2,3}, Akihiko Ishii^{2,3}, Hirohito Ogawa^{2,3}**¹Department of Disease Control, School of Veterinary Medicine, University of Zambia, Zambia, ²Research Centre for Zoonosis Control, Hokkaido University, ³Hokudai Centre for Zoonosis Control, University of Zambia

Wednesday, 14 September

16:30-18:15 Room C

VI-SY33 Virus Movement in Plants

Conveners: Manfred Heinlein *Switzerland*
Peter Palukaitis *Korea, South*

VI-SY33-1 CELL-TO-CELL MOVEMENT OF TOBACCO MOSAIC VIRUS
Manfred Heinlein^{1,2}
¹Institut de Biologie Moleculaire des Plantes (IBMP), CNRS-UPR2357, Centre Nationale de la Recherche Scientifique (CNRS), France, ²Institute of Botany, Department of Plant Physiology, University of Basel

VI-SY33-2 THE CELL NUCLEUS AND PLANT VIRUS SYSTEMIC INFECTIONS
Michael Taliansky¹, Jane Shaw¹, Sang Hyon Kim¹, Natalia O Kalinina²,
Stuart MacFarlane¹, John W.S Brown¹
¹Plant Pathology, Scottish Crop Research Institute, UK, ²AN Belozersky Institute of Physico-Chemical Biology, Moscow State University

VI-SY33-3 INTERACTION OF THE POTYVIRUS PROTEIN, P3N-PIPO, WITH A PLASMA MEMBRANE-ASSOCIATED HOST PROTEIN IS CRUCIAL FOR VIRUS INFECTION
Vijayapalani Paramasivan, Allen Miller

Plant Pathology, Iowa State University, USA

VI-SY33-4 CONTRIBUTION OF TOPOLOGY DETERMINANTS OF A VIRAL MOVEMENT PROTEIN ON MEMBRANE ASSOCIATION, INTRACELLULAR TRAFFIC AND VIRAL CELL-TO-CELL MOVEMENT
Vicente Pallas, Ainhoa Genoves, Jose A Navarro

Universidad Politecnica de Valencia, Spain

VI-SY33-5 PLASMA MEMBRANE INTRINSIC PROTEIN 1 FROM NICOTIANA BENTHAMIANA IS INVOLVING IN REGULATING CELL-TO-CELL MOVEMENT OF BAMBOO MOSAIC VIRUS
Ching-Hsiu Tsai, Lin-Ling Shenkwen, Yu-Kai Tseng, Shun-Fang Cheng, Yau-Heiu Hsu

Graduate Institute of Biotechnology, National Chung Hsing University, Taiwan

VI-SY33-6 TOBAMOVIRUS SUSTAINED INTERCELLULAR MOVEMENT: VIRAL AND HOST DETERMINANTS THAT MAKE A DIFFERENCE
Richard S Nelson, Xiaohua Yang, Chengke Liu, Xin Shun Ding

Plant Biology, Samuel Roberts Noble Foundation, Inc., USA

VI-SY33-7 TRIPLE GENE BLOCK INTERACTIONS DURING BARLEY STRIPE MOSAIC VIRUS MOVEMENT
Hyoun Sub Lim¹, MiYeon Lee², Jennifer Bragg², Uma Ganesan², Brian Kim²,
John Hammond³, Andrew O Jackson²
¹Department of Applied Biology, Chungnam National University, Korea, South, ²Department of Plant and Microbial Biology, University of California, ³USDA-ARS FNPRU

Wednesday, 14 September

16:30-18:00 Room F

VI-SY34 Viruses and Cancer

Conveners: Kunitada Shimotohno *Japan*
Ethel-Michele de Villiers *Germany*

VI-SY34-1 AMINO ACID SUBSTITUTIONS OR INSERTION IN THE MEQ PROTEINS COULD AFFECT THEIR TRANSACTIVATION AND TRANSFORMATION ABILITIES
Shiro Murata, Tomoyuki Hashiguchi, Tsukasa Okada, Rika Kano, Misao Onuma,
Satoru Konnai, Kazuhiko Ohashi

Laboratory of Infectious Diseases, Department of Disease Control, Graduate School of Veterinary Medicine, Hokkaido University, Japan

VI-SY34-2 A VIRAL MECHANISM FOR DYSREGULATION OF POST-TRANSLATIONAL PROCESSING IN KAPOSI'S SARCOMA-ASSOCIATED HERPESVIRUS LATENCY
Masahiro Fujimuro¹, Chie Suzuki²
¹Mol. Cell Biol., Sch. of Med., Univ. of Yamanashi, Japan, ²Biochem., Sch. of Pharm., Hokkaido Univ.

VI-SY34-3 DEVELOPMENT OF THE NOVEL STRATEGY FOR THE TREATMENT OF PRIMARY EFFUSION LYMPHOMA**Chizuka Higashi¹, Yamada Koji², Masahiro Fujimuro¹**¹ Mol. Cell Biol., Sch. of Med., Univ. of Yamanashi, Japan, ²Biochemistry, Sch. of Pharm., Hokkaido Univ.**VI-SY34-4 HCV NS3 AND NS5B INDUCES IRF-2 EXPRESSION IN B CELL LINE****Masahiko Ito¹, Atsuko Masumi², Toshiaki Mizuochi², Tetsuro Suzuki¹**¹Dept. of Infectious Diseases, Hamamatsu University School of Medicine, Japan, ²Dept. of Safety Research on Blood and Biological Products, National Institute of Infectious Diseases**VI-SY34-5 STABILIZATION OF AU-RICH ELEMENT CONTAINING MRNA MEDIATED BY ADENOVIRUS GENE PRODUCT CONTRIBUTES TO CELL TRANSFORMATION****Takeshi Kuroshima¹, Motoaki Yasuda², Tetsuya Kitamura¹, Aya Yanagawa-Matsuda¹, Masanobu Shindoh¹, Fumihiro Higashino¹**¹Department of Oral Pathology and Biology, Hokkaido University Graduate School of Dental Medicine, Japan, ²Department of Oral Molecular Microbiology, Hokkaido University Graduate School of Dental Medicine

Thursday, 15 September

11:25-12:55 Room A

VI-SY35 Antiviral Drugs
Conveners: Eric de Clercq
Charles Boucher

Belgium
Netherlands
VI-SY35-1 THE E138K DRUG RESISTANCE MUTATION IN HIV REVERSE TRANSCRIPTASE CONFERS RESISTANCE TO SECOND GENERATION NNRTIS AND COMPENSATES FOR FITNESS DEFICITS OF M184I/V.

Mark A Wainberg, Eugene Asahchop, Maureen Oliveira,
Bluma Brenner, Hongtao Xu
Lady Davis Institute, Jewish General Hospital, McGill University AIDS Centre, Canada
VI-SY35-2 PHOSPHATIDYLINOSITOL 4-KINASE III BETA IS A TARGET OF ENVIROXIME-LIKE COMPOUNDS FOR ANTIPOLIOVIRUS ACTIVITY

Minetaro Arita¹, Hirotatsu Kojima², Tetsuo Nagano², Takayoshi Okabe², Takaji Wakita¹,
Hiroyuki Shimizu¹
¹National Institute of Infectious Diseases, Japan, ²Chemical Biology Research Initiative, The University of Tokyo

VI-SY35-3 ANTIVIRAL ACTIVITY AND POSSIBLE MECHANISMS OF ACTION OF PENTAGALLOYLGLUCOSE (PGG) AGAINST INFLUENZA A VIRUS

Ge Liu¹, Sheng Xiong^{1,2}, Yang Fei Xiang², Chao Wan Guo¹, Feng Ge¹, Chong Ren Yang³,
Ying Jun Zhang³, Yi Fei Wang², Kaio Kitazato¹
¹Department of Molecular Microbiology and Immunology, Nagasaki University, Graduate School of Biomedical Sciences, Japan, ²Biomedical R&D Center, Guangdong Provincial Key Laboratory of Bioengineering Medicine, National Engineering Research Center of Genetic Medicine, Jinan University, ³Kunming Institute of Botany, Chinese Academy of Sciences

VI-SY35-4 FUNCTIONAL INTERACTION OF DOMAINS IN WEST NILE VIRUS NON-STRUCTURAL PROTEIN 5 PROVIDES A TARGET FOR ANTIVIRAL DRUGS

Cindy SE Tan^{1,2}, Jody M Hobson-Peters^{1,2}, David P Fairlie³, Martin J Stoermer³,
Alexander A Khromykh^{1,2}, Roy A Hall^{1,2}
¹School of Chemistry and Molecular Biosciences, University of Queensland, Australia, ²Australian Infectious Diseases Research Centre, University of Queensland, ³Institute of Molecular Biosciences, University of Queensland

VI-SY35-5 STRUCTURE-ACTIVITY RELATIONSHIP ANALYSIS OF A NOVEL ANTI-ADENOVIRAL COMPOUND, (2-{[2-(BENZOYLAMINO)BENZOYL]AMINO}-BENZOIC ACID), DISCOVERED USING SMALL-MOLECULE SCREENING

Marten C Strand¹, Christopher T Oberg², Emma K Andersson¹, Karin Edlund¹,
Kristina Lindman¹, Nam Phuong², Ya-Fang Mei¹, Mikael Elofsson², Goran Wadell¹
¹Virology, Department of Virology, Umea University, Sweden, ²Department of Chemistry, Umea University

VI-SY35-6 RATE OF NATURALLY-OCCURRING AND DRUG-SELECTED RESISTANCE TO THE NEURAMINIDASE INHIBITORS: FINDINGS FROM THE FIRST 3-YEARS OF THE INFLUENZA RESISTANCE INFORMATION STUDY (IRIS)

Charles Boucher¹, Martin Schutten¹, Regina Dutkowski², Klaus Klumpp², Bruno Lina³,
Ann Nist², Albert Osterhaus¹, Jonathan Nguyen-Van-Tam⁴, Xiao Tong², Richard J Whitley⁵
¹Erasmus Medical Centre, Netherlands, ²Hoffmann-La Roche Inc., ³University of Lyon, ⁴University of Nottingham, ⁵University of Alabama at Birmingham

VI-SY35-7 ANTI-INFLUENZA A VIRUS ACTIVITY OF THE FUSION INHIBITOR, STACHYFLIN

Yurie Motohashi¹, Masatoshi Okamatsu¹, Yoshihiro Sakoda¹, Takeshi Noshi²,
Ryu Yoshida², Hiroshi Kida^{1,3}
¹Laboratory of Microbiology, Department of Disease Control, Graduate School of Veterinary Medicine, Hokkaido University, Japan, ²Shionogi Discovery Research Laboratories, ³Research Center for Zoonosis Control, Hokkaido University

Thursday, 15 September		11:25-12:55 Room D+E
VI-SY36 Viral Glycoproteins		
Convener: Shibo Jiang USA		
VI-SY36-1	A HIGHLY CONSERVED ARGININE RESIDUE IN THE MEMBRANE-SPANNING DOMAIN OF HIV-1 GP41 IS REQUIRED FOR AN EFFICIENT MEMBRANE FUSION Zene Matsuda^{1,2}, Yufei Long², Fanxia Meng², Naoyuki Kondo³, Aikichi Iwamoto⁴ ¹ Center for Asian Infectious Diseases, Institute of Medical Science, The University of Tokyo, Japan, ² Laboratory of Structural Virology and Immunology, Institute of Biophysics, CAS, ³ Department of Pediatrics, Emory University School of Medicine, ⁴ Division of Infectious Diseases, Advanced Clinical Research Center, Institute of Medical Science, the University of Tokyo	
VI-SY36-2	THE ROLE OF PRM PROTEIN IN WEST NILE VIRUS PARTICLE SECRETION Yin Xiang Setoh, Natalie A Prow, Jody Hobson-Peters, Paul R Young, Roy A Hall School of Chemistry and Molecular Biosciences, The University of Queensland, Australia	
VI-SY36-3	IDENTIFICATION OF AMINO ACIDS OF SIMIAN VIRUS 41 (SV41) FUSION PROTEIN THAT CONVERT PARAINFLUENZA VIRUS 5 FUSION PROTEIN TO A PROTEIN WHICH SPECIFICALLY INTERACTS WITH SV41 HEMAGGLUTININ-NEURAMINIDASE BY SUBSTITUTION Masato Tsurudome¹, Mito Nakahashi¹, Yoshiaki Matsushima¹, Machiko Nishio¹, Mitsuo Kawano¹, Hiroshi Komada², Tetsuya Nosaka¹ ¹ Microbiology and Molecular Genetics, Mie University Graduate School of Medicine, Japan, ² Microbiology, Suzuka University of Medical Science and Technology	
VI-SY36-4	THE CONSTRUCTION AND CHARACTERIZATION OF NEUTRALIZING ANTIBODY FOR HUMAN HERPESVIRUS 6 INFECTION Akiko Kawabata¹, Hiroko Oyaizu², Huamin Tang², Mayuko Hayashi¹, Koichi Yamanishi³, Yasuko Mori^{1,2} ¹ Division of Clinical Virology, Kobe University Graduate School of Medicine, Japan, ² Laboratory of Virology and Vaccinology, National Institute of Biomedical Innovation, ³ National Institute of Biomedical Innovation	
VI-SY36-5	THE SI STRAIN OF MEASLES VIRUS DERIVED FROM AN SSPE PATIENT EXHIBITS ALTERED RECEPTOR SPECIFICITY AND REDUCED MEMBRANE FUSION ACTIVITY Fumio Seki, Yuichiro Nakatsu, Kenji Someya, Maino Tahara, Katsuhiko Komase, Makoto Takeda Virology III, National Institute of Infectious Diseases, Japan	
VI-SY36-6	CHARACTERIZATION OF MONOCLONAL ANTIBODIES AGAINST THE 2009 PANDEMIC H1N1 INFLUENZA VIRUS HEMAGGLUTININ Reiko Yoshida¹, Disuke Tomabechi¹, Manabu Igarashi², Hiroko Miyamoto¹, Ayaka Yokoyama¹, Tetsuo Kase³, Hiroshi Kida^{4,5}, Ayato Takada¹ ¹ Global Epidemiology, Hokkaido University Research Center for Zoonosis Control, Japan, ² Bioinformatics, Hokkaido university Research Center for Zoonosis Control, ³ Osaka Prefectural Institute of Public Health, ⁴ Graduate School of Veterinary Medicine, Hokkaido University, ⁵ Hokkaido University Research Center for Zoonosis Control	
Thursday, 15 September		11:25-12:55 Room C
VI-SY37 Positive Strand RNA Viruses: Replication		

- VI-SY37-2 ROLE OF MEMBRANES IN DENGUE VIRUS REPLICATION**
Richard J Kuhn^{1,2}, Rushika Perera¹, Catherine Riley¹, Jiraphan Junjhon¹, Thomas J Edwards¹, Amber Hopf-Jannasch², Giorgis I Mezengie³, Thomas O Metz³, Ronald J Moore³, Ljiljana Pasa-Tolic³, Jiri Adamec²
¹Biological Sciences, Purdue University, USA, ²Bindley Bioscience Center, Purdue University, ³Pacific Northwest National Laboratory
- VI-SY37-3 ALPHAVIRUS NSP3 PROMOTES VIRAL RNA REPLICATION BY BINDING AND RECRUITING HOST CELL AMPHIPHYSINS**
Tero Ahola¹, Maarit Neuvonen¹, Arunas Kazlauskas², Kalle Saksela²
¹Institute of Biotechnology, University of Helsinki, Finland, ²Department of Virology, Haartman Institute, University of Helsinki and Helsinki University Central Hospital
- VI-SY37-4 SOLUTION STRUCTURES AND FUNCTIONAL ANALYSIS OF THE CALICIVIRUS VIRAL PROTEIN GENOME LINKED (VPG)**
Eoin Leen¹, King R Kwok², James R Birtley¹, Sean Prater¹, Yasmin Goodfellow³, Ian Goodfellow³, Lisa O Roberts⁴, Pete J Simpson², Steve J Matthews², Stephen Curry¹
¹Biophysics Section, Imperial College London, UK, ²Division of Molecular Biosciences, Imperial College London, ³Department of Virology, Imperial College London, ⁴Faculty of Health and Medical Sciences, Surrey University
- VI-SY37-5 FUNCTIONAL PROFILING OF THE MURINE NOROVIRUS GENOME**
Ian Goodfellow, Dalan Bailey, Lucy Thorne
 Department of Medicine, Imperial College London, UK
- VI-SY37-6 ACQUISITION OF PATHOGENICITY BY SERIAL PASSAGES OF LIVE ATTENUATED VACCINE STRAIN OF CLASSICAL SWINE FEVER VIRUS IN PIGS**
Tomokazu Tamura¹, Yoshihiro Sakoda¹, Fumi Yoshino¹, Takushi Nomura¹, Naoki Yamamoto¹, Masatoshi Okamatusu¹, Nicolas Ruggli², Hiroshi Kida^{1,3}
¹Laboratory of Microbiology, Department of Disease Control, Graduate School of Veterinary Medicine, Hokkaido University, Japan, ²Institute of Virology and Immunoprophylaxis, ³Research Center for Zoonosis Control, Hokkaido University

Thursday, 15 September

11:25-12:55 Room F

VI-SY38 Viral Diagnosis

Conveners: Tetsuya Mizutani Japan
Christian Drosten Germany

- VI-SY38-1 CLINICAL EVALUATION OF A MASSCODE PCR ASSAY FOR THE DETECTION OF VIRUSES THAT CAUSE RESPIRATORY DISEASE**
David W Smith^{1,2}, Lee C Yang³, Kate Moody¹, David T Williams^{1,4}, Scott Basehore³, Natalia Novoradovskaya³, Russell McInnes³, Craig Monell³, Gavin Fischer³
¹Microbiology and Infectious Diseases, PathWest Laboratory Medicine WA, Australia, ²School of Pathology and Laboratory Medicine and School of Biomedical, Biomolecular and Chemical Sciences, University of Western Australia, ³Life Sciences Group, Agilent Technologies, ⁴School of Biomolecular Sciences, Curtin University
- VI-SY38-2 NUCLEIC ACID-BASED DETECTION OF DENGUE INFECTION IS SUPERIOR TO ANTIBODY AND PROTEIN ANTIGEN DETECTION METHODS**
Maria Luisa G Daroy^{1,2}, Cynthia A Mapua^{1,2}, Gina J Akiat³, Lady-Anne C Suarez¹, Mary Jane Gregorio¹, Mark Pierre S Dimamay^{1,2}, Corazon C Buerano^{1,4}, Ronald R Matias^{1,2,5}, Filipinas F Natividad^{1,2}
¹Research and Biotechnology Division, St. Luke's Medical Center, Philippines, ²Molecular Medicine Program, St. Luke's College of Medicine, ³Dept. of Infectious Diseases and Tropical Medicine, St. Luke's Medical Center, ⁴Institute of Biology, University of the Philippines, ⁵Medical Affairs Division, United Laboratories, Inc.
- VI-SY38-3 DIAGNOSIS OF INFLUENZA VIRUS STRAIN BY HAIRPIN-TYPE PEPTIDE NUCLEIC ACID**
Kunihiro Kaihatsu, Shinjiro Sawada, Shota Nakamura, Takaaki Nakaya, Naohisa Goto, Teruo Yasunaga, Nobuo Kato
 Osaka University, Japan

VI-SY38-4 IDENTIFICATION OF SITH-1 AS NOVEL LATENT PROTEIN OF HUMAN HERPESVIRUS 6 (HHV-6) ASSOCIATED WITH CHRONIC FATIGUE SYNDROME (CFS) AND MOOD DISORDERS

Nobuyuki Kobayashi, Kazuya Shimada, Akihiro Shimizu, Kazuhiro Kondo
Department of Virology, The Jikei University School of Medicine, Japan

VI-SY38-5 AN ISOLATED VIRUS HOMOLOGUS TO PORCINE SAPELOVIRUS FROM WILD BOAR

Tetsuya Mizutani¹, Masako Abe², Naoto Ito², Kouji Sakai³, Yoshihiro Kaku⁴, Mami Oba¹, Momoko Ogata¹, Ichiro Kurane¹, Masayuki Saijo¹, Shigeru Morikawa¹, Makoto Sugiyama²

¹Virology 1, National Institute of Infectious Diseases, Japan, ²The United Graduate School of Veterinary Sciences, Gifu University, ³Virology 3, National Institute of Infectious Diseases, ⁴Veterinary Science, National Institute of Infectious Diseases

Thursday, 15 September

11:25-12:55 Room H

VI-SY39 Structure and Assembly: Non-Enveloped Viruses

Conveners: Vijay S Reddy USA
B.V.Venkataram Prasad USA

VI-SY39-1 ECHOVIRUS 1 INFECTION IS ASSOCIATED WITH STRUCTURAL CHANGES IN ALPHA2BETA1-INTEGRIN -TRIGGERED MULTIVESICULAR BODIES

Pan Soonsawad^{1,2,3}, Paula Upla^{2,4}, Wattana Weerachatanukul⁵, Selina Poon^{1,2}, Kitty Y Cheng¹, Juan Espinoza¹, Gregory Mcnerney⁶, Thomas Huser⁶, Varpu Marjomaki⁴, Anders Vahlne², Holland R Cheng¹

¹Molecular and Cellular Biology, University of California Davis, USA, ²Karolinska Institutet Structural Virology F68 University Hospital, ³Department of Anatomy, Faculty of Dentistry Mahidol University, ⁴Department of Environmental and Biological Science/Nanoscience Center, University of Jyväskylä, ⁵Department of Anatomy, Faculty of Science, Mahidol University, ⁶Center for Biophotonics Science and Technology, University of California

VI-SY39-2 CYS80 OF JC VIRUS CAPSID PROTEIN, VP1 IS ESSENTIAL FOR PENTAMER FORMATION

Shintaro Kobayashi¹, Tadaki Suzuki², Manabu Igarashi³, Noriko Ohtake⁴, Keita Nagakawa⁴, Kenichi Niikura⁵, Takashi Kimura¹, Harumi Kasamatsu⁶, Hirofumi Sawa^{1,7}

¹Molecular Pathobiology, Hokkaido University Research Center for Zoonosis, Japan, ²Pathology, National Institute of Infectious Diseases, ³Bioinformatics, Hokkaido University Research Center for Zoonosis Control, ⁴Graduate School of Science, Hokkaido University, ⁵Nanotechnology Research Center, Research Institute for Electronic Science, Hokkaido University, ⁶Molecular, Cell and Developmental Biology and Molecular Biology Institute, University of California, ⁷Global COE Program for Zoonosis Control

VI-SY39-3 PERSPECTIVES ON THE CRYSTAL STRUCTURE OF HUMAN ADENOVIRUS

Vijay S Reddy¹, Kundhavai S Natchiar¹, Tina-Marie Mullen², Glen R Nemerow²

¹Department of Molecular Biology, The Scripps Research Institute, USA, ²Department of Immunology & Microbial Science, The Scripps Research Institute

VI-SY39-4 ELUCIDATING THE INTERNAL STRUCTURE OF THE RCNMV CAPSID BY SMALL ANGLE NEUTRON SCATTERING ANALYSIS

Steven A Lommel¹, Stanton Martin¹, Lilin He³, Richard H Guenther¹, Flora Meilleur^{2,3}, William Heller³, Tim Sit¹

¹Department of Plant Pathology, North Carolina State University, USA, ²Center for Structural Molecular Biology, Neutron Scattering Science Division, Oak Ridge National Laboratory, ³Department of Molecular & Structural Biochemistry, North Carolina State University

VI-SY39-5 CHARACTERIZATION OF VIRUS-LIKE PARTICLES OF RAT HEPATITIS E VIRUS GENERATED BY RECOMBINANT BACULOVIRUS

Tiancheng Li¹, Kumiko Yoshimatsu⁴, Shumpei P Yasuda⁴, Jiro Arikawa⁴, Michiyo Kataoka², Yasushi Ami³, Yuriko Suzaki³, Takaji Wakita¹

¹Department of Virology 2, National Institute of Infectious Diseases, Japan, ²Department of Pathology, National Institute of Infectious Diseases, ³Division of Experimental Animals Research, National Institute of Infectious Diseases, ⁴Department of Microbiology, Graduate School of Medicine, Hokkaido University

VI-SY39-6 STRUCTURE, ASSEMBLY AND APPLICATIONS OF VIRAL COAT PROTEINS

Gabriela Chavez-Calvillo^{1,2}, Roger Vega-Acosta³, Carlos Amero², Jaime Ruiz-Garcia³, Laura Silva-Rosales⁴, Mauricio Carrillo-Tripp¹

¹National Laboratory of Genomics for Biodiversity, CINVESTAV Irapuato, Mex., Mexico, ²Chemical Research Center, The Autonomous University of Morelos, ³Faculty of Physics, University of San Luis Potosi, SLP,

⁴Department of Genetic Engineering, CINVESTAV Irapuato

Thursday, 15 September

11:25-12:55 Room I

VI-SY40 RNA Recombination

Conveners: Paul Ahlquist USA
Jozef Bujarski USA

VI-SY40-1 5' SUBGENOMIC RNA3A RECOMBINES WITH GENOMIC RNA3 OF BROME MOSAIC BROMOVIRUS IN VITRO AND IN VIVO

Jozef J Bujarski^{1,2}, Joanna Sztuba-Solinska¹, Aleksandra M Dziaott¹

¹Dept. of Biological Sciences, Northern Illinois University, USA, ²Institute of Bioorganic Chemistry, Polish Academy of Sciences

VI-SY40-2 STRUCTURAL DYNAMICS OF NOROVIRUS GII.4 GENOME IN NATURE

Kazushi Motomura¹, Masaru Yokoyama¹, Tomoichiro Oka², Kazuhiko Katayama², Mamoru Noda³, Tomoyuki Tanaka⁴, Hironori Sato¹

¹Pathogen Genomics Center, National Institute of Infectious Diseases, Japan, ²Department of Virology II, National Institute of Infectious Diseases, ³National Institute of Health Sciences, ⁴Sakai City Institute of Public Health

VI-SY40-3 INTERMOLECULAR RNA RECOMBINATION OCCURS AT DRAMATICALLY DIFFERENT FREQUENCIES IN ALTERNATE FORMS OF BROMOVIRUS RNA REPLICATION COMPARTMENTS

Hernan Garcia-Ruiz¹, Arturo Diaz², Paul Ahlquist²

¹Donald Danforth Plant Science Center, USA, ²Institute for Molecular Virology, University of Wisconsin - Madison

Thursday, 15 September

14:30-16:00 Room A

VI-SY41 HIV/SIV Pathogenesis

Conveners: Satya Dandekar USA
Roger Le Grand France

VI-SY41-1 HIV-1 INFECTION ENHANCES THE SUSCEPTIBILITY OF T CELLS TO MEASLES VIRUS INFECTION BY UPREGULATING SIGNALING LYMPHOCYTE ACTIVATION MOLECULE (SLAM) EXPRESSION

Yu-Ya Mitsuki¹, Kentaro Shibusawa¹, Kazutaka Terahara¹, Kazuo Kobayashi¹, Yuko Morikawa², Tetsuo Nakayama³, Makoto Takeda⁴, Yusuke Yanagi⁵, Yasko Tsunetsugu Yokota¹

¹Immunology, National Institute of Infectious Diseases, Japan, ²Viral Infection II, Kitasato Institute for Life Sciences, Kitasato University, ³Viral Infection I, Kitasato Institute for Life Sciences, Kitasato University, ⁴Virology III, National Institute of Infectious Diseases, ⁵Virology, Medical Institute of Bioregulation, Kyushu University

VI-SY41-2 THE HIV HIDE AND SEEK GAME: AN IMMUNOGENOMIC ANALYSIS OF THE HIV EPITOPE REPERTOIRE

Yoram Louzoun, Tal Vider Shalit
 Mathematics, Israel

VI-SY41-3 HIV-1 PROTEINS PREFERENTIALLY ACTIVATE ANTI-INFLAMMATORY M2-MACROPHAGES
Takashi Chihara, Michihiro Hashimoto, Shinya Suzu

Center for AIDS Research, Kumamoto University, Japan

VI-SY41-4 ANALYSIS OF VIRAL GENOME SEQUENCES IN SIV CONTROLLERS

Takushi Nomura¹, Hiroyuki Yamamoto^{1,2}, Syo Shi^{1,2}, Nami Iwamoto^{1,2}, Tetsuro Matano^{1,2}

¹AIDS Research Center, National Institute of Infectious Diseases, Japan, ²Institute of Medical Science, University of Tokyo

VI-SY41-5 GENOTYPIC VARIATION OF CYNOMOLGUS MONKEY TRIM5ALPHA DETERMINES THE SUSCEPTIBILITY TO MONKEY-TROPIC HIV-1 INFECTION

Akatsuki Saito^{1,2,3}, Masako Nomaguchi⁴, Ken Kono⁵, Emi E Nakayama⁵, Tatsuo Shioda⁵, Tomoyuki Yoshida¹, Yasuhiro Yasutomi³, Tetsuro Matano², Akio Adachi⁴, Hirofumi Akari^{1,3}

¹Center for Human Evolution Modeling Research, Primate Research Institute, Kyoto University, Japan,

²International Research Center for Infectious Diseases, The Institute of Medical Science, The University of Tokyo,

³Tsukuba Primate Research Center, National Institute of Biomedical Innovation, ⁴Department of Microbiology, Institute of Health Biosciences, The University of Tokushima Graduate School, ⁵Department of

Viral Infections, Research Institute for Microbial Diseases, Osaka University

VI-SY41-6 THE EFFECT OF TNFA POLYMORPHISM ON THE SURVIVAL OF PATIENTS WITH HIV INFECTION IN THAILAND

Michio Yasunami¹, Nuanjun Wichukchinda², Panita Pathipvanich³, Reiko Miyahara¹, Masahiko Mori¹, Naho Tsuchiya¹, Archawin Rojanawiwat², Pathom Sawanpanyalert², Koya Ariyoshi¹

¹Nagasaki University Institute of Tropical Medicine, Japan, ²National Institute of Health, Ministry of Public Health, ³Day Care Center, Lampang Hospital

Thursday, 15 September

14:30-16:00 Room D+E

VI-SY42 Cytomegaloviruses

Conveners: Klaus Frueh
Jin Hyun Ahn

USA
Korea, South

VI-SY42-1 THE HUMAN CYTOMEGALOVIRUS GENE PRODUCTS ESSENTIAL FOR LATE VIRAL GENE EXPRESSION ASSEMBLE INTO PRE- REPLICATION COMPLEXES BEFORE VIRAL DNA REPLICATION

Hiroki Isomura, Tatsuya Tsurumi

Dept. of Virology, Aichi Cancer Center Research Institute, Japan

VI-SY42-2 CHARACTERIZATION OF HUMAN CYTOMEGALOVIRUS UL136 GENE PRODUCT

Huanan Liao¹, Jung-Hyun Lee², Naoki Inoue³, Kenji Miyado⁴, Shigeyoshi Fujiwara¹, Hiroyuki Nakamura¹

¹Department of Infectious Diseases, National Research Institute for Child Health and Development, Japan,

²Department of Pediatrics, College of Medicine, The Catholic University of Korea, ³Department of Virology

I, National Institute of Infectious Diseases, ⁴Department of Reproductive Biology, National Research Institute for Child Health and Development

VI-SY42-3 HUMAN CYTOMEGALOVIRUS INFECTION CAUSES DEGRADATION OF SP100 PROTEINS THAT SUPPRESS VIRAL GENE EXPRESSION

Jin-Hyun Ahn¹, Young-Eui Kim¹, Jin-Hyoung Lee¹, Eui Tae Kim¹, Su Yeon Gu¹, Hyang Sook Seol¹, Paul Ling², Chan Hee Lee³

¹Department of Molecular Cell Biology, Sungkyunkwan University School of Medicine, Korea, South,

²Department of Molecular Virology and Microbiology, Baylor College of Medicine, ³Division of Life Sciences, Chungbuk National University

VI-SY42-4 MOUSE EMBRYONIC STEM CELLS INHIBIT MURINE CYTOMEGALOVIRUS INFECTION THROUGH A MULTI-STEP PROCESS

Hideya Kawasaki¹, Isao Kosugi¹, Yoshifumi Arai¹, Toshihide Iwashita¹, Yoshihiro Tsutsui²

¹Second Department of Pathology, Hamamatsu University School of Medicine, Japan, ²Faculty of Health Science, Hamamatsu University

VI-SY42-5 A GENOTYPIC AND SEROLOGIC STUDY OF CYTOMEGALOVIRUS (CMV) REINFECTION IN MOTHERS AND NEONATES WITH CONGENITAL CMV INFECTION IN JAPAN

Kazufumi Ikuta¹, Ken Ishioka¹, Takashi Imamura², Kimisato Asano³, Tetsushi Yoshikawa⁴, Hiroyuki Moriuchi⁵, Shigeyoshi Fujiwara⁶, Takahiko Kubo⁷, Shin Koyano⁸, Naoki Inoue⁹, Tatsuo Suzutani¹

¹Department of Microbiology, Fukushima Medical University, Japan, ²Department of Pediatrics, Fukushima

Medical University, ³Maternal and Perinatal Center, Fukushima Medical University, ⁴Department of Pediatrics,

Fujita Health University, ⁵Department of Pediatrics, School of Medicine, Nagasaki University, ⁶Department of

Infectious Diseases, National Research Institute for Child Health and Development, ⁷Department of Perinatal

Medicine and Maternal Care, National Center for Child Health and Development, ⁸Department of Pediatrics,

Asahikawa Medical University, ⁹Department of Virology I, National Institute of Infectious Diseases

VI-SY42-6 LACK OF PRESENCE OF THE HUMAN CYTOMEGALOVIRUS IN HUMAN GLIOBLASTOMAS

Yoriko Yamashita¹, Hiroki Isomura², Yoshinori Ito³, Kazuya Motomura⁴,
Atsushi Natsume⁴, Toshihiko Wakabayashi⁴, Shinya Toyokuni¹, Tatsuya Tsurumi²

¹Department of Pathology and Biological Responses, Nagoya University Graduate School of Medicine, Japan, ²Division of Virology, Aichi Cancer Center Research Institute, ³Department of Pediatrics, Nagoya University Graduate School of Medicine, ⁴Department of Neurosurgery, Nagoya University Graduate School of Medicine

VI-SY42-7 HARNESSING THE UNIQUE BIOLOGY OF CYTOMEGALOVIRUS FOR VACCINE VECTOR DEVELOPMENT

Klaus Frueh

Vaccine and Gene Therapy Institute, Oregon Health and Science University, USA

Thursday, 15 September

14:30-16:00 Room C

VI-SY43 Viroid and Satellite Viruses

Convener: Teruo Sano

Japan

VI-SY43-1 PATHOGENICITY OF HOP STUNT VIROID-GRAPEVINE AND ITS MUTANT ADAPTED TO HOPS

Teruo Sano¹, Takahiro Matsuda¹, Adkar-Purushothama Charith Raj¹, Zhi-Xiang Zhang²,
Shi-Fang Li²

¹Hirosaki University, Faculty of Agriculture and Life Science, Japan, ²State Key Laboratory of Biology of Plant Diseases and Insect Pests, Institute of Plant Protection, Chinese Academy of Agricultural Sciences

VI-SY43-2 THE 5' CO-EVOLVED APICAL HAIRPIN STEM LOOP OF BAMBOO MOSAIC VIRUS AND ITS SATELLITE RNA CONTRIBUTES TO REPLICATION COMPETENCE

Na-Sheng Lin¹, Hsin-Chuan Chen¹, Chi-Ping Cheng¹, Ting-Yu Yeh¹, Yau-Heiu Hsu²

¹Institute of Plant and Microbial Biology, Academia Sinica, Taiwan, ²Graduate Institute of Biotechnology, National Chung Hsing University

VI-SY43-3 ACCUMULATION OF POTATO SPINDLE TUBER VIROID-SPECIFIC SMALL RNAs IS ACCOMPANIED BY SPECIFIC CHANGES IN GENE EXPRESSION IN TWO TOMATO CULTIVARS

Robert A Owens¹, Akito Taneda², Mineo Senda³, Kimberly Tech¹, Jacyn C Baker¹,
Teruo Sano³

¹USDA/ARS, Molecular Plant Pathology Laboratory, USA, ²Hirosaki University, Graduate school of Science and Technology, ³Hirosaki University, Faculty of Agriculture and Life Science

Thursday, 15 September

14:30-16:00 Room F

VI-SY44 Rhabdoviruses

Conveners: Matthias J Schnell

USA

Karl-Klaus Conzelmann

Germany

VI-SY44-1 IN PLANTA VIRAL PROTEIN LOCALIZATION AND INTERACTION MAPS FOR NUCLEO- AND CYTORHABDOVIRUSES

Ralf G Dietzgen^{1,2}, Kathleen M Martin², Kristin Kopperud², Michael M Goodin²

¹Queensland Alliance for Agriculture and Food Innovation Institute, The University of Queensland, Australia, ²Department of Plant Pathology, University of Kentucky

VI-SY44-2 GFP EXPRESSION FROM A BIOLOGICALLY ACTIVE MINIREPLICON OF SONCHUS YELLOW NET VIRUS

Andrew O Jackson, Uma Ganesan, Jennifer N Bragg, MiYeon Lee, Justin Kappel,
Cole Peters, Manling Shi, Min Deng, Sharon Marr

Plant and Microbial Biology, University of California-Berkeley, USA

VI-SY44-3 CRITICAL ROLE OF RABIES VIRUS PHOSPHOPROTEIN FOR ASSEMBLY OF VIRUS PARTICLES

Anika Kern, Karl-Klaus Conzelmann

Max von Pettenkofer Institute & Gene Center, Ludwig Maximilians-University Munich, Germany

- VI-SY44-4 GENERATION OF RABIES VIRUS STRAIN ATTENUATED BY MULTIPLE MECHANISMS**
 Keisuke Nakagawa¹, Naoto Ito^{1,2}, Tatsunori Masatani¹, Masako Abe¹, Satoko Yamaoka¹, Kota Okadera¹, Makoto Sugiyama^{1,2}
¹The United Graduate School of Veterinary Sciences, Gifu University, Japan, ²Laboratory of Zoonotic Diseases, Faculty of Applied Biological Sciences, Gifu University
- VI-SY44-5 A CANDIDATE FOR A VIRAL ELEMENT RELATED TO STREET RABIES VIRUS PATHOGENICITY FOLLOWING PERIPHERAL INFECTION**
 Kentaro Yamada¹, Kazuko Noguchi², Takashi Matsumoto², Takahiro M Mitsui², Kamruddin Ahmed¹, Akira Nishizono^{1,2}
¹Research Promotion Project, Oita University, Japan, ²Department of Microbiology, Faculty of Medicine, Oita University
- VI-SY44-6 THE GENE 3-ENCODED CELL-TO-CELL MOVEMENT PROTEIN IS A VIRUS STRUCTURAL PROTEIN OF RICE TRANSITORY YELLOWING VIRUS**
 Akihiro Hiraguri¹, Osamu Netsu¹, Takumi Shimizu¹, Tamaki Uehara-Ichiki¹, Toshihiro Omura¹, Nobumitsu Sasaki², Hiroshi Nyunoya², Takahide Sasaya¹
¹National Agricultural Research Center/BRAIN, Japan, ²Gene Research Center, Tokyo University of Agriculture and Technology

Thursday, 15 September

14:30-16:00 Room H

VI-SY45 Flaviviruses

- Conveners:** Pei Yong Shi USA
 Richard J Kuhn USA
- VI-SY45-1 TYPE I INTERFERON ACTIVATES THE INTERFERON ANTAGONIST FUNCTION OF YELLOW FEVER VIRUS NS5 PROTEIN**
 Juliet Morrison, Maudry Laurent-Rolle, Adolfo Garcia-Sastre
 Microbiology, Mount Sinai School of Medicine, USA
- VI-SY45-2 GENETIC AND FUNCTIONAL ANALYSIS OF THE PROTEOLYTIC CLEAVAGE AT THE JUNCTION OF THE NS1 AND NS2A PROTEINS OF MURRAY VALLEY ENCEPHALITIS VIRUS**
 Siti NK Addis^{1,2}, Jayaram Bettadapura³, Eva Lee¹, Mario Lobigs¹
¹Emerging Pathogens and Vaccines Program, John Curtin School of Medical Research, Australian National University, Australia, ²Faculty of Science and Technology, Universiti Malaysia Terengganu, ³Institute for Glycomics, Griffith University
- VI-SY45-3 CONTROL OF NEUROTROPIC FLAVIVIRUS PATHOGENESIS BY MICRORNA-TARGETING**
 Alexander G Pletnev, Brian L Heiss, Olga A Maximova, Natalya L Teterina, Amber R Engel
 DHHS, Laboratory of Infectious Diseases, NIAID, NIH, USA
- VI-SY45-4 THE CAPSID-BINDING NUCLEOLAR HELICASE DDX56 IS IMPORTANT FOR INFECTIVITY OF WEST NILE VIRUS**
 Zaikun Xu¹, Robert Anderson², Tom C Hobman^{1,3}
¹Department of Cell Biology, University of Alberta, Canada, ²Department of Microbiology and Immunology, Dalhousie University, ³Li Ka Shing Institute of Virology, University of Alberta
- VI-SY45-5 THE TRIPARTITE RELATIONSHIP BETWEEN CYTOSOLIC EXPOSURE OF DOUBLE-STRANDED RNA, INTERFERON ACTIVATION, AND DISSEMINATION OF JAPANESE ENCEPHALITIS VIRUS IN CULTURED CELLS**
 Lyre Anni Espada-Murao, Kouichi Morita
 Department of Virology, Institute of Tropical Medicine, GCOE Programme, Nagasaki University, Japan
- VI-SY45-6 A CONSERVED REGION IN WEST NILE VIRUS NS4A CONTRIBUTES TO REMOVAL OF 2K PEPTIDE AND IS ESSENTIAL FOR REPLICATION**
 Jason Mackenzie, Rebecca Ambrose
 Department of Microbiology, La Trobe University, Australia

Thursday, 15 September

14:30-16:00 Room I

VI-SY46 Emerging Viruses in Vegetable and Fruit Crops

Conveners: Thierry Candresse *France*
Nobuyuki Yoshikawa *Japan*

- VI-SY46-1 MOLECULAR EPIDEMIOLOGICAL STUDY OF PLUM POX VIRUS IN JAPAN BASED ON COMPLETE GENOME SEQUENCES**
Kensaku Maejima, Yusuke Takinami, Kazuya Ishikawa, Misako Himeno, Tatsushi Adachi, Ryo Iwai, Chihiro Miura, Nami Minato, Shigetou Namba
Department of Agricultural and Environmental Biology, Graduate School of Agricultural and Life Sciences, The University of Tokyo, Japan
- VI-SY46-2 TOMATO RESISTANCE BREAKDOWN OF TOMATO SPOTTED WILT VIRUS IN SPAIN**
Diana E Debreczeni¹, Jose Aramburu², Carmelo Lopez³, Belen Belliure¹, Luis Galipienso², Salvador Soler³, **Luis Rubio**¹
¹Ivia, Spain, ²IRTA, ³COMAV-UPV
- VI-SY46-3 TOWARDS THE ELIMINATION OF INFECTIOUS ENDOGENOUS BANANA STREAK VIRUS SEQUENCES FROM MUSA BALBISIANA**
Pierre-Yves Teycheney^{1,2}, Marie Umber², Benoit Farinas², Lydiane Bonheur², Christophe Jenny²
¹Bios, CIRAD, Guadeloupe, ²CIRAD-Bios, UMR AGAP, Amélioration Génétique et Adaptation des Plantes méditerranéennes et tropicales, Station de Neufchâteau
- VI-SY46-4 ANALYSIS OF THE PHYTOVIRAL METAGENOME IN VEGETABLE CROPS AND ASSOCIATED WEEDS IN A TEMPERATE AGRICULTURAL CONTEXT**
Candresse Thierry, Marais Armelle, Faure Chantal, Svanella-Dumas Laurence, Bergey Bernard, Laizet Yec'Han, Couture Carole
Virology Team, UMR BFP Bordeaux, Inra, France
- VI-SY46-5 IDENTIFICATION OF A VIRUS-LIKE RNA ASSOCIATED WITH KOBU-SHO IN GENTIAN PLANTS**
Go Atsumi¹, Ken-Taro Sekine¹, Yasuya Iwadata², Reiko Tomita¹, Ken-Ichi Chiba², Shiho Akasaka², Kazumichi Fujiwara², Naoto Yamaoka³, Masahiro Nishihara¹, Hideyuki Takahashi¹, Masamichi Nishiguchi³, Kappei Kobayashi^{1,3}
¹Iwate Biotechnology Research Center, Japan, ²Iwate Agricultural Research Center, ³Faculty of Agriculture, Ehime University
- VI-SY46-6 HOST PREFERENCE OF WATERMELON SILVER MOTTLE VIRUS AND MELON YELLOW SPOT VIRUS FOR FIELD WATERMELON AND MELON**
Tsung-Chi Chen¹, Ju-Ting Li^{1,2}, Li-Hsin Huang², Jung-Shu Weng¹, Yuan-Fu Cheng¹, Jui-Chu Peng^{3,4}, Shyi-Dong Yeh⁴
¹Department of Biotechnology, Asia University, Taiwan, ²Division of Pesticide Application, Taiwan Agricultural Chemicals and Toxic Substances Research Institute, ³Division of Crop Environment, Tainan District Agricultural Research and Extension Station, ⁴Department of Plant Pathology, National Chung Hsing University

Thursday, 15 September

16:30-18:00 Room C

VI-SY47 Picornaviruses

Conveners: Raul Andino *USA*
Thomas Michiels *Belgium*

- VI-SY47-1 HUMAN SCARB2-DEPENDENT INFECTION OF CLINICAL ISOLATES OF COXSACKIEVIRUS A14, A16 AND ENTEROVIRUS 71**
Seiya Yamayoshi¹, Setsuko Iizuka², Teruo Yamashita³, Hiroko Minagawa³, anako Sanjoh⁴, Noriko Katsushima⁵, Tsutomu Itagaki⁶, Katsumi Mizuta⁷, Yukio Nagai⁸, Michiko Okamoto⁹, Hidekazu Nishimura⁹, Ken Fujii¹, Satoshi Koike¹
¹Neurovirology Project, Tokyo Metropolitan Institute of Medical Science, Japan, ²Shimane prefectural Institute of Public Health and Environmental Science, ³Laboratory of Virology, Department of Microbiology and Medical Zoology, Aichi Prefectural Institute of Public Health, ⁴Sanjoh Clinic, ⁵Katsushima Pediatric Clinic, ⁶Yamanobe Pediatric Clinic, ⁷Department of Microbiology, Yamagata Prefectural Institute of Public Health, ⁸Nagai Children's Clinic, ⁹Virus Research Center, Sendai Medical Center

VI-SY47-2 ANALYSIS OF AMINO ACID DETERMINANTS OF ENTEROVIRUS 71 RESPONSIBLE FOR THE PSGL-1-BINDING PHENOTYPE

Yorihiro Nishimura, Takaji Wakita, Hiroyuki Shimizu

*Department of Virology II, National Institute of Infectious Diseases, Japan***VI-SY47-3 ENTEROVIRUS 71 AND COXSACKIEVIRUS A16 3C PROTEASES: BINDING TO RUPINTRIVIR AND THEIR SUBSTRATE, AND ANTI-HFMD DRUG DESIGN**Guangwen Lu^{1,2}, Jianxun Qi¹, Zhujun Chen³, Xiang Xu³, Feng Gao⁴, Jinghua Yan¹, George Fu Gao^{1,2,5,6}¹CAS Key Laboratory of Pathogenic Microbiology and Immunology (CASPMI), Institute of Microbiology, Chinese Academy of Sciences, China, ²Graduate University, Chinese Academy of Sciences, ³College of Life Science, Anhui Agricultural University, ⁴National Laboratory of Macromolecules, Institute of Biophysics, Chinese Academy of Sciences, ⁵China-Japan Joint Laboratory of Molecular Immunology and Molecular Microbiology, Institute of Microbiology, Chinese Academy of Sciences, ⁶Beijing Institutes of Life Science, Chinese Academy of Sciences**VI-SY47-4 ANTAGONISTIC ROLE OF FBP1 AND FBP2 IN REGULATION OF INTERNAL RIBOSOMAL ENTRY SITE OF ENTEROVIRUS 71**Shin-Ru Shih^{1,2,3}, Peng-Nien Huang^{1,3}, Jing-Yi Lin¹, Nicolas Locker⁴, Yu-An Kung^{1,3}, Chuan-Tien Hung^{1,3}, Jhao-Yin Lin^{1,3}, Hsing-I Huang^{1,2}, Mei-Ling Li⁵¹Research Center for Emerging Viral Infections, Chang Gung University, Taiwan, ²Department of Medical Biotechnology and Laboratory Science, Chang Gung University, ³Graduate Institute of Biomedical Science, Chang Gung University, ⁴Division of Microbial Sciences, Faculty of Health and Medical Sciences, University of Surrey, ⁵Department of Molecular Genetics, Microbiology and Immunology, UMDNJ-Robert Wood Johnson Medical School**VI-SY47-5 EPIDEMIOLOGICAL AND GENETIC ANALYSES OF A DIFFUSE OUTBREAK OF HEPATITIS A IN JAPAN, 2010**Koji Ishii¹, Tomoko Kiyohara¹, Sayaka Yoshizaki¹, Takaji Wakita¹, Tomoe Shimada², Naomi Nakamura², Yuki Tada², Mamoru Noda³¹Department of Virology II, National Institute of Infectious Diseases, Japan, ²Infectious Disease Surveillance Center, National Institute of Infectious Diseases, ³Division of Biomedical Food Research, National Institute of Health Sciences**VI-SY47-6 COMPREHENSIVE FULL LENGTH SEQUENCE ANALYSIS OF SAFFOLD VIRUSES: RE-EVALUATING CLASSIFICATION**Naeem Asif¹, Takushi Hosomi², Yorihiro Nishimura¹, Muhammad M Alam³, Tomoichiro Oka¹, Sohail Zaidi³, Hiroyuki Shimizu¹¹Department of Virology II, National Institute of Infectious Diseases, Japan, ²The Public Health Institute of Kochi Prefecture, ³Department of Virology, National Institute of Health

Thursday, 15 September

16:30-18:00 Room F

VI-SY48 Prions and BSEConveners: Motohiro Horiuchi *Japan*
Tetsuyuki Kitamoto *Japan***VI-SY48-1 CHARACTERIZATION OF PRION INFECTION IN DIFFERENTIATED MOUSE NEUROSPHERES**

Sassa Yukiko, Takeshi Yamasaki, Rie Hasebe, Motohiro Horiuchi

*Veterinary Hygiene, Graduate School of Veterinary Medicine, Hokkaido University, Japan***VI-SY48-2 DETECTION OF NEWLY GENERATED PRP^{SC} IN NEURO2A CELLS INOCULATED WITH FLUORESCENT-DYE LABELED PURIFIED PRP^{SC}**Takeshi Yamasaki¹, Gerald S Baron², Motohiro Horiuchi¹¹Laboratory of Veterinary Hygiene, Graduate School of Veterinary Medicine, Hokkaido University, Japan, ²Laboratory of Persistent Viral Diseases, Rocky Mountain Laboratories, National Institute for Allergy and Infectious Diseases, National Institute of Health**VI-SY48-3 INVOLVEMENT OF CD14 IN THE EARLY NEUROPATHOGENESIS OF PRION DISEASE**

Rie Hasebe, Keiko Sakai, Chang H Song, Motohiro Horiuchi

Graduate School of Veterinary Medicine, Hokkaido University, Japan

VI-SY48-4 BLOCKING OF FCR SUPPRESSES THE INTESTINAL INVASION OF SCRAPIE AGENTS

Ryuta Uraki¹, Akikazu Sakudo¹, Kosuke Michibata², Yasuhisa Ano¹, Jyuri Kono³, Masayoshi Yukawa³, Takashi Onodera¹

¹Department of Molecular Immunology, Graduate School of Agricultural and Life Sciences, University of Tokyo, Japan, ²Laboratory of Biometabolic Chemistry, School of Health Sciences, Faculty of Medicine, University of the Ryukyus, ³Department of Veterinary Medicine, College of Bioresource Sciences, Nihon University

VI-SY48-5 FK506 PROLONGS SURVIVAL TIME OF FK-1 INFECTED MICE

Takehiro Nakagaki^{1,2}, Katsuya Satoh¹, Yuji Kamatari³, Ryuichiro Atarashi¹, Noriyuki Nishida¹

¹Department of Molecular Microbiology and Immunology, Nagasaki University Graduate School of Medical Sciences, Japan, ²Research Fellow of the Japan Society for the Promotion of Science, ³Center for Emerging Infectious Diseases, Department of Gene and Development, Graduate School of Medicine, Gifu University

Thursday, 15 September

16:30-18:00 Room H

VI-SY49 Plant Virus Expression Vectors

Conveners: Andrew O Jackson USA
Steve A Lommel USA

VI-SY49-1 NOVEL EXPRESSION SYSTEM TO CONFINE THE CUCUMBER MOSAIC VIRUS VECTOR IN THE INFECTED TRANSGENIC PLANTS

Noriho Fukuzawa¹, Noriko Itchoda², Takeaki Ishihara², Chikara Masuta³, Takeshi Matsumura¹

¹Bioproduction Research Institute, National Institute of Advanced Industrial Science and Technology, Japan, ²Agricultural Research Institute, HOKUREN Federation of Agricultural Cooperatives, ³Graduate School of Agriculture, Hokkaido University

VI-SY49-2 DEVELOPMENT OF A SELF-ASSEMBLING PROTEIN PRODUCTION SYSTEM BY A COMBINATION OF TWO PLANT VIRAL VECTORS

Noriko Itchoda¹, Kazunori Goto¹, Sakiko Tamura¹, Kiichi Kajino², Chihiro Sugimoto², Kenji Nakahara³, Chikara Masuta³, Takeshi Matsumura⁴

¹HOKUREN Federation of Agricultural Cooperatives, Japan, ²Research Center for Zoonosis Control, Hokkaido University, ³Graduate School of Agriculture, Hokkaido University, ⁴National Institute of Advanced Industrial Science and Technology

VI-SY49-3 DEVELOPMENT OF A COMMON EPITOPE OF NSS PROTEIN OF ASIA-TYPE TOSPOVIRUSES AS A TAG FOR RECOMBINANT PROTEINS EXPRESSED IN BACTERIAL AND PLANT VIRAL SYSTEMS

Hao-Wen Cheng, Jan-Shang Li, Kuan-Chun Chen, Shyi-Dong Yeh

Department of Plant Pathology, National Chung Hsing University, Taiwan

Friday, 16 September		11:25-12:55 Room A
VI-SY50 Virus Eradication		
Conveners: Olen Kew		USA
Akio Nomoto		Japan
VI-SY50-1	POLIO ERADICATION - PROGRESS, STATUS AND END GAME STRATEGY Roland W Sutter, Hiro Okayasu, R Bruce Aylward Polio Eradication Department, World Health Organization, Switzerland	
VI-SY50-2	CHIMPANZEE/HUMAN MONOCLONAL ANTIBODIES FOR TREATMENT OF CHRONIC POLIOVIRUS EXCRETORS AND EMERGENCY POST-EXPOSURE PROPHYLAXIS Konstantin Chumakov ¹ , Zhaochun Chen ² , Eugenia Dragunsky ¹ , Diana Kouliavskaia ¹ , Michelle Makiya ² , Alexander Neverov ¹ , Gennady Rezapkin ¹ , Andrew Sebrell ² , Robert Purcell ² ¹ Office of Vaccines Research and Review, FDA Center for Biologics Evaluation and Research, USA, ² National Institute of Allergy and Infectious Diseases, National Institutes of Health	
VI-SY50-3	GENETIC RECOMBINATION BETWEEN POLIOVIRUSES AND COXSACKIE A VIRUSES IN CULTURED CELLS Francis Delpeyroux ^{1,2} , Barbara Holmblat ^{1,2} , Sophie Jegouic ^{1,2} , Marie-Line Joffret ^{1,2} , Mael Bessaud ^{1,2} , Nicolas Combelas ^{1,2} ¹ Virology, Institut Pasteur, France, ² Inserm U994	
VI-SY50-4	STRATEGY FOR AN AFFORDABLE INACTIVATED POLIOVIRUS VACCINE Hiromasa Okayasu, Roland W Sutter, Bruce R Aylward Global Polio Eradication Initiative, World Health Organization, Switzerland	
VI-SY50-5	DEVELOPMENT OF INACTIVATED POLIO VACCINE USING ATTENUATED SABIN POLIOVIRUS STRAINS FOR COST-PRIZE REDUCTION, CLINICAL STUDIES, AND TECHNOLOGY-TRANSFER PURPOSES Wilfried A.M Bakker, Yvonne E Thomassen, Aart G van't Oever, Leo A van der Pol Vaccinology Unit, National Institute for Public Health and The Environment (RIVM), Netherlands	
VI-SY50-6	COLLECTION/PRESERVATION CONDITIONS OF SAMPLES FOR MEASLES VIRUS DETECTION TO IMPROVE LABORATORY DIAGNOSIS FOR CASE-BASED MEASLES SURVEILLANCE Hiroko Minagawa ¹ , Teruo Yamashita ¹ , Yoshihiro Yasui ¹ , Mami Hata ¹ , Shinichi Kobayashi ¹ , Hirokazu Adachi ¹ , Emi Mizutani ¹ , Miyabi Ito ¹ , Noriko Fujiwara ¹ , Akira Fujiura ¹ , Katsuhiro Komase ² ¹ Aichi Prefectural Institute of Public Health, Japan, ² National Institute of Infectious Diseases	
Friday, 16 September		11:25-12:55 Room D+E
VI-SY51 Immune Responses to Virus Infection		
Conveners: Stephen Turner		Australia
Tetsuro Matano		Japan
VI-SY51-1	PROGRAMMED MIGRATION OF ANTIGEN-SPECIFIC CD8 T CELLS TO THE LUNG AIRWAYS FOLLOWING RESPIRATORY VIRUS INFECTION Shiki Takamura ¹ , Alan D Roberts ² , Dawn M Jelley-Gibbs ² , Susan T Wittmer ² , Jacob E Kohlmeier ² , David L Woodland ² ¹ Department of Immunology, Kinki University Faculty of Medicine, Japan, ² Trudeau Institute	
VI-SY51-2	CONTROL OF INFLUENZA VIRUS INFECTION: ROLE OF CYTOKINE STORM, SPHINGOSINE-1-PHOSPHATE 1 RECEPTOR AND PULMONARY ENDOTHELIUM Kevin B Walsh ¹ , John R Teijaro ¹ , Stuart Cahalan ² , Daniel M Fremgen ¹ , Yoshihiro Kawaoka ³ , Hugh Rosen ² , Michael B.A Oldstone ¹ ¹ Immunology and Microbial Science, The Scripps Research Institute, USA, ² Department of Chemical Physiology, The Scripps Research Institute, ³ Department of Pathobiological Sciences, University of Wisconsin-Madison	

- VI-SY51-3 EFFICACY OF SINGLE EPITOPE-SPECIFIC CYTOTOXIC T LYMPHOCYTE INDUCTION BY VACCINATION AGAINST A SIMIAN IMMUNODEFICIENCY VIRUS CHALLENGE**
Hiroshi Ishii^{1,2}, Nami Iwamoto^{1,2}, Saori Matsuoka^{1,2}, Makoto Inoue³, Akihiro Iida³, Hiroto Hara³, Shu Tsugumine³, Mamoru Hasegawa³, Taeko Naruse⁴, Akinori Kimura⁴, Tetsuro Matano^{1,2}
¹AIDS Research Center, National Institute of Infectious Diseases, Japan, ²Institute of Medical Science, University of Tokyo, ³DNAVEC Corporation, ⁴Medical Research Institute, Tokyo Medical and Dental University
- VI-SY51-4 THE ROLE OF TUMOR NECROSIS FACTOR (TNF) IN THE PATHOGENESIS OF POXVIRAL DISEASES**
Ma. Junaliah T Tuazon, Guna Karupiah, Esther Ng, Preethi Eldi, Geeta Chaudhri
 Immunology, JCSMR, College of Medicine, Biology & Environment, Australian National University, Australia
- VI-SY51-5 EARLY AND DYNAMIC INNATE ANTIVIRAL RESPONSES VIA IRF-3-INDEPENDENT PATHWAY TRIGGERED BY SARS-COV INFECTION**
Shuetsu Fukushi^{1,2}, Naoko Iwata-Yoshikawa^{1,3}, Tomoki Yoshikawa¹, Terence E Hill¹, Cristi L Galindo⁴, Harold R Garner⁴, Tehsheng Chan¹, Clarence J Peters^{1,5}, Chien-Te K Tseng^{1,5}
¹Microbiology and Immunology, University of Texas Medical Branch, USA, ²Department of Virology I, National Institute of Infectious Diseases, ³Department of Pathology, National Institute of Infectious Diseases, ⁴Virginia Bioinformatics Institute, Virginia Polytechnic and State University, ⁵Center for Biodefense and Emerging Infectious Diseases, University of Texas Medical Branch
- VI-SY51-6 GENE EXPRESSION PROFILING IN PATIENTS WITH RESPIRATORY OR CENTRAL NERVOUS SYSTEM MANIFESTATIONS DURING THE 2009 H1N1 INFLUENZA INFECTION**
Nobuko Yamashita, Mitsuru Tsuge, Yoshiharu Nagaoka, Masato Yashiro, Yukie Saito, Yousuke Fujii, Hirokazu Tsukahara, Tsuneo Morishima
 Pediatrics, Okayama University Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences, Japan

Friday, 16 September

11:25-12:55 Room C

VI-SY52 Emerging Viruses

Conveners: George F Gao *China*
 Nancy J Sullivan *USA*
 Erica Ollmann Saphire *USA*

- VI-SY52-1 ASSESSING THE LIKELIHOOD OF REASSORTMENT OF PANDEMIC H1N1 AND H5N1 IN NATURE**
Kim L Roberts, Lorian Hartgroves, Holly Shelton, Jennifer Farrell, Eliza Liang, Wendy Barclay
 Virology, Imperial College London, UK
- VI-SY52-2 A NOVEL BUNYAVIRUS CAUSING SEVERE FEVER WITH THROMBOCYTOPENIA SYNDROME IN HUMANS**
Mifang Liang, Chong Jin, Jiandong Li, Yulan Sun, Quanfu Zhang, Jin Qu, Chuna Li, Qing Wang, Shiwen Wang, Dexin Li
 EHF, National Institute for Viral Disease Control and Prevention, China
- VI-SY52-3 DEVELOPMENT OF RECOMBINANT MEASLES VIRUS VACCINE FOR NIPAH VIRUS INFECTION**
Chieko Kai, Hiroki Sato, Fusako Ikeda, Akihiro Sugai, Misako Yoneda
 Animal Research Center, Institute of Medical Science, The University of Tokyo, Japan

Friday, 16 September		11:25-12:55 Room F
VI-SY53	Virus Evolution	
Conveners: Kimihito Ito <i>Japan</i> Alexander E Gorbalenya <i>Netherlands</i>		
VI-SY53-1	ANTIGENIC AND GENETIC CHARACTERIZATIONS OF INFLUENZA VIRUSES ISOLATED IN 2010/11 SEASON IN JAPAN Hong Xu, Noriko Kishida, Emi Takashita, Seiichiro Fujisaki, Reiko Ito, Teruko Doi, Hiromi Sugawara, Miho Ejima, Namhee Kim, Masato Tashiro, Takato Odagiri, The Influenza Virus Surveillance Group of Japan <i>Laboratory of Influenza Virus Surveillance, Influenza Virus Research Center, National Institute of Infectious Diseases, Japan</i>	
VI-SY53-2	EVOLUTIONARY CHANGES IN HEMAGGLUTININ CONTRIBUTE TO STABLE CIRCULATION OF OSELTAMIVIR-RESISTANT H1N1 INFLUENZA IN 2007-2008 Teridah E Ginting ^{1,2} , Kyoko Shinya ^{1,2} , Akiko Makino ^{1,2} , Yoshihiro Kawaoka ^{1,2,3,4,5,6} ¹ Center for Infectious Diseases, Graduate School of Medicine, Kobe University, Japan, ² Division of Zoonosis, Department of Microbiology and Infectious Disease, Graduate School of Medicine, Kobe University, ³ Influenza Research Institute, Department of Pathological Sciences, University of Wisconsin-Madison, ⁴ Division of Virology, Department of Microbiology and Immunology, Institute of Medical Science, University of Tokyo, ⁵ International Research Center for Infectious Diseases, Institute of Medical Science, University of Tokyo, ⁶ ERATO Infection-Induced Host Responses Project, Japan Science and Technology Agency	
VI-SY53-3	NON-RETROVIRAL RNA VIRUS SEQUENCES ENDOGENIZED ON PLANT GENOMES Sotaro Chiba ¹ , Hideki Kondo ¹ , Akio Tani ¹ , Daisuke Saisho ¹ , Wataru Sakamoto ¹ , Satoko Kanematsu ² , Nobuhiro Suzuki ¹ ¹ Institute of Plant Science and Resources, Okayama University, Japan, ² National Institute of Fruit Tree Science, National Agricultural Research Organization	
VI-SY53-4	POXVIRUS PROTEIN EVOLUTION: FAMILY WIDE ASSESSMENT OF GENE ORIGINS Elliot J Lefkowitz, R. Curtis Hendrickson, Mary R Odom <i>Microbiology, University of Alabama at Birmingham, USA</i>	
VI-SY53-5	THE LARGEST RNA VIRUS GENOMES EVOLVED BY WAVELIKE EXPANSIONS OF THREE MAJOR CODING REGIONS Alexander E Gorbalenya ¹ , Chris Lauber ¹ , Jelle J Goeman ² , Phan Thi Nga ³ , Maria del Carmen Parquet ⁴ , Manmohan Parida ⁴ , Takeshi Nabeshima ⁴ , Fuxun Yu ⁴ , Takashi Ito ⁵ , Eric J Snijder ¹ , Kouichi Morita ⁴ ¹ Department of Medical Microbiology, Leiden University Medical Center, Netherlands, ² Department of Medical Statistics and Bioinformatics, Leiden University Medical Center, ³ Department of Virology, National Institute of Hygiene and Epidemiology, ⁴ Department of Virology, Institute of Tropical Medicine, Global COE Program, Nagasaki University, ⁵ Department of Biochemistry, Grad. School of Medical Science, Nagasaki University	
Friday, 16 September		14:30-16:00 Room A
VI-SY54	Hepatitis C	
Convener: Guangxiang Luo <i>USA</i>		
VI-SY54-1	HOST AND VIRAL DETERMINANTS REQUIRED TO ESTABLISH HCV INFECTION IN MOUSE HEPATOCYTES Hussein H Aly ¹ , Hiroyuki Oshiumi ¹ , Misako Matsumoto ¹ , Takaji Wakita ² , Kunitada Shimotohno ³ , Tsukasa Seya ¹ ¹ Microbiology and Immunology, Hokkaido University, Japan, ² Department of Virology II, National Institute of Infectious Diseases, ³ Research Institute, Chiba Institute of Technology	
VI-SY54-2	IDENTIFICATION OF A HOST FACTOR THAT INTERACTS WITH HEPATITIS C VIRUS NS2 PROTEIN AND IS INVOLVED IN THE VIRAL ASSEMBLY Ryosuke Suzuki ¹ , Tetsuro Suzuki ² , Kenji Saito ¹ , Mami Matsuda ¹ , Koichi Watashi ¹ , Yoshiharu Matsuura ³ , Takaji Wakita ¹ , Hideki Aizaki ¹ ¹ Department of Virology II, National Institute of Infectious Diseases, Japan, ² Department of Infectious Diseases, Hamamatsu University School of Medicine, ³ Research Institute for Microbial Diseases, Osaka University	

- VI-SY54-3 PERSISTENT EXPRESSION OF THE FULL GENOME OF HEPATITIS C VIRUS IN B CELLS INDUCES SPONTANEOUS DEVELOPMENT OF B-CELL LYMPHOMAS IN VIVO**
Yuri Kasama¹, Satoshi Sekiguchi², Makoto Saito¹, Masaaki Satoh¹, Kazuhiko Kuwahara¹, Motohiro Takeya¹, Nobuo Sakaguchi¹, Michinori Kohara², Kyoko Tsukiyama-Kohara¹
¹Faculty of Life Sciences, Kumamoto University, Japan, ²The Tokyo Metropolitan Institute
- VI-SY54-4 VIRAL AND CELLULAR DETERMINANTS OF HEPATITIS C VIRUS INFECTION AND ASSEMBLY**
Guangxiang G Luo^{1,2}, Jieyun Jiang¹, Wei Cun¹, Shuang Shi², Jia Liu²
¹Microbiology, Immunology and Molecular Genetics, University of Kentucky College of Medicine, USA, ²Department of Microbiology, Peking University School of Basic Medical Sciences
- VI-SY54-5 IDENTIFICATION OF SMALL MOLECULES AFFECTING LATE STEPS OF HEPATITIS C VIRUS LIFE CYCLE**
Koichi Watashi, Nanako Uchida, Ryosuke Suzuki, Hideki Aizaki, Takaji Wakita
Department of Virology II, National Institute of Infectious Diseases, Japan
- VI-SY54-6 IDENTIFICATION OF AN E3 UBIQUITIN LIGASE THAT MEDIATES UBIQUITYLATION OF HEPATITIS C VIRUS NS5A PROTEIN**
Ikuko Shoji¹, Noriko Okada¹, Xiang Gan^{1,2}, Shoji Miyagawa¹, Miho Makimoto¹, Ahmed El-Shamy¹, Lin Deng¹, Da-Peng Jang¹, Yoshi-Hiro Ide¹, Hak Hotta¹
¹Division of Microbiology, Kobe University Graduate School of Medicine, Japan, ²Faculty of Life Science, Hubei University

Friday, 16 September

14:30-16:00 Room D+E

VI-SY55 Orthomyxoviruses: Pathogenesis

Conveners: Kanta Subbarao USA
Sylvie Van Der Werf France

- VI-SY55-1 THE GLYCOPROTEINS OF INFLUENZA VIRUS PLAY A SIGNIFICANT ROLE IN VIRAL PATHOGENESIS AS EVALUATED IN THE FERRET MODEL**
Hong Jin, Xing Cheng, Zhongying Chen, James Zengel, Qi Xu
Research, MedImmune, USA
- VI-SY55-2 SUMOYLATION OF INFLUENZA A VIRUS NONSTRUCTURAL PROTEIN 1 IS IMPORTANT FOR TYPE I INTERFERON ANTAGONISM AND PATHOGENICITY**
Takeo Gorai¹, Shinji Watanabe², Tokiko Watanabe², Hideo Goto¹, Yoshihiro Kawaoka^{1,2,3,4}
¹Division of Virology, Department of Microbiology and Immunology, Institute of Medical Science, University of Tokyo, Japan, ²ERATO Infection-Induced Host Responses Project, Japan Science and Technology Agency, ³Department of Pathobiological Sciences, School of Veterinary Medicine, University of Wisconsin-Madison, ⁴International Research Center for Infectious Diseases, Institute of Medical Science, University of Tokyo
- VI-SY55-3 H5N1 HIGHLY PATHOGENIC AVIAN INFLUENZA VIRUS INFECTIONS IN WILD BIRDS AND POULTRY IN 2010-2011 WINTER SEASONS IN JAPAN**
Yoshihiro Sakoda¹, Hiroshi Ito², Yuko Uchida³, Takehiko Saito³, Toshihiro Ito², Hiroshi Kida^{1,4}
¹Laboratory of Microbiology, Department of Disease Control, Graduate School of Veterinary Medicine, Hokkaido University, Japan, ²The Avian Zoonosis Research Center, Faculty of Agriculture, Tottori University, ³Research Team for Zoonotic Diseases, National Institute of Animal Health, ⁴Research Center for Zoonosis Control, Hokkaido University
- VI-SY55-4 THE CONTRIBUTION OF THE MULTIBASIC AMINO ACID MOTIF OF THE H5 HEMAGGLUTININ OF THE HIGHLY PATHOGENIC H5N1 VIRUS TO VIRULENCE VARIES IN MAMMALIAN HOSTS**
Kanta Subbarao¹, Amorsolo L Suguitan, Jr.², Yumiko Matsuoka¹, Yuk-Fai Lau¹, Celia P Santos¹, Leatrice N Vogel¹, Hong Jin², George Kemble²
¹Laboratory of Infectious Diseases, NIAID, National Institutes of Health, USA, ²MedImmune, LLC

VI-SY55-5 DIFFERENTIAL CONTRIBUTION OF PB1-F2 TO THE VIRULENCE OF HIGHLY PATHOGENIC H5N1 AVIAN INFLUENZA A VIRUSES IN MAMMALIAN AND AVIAN SPECIES

Mirco Schmolke¹, Balaji Manicassamy¹, Lindomar Pena², Troy Sutton², Rong Hai¹, Zsuzsanna T Varga¹, Benjamin G Hale¹, John Steel³, Daniel R Perez², Adolfo Garcia-Sastre¹

¹Microbiology, Mount Sinai School of Medicine, USA, ²Veterinary Medicine, University of Maryland,

³Microbiology and Immunology, School of Medicine, Emory University, Rollins Research Center

VI-SY55-6 THIOREDOXIN-1 SUPPRESSES LUNG INFLAMMATION AND OXIDATIVE INJURY IN INFLUENZA VIRUS-INDUCED PNEUMONIA IN MICE

Masato Yashiro¹, Hirokazu Tsukahara¹, Akihiro Matsukawa², Yousuke Fujii¹, Yoshiharu Nagaoka¹, Mitsuru Tsuge¹, Nobuko Yamashita¹, Hiroshi Masutani³, Junji Yodoi³, Yuma Hoshino⁴, Tsuneo Morishima¹

¹Pediatrics, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Japan, ²Pathology & Experimental Medicine, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, ³Laboratory of Infection and Prevention, Departments of Biological Response,

Institute for Virus Research, Kyoto University, ⁴Departments of Respiratory Medicine, Graduate School of Medicine, Kyoto University

Friday, 16 September

14:30-16:00 Room C

VI-SY56 Adenoviruses

Conveners: Niklas Arnberg
Albert Heim

Sweden

Germany

VI-SY56-1 QUO VADIS ADENOVIRUS TYPING?

Maria Benko

Molecular Virology, Veterinary Medical Research Institute, Hungarian Academy of Sciences, Hungary

VI-SY56-2 ADENOVIRUS SURVEILLANCE IN JAPAN, 2000-2007

Tsuguto Fujimoto, Nozomu Hanaoka, Arun Kumar Adhikary, Nobuhiko Okabe

Infectious Diseases Surveillance Center, National Institute of Infectious Diseases, Japan

VI-SY56-3 CHARACTERIZATION OF CELLULAR RECEPTORS FOR HUMAN ADENOVIRUS TYPE 37

Rickard J Storm¹, Emma C Nilsson¹, Johannes Bauer², Sara Spjut³, Susanne M.C Johansson¹, Aviar Lookene⁴, Weixing Qian³, Lars Frängsmyr¹, Mikael Elofsson³, Thio Stehle², Niklas Arnberg¹

¹Division of Virology, Department of Clinical Microbiology, Umeå University, Sweden, ²Interfaculty Institute for Biochemistry, University of Tübingen, ³Department of Chemistry, Umeå University, ⁴Department of Chemistry, Tallin University of Technology

VI-SY56-4 ADENOVIRUS PVIII PROTEIN INTERACTS WITH DEAD BOX RNA HELICASE DDX3 AND SUPPRESSES CAP DEPENDENT MRNA TRANSLATION

Suresh K Tikoo^{1,2,3}, Lisanewok E Ayalew^{2,3}

¹School of Public Health, University of Saskatchewan, Saskatoon Canada, Canada, ²VIDO-InterVac, University of Saskatchewan, ³Veterinary Microbiology, University of Saskatchewan

VI-SY56-5 POSITIVE REGULATION OF ADENOVIRUS GENE EXPRESSION BY CELLULAR AND VIRAL CHROMATIN PROTEINS

Tetsuro Komatsu, Hirohito Haruki, Kyosuke Nagata

Department of Infection Biology, Graduate School of Comprehensive Human Sciences, University of Tsukuba, Japan

VI-SY56-6 EVOLUTIONARY PROCESS BEHIND THE ORIGIN OF ADENOVIRUS TYPE -19A CAUSING EPIDEMIC KERATOCONJUNCTIVITIS

Gabriel Gonzalez¹, Koki Aoki², Kanako O Koyanagi¹, Nobuyoshi Kitaichi⁴, Shigeaki Ohno³, Hisatoshi Kaneko⁵, Hiroaki Ishiko⁶, Susumu Ishida², Hidemi Watanabe¹

¹Graduate School of Information Science and Technology, Hokkaido University, Japan, ²Ophthalmology, Graduate School of Medicine, Hokkaido University, ³Ocular Inflammation and Immunology, Graduate School of Medicine, Hokkaido University, ⁴Ophthalmology, Health Sciences University of Hokkaido, ⁵Microbiology, Fukushima Medical University School of Medicine, ⁶Host Defense, Mitsubishi Chemical Medience Co

Friday, 16 September

14:30-16:00 Room F

VI-SY57 Plant DNA Viruses
Convener: Bruno Gronenborn *France*
VI-SY57-1 THE MULTICOMPONENT SINGLE-STRANDED DNA NANOVIRUSES ARE AMONG THE FASTEST EVOLVING VIRUSES
Bruno Gronenborn¹, Ioana Grigoras¹, Ana Grande-Perez², Tatiana Timchenko¹, Lina Katul³, Heinrich-Josef Vetten³
¹Institut des Sciences du Végétal, Centre National de la Recherche Scientifique, France, ²Instituto de Hortofruticultura Subtropical y Mediterránea, ³Julius Kuhn Institute (JKI), Bundesforschungsinstitut für Kulturpflanzen, Institut für Epidemiologie und Pathogendiagnostik

VI-SY57-2 FUNCTIONAL STUDIES OF GEMINIVIRUS VIRAL SENSE PROMOTERS
Garry Sunter¹, Ho Yong Chung¹, Mary Berger¹, Janet L Sunter¹, Gabriela Lacatus², Kavitha Rao³
¹Biology, UT San Antonio, USA, ²Tumor Virology Program, Greheey Children's Cancer Research Institute, The University of Texas Health Sciences Center, ³Penn State University, College Park

VI-SY57-3 IDENTIFICATION OF THE PROTEIN WHICH ACTIVATES THE EXPRESSION OF THE VIRUS-SENSE GENES OF BEET SEVERE CURLY TOP VIRUS
Hideto Hayakawa¹, Masashi Suzuki¹, Masashi Ugaki¹, Kazuyuki Hiratsuka²
¹Integrated Biosciences, The University of Tokyo, Japan, ²Graduate School of Environment and Information Sciences, Yokohama National University

VI-SY57-4 BIOCHEMICAL ANALYSIS OF REPLICATION INITIATOR PROTEIN OF TOMATO LEAF CURL GUJARAT VIRUS WITH ALTERED DNA BINDING AND REPLICATION
Biju George^{1,2}, S K Jain², Supriya Chakraborty¹
¹School of Life Sciences, JNU, Jawaharlal Nehru University, India, ²Department of Biotechnology, Jamia Hamdard University

VI-SY57-5 ENDOGENOUS DIONYVIRUS SEQUENCES ARE WIDESPREAD IN PLANT GENOMES
Pierre-Yves Teycheney¹, Andrew D.W Geering², Nathalie Choise³, Simone Sclabrin⁴, Matthias Zytnecki³, Silvia Vezzuli⁵, Riccardo Velasco⁵, Hadi Quesneville³
¹Bios, CIRAD, Guadeloupe, ²Queensland Alliance for Agriculture and Food Innovation (QAAFI), Ecosciences Precinct, ³URGI, INRA Versailles, ⁴Istituto di Genomica Applicata, Parco Scientifico e Tecnologico di Udine Luigi Danieli, ⁵IASMA Research and Innovation Centre, Fondazione Edmund Mach

Friday, 16 September

14:30-16:00 Room H

VI-SY58 Virus Entry, Trafficking and Membrane Fusion
Conveners: Yusuke Yanagi *Japan*
John A.T Young *USA*
VI-SY58-1 QUASISPECIES EXPLAINS A DISCREPANCY BETWEEN THE PHENOTYPE OF A MUTANT MEASLES VIRUS AND THE RESULT OF PLASMID-MEDIATED FUSION ASSAY
Yuta Shirogane, Shumpei Watanabe, Mai Nakashima, Satoshi Ikegame, Yusuke Yanagi
Department of Virology, Faculty of Medicine, Kyushu University, Japan
VI-SY58-2 STRUCTURE-FUNCTION ANALYSIS OF VARICELLA-ZOSTER VIRUS GLYCOPROTEIN H DETERMINES INDEPENDENT ROLES FOR DOMAIN I IN SKIN TROPISM AND DOMAIN III IN FUSOGENICITY
Stefan L Oliver, Susan E Vleck, Jennifer J Brady, Jaya Rajamani, Marvin H Sommer, Ann M Arvin
Stanford University School of Medicine, USA
VI-SY58-3 ROLE OF CYTOSKELETON IN TRAFFICKING OF MOUSE POLYOMAVIRUS
Vojtech Zila, Lucie Klimova, David Liebl, Francesco Difato, Jitka Forstova
Department of Genetics and Microbiology, Faculty of Science, Charles University in Prague, Czech Republic
VI-SY58-4 MORPHOGENESIS AND THE MEMBRANOUS ORIGIN OF CHIKUNGUNYA VIRUS REPLICATION COMPLEXES WITHIN INFECTED HUMAN AND MOSQUITO CELL LINES
Caiyun, Karen Chen, Mah-Lee Ng, Jang-Hann Chu
Microbiology, National University of Singapore, Singapore

VI-SY58-5 DIFFERENTIAL REQUIREMENTS FOR CLATHRIN ENDOCYTIC COMPONENTS IN ENTRY MEDIATED BY MARBURG OR EBOLA VIRUS GLYCOPROTEIN PSEUDOVIRIONS

Suchita Bhattacharyya, Thomas J Hope, John A.T Young
Salk Institute, USA

Friday, 16 September

14:30-16:00 Room I

VI-SY59 Phage

Convener: Fumio Arisaka Japan

VI-SY59-1 IMPROVED ADSORPTION OF *ENTEROCOCCUS FAECALIS* BACTERIOPHAGE ϕ EF24C CAUSED BY A POINT MUTATION IN A TAIL FIBER GENE

Jumpei Uchiyama¹, Iyo Takemura¹, Miho Satoh², Shin-Ichiro Kato², Takako Ujihara², Kazue Akechi¹, Shigenobu Matsuzaki¹, Masanori Daibata¹

¹Department of Microbiology and Infection, Faculty of Medicine, Kochi University, Japan, ²Science Research Center, Kochi University

VI-SY59-2 IDENTIFICATION OF A TAIL ADSORPTION PROTEIN BY COMPARATIVE GENOMIC ANALYSIS OF *STAPHYLOCOCCUS AUREUS* BACTERIOPHAGES S13' AND S24-1

Iyo Takemura^{1,3}, Jumpei Uchiyama¹, Miho Satoh², Shin-Ichiro Kato², Takako Ujihara², Shigenobu Matsuzaki¹, Tetsuro Sugiura³, Masanori Daibata¹

¹Department of Microbiology and Infection, Faculty of Medicine, Kochi University, Japan, ²Science Research Center, Kochi University, ³Clinical Laboratory, Kochi University Hospital

VI-SY59-3 EFFECT OF BACTERIOPHAGES INFECTION ON THE PATHOGENICITY STUDY OF *RALSTONIA SOLANACEARUM*

Geok Hun Tan

Biotechnology Research Centre, Malaysian Agricultural Research and Development Institute (MARDI), Malaysia

VI-SY59-4 A RECENTLY DISCOVERED LINEAGE OF ICOSAHEDRAL, INNER-MEMBRANE CONTAINING VIRUSES WITH NOVEL CAPSID ARCHITECTURE ILLUSTRATES STRUCTURAL EVOLUTION OF VIRUSES

Matti Jalasvuori¹, Ilona Rissanen¹, Karl Harlos², Reetta Penttinen¹, David Stuart², Jaana Bamford¹

¹University of Jyväskylä, Finland, ²University of Oxford

VI-SY59-5 QUANTITATIVE OBSERVATION OF VIRUS-LIKE PARTICLES ON ELECTRON MICROSCOPES

Koji Tsukada

Biotechnology, Osaka University, Japan

VI-SY59-6 THE STRICT SEQUENTIAL ASSEMBLY OF THE BASEPLATE WEDGE OF BACTERIOPHAGE T4 IS MATERIALIZED BY CONFORMATIONAL CHANGE OF THE SUBUNIT PROTEINS UPON ASSOCIATION

Fumio Arisaka¹, Moh Lan Yap¹, Yasunori Monzaki¹, Kazuhiro Mio², Shuji Kanamaru¹

¹Life Science, Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology, Japan, ²National Institute of Advanced Industrial Science and Technology (AIST)

Friday, 16 September

16:30-18:00 Room C

VI-SY60 Virus Ecology and Tropical Viral Diseases

Conveners: Lesley Torrance UK
Keiko Natsuaki Japan

VI-SY60-1 GEOGRAPHICAL ORIGINS AND WORLDWIDE MIGRATION OF BEET NECROTIC YELLOW VEIN VIRUS

Tetsuo Tamada, Hideki Kondo, Soutaro Chiba, Andika Ida Bagus

Institute of Plant Science and Resources, Okayama University, Japan

VI-SY60-2 VIRUS CHALLENGES IN SEED POTATO PRODUCTION SYSTEMS IN SUB SAHARAN AFRICA: KENYA AS A CASE STUDY

Lesley Torrance¹, Hassan Were²

¹Plant Pathology, Scottish Crop Research Institute, UK, ²Masinde Muliro University of Science and Technology

- VI-SY60-3 VIROME IN BAT INTESTINAL TRACT, IMPLICATION OF IMPORTANT ROLES PLAYED BY BATS IN ECOSYSTEM**
Zhengli Shi, Xingyi Ge, Yan Li, Huajun Zhang, Peng Zhou, Yunzhi Zhang
State Key Laboratory of Virology, Wuhan Institute of Virology, Chinese Academy of Sciences, China
- VI-SY60-4 PATTERNS AND POSSIBLE SOURCES OF AVIAN INFLUENZA VIRUSES THROUGH VIROLOGICAL AND SEROLOGICAL SURVEILLANCE IN TAIWAN, 2008-2010**
Chwan-Chuen King¹, Chang-Chun Lee¹, Kuan-Yin Chu¹, Ming-Der Liu¹, Molly Tsai¹, C Y Chiang², Chuan-Liang Kao³, Chinglai Yang⁴, Richard W Compans⁴
¹*Inst. of Epidemiology and Preventive Medicine, College of Public Health, National Taiwan University, Taiwan*, ²*Dept. of Environmental Science and Engineering, TungHai University*, ³*Dept. of Clinical Laboratory Sciences and Medical Biotechnology*, ⁴*Dept. of Microbiology & Immunology, Emory Vaccine Center, School of Medicine, Emory University*
- VI-SY60-5 EVIDENCE OF TRANS-BORDER RABIES TRANSMISSION BY DOGS BETWEEN NIGERIA AND CHAD**
Mariam F Ogo¹, Louis H Nel², Claude T Sabeta³
¹*Rabies Unit, Viral Research Division, National Veterinary Research Institute, Nigeria*, ²*Microbiology and Plant Pathology, University of Pretoria*, ³*Rabies Unit, Onderstepoort Veterinary Institute*
- VI-SY60-6 IDENTIFICATION AND CHARACTERIZATION OF A NOVEL POTYVIRUS FROM TRICHOSANTHES CUCUMEROIDES**
Keiko T Natsuaki, Ok-Kyung Kim
Tokyo University of Agriculture, Japan

Friday, 16 September

16:30-18:00 Room H

VI-SY61 Hantaviruses and West Nile Virus

Convener: John Mackenzie

Australia

VI-SY61-1 THE MODE AND TEMPO OF HANTAVIRUS EVOLUTION: INSIGHTS FROM NOVEL HANTAVIRUS SPECIES

Tarja Sironen, Alexander Plyusnin

Department of Virology, Haartman Institute, University of Helsinki, Finland

VI-SY61-2 EXPANDED EVOLUTIONARY INSIGHTS FROM JEJU VIRUS, A NEWFOUND HANTAVIRUS HARBORED BY THE ASIAN LESSER WHITE-TOOTHED SHREW (CROCIDURA SHANTUNGENSIS)

Satoru Arai¹, Se Hun Gu², Luck Ju Baek², Kenji Tabara³, Hong-Shik Oh⁴, Nobuhiro Takada⁵, Hae Ji Kang⁶, Keiko Tanaka-Taya¹, Shigeru Morikawa¹, Nobuhiko Okabe¹, Richard Yanagihara⁶, Jin-Won Song²

¹*National Institute of Infectious Diseases, Japan*, ²*Korea University*, ³*Shimane Prefectural Institute of Public Health and Environmental Science*, ⁴*Jeju National University*, ⁵*University of Fukui*, ⁶*University of Hawaii at Manoa*

VI-SY61-3 GENETIC DIVERSITY OF IMJIN VIRUSES IN THE USSURI WHITE-TOOTHED SHREW (CROCIDURA LASIURA) CAPTURED IN THE REPUBLIC OF KOREA, 2004-2010

Se Hun Gu¹, Hae Ji Kang^{1,2}, Luck Ju Baek¹, Ji Yun Noh¹, Heung-Chul Kim³, Terry A Klein³, Richard Yanagihara², Jin-Won Song¹

¹*Department of Microbiology, College of Medicine, Korea University, Korea, South*, ²*John A Burns School of Medicine, University of Hawaii at Manoa*, ³*Force Health Protection and Preventive Medicine, U.S. Army*

VI-SY61-4 ROLE OF HANTAVIRUS NUCLEOCAPSID PROTEIN IN INTRACELLULAR TRAFFIC OF GLYCOPROTEINS

Kenta Shimizu, Kumiko Yoshimatsu, Takaaki Koma, Shumpei P Yasuda, Jiro Arikawa

Department of Microbiology, Hokkaido University Graduate School of Medicine, Japan

VI-SY61-5 THE GN GLYCOPROTEIN OF ANDES VIRUS (AN HPS ASSOCIATED HANTAVIRUS) IS PHOSPHORYLATED AND ENDOCYTOSED

Punya Shrivastava-Ranjan, Cesar G Albarino, Bergeron Eric, Nichol T Stuart, Spiropoulou F Christina

Viral Special Pathogens Branch, Centre for Disease Control and Prevention, USA

Friday, 16 September

16:30-18:00 Room I

VI-SY62 Fungal Viruses

Conveners: Donald L Nuss USA
 Bradley I Hillman USA

VI-SY62-1 VIRAL AND HOST FACTORS INTERACTING WITH MYCOREOVIRUS 1 NON-STRUCTURAL PROTEIN VP10

Alain A Gumarang¹, Lying Sun², Yukio Shirako³, Nobuhiro Suzuki¹

¹Institute of Plant Science and Resources, Okayama University, Japan, ²Institute of Virology and Biotechnology, Zhejiang Acad. Agric. Sci., ³ANESC, University of Tokyo

VI-SY62-2 FUNCTIONAL ANALYSIS OF A FUNGAL HOST FACTOR, WORONIN BODY MAJOR PROTEIN PRECURSOR, THAT RESPONSES AGAINST *FUSARIUM GRAMINEARUM* VIRUS 1-STRAIN DK21

Moonil Son, Kyung-Mi Lee, Jisuk Yu, Minji Kang, Minjung You, Kook-Hyung Kim

Department of Agricultural Biotechnology and Center for Fungal Pathogenesis, Korea, South

VI-SY62-3 CHARACTERIZATION OF A NOVEL BIPARTITE DOUBLE-STRANDED RNA MYCOVIRUS CONFERRING HYPOVIRULENCE IN THE PHYTOPATHOGENIC FUNGUS *BOTRYTIS PORRI*

Mingde Wu^{1,2}, Fengying Jing¹, Jing Zhang^{1,2}, Guoqing Li^{1,2}, Daohong Jiang^{1,2}

¹Department of Plant Protection, Huazhong Agricultural University, China, ²The State Key Laboratory of Agricultural Microbiology, Huazhong Agricultural University

VI-SY62-4 GENOME REARRANGEMENT OF A MYCOVIRUS *ROSELLINIA NECATRIX* MEGABIRNAVIRUS1 AFFECTING ITS ABILITY TO ATTENUATE THE HOST FUNGUS VIRULENCE

Satoko Kanematsu¹, Hajime Yaegashi¹, Atsuko Sasaki¹, Nobuhiro Suzuki²

¹National Institute of Fruit Tree Science, NARO, Japan, ²Institute of Plant Science and Resources, Okayama University

VI-SY62-5 ZINC COMPOUNDS ACCELERATE HYPHAL FUSION AND TRANSMISSION OF MYCOVIRUSES IN *ROSELLINIA NECATRIX*

Kenichi Ikeda¹, Kanako Inoue^{1,3}, Satoko Kanematsu^{2,3}, Pyoyun Park^{1,3}

¹Graduate School of Agricultural Science, Kobe University, Japan, ²National Institute of Fruit Tree Science, NARO, ³Promotion of Basic and Applied Researches for Innovations in Bio-oriented Industry (BRAIN)

Posters

XV International Congress of Virology



Poster Sessions

Poster 1

Discussion time: 10:15-11:15 / Tuesday, 13 September

VI-PO20	Virus Taxonomy	VI-PO31	Reo, Rota and Orbiviruses
VI-PO6	Bioinformatics (Bridge between Divisions)	VI-PO16	Filoviruses
VI-PO3	Virus Receptors	VI-PO22	Paramyxoviruses
VI-PO2	Host factors for Virus Replication	VI-PO7	Orthomyxoviruses: Structure, Replication and Assembly
VI-PO63	Structure and Assembly: Enveloped Viruses	VI-PO10	Bunyaviruses
VI-PO1	Virus and Host Responses	VI-PO17	Arenaviruses
VI-PO18	Viruses and Innate Immunity	VI-PO24	Calici- and Astroviruses
VI-PO26	Virus Suppression of RNA Silencing	VI-PO64	Nidoviruses
VI-PO4	Viruses as Oncolytic Agents	VI-PO11	Alpha- and Rubiviruses
VI-PO34	Viruses and Cancer	VI-PO25	Transmission and Epidemiology of Arboviral Diseases
VI-PO30	Papillomaviruses	VI-PO32	Viral Zoonoses
VI-PO12	Herpes (Simplex) Viruses	VI-PO23	Host Response and Resistance in Plant Viruses
VI-PO8	Epstein - Barr Virus	VI-PO29	Plant Virus Replication and Translation
VI-PO9	Parvoviruses	VI-PO33	Virus Movement in Plants
VI-PO27	Hepatitis B	VI-PO15	Plant Virus-Vector Interactions
VI-PO21	HIV/SIV Molecular Biology	VI-PO5	Vaccines
VI-PO13	HTLV and Animal Retroviruses	VI-PO19	Gene Therapy

Poster 2

Discussion time: 10:15-11:15 / Thursday, 15 September

VI-PO59	Phage	VI-PO39	Structure and Assembly: Non-Enveloped Viruses
VI-PO62	Fungal Viruses	VI-PO51	Immune Responses to Virus Infection
VI-PO43	Viroid and Satellite Viruses	VI-PO56	Adenoviruses
VI-PO57	Plant DNA Viruses	VI-PO42	Cytomegaloviruses
VI-PO49	Plant Virus Expression Vectors	VI-PO41	HIV/SIV Pathogenesis
VI-PO46	Emerging viruses in Vegetable and Fruit Crops	VI-PO47	Picornaviruses
VI-PO60	Virus Ecology and Tropical Viral Diseases	VI-PO45	Flaviviruses
VI-PO53	Virus Evolution	VI-PO61	Hantaviruses and West Nile Virus
VI-PO52	Emerging Viruses	VI-PO65	Coronaviruses
VI-PO50	Virus Eradication	VI-PO66	Arteriviruses and Toroviruses
VI-PO38	Viral Diagnosis	VI-PO54	Hepatitis C
VI-PO35	Antiviral Drugs	VI-PO44	Rhabdoviruses
VI-PO36	Viral Glycoproteins	VI-PO55	Orthomyxoviruses: Pathogenesis
VI-PO58	Virus Entry, Trafficking and Membrane Fusion		

Poster 1

Discussion time: 10:15-11:15 / Tuesday, 13 September

VI-PO20 Virus Taxonomy

Tuesday, 13 September

VI-PO20-1

DETECTION AND MOLECULAR CHARACTERIZATION OF ORCHIDS INFECTING VIRUSES IN INDONESIA

Budi S Daryono¹, Tri Joko², Ganda D Untara³, Alin Liana Liana⁴

¹Faculty of Biology, Gadjah Mada University, Indonesia, ²Faculty of Agriculture, Gadjah Mada University, ³Bali Barat National Park, ⁴Genetics Laboratory, Faculty of Biology, Gadjah Mada University

VI-PO20-2

BLUEBERRY VIRUSES DETECTED IN BLUEBERRY TREES IN JAPAN

Masamichi Isogai, Saki Muramatsu, Tatuto Nakamura, Manabu Watanabe, Nobuyuki Yoshikawa

Faculty of Agriculture, Iwate University, Japan

VI-PO20-3

PHYLOGENETIC RELATIONSHIPS OF PLANT VIRUSES OF THE GENUS FABAVIRUS

Ezequiel A Rangel, Inmaculada Ferriol, Diana E Debreczeni, Luis Rubio

Ivia, Spain

VI-PO20-4

PHYLOGENY AND GENETIC DIVERSITY OF POTATO LEAFROLL VIRUS USING ORF 0 SEQUENCE IN IRAN

Masoud Shams-Bakhsh¹, Shaheen Nourinejad Zarghani¹, Neda Zand¹, Nemat Sokhandan Bashir², Maghsoud Pazhouhandeh³

¹Plant Pathology Department, Tabiat Modares University, Faculty of Agriculture, Iran, ²Plant Protection Department, Faculty of Agriculture, Tabriz University, ³Biotechnology Department, Science Faculty, Azarbaijan University

VI-PO20-5

UTILITY OF DNA POLYMERASE SEQUENCES IN HERPESVIRUS CLASSIFICATION

Andrew J Davison¹, Derek Gatherer¹, Paul M Sharp³, Bernhard Ehlers²

¹MRC - University of Glasgow Centre for Virus Research, UK, ²Robert Koch Institute, ³University of Edinburgh

VI-PO20-6

GENOTYPING OF BK VIRUS DETECTED FROM RENAL TRANSPLANT PATIENTS IN SYDNEY

Evelyn B Bernardo¹, Rati Sinha², Brett Neilan², Christian Nelson³, Raymond Chan¹

¹Department of Microbiology, Royal Prince Alfred Hospital, Australia, ²School of Biological Sciences, University of New South Wales, ³Qiagen Pty Ltd

VI-PO20-7

OCCURRENCE OF CUCUMBER MOSAIC VIRUS SUBGROUP I IN ALFALFA FIELDS OF CENTRAL IRAN

Reza Pourrahim¹, Shirin Farzadfar², Alireza Golnaraghi³, Sahar Vahid Hosseini⁴, Kazusato Ohshima⁵

¹Plant Virology Dept., Iranian Research Institute of Plant Protection, Iran, ²Iranian Research Institute of Plant Protection (IRIPP), ³Science and Research Branch, Islamic Azad University, ⁴Iranian Research Institute of Plant Protection (IRIPP), ⁵Fac. Agr., Saga University

VI-PO20-8

COMPLETE WHOLE GENOMIC CHARACTERIZATION OF HUMAN GROUP C ROTAVIRUS FROM KOREA

In Hyuk Baek, Wonyong Kim

Department of Microbiology, College of Medicine, Chung-Ang University, Korea, South

VI-PO20-9

A NOVEL MEMBER OF THE GENUS NEPOVIRUS ISOLATED FROM CUCUMIS MELO

Yasuhiro Tomitaka, Tomio Usugi, Shinya Tsuda

National Agriculture and Food Research Organization, Japan

VI-PO20-10

INVERTEBRATE VIRUS TAXONOMY: CURRENT STATUS

Peter J Krell

Molecular and Cellular Biology, University of Guelph, Canada

VI-PO20-11

THE COMPLETE GENOME SEQUENCE AND GENOME STRUCTURE OF PASSIONFRUIT MOSAIC VIRUS

Yeon Sook Song, Ki Hyun Ryu

Horticultural Science, Seoul Women's University, Korea, South

VI-PO20-12

THE COMPLETE GENOME SEQUENCE OF RATTAIL CACTUS NECROSIS-ASSOCIATED VIRUS ISOLATED FROM APORCACTUS FLAGELLIFORMIS

Na Ri Kim¹, Yeon Sook Song¹, Bong Nam Chung², Ki Hyun Ryu¹

¹Horticultural Science, Seoul Women's University, Korea, South,

²Horticultural & Herbal Crop Environment Division, National Institute of Horticultural & Herbal Science, Rural Development Administration

VI-PO20-13

TRANSGENIC PEPPER CARRYING THE COAT PROTEIN OF CUCUMBER MOSAIC VIRUS MAY ATTRACT NATURAL ENEMIES OF APHID

Tae Yu Yun¹, Min Ho Lee², Ki Hyun Ryu¹

¹Horticultural Science, Seoul Women's University, Korea, South,

²Organic Agriculture Division, National Academy of Agricultural Science (NAAS), RDA

VI-PO20-14

INCIDENCE AND COMPARISON OF GENOME SEQUENCES OF CACTUS-INFECTING POTEXVIRUSES IN KOREA

Kyung A Song, Yeon Sook Song, Ji Yeon Kwon,
Sun Hee Choi, Ki Hyun Ryu
Horticultural Science, Seoul Women's University, Korea, South

VI-PO20-15

CURRENT AND FUTURE TAXONOMY OF THE PICORNAVIRIDAE

Nick J Knowles¹, Tapani Hovi², Timo Hyypia³,
Andrew MQ King¹, A Michael Lindberg⁴, Mark A Pallansch⁵,
Ann C Palmenberg⁶, Peter Simmonds⁷, Tim Skern⁸,
Glyn Stanway⁹, Teruo Yamashita¹⁰

¹Institute for Animal Health, UK, ²National Institute for Health and Welfare (THL), ³University of Turku, ⁴Linnaeus University, ⁵Centers for Disease Control and Prevention (CDC), ⁶Institute for Molecular Virology, ⁷Centre for Infectious Diseases, ⁸Medical University of Vienna, ⁹University of Essex, ¹⁰Aichi Prefectural Institute of Public Health

VI-PO20-16

MOLECULAR CHARACTERIZATION OF CEREAL YELLOW DWARF VIRUS-RPS (CYDV-RPS) ISOLATES OCCURRING IN JAPAN

Yoshitaka Sano¹, Akira Masubara¹, Genki Mimuro²,
Takahiro Watanabe³

¹Department of Agrobiological, Faculty of Agriculture, Niigata University, Japan, ²Agriculture experimental station, Toyama Prefecture, ³Agriculture experimental station, Fukui Prefecture

VI-PO6 Bioinformatics (Bridge between Divisions)

Tuesday, 13 September

VI-PO6-1

DECIPHERING THE MICRORNA PATHWAY INTERACTIONS OF HOST AND HIV-1 REGULATORY AND ACCESSORY GENES: A COMPUTATIONAL PERSPECTIVE

Neil H Tan Gana, Yurina Hibi, Miyuki Sakai, Ann Florence B Victoriano, Takashi Okamoto
Cell and Molecular Biology Department, Institute of Molecular Medicine, Nagoya City University Graduate School of Medical Sciences, Japan

VI-PO6-2

ANALYSIS OF SEQUENCES AND SECONDARY STRUCTURE PREDICTIONS OF NS3 PROTEASE DENGUE VIRUS TYPE 2 ISOLATED IN DKI JAKARTA INDONESIA

Ludhang P Rizki¹, Tri Wibawa¹, Nastiti Wijayanti²,
Soetaryo Soetaryo³

¹Microbiology, Department of Microbiology Faculty of Medicine Universitas Gadjah Mada Jogjakarta Indonesia, Indonesia, ²Faculty of Biology, Universitas Gadjah Mada, ³Department of Child Health, Universitas Gadjah Mada

VI-PO6-3

IDENTIFYING CO-EVOLVING AMINO ACID POSITIONS OF INFLUENZA A VIRUSES WITH A NOVEL EMPIRICAL MUTUAL INFORMATION METHOD

Guang-Wu Chen^{1,2}, Yu-Nong Gong³, Marc A Suchard⁴

¹Computer Science and Information Engineering, Chang Gung University, Taiwan, ²Research Center for Emerging Viral Infections, Chang Gung University, ³Graduate Institute of Electrical Engineering, Chang Gung University, ⁴Department of Biomathematics and Human Genetics, University of California

VI-PO6-4

VI-PO6-4: AN OPEN COMPREHENSIVE BIOINFORMATICS DATABASE AND ANALYSIS RESOURCE FOR THE VIROLOGY RESEARCH COMMUNITY

Brett E Pickett¹, Eva Rab¹, Yun Zhang¹, Jyothi Noronha¹,
Burke Squires¹, Victoria Hunt¹, Mengya Liu², Monnie Mcgee²,
Chris Larson³, Edward B Klem⁴, Richard H Scheuermann^{1,5}

¹Pathology, University of Texas Southwestern Medical Center at Dallas, USA, ²Southern Methodist University, ³Vecna Technologies, ⁴Northrop Grumman Health Solutions, ⁵Division of Biomedical Informatics, University of Texas Southwestern Medical Center at Dallas

VI-PO3 Virus Receptors

Tuesday, 13 September

VI-PO3-1

SINGLE AMINO ACID RESIDUE IN EQUINE MAJOR HISTOCOMPATIBILITY COMPLEX CLASS I IS CRITICAL FOR ITS FUNCTION AS AN EQUINE HERPESVIRUS-1 RECEPTOR

Michihiro Sasaki¹, Manabu Igarashi², Hirofumi Sawa¹,
Rie Hasebe³, Hideto Fukushi⁴, Takashi Kimura¹

¹Department of Molecular Pathobiology, Hokkaido University Research Center for Zoonosis Control, Japan, ²Department of Bioinformatics, Hokkaido University Research Center for Zoonosis Control, ³Laboratory of Veterinary Hygiene, Graduate School of Veterinary Medicine, Hokkaido University, ⁴Laboratory of Veterinary Microbiology, Faculty of Applied Biological Sciences, Gifu University

VI-PO3-2

HUMAN HERPESVIRUS-6A ENVELOPE GLYCOPROTEIN, GQ1 IS CRITICAL FOR VIRUS ENTRY

Takahiro Maeki¹, Akiko Kawabata¹, Mayuko Hayashi^{1,2},
Huamin Tang², Koichi Yamanichi², Yasuko Mori^{1,2}

¹Division of Clinical Virology, Kobe University Graduate School of Medicine, Japan, ²Laboratory of Virology and Vaccinology, Division of Biomedical Research, National Institute of Biomedical Innovation

VI-PO3-3

CHARACTERIZATION OF A RECEPTOR FOR POLIOVIRUS BBB-PERMEATION

Coh-Ichi Nihei, Manabu Yamasaki, Akio Nomoto

Laboratory of Virology, Institute of Microbial Chemistry (IMC), Japan

VI-PO2 Host Factors for Virus Replication

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VI-PO2-1**CELLULAR CHAPERONE HEAT SHOCK PROTEIN-90 POSITIVELY REGULATES ROTAVIRUS INFECTION BY MODULATING THE VIRUS ENCODED NON STRUCTURAL PROTEIN -3**Mamta Chawla-Sarkar¹, Dipanjan Dutta¹, Nobumichi Kobayashi²¹Division of Virology, Scientist C, National Institute of Cholera and Enteric Diseases, India, ²Department of Hygiene, Sapporo Medical University**VI-PO2-2****INFLUENZA A VIRUS-INDUCED EARLY ACTIVATION OF ERK AND PI3K MEDIATES V-ATPASE-DEPENDENT INTRACELLULAR PH CHANGE REQUIRED FOR FUSION**

Henju Marjuki, Alex Gornitzky, Bindumadhav Marathe, Natalia Ilyushina, Jerry Aldridge, Gururao Desai, Richard Webby, Robert Webster

Infectious Diseases, St Jude Children's Research Hospital, USA

VI-PO2-3**A SINGLE AMINO ACID OF HUMAN IMMUNODEFICIENCY VIRUS TYPE 2 CAPSID PROTEIN AFFECTS CONFORMATION OF TWO EXTERNAL LOOPS AND VIRAL SENSITIVITY TO TRIM5α**Tadashi Miyamoto¹, Masaru Yokoyama², Ken Kono¹, Tatsuo Shioda¹, Hironori Sato², Emi E Nakayama¹¹Department of Viral Infections, Research Institute for Microbial Diseases, Osaka University, Japan, ²Pathogen Genomics Center, National Institute of Infectious Diseases**VI-PO2-4****HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A2 PARTICIPATES IN THE REPLICATION OF JAPANESE ENCEPHALITIS VIRUS THROUGH THE INTERACTION WITH VIRAL PROTEINS AND RNA**Hiroshi Katoh¹, Yoshio Mori², Hiroto Kambara¹, Wataru Kamitani¹, Yoshiharu Matsuura¹¹Department of Molecular Virology, Research Institute for Microbial Diseases, Osaka University, Japan, ²Department of Virology III, National Institute of Infectious Diseases**VI-PO2-5****IDENTIFICATION OF THE FUNCTIONAL REGION REQUIRED FOR ANTI-HIV-1 ACTIVITY OF APOBEC1**

Terumasa Ikeda, Atsushi Koito

Department of Retrovirology and Self-Defense, Faculty of Life Sciences, Kumamoto University, Japan

VI-PO2-6**THE FUSE BINDING PROTEIN 1 INTERACTS WITH UNTRANSLATED REGIONS OF JAPANESE ENCEPHALITIS VIRUS RNA AND NEGATIVELY REGULATES VIRAL REPLICATION**Hsu-Ling Chien^{1,2}, Ching-Len Liao^{1,3}, Yi-Ling Lin^{1,2,3,4}¹Graduate Institute of Life Sciences, National Defense Medical Center, Taiwan, ²Institute of Biomedical Sciences, Academia Sinica, ³Department of Microbiology and Immunology, National Defense Medical Center, ⁴Genomics Research Center, Academia Sinica**VI-PO2-7****TO STUDY THE DEUBIQUITINATING ENZYMES INVOLVED IN THE ANTIVIRAL EFFECT OF TYPE I INTERFERONS**Hom-Ming Yeh¹, Ho-Chun Yang², Shih-Han Ke³, Yi-Ling Lin^{1,3,4}¹Graduate Institute of Life Sciences, National Defense Medical Center, Taiwan, ²Graduate Institute of Microbiology, National Taiwan University, ³Department of Microbiology and Immunology, National Defense Medical Center, ⁴Institute of Biomedical Sciences, Academia Sinica**VI-PO2-8****DIFFERENTIAL ROLES OF SLU7 ON THE EXPRESSION OF M2 ION CHANNEL PROTEIN OF INFLUENZA A VIRUS IN HUMAN VERSUS AVIAN CELLS**Rei-Lin Kuo^{1,2,3}, Erh-Fang Hsieh³, Li-Ting Lin², Chiayn Chiang^{1,3}, Yu-Chang Chang², Cheng-Kai Chang³, Guang-Wu Chen^{1,4}, Shin-Ru Shih^{1,2,3}¹Research Center for Emerging Viral Infections, Chang Gung University, Taiwan, ²Department of Medical Biotechnology and Laboratory Science, Chang Gung University, ³Graduate Institute of Biomedical Sciences, Chang Gung University, ⁴Department of Computer Science and Information Engineering, Chang Gung University**VI-PO2-9****FUNCTIONAL ASSAY OF LEF GENES FOR THE ACTIVATION OF POLYHEDRIN PROMOTER OF THE BACULOVIRUS**

Yueh-Lung Wu, Yu-Chan Chao

Institute of Molecular Biology, Academia Sinica, Taiwan

VI-PO2-10**ROLE OF RAB11A IN VIRUS ASSEMBLY OF HIV-1**Tsutomu Murakami¹, Honggui Wu^{1,2}, Miyako Kawamata¹, Joe Chiba², Taichiro Takemura¹¹AIDS Research Center, National Institute of Infectious Diseases, Japan, ²Department of Biological Science Technology, Tokyo University of Science**VI-PO2-11****CYCLOPHILIN A MEDIATED UBIQUITINATION DEGRADATION OF INFLUENZA VIRUS M1 PROTEIN TO RESTRICT THE VIRAL REPLICATION**

Xiaoling Liu, Zhendong Zhao, Chongfeng Xu, Wenjun Liu

Center for Molecular Virology, CAS Key Laboratory of Pathogenic Microbiology and Immunology, Institute of Microbiology, Chinese Academy of Sciences, China

VI-PO2-12

CYCLOPHILIN E INHIBITED INFLUENZA VIRUS REPLICATION BY TARGETING THE FUNCTIONS OF THE NUCLEOPROTEIN

Zengfu Wang¹, Xiaoling Liu¹, Zhendong Zhao¹, Chongfeng Xu¹, Ke Zhang¹, Caiwei Chen¹, Lei Sun¹, George F Gao², Xin Ye¹, Wenjun Liu¹

¹Center for Molecular Virology, CAS Key Laboratory of Pathogenic Microbiology and Immunology, Institute of Microbiology, Chinese Academy of Sciences, China, ²CAS Key Laboratory of Pathogenic Microbiology and Immunology, Institute of Microbiology, Chinese Academy of Sciences

VI-PO2-13

CELLULAR SIGNALING PATHWAYS INVOLVED IN CHIKUNGUNYA VIRUS AND SINDBIS VIRUS REPLICATION

Martijn J van Hemert¹, Florine Scholte¹, Ali Tas¹, Peter Ten Dijke², Paolo Cordioli³, Eric J Snijder¹

¹Medical Microbiology, Leiden University Medical Center, Netherlands, ²Molecular Cell Biology, Leiden University Medical Center, ³Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna

VI-PO2-14

ROLES OF HUMAN HERPESVIRUS 6 IMMEDIATE-EARLY 2 PROTEIN AND SPLICING FACTOR SART3 IN CELLULAR TROPISM

Kazuya Shimada, Kazuhiro Kondo

Department of Virology, The Jikei University School of Medicine, Japan

VI-PO2-15

SUPPRESSION OF SPHINGOMYELIN AUGMENTED BY HEPATITIS C VIRUS HAS ROBUST ANTI-VIRAL EFFECTS IN HUMAN LIVERS

Yuichi Hirata¹, Kazutaka Ikeda², Masayuki Sudoh³, Yuko Tokunaga¹, Yoshimi Tobita¹, Ryo Taguchi^{2,4}, Michinori Kohara¹

¹Department of Microbiology and Cell Biology, Tokyo Metropolitan Institute of Medical Science, Japan, ²Department of Metabolome, Graduate School of Medicine, The University of Tokyo, ³Kamakura Research Laboratories, Chugai Pharmaceutical Co. Ltd., ⁴Department of Biomedical Sciences, College of Life and Health Sciences, Chubu University

VI-PO2-16

INTERLEUKIN-26 ENHANCES INFECTION BY VESICULAR STOMATITIS VIRUS

Helmut Fickenscher, Michael Klages, Oliver Braum

Institute for Infection Medicine, Christian Albrecht University of Kiel, Germany

VI-PO2-17

APICAL TRANSPORT OF INFLUENZA A VIRUS RIBONUCLEOPROTEIN REQUIRES RAB11-POSITIVE RECYCLING ENDOSOME

Fumitaka Momose¹, Tetsuya Sekimoto¹, Takashi Ohkura¹, Shuichi Jo², Atsushi Kawaguchi², Kyosuke Nagata², Yuko Morikawa¹

¹Kitasato Institute for Life Sciences, Kitasato University, Japan, ²Department of Infection Biology, Graduate School of Comprehensive Human Sciences, University of Tsukuba

VI-PO2-18

THE TUMOR SUPPRESSOR APC REGULATES HIV-1 ASSEMBLY AND RELEASE

Kei Miyakawa^{1,2}, Mayuko Nishi¹, Naoki Yamamoto³, Akihito Ryo¹

¹Department of Microbiology, Yokohama City University School of Medicine, Japan, ²Japanese Foundation for AIDS Prevention, ³Department of Microbiology, National University of Singapore

VI-PO2-19

HEAT SHOCK PROTEIN 70 (HSP70) MODULATES THE INFLUENZA VIRUS REPLICATION

Rashid Manzoor¹, Yoshihiro Sakoda², Hiroshi Kida^{1,2,3,4}, Ayato Takada^{1,5}

¹Hokkaido University Research Center for Zoonosis Control, Japan, ²Department of Disease Control, Graduate School of Veterinary Medicine, Hokkaido University, ³Japan Science and Technology Agency Basic Research Programs, ⁴OIE Reference Laboratory for Animal Influenza, ⁵School of Veterinary Medicine, The University of Zambia

VI-PO2-20

RNA INTERFERENCE SCREEN FOR HOST FACTORS REQUIRED FOR HCV REPLICATION

Ri Sho¹, Xuhong Zhang², Hisayashi Watanabe³, Takafumi Saito³, Rika Ishii³, Sumio Kawata³, Seiji Hongo⁴, Akira Fukao¹

¹Department of Public Health, Yamagata University Graduate School of Medical Science, Japan, ²Department of Biochemistry and Molecular Biology, Yamagata University Graduate School of Medical Science, ³Department of Gastroenterology, Yamagata University Faculty of Medicine, ⁴Department of Infectious Diseases, Yamagata University Faculty of Medicine

VI-PO2-21

BRIDGING VIROLOGY AND BACTERIOLOGY: BACTERIAL LIPOPEPTIDES AS POTENTIAL MODULATORS BETWEEN RESPIRATORY BACTERIA AND PNEUMOVIRUS INFECTIONS AND AS ADJUVANTS FOR LIVE-ATTENUATED VIRAL VACCINES

Duy Tien Nguyen¹, Nelianne J Verkaik², Lot de Witte¹, Albert D.M.E Osterhaus¹, Alex van Belkum², Rik L de Swart¹

¹Department of Virology, Erasmus Medical Centre, Netherlands, ²Department of Microbiology, Erasmus Medical Centre

VI-PO2-22

ANTI-TETHERIN ACTIVITIES OF ZAIRE AND RESTON EBOLAVIRUS GLYCOPROTEIN

Yohei Kurosaki¹, Ayato Takada², Jiro Yasuda¹

¹Department of Emerging Infectious Diseases, Institute of Tropical Medicine, Nagasaki University, Japan, ²Department of Global Epidemiology, Research Center for Zoonosis Control, Hokkaido University

VI-PO2-23

TETHERIN/BST-2 FUNCTIONS AS AN ANTIVIRAL CELLULAR FACTOR AGAINST INFLUENZA VIRUS

Eri Takeda¹, Akira Sakurai^{1,2}, Emi Takashita², Jiro Yasuda¹

¹Department of Emerging Infectious Disease, Institute of Tropical Medicine, Nagasaki University, Japan, ²Translational Research Project Team, The Tokyo Metropolitan Institute of Medical Science

VI-PO2-24

CHROMATIN ENVIRONMENT-DEPENDENT TRANSCRIPTIONAL ACTIVITY OF BORNA DISEASE VIRUS RIBONUCLEOPROTEIN IN PERSISTENTLY INFECTED CELLSYusuke Matsumoto^{1,2}, Takuji Daito^{1,2}, Masayuki Horie^{1,2}, Kan Fujino^{1,2}, Keizo Tomonaga²¹Department of Virology, Research Institute for Microbial Diseases (BIKEN), Osaka University, Japan, ²Department of Viral Oncology, Institute for Virus Research, Kyoto University

VI-PO2-25

GLYCERALDEHYDE 3-PHOSPHATE DEHYDROGENASE (GAPDH) NEGATIVELY REGULATES THE REPLICATION OF BAMBOO MOSAIC VIRUS AND ITS ASSOCIATED SATELLITE RNAYau-Heiu Hsu¹, K. Reddisiva Prasanth¹, Ying-Wen Huang¹, Ming-Ru Liou¹, Yung-Liang Wang², Chung-Chi Hu¹, Ching-Hsiu Tsai¹, Menghsiao Meng¹, Na-Sheng Lin³¹Graduate Institute of Biotechnology, National Chung Hsing University, Taiwan, ²Department of Biomedical Sciences and Research Center for Emerging Viral Infections, Chang Gung University, ³Institute of Plant and Microbial Biology, Academia Sinica**VI-PO63 Structure and Assembly: Enveloped Viruses**

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VI-PO63-1

THE M2 ION CHANNEL PROTEIN MEDIATES THE ESCRT-INDEPENDENT BUDDING OF INFLUENZA VIRUSJeremy S Rossman^{1,2}, Xianghong Jing^{1,2}, George P Leser^{1,2}, Robert A Lamb^{1,2}¹Howard Hughes Medical Institute, USA, ²Department of Molecular Biosciences, Northwestern University

VI-PO63-2

INVOLVEMENT OF RECYCLING ENDOSOMES AND ENDOSOMAL REGULATORY PROTEINS IN SENDAI VIRUS NUCLEOCAPSID TRANSPORT

Raychel L Chambers, Toru Takimoto

Microbiology and Immunology, University of Rochester Medical Center, USA

VI-PO63-3

CHARACTERIZATION OF SPECIFIC AMINO ACID RESIDUES IN TRANSMEMBRANE AND HELIX DOMAIN OF JAPANESE ENCEPHALITIS VIRUS PRM PROTEIN IN THE PROCESS OF VIRUS FORMATION AND EGRESS

Jia-Guan Peng, Ying-Ju Lin, Suh-Chin Wu

Department of Life Science, Institute of Biotechnology, National Tsing-Hua University, Taiwan

VI-PO63-4

ULTRACENTRIFUGATION DEFORMS UNFIXED INFLUENZA A VIRIONSYukihiko Sugita¹, Takeshi Noda², Hiroshi Sagara³, Yoshihiro Kawaoka^{1,2,4,5}¹Division of Virology, Department of Microbiology and Immunology, Institute of Medical Science, University of Tokyo, Japan, ²Department of Special Pathogens, International Research Center for Infectious Diseases, Institute of Medical Science, University of Tokyo, ³Medical Proteomics Laboratory, Institute of Medical Science, University of Tokyo, ⁴ERATO Infection-induced Host Responses Project, ⁵Department of Pathological Sciences, School of Veterinary Medicine, University of Wisconsin-Madison

VI-PO63-5

ENCAPSIDATION OF BAMBOO MOSAIC VIRUS SATELLITE RNA IN VITRO AND IN VIVOYa-Chien Lee¹, Chung-Chi Hu¹, Na-Sheng Lin², Yau-Heiu Hsu¹¹Biotechnology, Graduate Institute of Biotechnology, National Chung Hsing University, Taiwan, ²Institute of Plant and Microbial Biology, Academia Sinica

VI-PO63-6

ELECTRON-MICROSCOPIC CHARACTERIZATION OF SIMIAN HEMORRHAGIC FEVER VIRUS (SHFV) PARTICLES AND SHFV-INFECTED CELLSJens H Kuhn^{1,2}, Yingyun Cai^{1,2}, Hannah B Sanford^{1,2}, John Bernbaum^{1,2}, Reed Johnson¹, Peter B Jahrling¹, Victoria Wahl-Jensen^{1,2}¹NIH/NIAID/DCR/Integrated Research Facility at Fort Detrick (IRF-Frederick), USA, ²Tunnell Consulting, Inc.**VI-PO1 Virus and Host Responses**

Tuesday, 13 September

VI-PO1-1

THE ER STRESS TRANSDUCER ATF6 IS CLEAVED BY ENTEROVIRUS 71 FOR VIRAL REPLICATIONJim-Tong Horng, Jia-Rong Jheng, Kean-Seng Lau
Biochemistry, Chang Gung University, Taiwan

VI-PO1-2

INFLUENZA VIRUS INFECTION INDUCES THE GENE EXPRESSION OF CHEMOATTRACTIVE, PRO-INFLAMMATORY AND ANTIVIRAL CYTOKINES IN HUMAN FETAL MEMBRANE AMNIOTIC MESENCHYMAL CELLS AS WELL AS CHORIONIC TROPHOBLAST CELLS

Noboru Uchide, Kunio Ohyama, Hiroo Toyoda

Department of Clinical Molecular Genetics, Tokyo University of Pharmacy and Life Sciences, Japan

VI-PO1-3

PROTEOMICS ANALYSIS OF REOVIRUS-INFECTED HELA CELLS

Jieyuan Jiang

The Institute of Veterinary Medicine, No, China

VI-PO1-4

EFFECT OF HLA CLASS I-MEDIATED SELECTIVE PRESSURE ON HIV-1 ACCESSORY GENES

Z Hasan¹, J Carlson², H Gatanaga^{1,3}, A Le⁴, C Brumme⁵, S Oka^{1,3}, Z Brumme^{4,5}, T Ueno¹

¹Ueno Project Laboratory, Center for AIDS Research, Kumamoto University, Japan, ²Microsoft Research, ³AIDS Clinical Center, National Center for Global Health and Medicine, ⁴Simon Fraser University, ⁵BC Centre for Excellence in HIV/AIDS

VI-PO1-5

POSSIBLE SUPPRESSION MECHANISMS OF HUMAN CYTOMEGALOVIRUS INFECTION WITH A NATURAL PRODUCT

Kunio Ohyama¹, Yuki Akiyama¹, Chieko Hirobe², Noboru Uchida¹, Hiroo Toyoda¹

¹Clinical Molecular Genetics, Tokyo University of Pharmacy & Life Sciences, Japan, ²Cultural History, Seisen University

VI-PO1-6

EFFECTS OF RECEPTOR BINDING SPECIFICITY OF AVIAN INFLUENZA VIRUS ON THE HUMAN INNATE IMMUNE RESPONSE

Irene Ramos, Dabeiba Bernal-Rubio, Natasha Durham, Alan Belicha-Villanueva, Anice C Lowen, John Steel, Ana Fernandez-Sesma

Department of Microbiology, Mount Sinai School of Medicine, USA

VI-PO1-7

COMPARATIVE RESPIRATORY SYNCYTIAL VIRUS CYTOPATHOGENESIS IN WELL-DIFFERENTIATED PRIMARY PAEDIATRIC AIRWAY EPITHELIAL CELL MODELS DERIVED FROM THE UPPER AND LOWER RESPIRATORY TRACTS

Hong Guo-Parke¹, Paul Canning¹, Isobel Douglas², Remi Villenave¹, Liam Heaney¹, Peter Coyle³, Keith Bailie², Michael Shields^{1,2}, Ultan Power¹

¹Center for Infection and Immunity, School of Medicine, Dentistry and Biomedical Sciences, Queen's University Belfast, UK, ²The Royal Belfast Hospital for Sick Children, ³The Regional Virus Laboratory, Belfast Trust

VI-PO1-8

INTRODUCTION OF A MODEL SYSTEM TO STUDY VIRUS LATENCY IN A PERENNIAL PLANT ILLUSTRATED BY HOSTA VIRUS X INFECTION OF HOSTA

Katja R Richert-Poeggeler¹, Ulrich Commandeur², Kappei Kobayashi³, Christina Maass¹, Ben E Lockhart⁴

¹Epidemiology and Pathogen Diagnostics, Julius Kuehn-Institute, Germany, ²Institute for Biology VII, RWTH Aachen, ³Laboratory of Plant Molecular Biology and Virology, National University Corporation Ehime University, ⁴Department of Plant Pathology, University of Minnesota

VI-PO1-9

ANTIVIRAL PROTECTION MEDIATED BY DIFFERENT STRAINS OF THE BACTERIUM WOLBACHIA IN DROSOPHILA

Karyn N Johnson, Sheree E Osborne, Scott L O'Neill, Inaki Iturbeorrea

School of Biological Sciences, The University of Queensland, Australia

VI-PO1-10

SEMV INFECTIOUS CLONE: IMPORTANCE OF POLYPROTEIN 2A AND 2AB PROCESSING BY THE PROTEASE IN VIRAL REPLICATION

Govind Kunduri¹, Kristiina Mäkinen², Savithri Subbarao Handanahal³

¹Biochemistry, Indian Institute of Science, Student, India, ²Chemistry and Biochemistry, University of Helsinki, ³Biochemistry, Indian Institute of Science

VI-PO1-11

FUNCTIONAL CHARACTERIZATION OF COAT PROTEIN AND V2 INVOLVED IN CELL TO CELL MOVEMENT OF COTTON LEAF CURL KOKHRAN VIRUS-DABAWALI

Ambika Mosale Venkatesh Murthy¹, Poornima Priyadarshini C G², Savithri S Handanahal²

¹Biochemistry, Indian Institute of Science, India, ²Biochemistry, Indian Institute of Science

VI-PO1-12

CYTOKINE PRODUCTION BY PRIMARY HUMAN MACROPHAGES INFECTED WITH HIGHLY PATHOGENIC H5N1 OR PANDEMIC H1N1 2009 INFLUENZA VIRUSES

Saori Sakabe^{1,2}, Kiyoko Iwatsuki-Horimoto², Ryo Takano², Chairul A Nidom³, Mai Thi Quynh Le⁴, Tokiko Nagamura-Inoue⁵, Taisuke Horimoto^{2,8}, Naohide Yamashita⁶, Yoshihiro Kawaoka^{1,2,7}

¹Institute of Medical Science, University of Tokyo, ERATO Kawaoka Infection-Induced Host Responses Project (JST), Japan, ²Division of Virology, Institute of Medical Science, University of Tokyo, ³Faculty of Veterinary Medicine, Tropical Disease Centre, Airlangga University, ⁴National Institute of Hygiene and Epidemiology, ⁵Department of Cell Processing and Transfusion, Research Hospital, Institute of Medical Science, University of Tokyo, ⁶Department of Advanced Medical Science, Institute of Medical Science, University of Tokyo, ⁷International Research Center for Infectious Diseases, Institute of Medical Science, University of Tokyo, ⁸Department of Veterinary Microbiology, Graduate School of Agriculture and Life Sciences, University of Tokyo

VI-PO1-13

HUMAN IMMUNODEFICIENCY VIRUS-1 TAT INDUCES OXIDATIVE STRESS IN TOMATO PLANTS

Marni E Cueno¹, Yurina Hibi², Kenichi Imai¹, Takashi Okamoto², Kuniyasu Ochiai¹

¹Division of Immunology and Pathobiology, Nihon University School of Dentistry, Japan, ²Department of Molecular and Cellular Biology, Nagoya City University Graduate School of Medical Sciences

VI-PO1-14

TWO GASTROENTERITIS OUTBREAKS CAUSED BY GII NOROVIRUSES: PRELIMINARY INVESTIGATION OF EPIDEMIOLOGY AND HOST SUSCEPTIBILITY

Miao Jin^{1,2}, Yaqing He³, Huiying Le¹, Pengwei Huang², Ming Tan², Weiming Zhong², Zhao-Jun Duan¹, Xi Jiang²

¹Department of Viral Diarrhea, Institute for Viral Disease Control and Prevention, China, ²Department of Pediatrics, University of Cincinnati College of Medicine, ³Shenzhen Center for Disease Control and Prevention

VI-PO1-15

EPITOPE MAPPING OF NEUTRALIZING ANTIBODY IN AVIAN INFLUENZA A H5N1 VIRUS HEMAGGLUTININ AND CONSTRUCTION OF ITS SINGLE-CHAIN VARIABLE FRAGMENT

Takashi Ohkura¹, Yuji Kikuchi^{1,2}, Naoko Kono³, Shigeyuki Itamura³, Katsuhiro Komase^{4,5}, Fumitaka Momose¹, Yuko Morikawa¹

¹Graduate School of Infection Control Sciences, Kitasato University, Japan, ²Faculty of Pharmacy, Iwaki Meisei University, ³Center for Influenza Virus Research, National Institute of Infectious Diseases, ⁴Department of Virology III, National Institute of Infectious Diseases, ⁵Research Center for Biologicals, Kitasato Institute

VI-PO1-16

PROLIFERATION OF IL-10-PRODUCING T CELLS IN RESPONSE TO MEASLES VIRUS-INFECTION MOUSE MYELOID DENDRITIC CELLS

Hiromi Takaki, Fukiko Kobayashi, Misako Matsumoto, Sayuri Yamazaki, Hiroyuki Oshiumi, Tsukasa Seya

Department of Microbiology and Immunology, Graduate School of Medicine, Hokkaido University, Japan

VI-PO1-17

DOUBLE-EDGED SWORD EFFECT OF SELECTIVE INTERFERON REGULATORY FACTOR-2 UP REGULATION DURING WEST NILE VIRUS INFECTION

Kim Long Yeo^{1,2}, Mary Mah Lee Ng²

¹NUS Graduate School for Integrative Sciences and Engineering, National University of Singapore, Singapore, ²Department of Microbiology, Yong Loo Lin School of Medicine, National University of Singapore

VI-PO1-18

ANALYSIS OF HHV-6 GENE EXPRESSIONS IN MALIGNANT LYMPHOMA TISSUES USING REAL-TIME RT-PCR

Yoshihiko Enomoto¹, Hiroko Sugiyama¹, Yuki Higashimoto¹, Yuri Katou¹, Masahiro Oohashi², Yoshiki Kawamura², Masaru Ihira³, Tetushi Yoshikawa²

¹Fujita Health University Hospital, Clinical Laboratory, Japan, ²Fujita Health University Hospital, Pediatrics, ³Fujita Health University School of Health Sciences Faculty of Chirinal Engineering

VI-PO1-19

IDENTIFICATION OF HOST GENES SHOWING DIFFERENTIAL EXPRESSION PROFILES IN CELL-BASED LONG-TERM REPLICATION OF HEPATITIS C VIRUS RNA

Hiroe Sejima¹, Kyoko Mori^{1,2}, Yasuo Ariumi¹, Masanori Ikeda¹, Nobuyuki Kato¹

¹Department of Tumor Virology, Okayama University Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences, Japan, ²JSPS Research Fellow

VI-PO1-20

PATHOGENESIS AND POSSIBLE TREATMENT TARGETS OF MULTIPLE ORGAN FAILURE IN HIGH RISK PATIENTS WITH SEVERE INFLUENZA AND ANIMAL MODELS

Hiroshi Kido, Kazuhiro Yamane, Junji Chida, Min Yao, Mihiro Yano

Institute for Enzyme Research, Tokushima University, Japan

VI-PO1-21

Withdrawn

VI-PO1-22

REPRESSION OF PORCINE ENDOGENOUS RETROVIRUS INFECTION BY HUMAN APOBEC3

Young Bong Kim, Jungeun Lee, Jae Yoo Choi, Hee-Jung Lee, Yoon-Ki Hur

Department of Animal Biotechnology, Konkuk University, Korea, South

VI-PO1-23

IDENTIFICATION OF A NOVEL ANTIVIRAL RESPONSE TO HIV-1

Tatsuya Saitoh^{1,2}, Shizuo Akira^{1,2}

¹Department of Host Defense, Research Institute for Microbial Diseases, Osaka University, Japan, ²Laboratory of Host Defense, WPI Immunology Frontier Research Center, Osaka University

VI-PO1-24

SENSIBILITY FOR H5N1 INFLUENZA VIRUS INFECTION IN THE WILD BIRDS

Katsuro Hagiwara¹, Manabu Onuma², Koichi Goka²

¹Veterinary Medicine, Rakuno Gakuen University, Japan, ²National Institute for Environmental Studies

VI-PO1-25

ANALYSIS OF THE HOST GENE EXPRESSION PROFILE OF ENDOTHELIAL CELLS TO NIPAH VIRUS INFECTION

Alexander N Freiberg^{1,2}, Tatyana Yun¹, Mala Sinha³, Russel Carmical⁴, Bruce Luxon³, Benhur Lee⁵

¹Pathology, University of Texas Medical Branch, USA, ²Institute for Human Infections and Immunity, University of Texas Medical Branch, ³Bioinformatics Program, University of Texas Medical Branch, ⁴Department of Biochemistry and Molecular Biology, University of Texas Medical Branch, ⁵Department of Microbiology, University of California

VI-PO1-26

COMPARISON OF THE PATHOGENICITY AND TRANSMISSIBILITY AMONG HIGHLY PATHOGENIC AVIAN INFLUENZA VIRUSES IN CHICKEN

Koutarou Suzuki^{1,2}, Hironao Okada^{3,4}, Toshihiro Itoh^{3,4}, Tatsuya Tada^{2,4}, Kenji Tsukamoto^{2,4}

¹Division of Health and Sport Sciences, Postgraduate School of Comprehensive Human Sciences, University of Tsukuba, Japan, ²Research Team for Zoonotic Diseases team, National Institute of Animal Health (NIAH), National Agriculture and Food Research Organization (NARO), ³National Institute of Advanced Industrial Science and Technology (AIST), ⁴Core Research for Evolutional Science and Technology (CREST), Japan Science and Technology Corporation

VI-PO1-27

SEROLOGICAL SURVEILLANCE OF 2009 PANDEMIC INFLUENZA H1N1 VACCINE STRAIN IN HIGH-RISK HUMAN POPULATIONS IN CENTRAL TAIWAN

Menlin Tsai¹, Ruyou Wei², Dayyu Chao³, Chwanchuen King⁴

¹Institute of Epidemiology, College of Public Health, National Taiwan University, Student, Taiwan, ²Institute of Microbiology and Public Health, National Chung Hsing University, student, ³Institute of Microbiology and Public Health, National Chung Hsing University, assistant professor, ⁴Institute of Epidemiology, College of Public Health, National Taiwan University, Professor

VI-PO1-28

IMPACT OF CTL ESCAPE MUTATION IN IMMUNODOMINANT HIV-1-SPECIFIC EPTOPE ON HIV-1-SPECIFIC CTL RESPONSES

Masao Hashimoto, Hayato Murakoshi, Masafumi Takiguchi

Takiguchi Project Laboratory, Center for AIDS Research, Kumamoto University, Japan

VI-PO1-29

ANDES HANTAVIRUS INHIBITS APOPTOSIS AND ITS NUCLEOCAPSID PROTEIN IS A TARGET FOR BOTH HUMAN CASPASE 3 AND GRANZYME B

Shawon Gupta¹, Malin Stoltz¹, Karin Sundstrom¹, Nicole Tischler³, Jonas Klingstrom^{1,2}

¹Department of Microbiology, Tumor and Cell Biology (MTC), Karolinska Institutet, Sweden, ²Swedish Institute for Communicable Disease Control, ³Fundación Ciencia para la Vida

VI-PO1-30

A 3D ORGANOTYPIC TISSUE MODEL FOR HANTAVIRUS INFECTION OF THE LUNG

Karin B Sundstrom¹, Anh Thu Nguyen Hoang², Mattias Svensson², Jonas Klingstrom^{1,3}

¹MTC, Karolinska Institutet, Sweden, ²CIM, Karolinska Institutet, ³Swedish Institute for Infectious Disease Control

VI-PO1-31

IMMUNE EVASION BY HIV-1PROTEASE-MEDIATED CLEAVAGE OF TANK-BINDING KINASE 1

Tomohiro Kanuma¹, Ayumi Kudoh¹, Nao Jounai¹, Fumihiko Takeshita¹, Tatsuya Sawasaki², Akihide Ryo¹

¹Microbiology, Yokohama City University School of Medicine, Japan, ²Cell-free Science and Technology Research Center, Ehime University

VI-PO1-32

INFLUENZA VIRUS M1 PROTEIN ACCUMULATES IN THE SUBNUCLEAR STRUCTURE, ND10, WITHOUT ANY HELP FROM OTHER VIRAL PROTEINS

Toshikatsu Shibata^{1,2}, Satoshi Hayakawa¹, Kazufumi Shimizu², Tatsuo Yamamoto², Kazumichi Kuroda¹

¹Division of Microbiology, Nihon University School of Medicine, Japan, ²Division of Obstetrics and Gynecology, Nihon University School of Medicine

VI-PO1-33

INTERACTION OF HIV-1 VPR WITH HOST CELL FACTORS INVOLVED IN THE CELL CYCLE G2 ARREST INDUCTION

Michiaki Masuda, Kiyomi Okawa, Fuminori Mizukoshi

Department of Microbiology, Dokkyo Medical University School of Medicine, Japan

VI-PO1-34

A QUANTIFICATION SYSTEM FOR INFLUENZA VIRUS IN PATIENT'S COUGH

Hidekazu Nishimura¹, Etuko Hatagishi¹, Suguru Ohmiya¹, Hisakazu Yano¹, Toru Hori¹, Yasushi Suzuki², Reiko Saito², Makoto Shoji³, Yoshihisa Morisaki⁴, Soichiro Sakata⁵

¹Virus Research Center, Clinical Research Division, Sendai Medical Center, Japan, ²Division of Public Health, Department of Infectious Disease Control and International Medicine, Graduate School of Medicine and Dental Sciences, Niigata University, ³Shoji Clinic, ⁴Sendai Hospital, Japan Self Defence Force, ⁵Takasago Thermal Engineering Co.,LTD

VI-PO1-35

ANALYSIS OF MURINE INTERFERON REGULATORY FACTOR-3 (IRF-3) PROMOTER

Takujiro Homma, Daisuke Ishibashi, Noriyuki Nishida

Nagasaki University Graduate School of Medical Sciences, Japan

VI-PO1-36

DIFFERENT IMMUNE RESPONSES TO DENGUE VIRUS INFECTION IN DENGUE HEMORRHAGIC FEVER VERSUS DENGUE FEVER CASES IN KAOHSIUNG, TAIWAN

Hui-Ying Ko, Tsai-Ying Yen, Chwan-Chuen King

Institute of Epidemiology, National Taiwan University, Taiwan

VI-PO1-37

AUTOPHAGY IS INVOLVED IN VIRAL PROTEIN EXPRESSION OF INFLUENZA A VIRUS

Kaio Kitazato¹, Ge Liu¹, Chao-Wan Guo¹, Yang-Fei Xiang², Masaaki Komatsu³, Tamotsu Yoshimori⁴, Yi-Fei Wang²

¹Department of Molecular Microbiology and Immunology, Graduate School of Biomedical Sciences, Nagasaki University, Japan, ²Biomedical R&D Center, Guangdong Provincial Key Laboratory of Bioengineering Medicine, National Engineering Research Center of Genetic Medicine, Jinan University, ³Laboratory of Frontier Science, Tokyo Metropolitan Institute of Medical Science, ⁴Graduate School of Frontier Biosciences and Graduate School of Medicine, Osaka University

VI-PO1-38

CXCR3-CXCL10 AXIS ENHANCES NEUTROPHIL-MEDIATED PULMONARY INFLAMMATION WITH NON-VIRAL AND VIRAL ORIGINS

Keiji Kuba¹, Masayuki Morita¹, Yoshihiro Kawaoka², Yumiko Imai¹

¹Department of Biological Informatics and Experimental Therapeutics, Akita University Graduate School of Medicine, Japan, ²Department of Microbiology and Immunology and International Research Center for Infectious Diseases, Institute of Medical Science, University of Tokyo

VI-PO1-39

LIPIDOMICS ANALYSIS REVEALED THE DYNAMIC CHANGES IN PRO-RESOLVING LIPID MEDIATORS IN THE INFLUENZA VIRUS-INFECTED LUNGS

Masayuki Morita¹, Keiji Kuba¹, Masaki Saito¹, Mizuho Nakayama¹, Takashi Suzuki¹, Yoshihiro Kawaoka², Yumiko Imai¹

¹Department of Biological Informatics and Experimental Therapeutics, Akita University Graduate School of Medicine, Japan, ²Department of Microbiology and Immunology and International Research Center for Infectious Diseases, Institute of Medical Science, University of Tokyo

VI-PO1-40

PYROSEQUENCING AS A TOOL FOR GENOTYPING HEPATITIS C VIRUS

Randy Voorhies¹, Jacki Huckins², Jaber Aslanzadeh¹

¹Clinical Laboratory Partners, USA, ²QIAGEN, Inc

VI-PO1-41

UPREGULATION OF GALNT3 AT THE EARLY STAGE OF INFLUENZA A VIRUS INFECTION THROUGH THE MIRNA PATHWAY

Masayuki Horie^{1,2}, Mayo Yasugi¹, Daisuke Okuzaki³, Tomoyuki Honda¹, Keizo Tomonaga²

¹Department of Virology, Research Institute for Microbial Diseases (BIKEN), Osaka University, Japan, ²Department of Viral Oncology, Institute for Virus Research, Kyoto University, ³Department of Molecular Genetics, Research Institute for Microbial Diseases (BIKEN), Osaka University

VI-PO1-42

NEUROVIRULENCE OF BORNA DISEASE VIRUS IN INFECTED NUDE RATS

Yoshii Nishino^{1,3}, Hiroo Madarame², Kan Fujino³, Saya Kojima³, Yuji Fukuhara², Shoichiro Kameoka², Maki Inoue³

¹Faculty of Life Sciences, Kyoto Sangyo University, Japan, ²Veterinary Teaching Hospital, Azabu University, ³School of Veterinary Medicine, Azabu University

VI-PO18 Viruses and Innate Immunity

Tuesday, 13 September

VI-PO18-1

MACROPINOCYTOSIS OF HUMAN PAPILLOMAVIRUSES IN NATURAL KILLER CELLS VIA CD16 INDUCES CYTOTOXIC GRANULE EXOCYTOSIS AND CYTOKINE SECRETION

Virginie M Renoux¹, Inge Langers¹, Beatrice Clemenceau², Marc Thiry³, Bettina Bisig¹, Christophe Deroanne⁴, Jacques Boniver¹, Philippe Delvenne¹, Jacobs Nathalie¹

¹Giga I3 - Laboratory of Experimental Pathology, University of Liege, Belgium, ²INSERM U892, Therapeutic Research Institute, University of Nantes, ³University of Liege, GIGA-Neurosciences, Cellular and Tissue Biology, ⁴Laboratory of Connective Tissues Biology, GIGA-Cancer

VI-PO18-2

COMMENSAL BACTERIA-MEDIATED SUPPRESSION OF HIV-1 REPLICATION IN MACROPHAGES THROUGH INNATE IMMUNE RESPONSE

Nursarat Ahmed¹, Takaya Hayashi¹, Atsuhiko Hasegawa¹, Noboru Okamura², Takao Masuda¹, Mari Kannagi¹

¹Immunotherapeutics, Tokyo Medical and Dental University, Japan, ²Laboratory of Microbiology and Immunology, Tokyo Medical and Dental University

VI-PO18-3

ANTAGONISTIC ACTIVITY OF PARAMYXOVIRUS V PROTEINS AGAINST TOLL-LIKE RECEPTOR 7/9 DEPENDENT ALPHA INTERFERON INDUCTION

Yoshinori Kitagawa¹, Mayu Yamaguchi^{1,2}, Min Zhou¹, Takayuki Komatsu³, Machiko Nishio⁴, Tsuyoshi Sugiyama⁵, Kenji Takeuchi⁶, Masae Itoh², Bin Gotoh¹

¹Department of Pathology, Shiga University of Medical Science, Japan, ²Genetics of Life, Faculty of Bio-Science, Nagahama Institute of Bio-Science and Technology, ³Department of Microbiology and Immunology, Aichi Medical University School of Medicine, ⁴Department of Microbiology, Mie University Graduate School of Medicine, ⁵Laboratory of Microbiology, Department of Public Health Pharmacy, Gifu Pharmaceutical University, ⁶Microbiology Section, Department of Pathological Sciences, Faculty of Medical Sciences, University of Fukui

VI-PO18-4

ANALYSIS OF SPECIFIC RIGI INTERACTIONS BY BIMOLECULAR FLUORESCENCE COMPLEMENTATION

Maria T Sanchez-Aparicio¹, Juan Ayllon¹, Adolfo Garcia-Sastre^{1,2,3}

¹Microbiology, Mount Sinai School of Medicine, USA, ²Department of Medicine, Division of Infectious Diseases, Mount Sinai School of Medicine, ³Global Health and Emerging Pathogens Institute, Mount Sinai School of Medicine.

VI-PO18-5

IKKε-MEDIATED STAT1 PHOSPHORYLATION AT S708 RESIDUE GOVERNS THE EXPRESSION OF INTERFERON-STIMULATED GENES IMPORTANT FOR WEST NILE VIRUS CONTROL

Olivia Perwitasari^{1,2}, Michael Gale, Jr.¹

¹Immunology, University of Washington, USA, ²Molecular and Cellular Biology Program, University of Washington

VI-PO18-6

INFLUENCE OF GENETIC VARIATION IN IL-28B PROMOTER ON THE GENE EXPRESSION LEVELS

Masaya Sugiyama¹, Yasuhito Tanaka², Makoto Nakanishi², Masashi Mizokami¹

¹The Research Center for Hepatitis and Immunology, National Center for Global Health and Medicine, Japan, ²Nagoya City University Graduate School of Medical Sciences

VI-PO18-7

Withdrawn

VI-PO18-8

DENDRITIC CELL ACTIVATION BY RECOMBINANT HEMAGGLUTININ PROTEINS OF H1N1 AND H5N1 INFLUENZA VIRUSES

Suh-Chin Wu^{1,2}, Wen-Chun Liu¹, Shih-Chang Lin¹, Yen-Ling Yu², Ching-Liang Chu¹

¹Institute of Biotechnology, National Tsing Hua University, Taiwan,

²Vaccine Research and Development Center, National Health Research Institutes

VI-PO18-9

VIRUS-DERIVED SINGLE-STRANDED RNA WITH STABLE SECONDARY STRUCTURE EXTRACELLULARLY ACTIVATES TOLL-LIKE RECEPTOR 3

Megumi Tatematsu, Tsukasa Seya, Misako Matsumoto

Microbiology and Immunology, Hokkaido University Graduate School of Medicine, Japan

VI-PO18-10

EXCESSIVE NEUTROPHILS AND NEUTROPHIL EXTRACELLULAR TRAPS CONTRIBUTE TO ACUTE LUNG INJURY OF INFLUENZA PNEUMONITIS

Meng Chee Phoon¹, Narasaraju Teluguakula¹, Edwin Yang¹, Perumalsamy Ramar¹, Huey Hian Ng¹, Wee Peng Poh¹, Audrey-Ann Liew¹, Nico van Rooijen², Vincent TK Chow¹

¹Department of Microbiology, National University of Singapore, Singapore, ²Department of Molecular Cell Biology, Vrije University of Amsterdam

VI-PO18-11

RECOGNITION OF ENCEPHALOMYOCARDITIS VIRUS BY NLRP3 INFLAMMASOME

Minako Ito, Takeshi Ichinohe, Yusuke Yanagi

Department of Virology, Faculty of Medicine, Kyushu University, Japan

VI-PO18-12

RIplet UBIQUITIN LIGASE IS ESSENTIAL FOR RIG-I DEPENDENT TYPE I INTERFERON PRODUCTION DURING VIRAL INFECTION

Hiroyuki Oshiumi, Misako Matsumoto, Tsukasa Seya

Graduate School of Medicine, Hokkaido University, Japan

VI-PO18-13

ANTIVIRAL MECHANISMS AND APPLICATIONS OF VIPERIN IN THE INHIBITION OF INFLUENZA VIRUS INFECTION IN VIVO AND IN VITRO

Kai Sen Tan¹, Wai Chii Ng¹, Wee Peng Poh¹, Farzad Olfat², Keh Chuang Chin³, Vincent Tak Kwong Chow¹

¹Microbiology, National University of Singapore, ²Singapore-MIT Alliance for Research and Technology, ³Singapore Immunology Network

VI-PO18-14

DDX60, A NOVEL DEXD/H BOX HELICASE, PARTICIPATES IN EVOKING ANTIVIRAL IMMUNITY AND ENHANCING THE CYTOPLASMIC IFN-BETA-INDUCING PATHWAY

Moeko Miyashita¹, Hiroyuki Oshiumi², Misako Matsumoto², Tsukasa Seya²

¹Hokkaido University Graduate School of Life Science, Japan,

²Hokkaido university graduate school of medicine

VI-PO18-15

THE ROLE OF TLR4 ON INNATE IMMUNITY AGAINST H5N1 INFLUENZA VIRUS INFECTION

Akiko Makino¹, Kyoko Shinya¹, Mustumi Ito², Kensuke Miyake³, Motoko Tanaka¹, Teridah E Ginting¹, Amie J Einfeld⁴, Yoshihiro Kawaoka^{1,2,4,5,6}

¹Division of Zoonosis, Department of Microbiology and Infectious Diseases, Graduate School of Medicine, Kobe University, Japan, ²Division of Virology, Department of Microbiology and Immunology, Institute of Medical Science, University of Tokyo, ³Division of Infectious Genetics, Institute of Medical Science, University of Tokyo, ⁴Influenza Research Institute, Department of Pathological Sciences, University of Wisconsin-Madison, ⁵International Research Center for Infectious Diseases, Institute of Medical Science, University of Tokyo, ⁶ERATO Infection-Induced Host Responses Project, Japan Science and Technology Agency

VI-PO18-16

C-TERMINAL REGION OF IKKε IS REQUIRED FOR HOST ANTIVIRAL RESPONSE

Toru Kubota¹, Noriyuki Otsuki¹, Makoto Takeda¹, Atsushi Kato¹, Tsung-Hsien Chang³, Mayumi Matsuoka²

¹Department of Virology III, National Institute of Infectious Diseases, Japan, ²Department of Bacteriology II, National Institute of Infectious Diseases, ³Department of Medical Education and Research, Kaohsiung Veterans General Hospital

VI-PO18-17

DNA-PROTEIN KINASE IS A SENSOR OF VIRAL DNA FOR IRF-3-DEPENDENT INNATE IMMUNITY

Brian J Ferguson¹, Nicholas E Peters¹, Daniel S Mansur^{1,2}, Geoffrey L Smith¹

¹Section of Virology, Department of Medicine, Imperial College, UK, ²Departamento de Microbiologia, Imunologia e Parasitologia, Universidade Federal de Santa Catarina

VI-PO18-18

HERPES SIMPLEX VIRUS TYPE 1 UL13 PROTEIN KINASE PLAYS A ROLE IN THE ESCAPE FUNCTION FROM TYPE 1 INTERFERON BY THE INDUCTION OF SUPPRESSOR OF CYTOKINE SIGNALING-3

Tatsuo Suzutani¹, Yuka Sato¹, Kei Ishibashi², Koichi Hashimoto³, Ken Ishioka¹, Shin-Ichi Yokota⁴, Nobuhiro Fujii⁴

¹Department of Microbiology, Fukushima Medical University, Japan, ²Department of Urology, Fukushima Medical University, ³Department of Pediatrics, Fukushima Medical University, ⁴Department of Microbiology, Sapporo Medical University

VI-PO18-19

HEAT SHOCK PROTEIN 70 OVER-EXPRESSION REDUCES INTERFERON ANTAGONIST FUNCTION OF JAPANESE ENCEPHALITIS VIRUS NS5 PROTEIN

Cheng-Wen Lin, Tsung-Han Hsieh, Chian-Jhen Huang

Department of Medical Laboratory Science and Biotechnology, China Medical University, Taiwan

VI-PO18-20

THE TLR3-TICAM-1 PATHWAY IS MANDATORY FOR INNATE IMMUNE RESPONSES TO POLIOVIRUS INFECTIONMasaaki Okamoto¹, Hiroyuki Oshiumi¹, Misako Matsumoto¹, Satoshi Koike², Tsukasa Seya¹¹Graduate School of Medicine, Hokkaido University, Japan, ²Tokyo Metropolitan Institute for Neuroscience

VI-PO18-21

Withdrawn

VI-PO18-22

INTERACTION OF VIRAL RESTRICTION FACTORS WITH THE RIG-I SENSOR PATHWAYElisa de Castro¹, Atsushi Inoue⁴, Stephen Soonthornvacharin⁴, Paul Dejesus⁴, Renate Konig⁴, Anthony Orth⁵, Loren Migalia⁵, Sumit K Chanda⁴, Adolfo Garcia-Sastre^{1,2,3}¹Department of Microbiology, Mount Sinai School of Medicine, One Gustave L. Levy Place, USA, ²Department of Medicine, Division of Infectious Diseases, Mount Sinai School of Medicine, One Gustave L. Levy Place, ³Global Health and Emerging Pathogens Institute, Mount Sinai School of Medicine, One Gustave L. Levy Place, ⁴Infectious and Inflammatory Disease Center, Burnham Institute for Medical Research, ⁵Genomics Institute of the Novartis Research Foundation

VI-PO18-23

RNA SPECIES GENERATED DURING VACCINIA VIRUS REPLICATION ARE PATHOGEN-ASSOCIATED MOLECULAR PATTERNS ACTIVATING PKR AND MDA5 DEPENDANT INTERFERON INDUCTION AND PKR DEPENDANT APOPTOSISJingxin Cao^{1,2}, Chad Myskiw², Janilyn Arsenio², Evan Booy², Yvon Deschambault¹, Spencer Gibson²¹National Microbiology Laboratory, The Public Health Agency of Canada, Canada, ²University of Manitoba

VI-PO18-24

LACTOCOCCUS LACTIS SUBSP. LACTIS JCM5805 IS A POTENT STIMULATOR OF PLASMACYTOID DENDRITIC CELL VIA ACTIVATION OF TLR9/MYD88Kenta Jounai^{1,2}, Ryohei Tsuji¹, Kumiko Ikado¹, Tetsu Sugimura¹, Yasuhisa Ano¹, Daisuke Fujiwara¹¹Central Laboratories for Frontier Technology, Kirin Holding Co., Ltd., Japan, ²Technical Development Center, Koiwai Dairy Products Co., Ltd.

VI-PO18-25

IDENTIFICATION OF LACTIC ACID BACTERIA THAT DIRECTLY STIMULATE PLASMACYTOID DENDRITIC CELL TO PRODUCE IFN- α Kenta Jounai^{1,2}, Ryohei Tsuji¹, Kumiko Ikado¹, Tetsu Sugimura¹, Yasuhisa Ano¹, Daisuke Fujiwara¹¹Central Laboratories for Frontier Technology, Kirin Holding Co., Ltd., Japan, ²Technical Development Center, Koiwai Dairy Products Co., Ltd.

VI-PO18-26

APOBEC3/RFV3 AND RETROVIRUS NEUTRALIZATIONDiana S Smith¹, Kejun Guo¹, Brad S Barrett¹, Karl Heilman¹, Kim J Hasenkrug², Warner C Greene³, Mario L Santiago¹¹Infectious Diseases/Medicine, University of Colorado Denver -Anschutz Medical Campus, USA, ²Rocky Mountain Laboratories, National Institutes for Allergy and Infectious Diseases, ³Gladstone Institute of Virology and Immunology

VI-PO18-27

THE IMPACT OF DICER-2 AND WOLBACHIA ON ANTIVIRAL PROTECTION IN DROSOPHILA

Lauren M Hedges, Karyn N Johnson

School of Biological Sciences, The University of Queensland, Australia

VI-PO18-28

SIGNATURES OF POSITIVE SELECTION IN TOLL-LIKE RECEPTOR GENES IN MAMMALSPedro J Esteves^{1,4}, Helena Areal^{1,2}, Joana Abrantes^{1,3}¹Cibio, Centro de Investigacao em Biodiversidade e Recursos Geneticos, Campus Agrario de Vairao, Portugal, ²Departamento de Zoologia e Antropologia da Faculdade de Ciencias da Universidade do Porto, ³INSERM U892, Institute de Biology, Universite de Nantes, ⁴CITS, Centro de Investigacao em Tecnologias de Saude, CESPU

VI-PO18-29

INTRACELLULAR DNA MEDIATED INNATE IMMUNE SIGNALING: HOST DEFENSE AGAINST DNA PATHOGENSGlen N Barber¹, Ai Harashima², Hiroyasu Konno², Keiko Konno², Hiroki Ishikawa³, Tianli Xia², Delia Gutman²¹Sylvester Comprehensive Cancer Center and Department of Medicine, University of Miami Miller School of Medicine, USA, ²Sylvester Comprehensive Cancer Center, University of Miami Miller School of Medicine, ³Tokoku University

VI-PO18-30

TOLL-LIKE RECEPTOR 3 (TLR3) POLYMORPHISM AND ITS ASSOCIATION WITH HEPATITIS B VIRUS INFECTION IN SAUDI PATIENTS

Ahmed Ali Alqahtani^{1,9}, Mohammed N Al-Ahdal^{1,6}, Ayman A Abdo^{2,9}, Faisal M Sanai^{3,9}, Mashael R Al-Anazi¹, Nisreen Z Khalaf¹, Saud A Alarifi^{4,8}, Hamad I Al-Ashgar⁵, Hind A Al-Humaidan⁶, Riham S Al-Swayeh⁶, Fahad N Al-Majhd^{7,8}

¹Biological and Medical Research Department, King Faisal Specialist Hospital & Research Center, Saudi Arabia, ²Department of Medicine, College of Medicine, King Saud University, ³Department of Medicine, National Guard Hospital, ⁴Department of Zoology, College of Science, King Saud University, ⁵Department of Medicine, King Faisal Specialist Hospital & Research Centre, ⁶Department of Pathology & Laboratory Medicine, King Faisal Specialist Hospital & Research Centre, ⁷Department of Botany and Microbiology, College of Science, King Saud University, ⁸Center of Excellence in Biotechnology Research, King Saud University, ⁹Liver Disease Research Center, King Saud University

VI-PO18-31

A COMPREHENSIVE ANALYSIS OF MAM PROTEOME OF HUH7 CELLS DURING HCV REPLICATION

Alexei Krasnoselsky¹, Stacy M Horner², David Purdy¹, Michael Gale, Jr.², Michael G Katze¹

¹Microbiology, University of Washington, USA, ²Immunology, University of Washington

VI-PO18-32

THE MEASLES VIRUS C PROTEIN COUNTERACTS INTERFERON-BETA INDUCTION IN THE NUCLEUS

Konstantin Sparrer, Karl-Klaus Conzelmann

Max von Pettenkofer Institute & Gene Center, Ludwig Maximilians-University Munich, Germany

VI-PO18-33

HSE4, A NOVEL HUMAN DEFICIENCY PREDISPOSING TO HERPES SIMPLEX ENCEPHALITIS SUSCEPTIBILITY

Vanessa Sancho-Shimizu¹, Rebeca Perez de Diego¹, Lazaro Lorenzo¹, Rabih Halwani², Abdullah Alangar², Sylvie Fabrega³, Shen-Ying Zhang⁴, Laurent Abel^{1,4}, Anne Puel¹, Saleh Al-Muhsen², Jean Laurent Casanova^{1,4}

¹Inserm U980, Univeristy Paris Descartes, France, ²King Saud University, ³Institut Federatif de Recherche Necker Enfants Malades IFR94, ⁴The Rockefeller Univeristy

VI-PO18-34

THE TLR3 AGONIST POLY(I:C) INHIBITED THE REPLICATION OF CHIKUNGUNYA VIRUS IN BEAS-2B CELLS

Yong Gang Li¹, Uamporn Siripanyaphinyo¹, Nitchakarn Noranate¹, Atchareeya A-Nuegoonpipat², Naokazu Takeda¹, Kazuyoshi Ikuta³, Surapee Anantapreecha²

¹Thailand-Japan Collaboration Center On Emerging and Re-Emerging Infections, Research Institute for Microbial Diseases, Osaka University, Thailand, ²National Institute of Health, Department of Medical Sciences, Ministry of Public Health, ³Department of Virology, Research Institute of Microbial Diseases, Osaka University

VI-PO18-35

SPECIES-SPECIFIC INHIBITION OF TRIM25 DEPENDENT RIG-I UBIQUITINATION BY THE INFLUENZA A VIRUS NS1 PROTEIN

Ricardo Rajsbaum¹, Natalya P Maharaj², Randy A Albrecht¹, Adolfo Garcia-Sastre¹, Michaela U Gack²

¹Microbiology, Mount Sinai School of Medicine, USA, ²New England Primate Research Center, Harvard Medical School

VI-PO18-36

BIOLOGICAL RELEVANCE AND MECHANISM OF IRF3/7 INHIBITION BY RABIES VIRUS PHOSPHOPROTEIN

Martina Rieder, Karl-Klaus Conzelmann

Max von Pettenkofer Institute & Gene Center, Ludwig Maximilians-University Munich, Germany

VI-PO26

Virus Suppression of RNA Silencing

Tuesday, 13 September

VI-PO26-1

DISCOVERY THE PTGS-RELATED SMALL RNAs FROM THE NON-MODEL SPECIES BY THE SILICON NANOWIRE FIELD-EFFECT TRANSISTOR AND NEXT-GENERATION SEQUENCE TECHNOLOGIES

Shih-Shun Lin^{1,2}, Kuan-I Chen³, Yen-Hsin Chiu¹, Li-Ya Wang¹, Keng-Hui Lee³, Yit-Tsong Chen³

¹Institute of Biotechnology, National Taiwan University, Taiwan, ²Agricultural Biotechnology Research Center, Academia Sinica, ³Institute of Atomic and Molecular Sciences, Academia Sinica

VI-PO26-2

ANALYSIS OF ESSENTIAL REGIONS OF NSS PROTEIN OF WATERMELON SILVER MOTTLE VIRUS FOR GENE SILENCING SUPPRESSION

Chung-Hao Huang, Kuan-Chun Chen, Hui-Wen Wu, Wen-Rong Hsiao, Shyi-Dong Yeh

Department of Plant Pathology, National Chung Hsing University, Taiwan

VI-PO26-3

ANALYSIS OF DNA-BINDING ABILITY AND PHOSPHORYLATION OF THE 2B PROTEIN OF CUCUMBER MOSAIC VIRUS

Kae Sueda, Hanako Shimura, Ayano Meguro, Takeshi Uchida, Jun-Ichi Inaba, Chikara Masuta

Graduate School of Agriculture, Hokkaido University, Japan

VI-PO26-4

MOLECULAR ANALYSIS OF TRANSGENIC HOT PEPPERS RESISTANT TO PEPPER MOTTLE VIRUS

Sung Nam Lee, Jin Sung Hong, Ki Hyun Ryu

Horticultural Science, Seoul Women's University, Korea, South

VI-PO26-5

PLANT VIRUS CONTROL EMPLOYING RNA-BASED VACCINES: A NOVEL NON-TRANSGENIC STRATEGY

Manfred Heinlein

IBMP, UPR2357, CNRS, France

VI-PO4 Viruses as Oncolytic Agents

Tuesday, 13 September

VI-PO4-1

XMRV INFECTION ALTERS CELLULAR GENE EXPRESSIONS IN HUMAN PROSTATE CANCER LNCAP CELLSKatsura Kakoki^{1,2}, Haruka Kamiyama¹, Tsukasa Igawa², Hideki Sakai², Naoki Yamamoto^{1,3}, Yoshinao Kubo¹¹Department of AIDS Research, Institute of Tropical Medicine, Japan, ²Department of Nephro-Urology Unit of Translational Medicine Course of Medical and Dental Sciences, Graduate school of Biochemical Sciences Nagasaki University, ³Department of Microbiology, National University of Singapore

VI-PO4-2

INDUCTION OF SYNCYTIA IN SQUAMOUS CELL CARCINOMA TISSUE BY ONCOLYTIC HERPES SIMPLEX VIRUS TYPE 1

Gen Takahashi, Syusuke Okunaga, Noritoshi Meshii, Motoko Shintani, Yoshiaki Yura

Oral and Maxillofacial Surgery II, Osaka University Graduate School of Dentistry, Japan

VI-PO4-3

HBV-X PROTEIN TRIGGERS HEPATOCARCINOGENESIS VIA PKC α -MEDIATED CYTOPLASMIC P21 OVEREXPRESSIONMasahiko Yano¹, Shogo Ohkoshi¹, Hiromichi Takahashi¹, Yohei Aoki¹, Kazuhide Yamazaki¹, Sou Kurita¹, Kenta Suzuki¹, Shun Fujimaki², Ayumi Sanpei², Yasunobu Matsuda^{1,2}, Yutaka Aoyagi¹¹Department of Gastroenterology and Hepatology, Niigata University Graduate School, Japan, ²Department of Medical Technology, School of Health Sciences, Niigata University

VI-PO4-4

HEPATITIS C VIRUS MODIFIES CELLULAR LIPID METABOLISM AND UTILIZES FOR VIRUS PROPAGATION

Shimotohno Kunitada, Hishiki Takayuki, Shimizu Yuko, Hunami Kenji, Ujino Saneyuki

Research Institute, Chiba Institute of Technology, Japan

VI-PO4-5

ONCOLYTIC VIRAL THERAPY FOR MURINE OVARIAN CANCER WITH HERPES SIMPLEX VIRUS TYPE 1 VARIANT HF10 COMBINED WITH GM-CSF AMPLICONFumi Goshima¹, Shinichi Esaki^{1,2}, Chen Hong Luo¹, Maki Kamakura¹, Daisuke Watanabe³, Hiroshi Kimura¹, Yukihiro Nishiyama¹¹Department of Virology, Graduate School of Medicine, Nagoya University, Japan, ²Department of Otolaryngology, Head and Neck Surgery, Nagoya City University Graduate School of Medical Sciences and Medical School, ³Department of Dermatology, Aichi Medical University**VI-PO34 Viruses and Cancer**

Tuesday, 13 September

VI-PO34-1

CHARACTERIZATION OF THE INTERACTION OF INFLUENZA VIRUS NS1 WITH AKTMami Matsuda¹, Futoshi Suizu², Noriyuki Hirata², Tadaaki Miyazaki³, Chikashi Obuse⁴, Masayuki Noguchi²¹Hokkaido University, Japan, ²Division of Cancer Biology, Institute for Genetic Medicine, Hokkaido University, ³Department of Bioresources, Hokkaido University Research Center for Zoonosis Control, ⁴Division of Molecular Life Science, Graduate School of Life Science, Hokkaido University

VI-PO34-2

DEVELOPMENT OF REPLICATION-COMPETENT XENOTROPIC MURINE LEUKEMIA VIRUS-RELATED VIRUS CARRYING THE PUROMYCIN RESISTANCE GENE

Ryuta Sakuma, Saori Shikama, Sayaka Sukegawa, Shoji Yamaoka

Molecular Virology, Tokyo Medical and Dental University, Japan

VI-PO30 Papillomaviruses

Tuesday, 13 September

VI-PO30-1

REPORTER POLYOMAVIRUS: A VERSATILE TOOL FOR VIRUS RESEARCH

Hana Spanielova, Jiri Pergner, Lenka Ptacnikova, Boris Ryabchenko

Department of Genetics and Microbiology, Charles University in Prague Faculty of Science, Czech Republic

VI-PO30-2

COMPLETE GENOMIC CHARACTERIZATION OF THREE NOVEL BOVINE PAPILLOMAVIRUSES, BPV-9 TO -11, AND ANALYSIS OF THEIR *IN VIVO* PATHOGENECITY

Shinichi Hatama, Ryoko Ishihara, Toru Kanno, Yoshiharu Ishikawa, Koichi Kadota, Yukino Tamamura, Ikuo Uchida

Hokkaido Research Station, National Institute of Animal Health, Japan

VI-PO30-3

IN SILICO SCREENING OF ANTI-HUMAN PAPILLOMAVIRUS INHIBITORYuki Arai¹, Norihito Kawashita^{1,2}, Yu-Shi Tian¹, Mai Nagata³, Kousuke Okamoto¹, Teruo Yasunaga², Tatsuya Takagi^{1,2}¹Graduate School of Pharmaceutical Sciences, Osaka University, Japan, ²Research Institute for Microbial Diseases, Osaka University, ³School of Pharmaceutical Sciences, Osaka University

VI-PO12 Herpes (Simplex) Viruses

Tuesday, 13 September

VI-PO12-1

SURVEYING FREQUENCY OF *HERPES SIMPLEX TYPE 2 (HSV-2)* WITH PCR METHOD IN SECOND HALF OF 2010 IN TEHRAN

Sama Rezasoltani, Hamed Molaabaszadeh

Science and Clinical Department, M.Sc. Student of Microbiology, Islamic Azad University Zanjan - Branch, Iran

VI-PO12-2

HERPES SIMPLEX VIRUS INFECTION OF MOUSE TESTIS: IN VIVO AND IN VITRO MODELS

Yury A Tyulenev¹, Victor A Naumenko¹, Ludmila V Shileyko², Regina R Klimova¹, Lubov F Kurilo², Alla A Kushch¹

¹Molecular Virology, D.I. Ivanovsky Institute of Virology, Russia,

²Department of Fertility Disorders, Institute of Medical Genetics

VI-PO12-3

GEMCITABINE ENHANCES ANTITUMOR ACTIVITY OF ONCOLYTIC HERPES SIMPLEX VIRUS MUTANT HF10 RESULTING IN ENHANCED ANTITUMOR IMMUNITY

Shinichi Esaki^{1,2}, Fumi Goshima¹, Hiroshi Kimura¹, Shingo Murakami², Yukihiko Nishiyama¹

¹Department of Virology, Graduate School of Medicine, Nagoya University, Japan, ²Department of Otolaryngology, Head and Neck Surgery, Nagoya City University Graduate School of Medical Sciences and Medical School

VI-PO12-4

THE EFFECT OF EP0 AND VHS GENE MUTATIONS ON THE GLOBAL GENE EXPRESSION OF PSEUDORABIES VIRUS

Dora Tombacz, Judit S Toth, Irma F Takacs, Adrian M Bengo, Sara Kalman, Beata Berta, Arun Khokale, Istvan Prazsak, Zsolt Boldogkoi

Department of Medical Biology, University of Szeged, Hungary

VI-PO12-5

HERPES SIMPLEX VIRUS TYPES 1 AND 2 INDUCE EXTENSIVE MODIFICATION AND RELOCALIZATION OF TANKYRASE1 IN INTERPHASE CELLS

Zhuan Li, Yohei Yamauchi, Hiroshi Kimura, Yukihiko Nishiyama

Department of Virology, Graduate School of Medicine, Nagoya University, Japan

VI-PO12-6

SHEDDING OF HERPES SIMPLEX VIRUS TYPE 1 (HSV-1) AND EMERGENCE OF DRUG-RESISTANT HSV-1 IN PATIENTS WITH HEMATOPOIETIC STEM CELL TRANSPLANTATION IN JAPAN

Lixin Wang¹, Masanori Tsuji², Shuichi Taniguchi², Hidekazu Nishimura³, Mutsuyo (Takayama)-Ito¹, Hitomi (Kinoshita)-Yamaguchi¹, Masayuki Saijo¹

¹Laboratory of Neurovirology, Department of Virology 1, National Institute of Infectious Diseases, Japan, ²Department of Hematology, Toranomon Hospital, ³Virus Center, Sendai Medical Center

VI-PO12-7

REACTIVATION AND SALIVARY SHEDDING OF THE HUMAN HERPES VIRUSES IN CHILDREN WITH ACUTE PLASMODIUM FALCIPARUM MALARIA

Kerstin I Falk^{1,2}, Arnaud Chene², Susanne Nylen², Maria T Bejarano^{2,3}, Fred Kironde⁴, Mats Wahlgren²

¹Swedish Institute for Communicable Disease Control, Sweden,

²Department of Microbiology Tumor and Cell Biology, Karolinska Institutet, ³Center for Infectious Medicine, Department of Medicine,

Karolinska Institutet, ⁴Department of Biochemistry, Faculty of Medicine, Makerere University

VI-PO12-8

ABERRANT VZV GLYCOPROTEINS TRAFFIC MODULATED BY NEUTRALIZING ANTI-GH MAB

Masaya Takemoto¹, Tohru Daikoku¹, Kazuhiro Suzuki², Yasushi Akahori², Yoshikazu Kurosawa², Yoshizo Asano³, Kimiyasu Shiraki¹

¹University of Toyama, Japan, ²Institute for Comprehensive Medical Science, Fujita Health University, ³Department of Pediatrics, Fujita Health University

VI-PO8 Epstein - Barr Virus

Tuesday, 13 September

VI-PO8-1

EXPRESSION OF MICRORNAS IN NASAL NATURAL KILLER/T-CELL LYMPHOMA CELL LINES

Kan Kishibe, Yuhki Komabayashi, Kazumi Yoshino, Akihiro Katayama, Toshihiro Nagato, Miki Takahara, Yasuaki Harabuchi

Department of Otolaryngology-Head and Neck Surgery, Asahikawa Medical University, Japan

VI-PO8-2

ESTABLISHMENT OF EPSTEIN-BARR VIRUS-POSITIVE EPITHELIAL-LIKE HYBRID CELLS USING CELL-TO-CELL COMBINED CULTURES OF TWO DIFFERENT MAMMALIAN CELL STRAINS

Ryo Kobayashi, Shuuji Sumida, Tomoko Ehara, Tetsuya Matsumoto

Department of Microbiology, Tokyo Medical University, Japan

VI-PO8-3

EBV-INDUCED IMMORTALIZATION IS INHIBITED BY POLYAMIDE TARGETING EBNA1-ORIP BINDING

Kohji Noguchi¹, Ai Yasuda¹, Kazuhiro Katayama¹, Junko Mitsunashi¹, Teru Kanda², Masafumi Minoshima³, Toshikazu Bando³, Hiroshi Sugiyama³, Yoshikazu Sugimoto¹

¹Department of Chemotherapy, Keio University Faculty of Pharmacy,

Japan, ²Division of Virology, Aichi Cancer Center Research Institute,

³Department of Chemistry, Graduate School of Science, Kyoto University

VI-PO8-4

ANTICANCER ACTIVITIES OF VALPROIC ACID ON EPSTEIN-BARR VIRUS-ASSOCIATED T AND NATURAL KILLER LYMPHOMA CELLS

Seiko Iwata¹, Yoshinori Ito², Kensei Gotoh², Jun-Ichi Kawada³, Maki Kamakura¹, Yukihiro Nishiyama¹, Hiroshi Kimura¹

¹Department of Virology, Nagoya University Graduate School of Medicine, Japan, ²Department of Pediatrics, Nagoya University Graduate School of Medicine, ³Department of Infection and Immunology, Aichi Children's Health and Medical Center

VI-PO8-5

EXPRESSION OF CD70 IN NASAL NATURAL KILLER/T-CELL LYMPHOMA

Kazumi Yoshino, Kan Kishibe, Akihiro Katayama, Toshihiro Nagato, Miki Takahara, Yasuaki Harabuchi

Department of Otolaryngology-Head and Neck Surgery, Asahikawa Medical University, Japan

VI-PO8-6

IDENTIFICATION AND CHARACTERIZATION OF A NOVEL TRANSCRIPTIONAL ACTIVATOR FOR EBV ONCOGENE LMP1

Chieko Noda, Takayuki Murata, Teru Kanda, Tatsuya Tsurumi

Division of Virology, Aichi Cancer Center Research Institute, Japan

VI-PO8-7

PRIMARY SEQUENCE HETEROGENEITY OF FAMILY OF REPEATS (FR) OF EPSTEIN-BARR VIRUS (EBV) RESULTS IN STRAIN-SPECIFIC DIFFERENCES IN THE FR STABILITY IN BAC VECTORS

Teru Kanda, Tatsuya Tsurumi

Division of Virology, Aichi Cancer Center Research Institute, Japan

VI-PO8-8

INVOLVEMENT OF HSP90 IN EPSTEIN-BARR VIRUS LYTIC REPLICATION. -HSP90 FACILITATES THE INTERACTION BETWEEN BALF5 AND BMRF1 AND LEADS TO THEIR PROPER LOCALIZATION-

Daisuke Kawashima, Teru Kanda, Tatsuya Tsurumi

Division of Virology, Aichi Cancer Center Research Institute, Japan

VI-PO8-9

EPSTEIN BARR VIRUS LATENT MEMBRANE PROTEIN 1 INITIATES CANCER PROGENITOR CELLS IN EPITHELIAL CELL LINES

Satoru Kondo

Division of Otolaryngology, Kanazawa University, Graduate School of Medicine, Japan

VI-PO8-10

NOVEL MOUSE XENOGRAFT MODELS OF CAEBV AND EBV-HLH REVEALS A CRITICAL ROLE OF CD4+ T CELLS IN THE PROLIFERATION OF EBV-INFECTED T AND NK CELLS

Ken-Ichi Imadome¹, Misako Yajima^{1,9}, Ayako Arai², Atsuko Nakazawa³, Norio Shimizu⁴, Naoki Yamamoto^{5,9}, Tomohiro Morio⁶, Shouichi Ohga⁷, Mamoru Ito⁸, Jun Komano⁵, Shigeyoshi Fujiwara¹

¹Department of Infectious Diseases, National Research Institute for Child Health and Development, Japan, ²Department of Hematology, Tokyo Medical and Dental University, ³Department of Pathology, National Center for Child Health and Development, ⁴Department of Virology, Division of Medical Science, Medical Research Institute, Tokyo Medical and Dental University, ⁵AIDS Research Center, National Institute of Infectious Diseases, ⁶Department of Pediatrics and Developmental Biology, Tokyo Medical and Dental University, ⁷Department of Perinatal and Pediatric Medicine, Graduate School of Medical Sciences, Kyushu University, ⁸Central Institute for Experimental Animals, ⁹Department of Microbiology, Yong Loo Lin School of Medicine, National University of Singapore

VI-PO8-11

IMPAIRED GERMINAL CENTER REACTION BY EPSTEIN-BARR VIRUS LATENT MEMBRANE PROTEIN 2A

Takeharu Minamitani¹, Hitoshi Kikutani^{1,2}, Teruhito Yasui^{1,2}

¹ Department of Molecular Immunology, Research Institute for Microbial Disease, Osaka University, Japan, ²WPI Immunology Frontier Research Center, Osaka University

VI-PO8-12

EBV LATENT MEMBRANE PROTEIN 1 OVERCOMES ATRA-INDUCED APOPTOSIS BY INHIBITING RETINOIC ACID RECEPTOR-BETA 2 EXPRESSION VIA PROMOTER HYPERMETHYLATION

Kyung Lib Jang, Indira Tiwari, Hye Ri Oh

Microbiology, Pusan National University, Korea, South

VI-PO9 Parvoviruses

Tuesday, 13 September

VI-PO9-1

THE CLINICAL EPIDEMIOLOGY OF PEDIATRICS PATIENTS WITH MEASLES IN SHANGHAI FROM 2000 TO 2009 YEAR

Hui Yu, Zi Ying Ye, Jie Wen Wang, Hong Xiao Wang

Infectious Diseases, Children's Hospital of Fudan University, China

VI-PO9-2

HUMAN PARVOVIRUS 4 (PARV4): LESSONS FROM EPIDEMIOLOGIC STUDIES PERFORMED IN SOUTH-EASTERN FRANCE

Philippe Biagini, Mhammed Touinssi, Philippe de Micco

UMR CNRS 6578 Equipe Emergence et Co-Evolution Virale, Etablissement Francais du Sang Alpes-Mediterranee et Universite de la Mediterranee, France

VI-PO9-3

PARVOVIRUS B19 VP1 PROTEIN STIMULATES PROLIFERATIVE ACTIVITY OF B19 NON-PERMISSIVE CELLS

Mikhail M Baryshev¹, Olga Bratslavskaya¹, Svetlana Kozireva¹, Rusy Russev², Elena Pavlova¹, Modra Murovska¹

¹Rsu August Kirichenstein Institute of Microbiology and Virology, Latvia, ²Institute of Experimental Pathology and Parasitology, Bulgarian Academy of Science

VI-PO9-4

F-ACTIN SUPPRESSES MEASLES VIRUS INFECTION PARTICLE FORMATION BY INTERFERING WITH THE INTERACTION BETWEEN THE MATRIX (M) AND THE HEMAGGLUTININ (H) PROTEINS

Hiroshi Wakimoto¹, Masakatsu Shimodoh¹, Yoshinori Kitagawa², Kaoru Takeuchi³, Bin Gotoh², Masae Itoh¹

¹Nagahama Institute of Bio-Science and Technology, Japan, ²Shiga University of Medical Science, ³University of Tsukuba

VI-PO9-5

PROTEASOME IS INVOLVED IN TRANSLATIONAL CONTROL IN PARVOVIRUS B19 INFECTION

Keiko Ishii, Satoko Kotsuki, Kazuyoshi Kawakami

Medical Microbiology, Mycology and Immunology, Tohoku University Graduate School of Medicine, Japan

VI-PO9-6

Withdrawn

VI-PO9-7

PARVOVIRUS B19 INFECTION IN OSTEOARTHRITIS AND RHEUMATOID ARTHRITIS PATIENTS

Modra Murovska¹, Olga Bratslavskaya¹, Anda Kadisa^{1,2,3}, Svetlana Kozireva¹, Peteris Studers⁴, Aivars Lejnietis^{2,3}

¹August Kirichenstein Institute of Microbiology and Virology, Riga Stradins University, Latvia, ²Department of Inner Diseases, Riga Stradins University, ³Riga East Clinical University Hospital, ⁴Traumatology and Orthopedics Hospital

VI-PO27 Hepatitis B

Tuesday, 13 September

VI-PO27-1

IN BANGLADESHI POPULATION, DETECTION OF HEPATITIS B VIRUS WHO ARE SERONEGATIVE

Md. Zakiur Rahman¹, Md Khairuzzaman², N M Abdal², Afzalunnesa B Lutfor³

¹Pathology & Microbiology, Sapporo Dental College, Bangladesh, ²Enam Medical college, ³Bogra Medical college

VI-PO27-2

CONTRIBUTION OF URACIL DNA GLYCOSYLASE TO ANTI-HEPATITIS B VIRUS EFFECT OF APOBEC3G

Kouichi Kitamura, Zhe Wang, Sajeda Chowdhury, Miyuki Simadu, Miki Koura, Masamichi Muramatsu

Department of Molecular Genetics, Kanazawa University, Japan

VI-PO27-3

IMPROVEMENT OF SERUM ALBUMIN LEVELS BY ADMINISTRATION OF BRANCHED CHAIN AMINO ACIDS IN PATIENTS WITH VIRUS-ASSOCIATED HEPATIC CIRRHOSIS

Kenji Oku¹, Takayuki Toyoyama², Masahiro Takayanagi¹, Rika Hara¹, Yoshitomo Kobayashi¹, Shin Furukawa¹, Hirohiko Kitakawa¹, Tetsuhiro Nishikawa¹, Yuuji Hori¹, Tetsuro Nagashima¹, Kazuyoshi Nihei¹

¹Internal Medicine, Kushiro Red Cross Hospital, Japan, ²Internal Medicine II, Hokkaido University Graduate School of Medicine

VI-PO27-4

ASSOCIATION OF RANTES GENE POLYMORPHISMS WITH HEPATITIS B VIRUS INFECTION IN SAUDI POPULATION

Mohammed N Al-Ahdal^{1,7}, Ahmed A Al-Qahtani^{1,10}, Ayman Abdo^{2,10}, Faisal Sanai^{3,10}, Mashael Al-Anazi¹, Nisreen Khalaf¹, Saud Al-Arifi^{4,9}, Majid Al-Okail^{5,9}, Hamad Al-Ashgar⁶, Hind Al-Humaidan⁷, Fahad Al-Majhadi^{8,9}

¹Biological and Medical Research, King Faisal Specialist Hospital and Research Center, Saudi Arabia, ²Department of Medicine, College of Medicine, King Saud University, ³Department of Medicine, National Guard Hospital, ⁴Department of Zoology, College of Science, King Saud University, ⁵Department of Biochemistry, College of Science, King Saud University, ⁶Department of Medicine, King Faisal Specialist Hospital and Research Center, ⁷Department of Pathology and Laboratory Medicine, King Faisal Specialist Hospital and Research Center, ⁸Department of Botany and Microbiology, College of Science, King Saud University, ⁹Center of Excellence in Biotechnology Research, King Saud University, ¹⁰Liver Disease Research Center, King Saud University

VI-PO27-5

SEROLOGIC EVALUATION OF HEPATITIS B AND D IN PATIENTS WITH CIRRHOSIS

Monireh Rahimkhani, Hossein Khavari Daneshvar, Sara Jamali

Tehran University of Medical Sciences, Iran

VI-PO27-6

RELATIONSHIP BETWEEN SERUM HBV-DNA LEVELS AND DISEASE SEVERITY IN PATIENTS WITH CHRONIC HEPATITIS B INFECTION

Maryam Vaezjalali¹, T.M. Azad², S.M. Alavian³, Ah Kashi¹

¹Microbiology, Shahid Beheshti University of Medical Sciences, Iran, ²Tehran university of medical sciences, ³Baqiyatallah research center for gastroenterology and liver disease

VI-PO27-7

HBV X PROTEIN OVERCOMES ALL-TRANS RETINOIC ACID-INDUCED CELLULAR SENESCENCE BY DOWNREGULATING LEVELS OF P16 AND P21 VIA DNA METHYLATION

Jang Kyung Lib, Su-Yeon Lim, Hyeong-Jun Ahn
Microbiology, Pusan National University, Korea, South

VI-PO21 HIV/SIV Molecular Biology

Tuesday, 13 September

VI-PO21-1

THE HIV-1 NEF PROTEIN MODULATES THE CELLULAR MIRNA PATHWAY AND DISTURBS THE EXOSOMAL RNA CARGO

Shahid Jameel, Madeeha Aqil, Afsar R Naqvi
Virology, International Centre for Genetic Engineering and Biotechnology, India

VI-PO21-2

HOST POLYCOMB FAMILY ACTS AS AN EPIGENETIC REPRESSOR FOR HIV-1 TRANSCRIPTION

Yuka Matsuda¹, Makoto Yamagishi¹, Mie Kobayashi¹, Takuma Hara¹, Takaomi Ishida², Toshiki Watanabe¹
¹Tumor Cell Biol., Dep. Medical Genome Sci., Grad. Sch. Frontier Sci., The Univ. of Tokyo, Japan, ²Research Center for Asian Infectious Diseases, Ins. of Medical Sci., The Univ. of Tokyo

VI-PO21-3

SIMIAN-TROPIC HIV-1 NL-4/556/7SVIFS SHOWS SLOWER CAPSID UNCOATING IN HUMAN CELLS.

Ken Kono¹, Ayumu Kuroishi¹, Emi E Nakayama¹, Amy E Hulme², Thomas J Hope², Tatsuo Shioda¹
¹Department of Viral Infections, Research Institute for Microbial Diseases, Osaka University, Japan, ²Department of Cell and Molecular Biology, Feinberg School of Medicine, Northwestern University

VI-PO21-4

PRODUCTION OF HIV PARTICLES IS REGULATED BY ALTERING SUB-CELLULAR LOCALIZATION AND DYNAMICS OF REV INDUCED BY DOUBLE-STRAND RNA BINDING PROTEIN

Silvio Urcuqui Inchima¹, Claudia Patino¹, Ximena Zapata¹, Maria P Garcia¹, Jose Arteaga², Christophe Chamot², Ajit Kumar³, Daniele Hernandez-Verdum⁴
¹Grupo de Inmunovirologia, Universidad de Antioquia, Colombia, ²Inmunologia y Epidemiologia Molecular, Universidad Industrial de Santander, ³Institut Jacques Monod, UMR 7592 CNRS Universite Paris Diderot, ⁴Department of Biochemistry and Molecular Biology, The George Washington University

VI-PO21-5

THE IMPORTANCE AND NECESSITY OF THE COMMON HIV DRUG RESISTANCE DATABASE DEVELOPMENT IN THE FORMER USSR COUNTRIES

Marina R Bobkova
T-Lymphotropic Viruses Laboratory, Ivanovsky Institute of Virology, Russia

VI-PO21-6

A NOVEL ANTISENSE RNA OF HIV-1, ALE, FUNCTIONS AS A SELF-LIMITING FACTOR FOR THE HIV-1 INFECTION

Mie Kobayashi-Ishihara¹, Makoto Yamagishi^{1,4}, Takuma Hara¹, Yuka Matsuda¹, Arika Miyake², Kazumi Nakano¹, Takaomi Ishida³, Toshiki Watanabe¹
¹Department of Medical Genome Science, Graduate School of Frontier Sciences, The University of Tokyo, Japan, ²Department of Bioscience, Tokushima University, ³Research Center for Asia Infectious Disease, Institute of Medical Science, The University of Tokyo, ⁴Japan Foundation of AIDS Prevention

VI-PO21-7

VIRAL RECOVERY FROM CYNOMOLGUS MACAQUES CONTROLLING A SIMIAN-TROPIC HIV-1 CHALLENGE

Naofumi Takahashi^{1,2}, Akatsuki Saito^{2,3}, Masako Nomaguchi⁴, Akio Adachi⁴, Hirofumi Akari³, Tetsuro Matano^{1,2}
¹AIDS Research Center, National Institute of Infectious Diseases, Japan, ²Institute of Medical Science, University of Tokyo, ³Primate Research Institute, Kyoto University, ⁴Institute of Health Biosciences, University of Tokushima Graduate School

VI-PO21-8

NOVEL PI3K/AKT INHIBITORS SCREENED BY THE CYTOPROTECTIVE FUNCTION OF HUMAN IMMUNODEFICIENCY VIRUS TYPE 1 TAT

Dong-Hyun Kim¹, Nina Kim¹, Joseph A Hollenbaugh², Baek Kim²
¹Department of Life and Nanopharmaceutical Sciences and Department of Pharmaceutical Sciences, Kyung-Hee University, Korea, South, ²Microbiology and Immunology, University of Rochester Medical Center

VI-PO21-9

THE POL REGION OF HUMAN IMMUNODEFICIENCY VIRUS GAGPOL NEGATIVELY REGULATES ITS MEMBRANE BINDING AND PARTICLE ASSEMBLY

Hiyori Haraguchi¹, Takeshi Noda², Yoshihiro Kawaoka^{2,3,4}, Yuko Morikawa¹
¹Kitasato Institute for Life Sciences, Kitasato University, Japan, ²Institute of Medical Science, University of Tokyo, ³ERATO Infection-Induced Host Responses Project, Japan Science and Technology Agency, ⁴Influenza Research Institute, Department of Pathological Sciences, University of Wisconsin-Madison

VI-PO21-10

SL1 REVISITED: FUNCTIONAL ANALYSIS OF THE STRUCTURE AND CONFORMATION OF HIV-1 GENOME RNA

Jun-Ichi Sakuragi, Sayuri Sakuragi, Tatsuo Shioda
Department of Viral Infections, RIMD, Osaka Univ, Japan

VI-PO21-11

HIV-1 DNA INTEGRATION INTO HOST CHROMOSOMAL DOUBLE-STRAND BREAK SITES IS NOT ATTENUATED BY RALTEGRAVIR, AN INTEGRASE INHIBITOR

Takayoshi Koyama¹, Kenzo Tokunaga², Tetsutaro Sata², Yukihito Ishizaka¹

¹Dept. of Intractable Diseases, National Center for Global Health and Medicine, Japan, ²Dept. of Pathology, National Institute of Infectious Diseases

VI-PO21-12

HIV-1 VPR PROTEIN ACCELERATES VIRAL REPLICATION DURING ACUTE PHASE IN VIVO

Kei Sato¹, Naoko Misawa², Mamoru Ito³, Yoshio Koyanagi^{1,2}

¹Kyoto University, Center for Emerging Virus Research, Institute for Virus Research, Japan, ²Kyoto University, Lab of Viral Pathogenesis, Institute for Virus Research, ³Central Institute for Experimental Animals

VI-PO21-13

HIV-1 NC FACILITATES FORMATION OF EFFICIENT INITIATION COMPLEX FOR REVERSE TRANSCRIPTION

Yasumasa Iwatani, Shingo Kitamura, Masaaki Nakashima, Hirotaka Ode, Akatsuki Saito, Shiro Ibe, Yoshiyuki Yokomaku, Wataru Sugiura

Clinical Research Center, National Hospital Organization Nagoya Medical Center, Japan

VI-PO21-14

HIV-1 PROMOTER IS NEGATIVELY REGULATED BY HNRNPA1

Taketoshi Mizutani^{1,2}, Aya Ishizaka¹, Hideo Iba¹

¹Division of Host-Parasite Interaction, Department of Microbiology and Immunology, Institute Medical Science University of Tokyo, Japan, ²RNA and Biofunctions, PRESTO, Japan Science and Technology Agency

VI-PO21-15

IDENTIFICATION OF CRITICAL RESIDUES IN APOBEC3C/F FOR HIV-1 VIF-MEDIATED DEGRADATION

Shingo Kitamura, Masaaki Nakashima, Hirotaka Ode, Akatsuki Saito, Hiroaki Yoshii, Yoshiyuki Yokomaku, Wataru Sugiura, Yasumasa Iwatani

Clinical Research Center, National Hospital Organization Nagoya Medical Center, Japan

VI-PO21-16

ARGININE AT POSITION 122 OF APOBEC3G MIGHT BE INVOLVED IN INTERACTION TO VIF, BUT NOT TO RNA REQUIRED FOR ENCAPSIDATION

Taisuke Izumi^{1,2}, **Katsuhiro Ito**¹, Masaru Yokoyama³, Masanobu Shinohara¹, Kotaro Shirakawa^{1,2}, Masashi Matsui¹, Takashi Uchiyama^{1,4}, Hironori Sato³, Keisuke Shindo¹, Akifumi Takaori-Kondo¹

¹Department of Hematology and Oncology, Graduate School of Medicine, Kyoto University, Japan, ²Japanese Foundation for AIDS Prevention, ³Laboratory of Viral Genomics, Center for Pathogen Genomics, National Institute of Infectious Diseases, ⁴The Tazuke Kofukai Medical Research Institute, Kitano Hospital

VI-PO21-17

INVOLVEMENT OF ACTIN BINDING PROTEIN CORONIN 1C IN HIV-1 REPLICATION AND RHESUS MACAQUE TRIM5 α -MEDIATED RESTRICTION

Saori Shikama, Ryuta Sakuma, Sayaka Sukegawa, Shoji Yamaoka

Molecular Virology, Tokyo Medical and Dental University, Japan

VI-PO21-18

REACTIVATION OF LATENT HIV-1 INFECTION BY BUTYRIC ACID-PRODUCING BACTERIA INVOLVES HISTONE MODIFICATION

Kenichi Imai¹, Muneaki Tamura¹, Kiyoshi Yamada¹, Takashi Okamoto², Kuniyasu Ochiai¹

¹Microbiology, Nihon University School of Dentistry, Japan, ²Molecular and Cellular Biology, Nagoya City University Graduate School of Medical Sciences

VI-PO21-19

SELECTION AND SEQUENCING ANALYSIS OF THE MUTANT HIV-1 THAT CAN REPLICATE WITHOUT CYP1 IN JURKAT CELL

Taichiro Takemura, Miyako Kawamata, Tsutomu Murakami

AIDS Research Center, National Institute of Infectious Diseases, Japan

VI-PO21-20

HIGH FREQUENCY OF HIV-1 DUAL INFECTIONS IN CENTRAL AFRICAN COUNTRIES

Eiji Ido^{1,2}, Nicaise Ndembu^{3,4}, Raphael Taty-Taty⁵, Shizuka Iwamoto⁶, Tetsuko Tada⁶, Stomy Karhemere⁷, Jean J Muyembe⁷

¹Department of Molecular Virology, Tokyo Medical and Dental University, Japan, ²Noguchi Memorial Institute for Medical Research, University of Ghana, ³University of Yaounde, ⁴Institute of Human Virology-Nigeria, ⁵Center of Infectious Diseases-Pointe-Noire, ⁶Institute for Virus Research, Kyoto University, ⁷National Institute of Biomedical Research

VI-PO21-21

SUBTYPE AND SEQUENCE ANALYSIS OF HIV-1 STRAINS IN SOUTH OF IRAN

Mirza K Bahmani^{1,2}, Ayyoob Khosravi³

¹Shiraz HIV/AIDS Research Center, SHARC, Shiraz University of Medical Science, Iran, ²BMSU, Virology Applied Research Center, ³Golestan University of Medical Sciences

VI-PO21-22

CHARACTERISTICS OF DRUG-RESISTANT HIV-1 TRANSMISSION: ANALYSIS OF DRUG RESISTANCE IN RECENTLY AND NOT-RECENTLY INFECTED TREATMENT-NAIVE PATIENTS IN JAPAN

Junko Hattori^{1,2}, Urara Shigemori¹, Masumi Hosaka¹, Reiko Okazaki¹, Yasumasa Iwatani^{1,3}, Yoshiyuki Yokomaku¹, Wataru Sugiura^{1,3}

¹Clinical Research Center, Nagoya Medical Center, Japan, ²Japan Foundation for AIDS Prevention, ³Nagoya University Graduate School of Medicine

VI-PO21-23

CELLULAR MICRORNAS DIFFERENTIALLY REGULATE BRAIN-DERIVED HIV-1 VPR EXPRESSION

Elizabeth Hui, Kristofor Ellestad, Christopher Power
Medicine, University of Alberta, Canada

VI-PO13 HTLV and Animal Retroviruses

Tuesday, 13 September

VI-PO13-1

A NOVEL FUNCTION OF HTLV-1 REX IN INHIBITION OF THE HOST MRNA SURVEILLANCE MECHANISM (NMD) FOR PROTECTION OF THE VIRAL GENOMIC MRNA

Kazumi Nakano¹, Tomomi Ando¹, Takaomi Ishida², Takeo Ohsugi³, Yuetsu Tanaka⁴, Toshiki Watanabe¹
¹Department of Medical Genome Sciences, Graduate School of Frontier Sciences, The University of Tokyo, Japan, ²Research Center for Asian Infectious Diseases, The Institute of Medical Science, The University of Tokyo, ³Center for Animal Resources and Development, The University of Kumamoto, ⁴Department of Immunology, Graduate School of Medicine, University of the Ryukyus

VI-PO13-2

SPlicing-REGULATORY MECHANISMS OF MURINE LEUKEMIA VIRUS

Akihito Machinaga, Sayaka Takase-Yoden
Department of Bioinformatics, Faculty of Engineering, Soka University, Japan

VI-PO13-3

INTERACTION OF THE MURINE LEUKEMIA VIRUS ENV PROTEIN AND HEPARAN SULFATE

Yohei Seki¹, Misaho Mizukura¹, Tomomi Ichimiya¹, Yasuo Suda², Shoko Nishihara¹, Michiaki Masuda³, Sayaka Takase-Yoden¹
¹Department of Bioinformatics, Faculty of Engineering, Soka University, Japan, ²Graduate School of Science and Engineering, Kagoshima University, ³Department of Microbiology, Dokkyo Medical University School of Medicine

VI-PO13-4

A 0.3-KB FRAGMENT CONTAINING THE R-U5-5'LEADER SEQUENCE OF THE MURINE LEUKEMIA VIRUS REGULATES SPLICING EFFICIENCY

Yeng Cheng Choo, Nobuo Ogita, Sayaka Takase-Yoden
Department of Bioinformatics, Faculty of Engineering, Soka University, Japan

VI-PO13-5

DETECTION OF HTLV-1 IN JAPANESE BREAST MILK

Futoshi Matsubara¹, Koichi Haraguchi²
¹Department of Microbiology and Biochemistry, Daiichi University, College of Pharmaceutical Sciences, Japan, ²Daiichi University, College of Pharmaceutical Sciences

VI-PO13-6

A NOVEL HTLV-1 TAX-BINDING PROTEIN USP10 INHIBITS AN OXIDATIVE STRESS-INDUCED ROS PRODUCTION AND APOPTOSIS

Masahiro Fujii, Masahiko Takahashi, Masaya Higuchi
Virology, Niigata University Graduate School of Medical and Dental Sciences, Japan

VI-PO13-7

HUMAN PHOSPHOLIPID SCRAMBLASE 1 SPECIFICALLY INTERACTS WITH HTLV-1 TAX AND AFFECTS ITS TRANSCRIPTIONAL ACTIVITIES

Shuichi Kusano, Yoshito Eizuru
Division of Persistent and Oncogenic Viruses, Center for Chronic Viral Diseases, Kagoshima University, Japan

VI-PO13-8

UBIQUITINATION-MEDIATED DEGRADATION AND DNA-BINDING IMPAIRMENT OF IRF-1 WERE INDUCED BY HTLV-1 HBZ

Risa Mukai, Takayuki Ohshima
Faculty of Pharmaceutical Sciences at Kagawa Campus, Tokushima Bunri University, Japan

VI-PO13-9

ACTIVATION OF PKCDELTA IN ADULT T-CELL LEUKEMIA

Chie Ishikawa^{1,2}, Naoki Mori¹
¹Department of Microbiology and Oncology, Graduate School of Medicine, University of The Ryukyus, Japan, ²Transdisciplinary Research Organization Subtropics Island Studies, University of the Ryukyus

VI-PO13-10

TIME-LAPSE IMAGING AND GENOME WHILE ANALYSIS REVEALED REGULATION OF CELL CYCLE ARREST AND APOPTOSIS BY HUMAN T-CELL LEUKEMIA VIRUS TYPE 1 TAX

Mariluz Arainga-Ramirez^{1,2}, Eri Takeda², Yoko Aida^{1,2}
¹Medical Genome Sciences, The University of Tokyo, Japan, ²Viral Infectious Diseases Unit, RIKEN Institute

VI-PO13-11

CARBOHYDRATE CHAIN PROFILING ON ATL CELL LINES

Emi Ikebe¹, Hiroko Fujita², Masao Ogata³, Masao Yamada², Hidekatsu Iha¹
¹Department of Microbiology, Oita University Faculty of Medicine, Japan, ²GP BioSCIENCES Ltd, ³Department of Transfusion, Oita University Faculty of Medicine

VI-PO13-12

CLONAL EPIGENETIC CHANGES IN SPECIFIC GENES DURING PROGRESSION OF ADULT T-CELL LEUKEMIA/ LYMPHOMA (ATLL)

Takashi Oka¹, Lamia Abd Al-Kader¹, Hiaki Sato², Yoko Shinnou¹, Kana Washio¹, Ichiro Murakami³, Aata Utsunomiya⁴, Mamoru Ouchida⁵, Tadashi Yoshino¹

¹Department of Pathology, Graduate School of Medicine, Dentistry & Pharmaceutical Sciences, Okayama University, Japan, ²Department of Medical Technology, Graduate School of Health Science, Okayama University Medical School, ³Department of Molecular Pathology, Tottori University Medical School, ⁴Department of Hematology, Imamura Bun-in Hospital, ⁵Department of Molecular Genetics, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University

VI-PO13-13

INVERSE CORRELATION BETWEEN TAX AND CD25 EXPRESSIONS IN HTLV-1 INFECTED CD4⁺ T-CELLS *IN VIVO*

Kenta Tezuka, Runze Xun, Mami Tei, Takaharu Ueno, Masakazu Tanaka, Norihiro Takenouchi, Jun-Ichi Fujisawa
Dept. Microbiology, Kansai Medical University, Japan

VI-PO13-14

ANTI-SENSE TRANSCRIPTS ENCODED BY HTLV-I IN ADULT T-CELL LEUKEMIA CELLS

Shuichi Kinpara^{1,2}, Takaya Hayashi¹, Atsuhiko Hasegawa¹, Takao Masuda¹, Mari Kannagi¹

¹Immunotherapeutics, Tokyo Medical and Dental University, Japan, ²Research Fellow of the Japan Society for the Promotion of Science

VI-PO13-15

EPIDEMIOLOGY AND VIRAL STRAINS CHARACTERIZATION OF EQUINE INFECTIOUS ANAEMIA CIRCULATING IN EUROPE

Aymeric Hans¹, Delphine Gaudaire¹, Elodie Morilland¹, Fanny Lecouturier¹, Caroline Leroux², Claire Laugier¹, Stephan Zientara³

¹Anses, Laboratory for Equine Diseases, Virology Unit, France, ²UMR754 INRA UCBL ENVL EPHE University Lyon 1, ³Anses, Laboratory for Animal Health, UMR 1161 Virology

VI-PO13-16

HTLV-1 BZIP FACTOR ENHANCES TGF-BETA SIGNALING THROUGH P300 COACTIVATOR

Tiejun Zhao¹, Yorifumi Satou¹, Kenji Sugata¹, Patrick L Green², Takeshi Imamura^{3,4,5}, Masao Matsuoka¹

¹Laboratory of Virus Control, Institute for Virus Research, Kyoto University, Japan, ²Center for Retrovirus Research and Departments of Veterinary Biosciences and Molecular Virology, Immunology and Medical Genetics, The Ohio State University, ³Department of Molecular Medicine for Pathogenesis, Ehime University Graduate School of Medicine, ⁴Division of Biochemistry, the Cancer Institute of the Japanese Foundation for Cancer Research (JFCR), ⁵Core Research for Evolutional Science and Technology (CREST), Japan Science and Technology Agency (JST)

VI-PO13-17

IMPAIRED FUNCTION OF REGULATORY T CELLS BY HTLV-1 BZIP FACTOR (HBZ)

Paola Miyazato¹, Yorifumi Satou¹, Tomoyuki Yamaguchi², Shimon Sakaguchi², Kouichi Ohshima³, Masao Matsuoka¹

¹Laboratory of Virus Control, Institute for Virus Research, Kyoto University, Japan, ²Department of Experimental Pathology, Institute for Frontier Medical Sciences, Kyoto University, ³Department of Pathology, Kurume University School of Medicine

VI-PO13-18

MOLECULAR CHARACTERIZATION OF NEW FOAMY VIRUSES IN A WIDE RANGE OF NEW WORLD MONKEY SPECIES

Claudia P Muniz¹, Andre F Santos¹, Lian Troncoso¹, Elisabete Farias¹, Esmeralda A Soares², Cibele R Bonvicino², Hector N Seuanes^{1,2}, William M Switzer³, Marcelo A Soares^{1,2}

¹Genetic, Universidade Federal do Rio de Janeiro, Brazil, ²Division of genetic, Instituto Nacional de Cancer, ³Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention

VI-PO13-19

SURVEILLANCE OF RETROVIRUSES IN ZAMBIAN PRIMATES (MONKEYS AND BABOONS)

Akira Kawaguchi^{1,2}, Ichiro Nakamura³, Yuka Thomas⁴, Bernard Hang'ombe⁵, Aaron Mweene⁵, Takashi Kimura², David Wang⁶, Hirofumi Sawa^{2,7}, Akihiro Ishii⁴

¹Center for Influenza Virus, National Institute of Infectious Diseases, Japan, ²Department of Molecular Pathobiology, Research Center for Zoonosis Control, Hokkaido University, ³Department of Collaborative Research and Education, Research Center for Zoonosis Control, Hokkaido University, ⁴Hokudai Center for Zoonosis Control in Zambia, Research Center for Zoonosis Control, Hokkaido University, ⁵School of Veterinary Medicine, University of Zambia, ⁶Molecular Microbiology and Pathology & Immunology, Washington University School of Medicine, ⁷Global COE Program, Research Center for Zoonosis Control, Hokkaido University

VI-PO13-20

INTERACTION OF HUMAN T-CELL LYMPHOTROPIC VIRUS TYPE I REX WITH DICER SUPPRESSES RNAI SILENCING

Makoto Abe¹, Hitoshi Suzuki¹, Hironori Nishitsuji¹, Hisatoshi Shida², Hiroshi Takaku¹

¹Department of Life and Environmental Sciences, Chiba Institute of Technology, Japan, ²Department of Molecular Virology, Institute for Genetic Medicine, Hokkaido University

VI-PO13-21

DIFFERENTIAL EFFECTS OF HTLV-1 TAX ON CELL FATE

Mariko Mizuguchi, Masataka Nakamura

Human Gene Sciences Center, Tokyo Medical and Dental University, Japan

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Withdrawn

VI-PO13-23

ESTABLISHMENT OF A FELINE CELL LINE SUITABLE FOR VACCINE MANUFACTURING

Aiko Fukuma^{1,2}, Yuko Morikawa², Takayuki Miyazawa³, Jiro Yasuda¹

¹Department of Emerging Infectious Diseases, Institute of Tropical Medicine Nagasaki University, Japan, ²Graduate School for Infection Control, Kitasato University, ³Laboratory of Signal Transduction, Institute for Virus Research Kyoto University

VI-PO13-24

DEVELOPMENT OF A NEW HIGH-THROUGHPUT METHOD TO INVESTIGATE T-CELL CLONALITY IN THE HTLV-1 INFECTED INDIVIDUALS BY ENRICHMENT OF THE HTLV-1 INTEGRATION SITE

Sanaz Firouzi, Sakura Aoki, Yutaka Suzuki, Tadanori Yamochi, Kazumi Nakano, Sumio Sugano, Toshiki Watanabe

Medical Genome Science, The University of Tokyo, Graduate School of Frontier Science, Japan

VI-PO31 Reo, Rota and Orbiviruses

Tuesday, 13 September

VI-PO31-1

GROUP C ROTAVIRUS INFECTION IN CHILDREN: PHYLOGENETIC RELATIONSHIP BETWEEN BRAZILIAN AND JAPANESE STRAINS

Adriana Luchs, Simone G Morillo, Cristina M Oliveira, Maria do Carmo S.T Timenetsky

Enteric Diseases Laboratory - Virology Center, Adolfo Lutz Institute, Brazil

VI-PO31-2

ROTAVIRUS G2P[4] AND G2P[4]+[6] INFECTIONS DURING NOROVIRUS GASTROENTERITIS OUTBREAK IN COSTLINE AREA OF SAO PAULO STATE, BRAZIL, SUMMER SEASON 2010

Adriana Luchs, Simone G Morillo, Audrey Cilli, Cibele D Ribeiro, Samira J Calux, Rita de Cassia C Carmona, Maria do Carmo S.T Timenetsky

Enteric Diseases Laboratory - Virology Center, Adolfo Lutz Institute, Brazil

VI-PO31-3

FULL-GENOMIC ANALYSIS OF HUMAN ROTAVIRUS STRAINS WHICH HAVE VP4 GENES BELONGING TO A RARE P[8] SUBTYPE (P[8]B)

Nobumichi Kobayashi¹, Souvik Ghosh¹, Shyamal K Paul², Shigeo Nagashima³

¹Hygiene, Sapporo Medical University, Japan, ²Mymensingh Medical College, ³Jichi Medical University

VI-PO31-4

FULL GENOMIC ANALYSES OF HUMAN G2P[4] ROTAVIRUS STRAINS FROM AFRICA

Souvik Ghosh¹, Noriaki Adachi², Zipporah Gatheru³, James Nyangao³, Masaho Ishino¹, Noriko Urushibara¹, Nobumichi Kobayashi¹

¹Hygiene, Sapporo Medical University School of Medicine, Japan, ²Kushiro City General Hospital, ³Centre for Virus Research, Kenya Medical Research Institute

VI-PO31-5

FULL-GENOME ANALYSIS OF RARE G6P[9] HUMAN ROTAVIRUS DETECTED IN JAPAN

Dai Yamamoto¹, Mitsuyo Kawaguchiya¹, Souvik Ghosh¹, Maho Ichikawa², Kei Numazaki², Nobumichi Kobayashi¹

¹Department of Hygiene, Sapporo Medical University, Japan, ²Department of Pediatrics, International University of Health and Welfare

VI-PO31-6

GENETIC ANALYSIS OF NONSTRUCTURAL PROTEIN NSP1 AMONG PORCINE GROUP B ROTAVIRUSES

Tohru Suzuki, Kazufumi Kuga, Ayako Miyazaki, Horoshi Tsunemitsu

Research Team for Viral Diseases, National Institute of Animal Health, Japan

VI-PO31-7

DYNAMICS OF GROUP A ROTAVIRUS INFECTION IN NATURALLY INFECTED PIGS: A LONGITUDINAL OBSERVATIONAL STUDY FROM BIRTH TO SLAUGHTER

Ayako Miyazaki¹, Kazufumi Kuga², Tohru Suzuki¹, Hiroshi Tsunemitsu^{1,2}

¹National Institute of Animal Health, Japan, ²The United Graduate School of Veterinary Sciences, Gifu University

VI-PO31-8

DETECTION OF GROUP A AND C ROTAVIRUSES AND ASTROVIRUSES IN FAECAL SAMPLES FROM PIGS (SUS SCROFA F. DOMESTICA) IN THE CZECH REPUBLIC

Romana Moutelikova, Ivana Scigalkova

Virology and Diagnostics, Veterinary Research Institute, Czech Republic

VI-PO31-9

MODIFICATION OF THE TRYPSIN CLEAVAGE SITE OF ROTAVIRUS VP4 TO FURIN-SENSITIVE DOES NOT ENHANCE REPLICATION EFFICIENCY

Satoshi Komoto, Mitsutaka Wakuda, Yoshimasa Maeno, Akiko Yui, Kyoko Higo-Moriguchi, Jun Sasaki, Kumiko Ishikawa, Koki Taniguchi

Department of Virology and Parasitology, Fujita Health University School of Medicine, Japan

VI-PO31-10

SEQUENCE ANALYSIS OF THE VP7 GENE OF HUMAN ROTAVIRUS G2P[4] ISOLATED IN SAPPORO CITY, JAPAN DURING 1987-2010

Masatoshi Tatsumi, Yoshinobu Nagaoka, Takeshi Tsugawa, Hiroyuki Tsutsumi

Department of Pediatrics, Sapporo Medical University School of Medicine, Japan

VI-PO31-11

MOLECULAR EPIDEMIOLOGY OF ACUTE GASTROENTERITIS DUE TO ROTAVIRUS AND NOROVIRUS AMONG CHILDREN LESS THAN 5 YEARS OF AGE IN NEPAL

Hoa TN Tran¹, Toyoko Nakagomi^{1,2}, Nigel A Cunliffe², Winifred Dove², Michiyo Yokoo¹, Basu D Pandey³, Jeevan B Sherchand⁴, Luis E Cuevas⁵, Osamu Nakagomi^{1,2}

¹Molecular Microbiology and Immunology, Nagasaki University, Japan,

²University of Liverpool, ³Sukra Raj Tropical and Infectious Disease

Hospital, ⁴Tribhuvan University, ⁵Liverpool School of Tropical Medicine

VI-PO31-12

FULL-GENOME ANALYSES SUGGEST THAT GROUP A ROTAVIRUSES UNDERGO FREQUENT REASSORTMENT OF SEVERAL GENE SEGMENTS IN ASYMPTOMATIC CATTLE

Masako Abe¹, Kota Okadera², Naoto Ito^{1,2}, Tatsunori Masatani¹, Keisuke Nakagawa¹, Satoko Yamaoka¹, Shigeo Sugita³, Makoto Sugiyama^{1,2}

¹The United Graduate School of Veterinary Sciences, Gifu University,

Japan, ²Laboratory of Zoonotic Diseases, Faculty of Applied Biological

Sciences, Gifu University, ³Equine Research Institute, Japan Racing

Association

VI-PO31-13

SUCCESSIVE REPLACEMENT OF G12P[6] ROTAVIRUS STRAINS OVER 2 YEARS IN NEPAL

Punita Bhattachan¹, Toyoko Nakagomi^{1,2}, Nigel A Cunliffe², Michiyo Yokoo¹, Basu D Pandey³, Jeevan B Sherchand⁴, Osamu Nakagomi^{1,2}

¹Molecular Microbiology and Immunology, Nagasaki University, Japan,

²University of Liverpool, ³Sukra Raj Tropical and Infectious Diseases

Hospital, ⁴Tribhuvan University Institute of Medicine

VI-PO31-14

POSSIBLE IMPLICATION OF AMINO ACID SUBSTITUTION D96N IN THE VP7 GENE OF G2P[4] STRAINS EMERGING IN NEPAL AND ELSEWHERE IN THE CONTEXT OF THE EVOLUTION OF G2 STRAINS

Yen H Doan¹, Toyoko Nakagomi^{1,2}, Nigel A Cunliffe², Basu D Pandey³, Jeevan B Sherchand⁴, Osamu Nakagomi^{1,2}

¹Department of Molecular Microbiology and Immunology, Nagasaki

University, Japan, ²University of Liverpool, ³Sukra Raj Tropical and

Infectious Disease Hospital, ⁴Tribhuvan University

VI-PO31-15

COMPLETE GENOMIC CHARACTERISATION OF CELL CULTURE ADAPTED HUMAN G12P[6] ROTAVIRUSES CAU195 AND CAU214

Thai Van Than, Wonyong Kim

Department of Microbiology and Research Institute for Translational System Biomics, Chung-Ang University College of Medicine, Korea, South

VI-PO31-16

NOVEL GROUP A ROTAVIRUS G27P[3] DETECTED IN A SUGAR GLIDER (PETAURUS BREVICEPS)

Kota Okadera¹, Masako Abe¹, Naoto Ito^{1,2}, Keisuke Nakagawa¹, Satoko Yamaoka¹, Yumi Une³, Makoto Sugiyama^{1,2}

¹The United Graduate School of Veterinary Sciences, Gifu University,

Japan, ²Laboratory of Zoonotic Diseases, Faculty of Applied Biological

Sciences, Gifu University, ³Laboratory of Veterinary Pathology, School

of Veterinary Medicine, Azabu University

VI-PO31-17

GENETIC DISSECTION FOR NONSTRUCTURAL PROTEIN 2 IN PORCINE GROUP B ROTAVIRUSES

Junichi Soma^{1,2}, Tohru Suzuki¹, Goro Suzuki², Kazufumi Kuga¹, Ayako Miyazaki¹, Takashi Sasaki², Hiroshi Tsunemitsu¹

¹Research Team for Viral Diseases, National Institute of Animal Health,

Japan, ²Institute of Animal Health, JA Zen-noh (National Federation of

Agricultural Cooperative Associations)

VI-PO16 Filoviruses

Tuesday, 13 September

VI-PO16-1

ANALYSIS OF MARBURG VIRUS GENOMIC REGULATORY REGIONS

Jesus A Alonso^{1,2}, Jean L Patterson^{1,2}

¹Microbiology and Immunology, University of Texas Health Science

Center San Antonio, USA, ²Virology and Immunology, Texas Biomedical Research Institute

VI-PO16-2

EVALUATION OF A BIVALENT EBOLA VIRUS VACCINE IN THE NOVEL SYRIAN HAMSTER MODEL

Yoshimi Tsuda¹, David Safronet¹, Marko Zivcec^{1,2}, Kyle Brown^{2,3}, Andrea Marzi¹, Heinz Feldmann^{1,2}, Hideki Ebihara¹

¹Laboratory of Virology, Division of Intramural Research, NIAID, NIH,

USA, ²Department of Medical Microbiology, Univ. of Manitoba, ³Special

Pathogens Program, National Microbiology Laboratory, Public Health

Agency of Canada

VI-PO16-3

A SEROLOGICAL SURVEY OF RESTON EBOLAVIRUS INFECTION IN SWINE DURING EPIZOOTIC IN 2008 IN THE PHILIPPINES

Yusuke Sayama^{1,2}, Shuetsu Fukushi¹, Mariko Saito², Satoshi Taniguchi¹, Itoe Iizuka¹, Tetsuya Mizutani¹, Ichiro Kurane¹, Masayuki Saijo¹, Hitoshi Oshitani², Shigeru Morikawa¹

¹Department of Virology 1, National Institute of Infectious Diseases, Japan, ²Department of Virology, Tohoku University Graduate School of Medicine

VI-PO16-4

INFLUENCE OF EBOLA VIRUS VP24 RECOMBINANT PROTEIN ON INDUCTION OF INTERFERON

Alexander A Chepur¹, Areseniya A Shelemba¹, Andrey A Kolokoltsov², Robert Davey²

¹Regulation of Immunopoesis Laboratory, Institute of Clinical Immunology, Russia, ²University of Texas Medical Branch

VI-PO22 Paramyxoviruses

Tuesday, 13 September

VI-PO22-1

A FAMILY-WIDE RT-PCR ASSAY FOR DETECTION OF PARAMYXOVIRUSES AND APPLICATION TO LARGE-SCALE SURVEILLANCE OF WILD BIRDS

Sander van Boheemen, Theo M Bestebroer, Josanna H Verhagen, Sander Herfst, Ron AM Fouchier
Virology, Erasmus MC, Netherlands

VI-PO22-2

MOLECULAR BASIS ON MUMPS VIRUS PATHOGENICITY: COMPARISON OF LIVE ATTENUATED VACCINE AND ITS PARENT (MIYAHARA STRAIN)

Atsushi Kato, Shiho Nagata, Tomoya Maedera, Makoto Takeda

Department of Virology III, National Institute of Infectious Diseases, Japan

VI-PO22-3

THE PROXIMAL-END 5'UTR OF PESTE DES PETITS RUMINANTS VIRUS FUSION GENE DRIVES CAP- INDEPENDENT TRANSLATION INITIATION

Songkhla Chulakasian¹, Min Liang Wong¹, Tien Jye Chang¹, Wei Li Hsu²

¹Department of Veterinary Medicine, College of Veterinary Medicine, National Chung Hsing University, Taiwan, ²Graduate Institute of Microbiology and Public Health, College of Veterinary Medicine, National Chung Hsing University

VI-PO22-4

ANALYSIS ON ACCESSORY PROTEINS OF MEASLES VIRUS IN NEUROPATHOGENICITY IN MICE

Tetsuro Arai, Yuri Terao-Muto, Akiko Uema, Fusako Ikeda, Misako Yoneda, Chieko Kai

Laboratory Animal Research Center, The Institute of Medical Science, The University of Tokyo, Japan

VI-PO22-5

ESTABLISHMENT AND ANALYSIS OF MEASLES VIRUS PERSISTENT STRAINS IN LYMPHOID CELL LINES

Toshiyuki Nakamura, Masakazu Kamada, Hiroki Sato, Misako Yoneda, Chieko Kai

Laboratory Animal Research Center, The Institute of Medical Science, The University of Tokyo, Japan

VI-PO22-6

CHARACTERIZATION OF CANINE DISTEMPER VIRUS ISOLATED FROM CYNOMOLGUS MONKEYS DURING 2008 EPIZOOTIC IN JAPAN.

Kouji Sakai¹, Yohei Nishio², Noriyo Nagata³, Yasushi Ami⁴, Katsuhiro Komase¹, Masayuki Shimojima², Ken Maeda², Makoto Takeda¹, Masayuki Saijo⁵, Shigeru Morikawa⁵

¹Department of Virology III, National Institute of Infectious Diseases, Japan, ²Laboratory of Veterinary Microbiology, Faculty of Agriculture, Yamaguchi University, ³Departments of Pathology, National Institute of Infectious Diseases, ⁴Division of Experimental Animal Research, National Institute of Infectious Diseases, ⁵Department of Virology I, National Institute of Infectious Diseases

VI-PO22-7

THE SENDAI VIRUS C PROTEIN SUPPORTS EFFICIENT GROWTH OF MEASLES VIRUS IN MOUSE CELL LINES

Masaharu Iwasaki, Yusuke Yanagi

Department of Virology, Faculty of Medicine, Kyushu University, Japan

VI-PO22-8

NUCLEOCYTOPLASMIC SHUTTLING OF THE HUMAN PARAINFLUENZA VIRUS TYPE 2 P PROTEIN

Machiko Nishio¹, Junpei Ohtsuka¹, Masato Tsurudome¹, Tetsuya Nosaka¹, Daniel Kolakofsky²

¹Department of Microbiology, Mie University Graduate School of Medicine, Japan, ²Department of Microbiology and Molecular Medicine, University of Geneva School of Medicine

VI-PO22-9

A SINGLE AMINO ACID MUTATION AT POSITION 170 OF HUMAN PARAINFLUENZA VIRUS TYPE 1 FUSION GLYCOPROTEIN INDUCES OBVIOUS SYNCYTIIUM FORMATION AND CASPASE-3-DEPENDENT CELL DEATH

Tadanobu Takahashi¹, Masahiro Takaguchi¹, Chika Hosokawa¹, Hiroo Ueyama¹, Keijo Fukushima¹, Takuya Hayakawa¹, Kazuhiko Itoh¹, Kiyoshi Ikeda², Takashi Suzuki¹

¹Department of Biochemistry, School of Pharmaceutical Sciences, University of Shizuoka and Global COE Program for Innovation in Human Health Sciences, Japan, ²Department of Organic Chemistry, Faculty of Pharmaceutical Sciences, Hiroshima International University

VI-PO22-10

SLAM-BLIND MEASLES VIRUS AS A NOVEL THERAPEUTIC AGENT FOR BREAST CANCER

Takaaki Sugiyama¹, Misako Yoneda¹, Takeshi Kuraishi², Shosaku Hattori², Yusuke Inoue³, Hiroki Sato¹, Chieko Kai¹

¹Laboratory Animal Research Center, The Institute of Medical Science, The University of Tokyo, Japan, ²Amami Laboratory of Injurious Animals, The Institute of Medical Science, The University of Tokyo, ³Department of Diagnostic Radiology, Kitasato University School of Medicine

VI-PO22-11

NOVEL MUTATIONS IN THE MEASLES VIRUS FUSION PROTEIN THAT ENHANCE ITS FUSION ACTIVITY

Shumpei Watanabe, Yuta Shirogane, Satoshi Ikegame, Ritsuko Koga, Shunsuke Yamamoto, Mai Nakashima, Yusuke Yanagi

Department of Virology, Faculty of Medicine, Kyushu University, Japan

VI-PO22-12

INHIBITION OF THE PRODUCTION OF NIPAH VIRUS-LIKE PARTICLES BY TETHERIN

Masahiko Kato¹, Jiro Yasuda², Hiroshi Sagara³, Mio Omi-Furutani¹, Misako Yoneda¹, Chieko Kai¹

¹Laboratory Animal Research Center, The Institute of Medical Science, The University of Tokyo, Japan, ²Department of Emerging Infectious Diseases, Institute of Tropical Medicine, Nagasaki University, ³Medical Proteomics Laboratory, The Institute of Medical Science, The University of Tokyo

VI-PO22-13

CHARACTERIZATION OF MUMPS VIRUS GENOTYPES IN THAILAND BETWEEN 2007 AND 2010

Patcha Incomserb, Athiwat Primsirikunawut, Atchariya Lukebua, Sanit Kumperasart, Prasopchai Aramrungrach, Jaruwat Jai-Ai, Nakanesuan Nealbumrung, Nipaporn Intoon, Sirima Pattamadilok

Department of Medical Sciences, National Institute of Health, Thailand

VI-PO22-14

DETERMINANTS OF NEUROVIRULENCE OF THE OSAKA-1 STRAIN OF MEASLES VIRUS DERIVED FROM A CASE OF SUBACUTE SCLEROSING PANENCEPHALITIS

Minoru Ayata¹, Shinji Ohgimoto¹, Mitsuru Kuwamura², Miyuu Tanaka², Kaoru Takeuchi³, Makoto Takeda⁴, Hisashi Ogura¹

¹Department of Virology, Osaka City University Medical School, Japan, ²Laboratory of Veterinary Pathology, Osaka Prefecture University, ³Department of Infection Biology, Graduate School of Comprehensive Human Sciences and Institute of Basic Medical Sciences, University of Tsukuba, ⁴Department of Virology III, National Institute of Infectious Diseases

VI-PO22-15

IDENTIFICATION OF CONSERVED NEUTRALIZING EPITOPES OF THE MEASLES VIRUS HEMAGGLUTININ PROTEIN LOCATED IN PROXIMITY AND DISTAL TO THE RECEPTOR-BINDING SITE

Maino Tahara¹, Katsuhiro Komase¹, XueMin Ma¹, JiLan He¹, Yusuke Yanagi², Katsumi Maenaka³, Paul A Rota⁴, Makoto Takeda¹

¹Department of Virology III, National Institute of Infectious Diseases, Japan, ²Department of Virology, Faculty of Medicine, Kyushu University, ³Laboratory of Biomolecular Science, Faculty of Pharmaceutical Sciences, Hokkaido University, ⁴Centers for Disease Control and Prevention

VI-PO22-16

MOLECULAR CHARACTERIZATION OF NEWCASTLE DISEASE VIRUSES ISOLATED CHICKEN FARMS IN MALAYSIA

Eun-Kyoung Lee, Kang-Seuk Choi, Woo-Jin Jeon, Mi-Ja Park, Yae-Na Yoo, Jun-Hun Kwon

National Veterinary Research & Quarantine Service, Korea, South

VI-PO22-17

GENETIC ANALYSIS OF HUMAN PARAINFLUENZA VIRUSES CIRCULATING IN KOREA IN 2006

Ki-Joon Song, Mi Hwa Yang, Kwang Mi Moon, Jin-Won Song, Luck Ju Baek, Kwang Sook Park

Microbiology, Korea University, Korea Bank for Pathogenic Viruses, Korea, South

VI-PO22-18

THE NUCLEOCAPSID PROTEINS OF MORBILLIVIRUS AND HENIPAVIRUS BLOCK HOST INTERFERON SIGNALING PATHWAY

Hiroki Sato, Ikuyo Takayama, Misako Yoneda, Chieko Kai

Laboratory Animal Research Center, Institute of Medical Science, The University of Tokyo, Japan

VI-PO22-19

RESPIRATORY SYNCYTIAL VIRUS IS THE MAJOR VIRAL PATHOGEN AND ITS CO-INFECTION WITH OTHER RESPIRATORY VIRUSES INCREASES THE RISK OF PEDIATRIC PNEUMONIA HOSPITALIZATION: A THREE-YEAR POPULATION-BASED STUDY IN CENTRAL VIETNAM

Laymyint Yoshida¹, Motoi Suzuki¹, Hiroshi Yoshino¹, Hien-Anh Nguyen², Thiem-Dinh Vu², Tho-Huu Le³, Mai-Quynh Le², Hiroyuki Moriuchi⁴, Duc-Anh Dang², Koya Ariyoshi¹

¹Department of Clinical Medicine, Institute of Tropical Medicine, Nagasaki University, Japan, ²National Institute of Hygiene and Epidemiology, ³Khanh Hoa Health Service, ⁴Department of Pediatrics, Nagasaki University Hospital

VI-PO22-20

IDENTIFICATION OF COMMON MUTATIONS IN THE HEMAGGLUTININ OF MEASLES VIRUS FROM PERSISTENTLY INFECTED VERO AND A549 CELLS

Tomoyuki Honda, Toshiyuki Nakamura, Hiroki Sato, Misako Yoneda, Chieko Kai
Laboratory Animal Research Center, The Institute of Medical Science, The University of Tokyo, Japan

VI-PO22-21

INTRACELLULAR TRAFFICKING OF THE MEASLES VIRUS L PROTEIN OCCURS INDEPENDENTLY OF THE VIRAL M PROTEIN AND IS RELATED TO MICROTUBULE NETWORK AND RECYCLING ENDOSOME.

Yuichiro Nakatsu¹, Xuemin Ma¹, Fumio Seki¹, Tadaki Suzuki², Katsuhiko Komase¹, Makoto Takeda¹

¹Department of Virology III, National Institute of Infectious Diseases, Japan, ²Department of Pathology, National Institute of Infectious Diseases

VI-PO22-22

SENDAI VIRUS C PROTEIN REGULATES GENOMIC AND ANTIGENOMIC RNA SYNTHESIS DURING THE COURSE OF INFECTION

Takashi Irie, Takemasa Sakaguchi
Department of Virology, Graduate School of Biomedical Sciences, Hiroshima University, Japan

VI-PO22-23

THE ACCESSORY C PROTEIN OF SENDAI VIRUS IS INVOLVED IN FOLDING OF THE N PROTEIN

Asuka Yoshida, Takemasa Sakaguchi, Takashi Irie
Department of Virology, Graduate School of Biomedical Sciences, Hiroshima University, Japan

VI-PO22-24

CHARACTERIZATION OF THE RNA BINDING ACTIVITY OF MEASLES VIRUS C PROTEIN

Tomomi Nishie, Kaoru Takeuchi, Kyosuke Nagata
Infection Biology, Graduate School of Comprehensive Human Sciences, University of Tsukuba, Japan

VI-PO22-25

INFECTION OF CYNOMOLGUS MONKEYS WITH RECOMBINANT WILD-TYPE MEASLES VIRUS BEARING VACCINE H PROTEIN

Kaoru Takeuchi¹, Sei-Ich Kato¹, Noriyo Nagata², Tadaki Suzuki², Yasushi Ami², Kazuyasu Mori², Yasuko Tsunetsugu-Yokota², Kyosuke Nagata¹
¹Graduate School of Comprehensive Human Sciences, University of Tsukuba, Japan, ²National Institute of Infectious Diseases of Japan

VI-PO22-26

CHARACTERISATION OF A MUMPS VACCINE IMPLICATED IN VACCINE FAILURE

Sarah M Gilliland, Lauren Parker, Philip Minor, Silke Schepelmann
Department of Virology, National Institute for Biological Standards and Control, UK

VI-PO22-27

ASSESSMENT OF FERRETS AS AN IN VIVO MODEL FOR MUMPS VIRUS INFECTION

Lauren Parker, Sarah M Gilliland, Philip Minor, Silke Schepelmann
Virology, National Institute for Biological Standards and Control, UK

VI-PO22-28

SULFATIDE BINDS WITH HUMAN PARAINFLUENZA VIRUS TYPE 3 AND NEGATIVELY REGULATES VIRAL FUSION PROCESS

Keijo Fukushima¹, Tadanobu Takashi¹, Yasuo Suzuki², Takashi Suzuki¹
¹Department of Biochemistry, School of Pharmaceutical Sciences, University of Shizuoka, Japan, ²Department of Biomedical Sciences, College of Life and Health Sciences, Chubu University

VI-PO22-29

HUMAN PARAINFLUENZA VIRUS TYPE 4 INFECTIONS IN PEDIATRIC PATIENTS IN SENDAI AND YAMAGATA CITIES, JAPAN

Oshi Watanabe^{1,6}, Akira Oumi¹, Hisakazu Yano¹, Yukio Nagai², Fumio Katsushima³, Yuriko Katsushima³, Noriko Katsushima³, Makoto Shoji⁴, Setsuko Kitaoka⁵, Yusaku Tazawa⁵, Hidekazu Nishimura¹
¹Virus Research Center, Clinical Research Division, Sendai Medical Center, Japan, ²Nagai Children's Clinic, ³Katsushima Pediatric Clinic, ⁴Shoji Clinic, ⁵Department of Pediatrics, Sendai Medical Center, ⁶Department of Pediatrics, Yamagata National Hospital

VI-PO22-30

INHIBITORY EFFECT OF HUMAN METAPNEUMOVIRUS (HMPV) M2-2 ON RNA SYNTHESIS

Nobuyuki Hamada, Koyu Hara, Yoko Nakazono, Takahito Kashiwagi, Hiroshi Watanabe
Division of Infectious Disease, Department of Infectious Medicine, Kurume University School of Medicine, Japan

VI-PO7 Orthomyxoviruses: Structure, Replication and Assembly

Tuesday, 13 September

VI-PO7-1

REPLICATION-INCOMPETENT INFLUENZA A VIRUSES THAT STABLY EXPRESS A FOREIGN GENE

Makoto Ozawa^{1,2}, **Sylvia T Victor**³, **Andrew S Taft**², **Subash C Das**², **Satoshi Kakugawa**³, **Masato Hatta**², **Eileen A Maher**², **Gabriele Neumann**², **Yoshihiro Kawaoka**^{1,2,3,4}

¹Department of Special Pathogens, International Research Center for Infectious Diseases, Institute of Medical Science, University of Tokyo, Japan, ²Department of Pathobiological Sciences, School of Veterinary Medicine, University of Wisconsin, ³Division of Virology, Department of Microbiology and Immunology, Institute of Medical Science, University of Tokyo, ⁴ERATO Infection-Induced Host Responses Project, Japan Science and Technology Agency

VI-PO7-2

CONSTRUCTION OF INFLUENZA VIRUS-LIKE PARTICLES USING A LIPOSOME-SUPPLEMENTED WHEAT CELL-FREE TRANSLATION SYSTEM

Atsushi Muroi^{1,2}, **Tomio Ogasawara**^{1,2}, **Kyoko Shinya**³, **Akiko Makino**³, **Teridah E Ginting**³, **Yaeta Endo**^{1,2}, **Tatsuya Sawasaki**^{1,2}

¹Cell-Free Science and Technology Center, Ehime University, Japan, ²The Venture Business Laboratory, Ehime University, ³Graduate school of Medicine, Dept. of Microbiology and Infection, Kobe University

VI-PO7-3

THE CYSTEINE RESIDUES IN THE EXTRACELLULAR DOMAIN OF CM2 ARE DISPENSABLE BUT INFLUENCE THE INFLUENZA C VIRUS REPLICATION

Yasushi Muraki, **Takako Okuwa**, **Toshiki Himeda**, **Yoshiro Ohara**

Department of Microbiology, Kanazawa Medical University School of Medicine, Japan

VI-PO7-4

A NOVEL ANTIVIRAL FUNCTION OF NEURAMINIDASE INHIBITORS AGAINST INFLUENZA VIRUS

Hiroshi Ushirogawa, **Masanobu Ohuchi**

Department of Microbiology, Kawasaki Medical School, Japan

VI-PO7-5

COMPARISON OF AVIAN AND HUMAN INFLUENZA VIRUS RNA POLYMERASES IN MAMMALIAN CELLS

Kadir Turan¹, **Atsushi Kawaguchi**², **Yoshimi Harada**², **Kyosuke Nagata**²

¹Department of Basic Pharmaceutical Sciences, Faculty of Pharmacy, Marmara University, Turkey, ²Department of Infection Biology, Graduate School of Comprehensive Human Sciences, University of Tsukuba

VI-PO7-6

THE K627E AMINO ACID SUBSTITUTION OF THE PB2 OF A/HONG KONG/483/1997 (H5N1) INFLUENZA VIRUS ALTERS THE EFFICIENCY OF RNA SYNTHESIS OF THE NP GENE

Naoki Yamamoto¹, **Yoshihiro Sakoda**¹, **Masatoshi Okamatsu**¹, **Hiroshi Kida**^{1,2}

¹Laboratory of Microbiology, Department of Disease Control, Graduate School of Veterinary Medicine, Hokkaido University, Japan, ²Research Center for Zoonosis Control, Hokkaido University

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MUTATIONAL ANALYSIS OF THE PB2 SUBUNIT OF H5N1 INFLUENZA VIRUS RNA POLYMERASE REQUIRED FOR THE ASSEMBLY OF THE FUNCTIONAL HYBRID RIBONUCLEOPROTEIN

Yoko Nakazono, **Koyu Hara**, **Takahito Kashiwagi**, **Nobuyuki Hamada**, **Hiroshi Watanabe**

Division of Infectious Diseases, Kurume University School of Medicine, Japan

VI-PO7-8

GLYCOSYLATION OF INFLUENZA C VIRUS CM2 PROTEIN AFFECTS THE EARLY PHASE OF VIRAL REPLICATION

Takako Okuwa, **Yasushi Muraki**, **Toshiki Himeda**, **Yoshiro Ohara**

Department of Microbiology, Kanazawa Medical University School of Medicine, Japan

VI-PO7-9

ROLES OF CYTOSKELETAL FILAMENTS IN CYTOPLASMIC TRANSPORT OF INFLUENZA A VIRUS VRNP

Michiko Kumakura, **Naoki Takizawa**, **Kyosuke Nagata**

Department of Infection Biology, Graduate School of Comprehensive Human Sciences, University of Tsukuba, Japan

VI-PO7-10

ROLE OF THE N-TERMINAL REGION OF THE PA SUBUNIT IN NUCLEAR IMPORT AND ASSEMBLY OF INFLUENZA A VIRUS RNA POLYMERASE

Tadaki Suzuki¹, **Akira Ainai**², **Noriyo Nagata**¹, **Tetsutaro Sata**¹, **Hideki Hasegawa**^{1,2}

¹Department of Pathology, National Institute of Infectious Diseases, Japan, ²Influenza Virus Research Center, National Institute of Infectious Diseases

VI-PO7-11

ANTIGENIC STRUCTURE OF THE HEMAGGLUTININ OF PANDEMIC INFLUENZA A (H1N1) VIRUS

Yoko Matsuzaki¹, **Kanetsu Sugawara**¹, **Yoshitaka Simotai**¹, **Seiji Hongo**¹, **Eri Nobusawa**²

¹Department of Infectious Diseases, Yamagata University Faculty of Medicine, Japan, ²Influenza Virus Research Center, National Institute of Infectious Diseases

VI-PO7-12

THE AMINO ACID REQUIREMENT AT POSITION 627 OF THE PB2 PROTEIN OF INFLUENZA A VIRUS FOR VIRUS REPLICATIONMasato Hatta¹, Yoshihiro Kawaoka^{1,2}¹Pathobiological Sciences, University of Wisconsin-Madison, USA,²Institute of Medical Science, University of Tokyo

VI-PO7-13

PATHOGENIC ANALYSIS OF INFLUENZA VIRUS H6N1 SUBTYPE CIRCULATING AMONG POULTRY IN NORTHERN VIETNAMKozue Hotta¹, Tatsufumi Usui², Hiroki Takakuwa³, Tsuyoshi Yamaguchi², Le Q Mai⁴, Koichi Otsuki³, Toshihiro Ito², Tetsu Yamashiro¹¹Center for Infectious Disease Research in Asia and Africa, Institute of Tropical Medicine, Nagasaki University, Japan, ²The Avian Zoonosis Research Center, Faculty of Agriculture, Tottori University, ³Avian Influenza Research Center, Kyoto Sangyo University, ⁴Department of Virology, National Institute of Hygiene and Epidemiology

VI-PO7-14

TAMIFLU-RESISTANT BUT HA-MEDIATED CELL-TO-CELL TRANSMISSION THROUGH APICAL MEMBRANES OF CELL-ASSOCIATED INFLUENZA VIRUSES

Kotaro Mori, Takahiro Haruyama, Kyosuke Nagata

Department of Infection Biology, Graduate School of Comprehensive Human Sciences, University of Tsukuba, Japan

VI-PO7-15

DIFFERENT IMAGES OF INFLUENZA VIRUS M1 PROTEIN AT BUDDING SITES OBTAINED BY IMMUNOSTAINING AND TETRACYSSTEINE-TAG STAININGToshikatsu Shibata^{1,2}, Satoshi Hayakawa¹, Kazufumi Shimizu², Tatsuo Yamamoto², Kazumichi Kuroda¹¹Division of Microbiology, Nihon University School of Medicine, Japan,²Division of Obstetrics and Gynecology, Nihon University School of Medicine

VI-PO7-16

MORPHOLOGICAL CHARACTERIZATION OF A/H1N1PDM09 VIRUSES ISOLATED IN EGG FROM CLINICAL SPECIMENSKayoko Sato¹, Hideki Asanuma¹, Michiyo Kataoka², Noriyo Nagata², Masato Tashiro¹, Shigeyuki Itamura¹¹Influenza Virus Research Center, National Institute of Infectious Diseases, Japan, ²Department of pathology, National Institute of Infectious Diseases

VI-PO7-17

THE TEMPLATE RECOGNITION MECHANISM OF THE INFLUENZA A VIRUS RNA POLYMERASE COMPLEXMoeko Minakuchi¹, Atsushi Kawaguchi^{1,2,3}, Kyosuke Nagata¹¹Infection Biology, Graduate School of Comprehensive Human Sciences, University of Tsukuba, Japan, ²Graduate School of Infection Control Science, Kitasato University, ³Japan Society for the Promotion Science (JSPS) Research Fellow

VI-PO7-18

INEFFICIENT ABILITY OF LLC-MK2 CELLS IN SUPPORTING THE GROWTH OF INFLUENZA VIRUSES ISOLATED FROM CLINICAL SPECIMENS: ANALYSIS OF ADAPTATION OF VIRUSES TO LLC-MK2 CELLS AND UNDERLYING MECHANISM

Hitoshi Takahashi, Yuichi Harada, Noriko Shimasaki, Kazuya Nakamura, Itsuki Hamamoto, Norio Yamamoto, Takato Odagiri, Shigeyuki Itamura, Masato Tashiro

Center for Influenza Virus Research, National Institute of Infectious Diseases, Japan

VI-PO7-19

CIRCULATION OF INFLUENZA A SUBTYPE H3N2 VIRUS IN MIGRATING AND WILD BIRDS FROM ATLANTICS RAIN FOREST IN BRAZILAdelia Hiroko Nagamori Kawamoto^{1,2}, Danielle Bruna Leal Oliveira², Luciano Matsumiya Thomazelli², Edison Luis Durigon²¹Virology Laboratory -DDC, Butantan Institute, Brazil, ²Laboratory of Clinic Molecular Virology, Biomedical Sciences University of São Paulo

VI-PO7-20

BIOCHEMICAL CHARACTERIZATION OF PA ENDONUCLEASE ACTIVITY

Erin Noble, Baek Kim

Microbiology and Immunology, University of Rochester, USA

VI-PO10 Bunyaviruses

Tuesday, 13 September

VI-PO10-1

MAPPING OF THE OLIGOMERIZATION REGIONS WITHIN THE NUCLEOPROTEIN OF CRIMEAN CONGO HEMORRHAGIC FEVER VIRUSJessica M Levingston Mac Leod¹, Natalia Frias-Staheli², Gustavo Martinez-Delgado¹, Adolfo Garcia-Sastre¹¹Microbiology, Mount Sinai School of Medicine, USA, ²The Rockefeller University

VI-PO10-2

EFFECT OF TRANSPORTATION ON THE EFFICACY OF A FORMALIN-INACTIVATED RIFT VALLEY FEVER VACCINENina M T Lagerqvist^{1,2}, Belisario Moiane^{1,3}, Luis C Neves³, Janusz T Paweska⁴, Ake Lundkvist^{1,2}, Kerstin I Falk^{1,2}¹Department of Microbiology, Tumor and Cell Biology, Karolinska Institutet, Sweden, ²Swedish Institutet for Communicable Disease Control, ³Veterinary Faculty, Eduardo Modlane University, ⁴Special Pathogens Unit, National Institute for Communicable Diseases

VI-PO10-3

TOSCANA VIRUS NSS PROTEIN PROMOTES DEGRADATION OF THE DOUBLE-STRANDED RNA-DEPENDENT PROTEIN KINASE

Birte K. H Kalveram, Olga Lihoradova, Tetsuro Ikegami

Department of Pathology, University of Texas Medical Branch, USA

VI-PO10-4

UUKUNIEMI VIRUS NUCLEOCAPSID PROTEIN - OLIGOMERIZATION AND RNA BINDING

Anna Katz¹, Alexander N Freiberg², Vera Backstrom^{1,3}, Liisa Holm³, Ralf F Pettersson⁴, Antti Vaheri¹, Ramon Flick², Alexander Plyusnin¹

¹Department of Virology, University of Helsinki, Finland, ²Department of Pathology, University of Texas Medical Branch, ³Structural Genomics Group, Institute of Biotechnology, University of Helsinki, ⁴Ludwig Institute for Cancer Research, Stockholm Branch, Karolinska Institute

VI-PO10-5

WHOLE GENOME VARIABILITY AMONG BIOLOGICALLY DIFFERENT FIELD STRAINS OF TAHYNA ORTHOBUNYAVIRUS

Patrik Kilian^{1,2}, Tomas Chrudimsky¹, Vlasta Danielova³, Libor Grubhoffer^{1,2}, Daniel Ruzek²

¹University of South Bohemia, Faculty of Science, Czech Republic, ²Institute of Parasitology, Biology Centre of the Academy of Sciences of the Czech Republic, ³National Institute of Public Health, Centre of Epidemiology and Microbiology

VI-PO10-6

DEVELOPMENT OF PSEUDOTYPES AND VIRUS LIKE PARTICLES OF CRIMEAN CONGO HEMORRHAGIC FEVER VIRUS

Robert A Davey¹, Andrey A Kolokoltsov¹, Areneniya Shelemba², Alexander A Chepurnov²

¹Microbiology and Immunology, University of Texas Medical Branch, USA, ²Institute of Clinical Immunology SB RAMS

VI-PO10-7

MOLECULAR EVOLUTION OF AZAGNY VIRUS, A NEWFOUND HANTAVIRUS HARBORED BY THE WEST AFRICAN PYGMY SHREW (CROCIDURA OBSCURIOR) IN COTE D'IVOIRE

Hae Ji Kang¹, Blaise Kadjo², Sylvain Dubey³, Francois Jacquet⁴, Richard Yanagihara¹

¹John A. Burns School of Medicine, University of Hawaii at Manoa, USA, ²Department of Biology, University de Cocody, ³School of Biological Sciences, University of Sydney, ⁴Department Systematics and Evolution, Museum National d'Histoire Naturelle.

VI-PO10-8

GENOME-WIDE RNA INTERFERENCE SCREEN FOR HOST FACTORS REQUIRED FOR RIFT VALLEY FEVER VIRUS INFECTION

Brooke Harmon¹, Benjamin Schudel¹, Chien-Te K Tseng², Oscar A Negrete¹

¹Sandia National Laboratories, USA, ²University of Texas Medical Branch

VI-PO10-9

DEVELOPMENT OF CELL LINES EXPRESSING A FLUORESCENT AND ANTIBIOTIC SELECTABLE MARKER UPON REPLICATION OF A CRIMEAN-CONGO HEMORRHAGIC FEVER VIRUS MINIGENOME

Eric Bergeron, Ayan K Chakrabarti, Cesar G Albarino, Stuart T Nichol

Viral Special Pathogens, Centers for Disease Control and Prevention, USA

VI-PO17 Arenaviruses

Tuesday, 13 September

VI-PO17-1

MODULATION OF STRESS RESPONSE IN PERSISTENTLY INFECTED VERO CELLS WITH THE ARENAVIRUS JUNIN

Florencia N Linero, Pablo M Fernandez Bell Fano, Eugenia Cuervo, Viviana Castilla, Luis A Scolaro

Laboratorio de Virologia, Dpto. Qca. Biol., Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Argentina

VI-PO17-2

ESTABLISHMENT OF SEROLOGICAL DIAGNOSIS OF ARGENTINE HEMORRHAGIC FEVER USING RECOMBINANT ANTIGENS

Koichiro Iha^{1,2}, Mina Nakauchi-Hori³, Satoshi Taniguchi^{1,2}, Shuetsu Fukushi¹, Tetsuya Mizutani¹, Momoko Ogata¹, Shigeru Kyuwa², Masayuki Saijo¹, Victor Romanowski⁴, Delia A Enria⁵, Shigeru Morikawa^{1,2}

¹Virology 1, National Institute of Infectious Diseases, Japan, ²Graduate School of Agricultural and Life Sciences, the University of Tokyo, ³Influenza Virus Research Center, National Institute of Infectious Diseases, ⁴Universidad Nacional de La Plata, ⁵Instituto Nacional de Enfermedades Virales Humanas

VI-PO17-3

DISSECTING THE MULTIFUNCTIONAL NUCLEOPROTEIN OF ARENAVIRUSES

Emilio J Ortiz-Riano¹, Juan C de La Torre², Luis Martinez-Sobrido¹

¹Microbiology and Immunology, University of Rochester Medical Center, USA, ²Department of Immunology and Microbial Science, The Scripps Research Institute

VI-PO24 Calici- and Astroviruses

Tuesday, 13 September

VI-PO24-1

STRUCTURAL FEATURES FOR THE SUBSTRATE RECOGNITION BY SAPOVIRUS 3C-LIKE PROTEASE

Masaru Yokoyama¹, Tomoichiro Oka², Kazuhiko Katayama², Hirotsu Kojima³, Tetsuo Nagano³, Takayoshi Okabe³, Tadahito Kanda⁴, Hironori Sato¹

¹Pathogen Genomics Center, National Institute of Infectious Diseases, Japan, ²Department of Virology II, National Institute of Infectious Diseases, ³Chemical Biology Research Initiative, The University of Tokyo, ⁴Center of Research Network for Infectious Diseases, RIKEN

VI-PO24-2

VIRUS BINDING-PROTEIN WITH AN AFFINITY TO MULTIPLE GENOTYPES OF HUMAN NOROVIRUS

Daisuke Sano¹, Takahiro Imai², Satoshi Okabe¹, Takayuki Miura¹, Yoshifumi Masago², Tatsuo Omura²

¹Division of Environmental Engineering, Faculty of Engineering, Hokkaido University, Japan, ²Department of Civil and Environmental Engineering, Graduate School of Engineering, Tohoku University

VI-PO24-3

IDENTIFICATION OF COMPOUNDS THAT MAY BLOCK NOROVIRUS-RECEPTOR INTERACTION

Ming Tan¹, Monica Chhabra³, Xufu Zhang¹, Jarek Meller⁴, Yizong Cheng³, Xi Jiang^{1,2}

¹Division of Infectious Diseases, Cincinnati Children's Hospital Medical Center, USA, ²Department of Pediatrics, University of Cincinnati College of Medicine, ³Department of Computer Science, University of Cincinnati College of Engineering, ⁴Department of Environmental Health, University of Cincinnati College of Medicine

VI-PO24-4

EVOLUTION OF NOROVIRUSES - IMPROVED UNDERSTANDING ON THE PREDOMINANCE OF G2.4

Xi Jiang, Ming Tan

Department of Pediatrics, Cincinnati Children's Hospital Medical Center, USA

VI-PO24-5

RECOMBINANT NOROVIRUSES OF GII/3 PREVALENT FROM 2003 TO 2010 IN TOYAMA PREFECTURE, JAPAN

Mayumi Obara, Masae Iwai, Masatsugu Obuchi, Eiji Horimoto, Takeshi Kurata, Takenori Takizawa

Department of Virology, Toyama Institute of Health, Japan

VI-PO24-6

BROADLY REACTIVE MONOCLONAL ANTIBODY WITH SEVERAL RECOMBINANT SAPOVIRUS-LIKE PARTICLES (SV-VLPs)

Noritoshi Kitamoto¹, Tomoichirou Oka², Grant S Hansman², Kazuhiko Katayama², Yoji Kato¹, Yomoyuki Tanaka³

¹Microbiology, University of Hyogo, Japan, ²Department of Virology II, National Institute of Infectious Diseases, ³Sakai Institute of Public Health

VI-PO24-7

DEVELOPMENT OF A PANTRAP METHOD TO DETECT NOROVIRUS FROM CONTAMINATED FOOD

Hirofumi Saito¹, Miho Toho², Mamoru Noda³, Tomoyuki Tanaka⁴, Tomoichiro Oka⁵, Kazuhiko Katayama⁵

¹Akita Prefectural Research Center for Public Health and Environment, Japan, ²Fukui Prefectural Institute of Public Health and Environmental Science, ³Division of Biomedical Food Research, National Institute of Health Science, ⁴Sakai City Institute of Public Health, ⁵Department of Virology II, National Institute of Infectious Diseases

VI-PO24-8

A FOODBORNE OUTBREAK OF SAPOVIRUS LINKED TO CATERED BOX-LUNCH IN JAPAN

Shinichi Kobayashi¹, Noriko Fujiwara¹, Yoshihiro Yasui¹, Teruo Yamashita¹, Akira Fujiura¹, Mamoru Noda², Hiroko Minagawa¹

¹Laboratory of Virology, Aichi Prefectural Institute of Public Health, Japan, ²National Institute of Health Sciences

VI-PO24-9

ANALYSIS OF AMINO ACID SEQUENCE OF NOROVIRUS GII.4 ORF2 FROM 6 PATIENTS INCLUDING A WEAK-SECRETOR IN THE SAME REGION WITHIN THE PERIOD OF ONE MONTH

Tomoko Yoda¹, Kenji Yamazaki², Ikuko Aoyama², Hiromi Miyagawa²

¹Division of Infectious Disease, Bacteriology, Osaka Prefectural Institute of Public Health, Japan, ²Division of Infectious Disease, Virology, Osaka Prefectural Institute of Public Health

VI-PO24-10

DETECTION AND MOLECULAR CHARACTERIZATION OF THE FIRST PORCINE SAPOVIRUS STRAIN FROM DIARRHOEIC PIGLET IN THE CZECH REPUBLIC

Lucie Dufkova, Pavel Kulich, Jana Prodelalova

Virology and Diagnostics, Veterinary Research Institute, Czech Republic

VI-PO24-11

ISOLATION OF CROSS-REACTIVE HUMAN MONOCLONAL ANTIBODIES AGAINST HUMAN NOROVIRUSES

Kyoko Higo-Moriguchi¹, Haruko Shirato², Yuichi Someya², Yoshinobu Okuno³, Yoshikazu Kurosawa⁴, Koki Taniguchi¹

¹Department of Virology and Parasitology, Fujita Health University School of Medicine, Japan, ²Department of Virology II, National Institute of Infectious Diseases, ³Kanoni Institute, The Research Foundation for Microbial Diseases of Osaka University, ⁴Institute for Comprehensive Medical Science, Fujita Health University School of Medicine

VI-PO24-12

MICROSCOPIC ANALYSIS OF HUMAN NOROVIRUS-LIKE PARTICLES BOUND TO CACO-2 CELLS

Kosuke Murakami¹, Tomoichiro Oka¹, Reiko Todaka¹, Takaji Wakita¹, Tsukasa Matsuda², Kazuhiko Katayama¹

¹Department of Virology II, National Institute of Infectious Diseases, Japan, ²Graduate School of Bioagricultural Sciences, Nagoya University

VI-PO24-13

CHRONIC NOROVIRUS INFECTION IN RENAL TRANSPLANT RECIPIENTS

Mateja Poljsak-Prijatelj¹, Marko Kolenc¹, Spela Furar¹, Aljosa Kandus², Andrej Steyer¹

¹University of Ljubljana, Faculty of Medicine, Institut of Microbiology and Immunology, Slovenia, ²University Medical Centre

VI-PO24-14

THE TRANSITION OF NOROVIRUS GENOTYPES IN DIFFERENT AGE GROUPS UNDER THE SURVEILLANCE FOR GASTROENTERITIS FROM APR.1999 TO JAN. 2011 IN OSAKA

Naomi T Sakon¹, Kenji Yamazaki¹, Tomoko Yoda², Keiko Nakata¹, Tetsuo Kase¹

¹Infectious Diseases, Osaka Prefectural Institute of Public Health, Japan, ²Infectious Diseases, Bacteriology, Osaka Prefectural Institute of Public Health

VI-PO24-15

STRUCTURAL BASIS FOR CITRATE INHIBITION OF NOROVIRUS

Grant Hansman^{1,3}, Syed Hussan², Jason S Mclellan³, Kazuhiko Katayama¹, Carole A Bewley², Peter D Kwong³

¹Virology II, National Institute of Infectious Diseases, Japan, ²Laboratory of Bioorganic Chemistry, National Institute of Diabetes and Digestive and Kidney Diseases, NIH, ³Vaccine Research Center, National Institute of Allergy and Infectious Diseases, NIH

VI-PO24-16

SURVEILLANCE OF PATHOGENS IN OUTPATIENTS WITH GASTROENTERITIS AND GENETIC ANALYSIS OF SAPOVIRUS STRAINS BETWEEN 2002 AND 2010 IN KUMAMOTO PREFECTURE, JAPAN

Seiya Harada¹, Koichi Nishimura¹, Mineyuki Okada², Kazuhiko Katayama³, Tomoichiro Oka³

¹Department of Microbiology, Kumamoto Prefectural Institute of Public Health and Environmental Science, Japan, ²Chiba Prefectural Toso Meat Inspection Office, ³Department of Virology II, National Institute of Infectious Diseases

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Withdrawn

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HOSPITAL-BASED SURVEILLANCE OF NOROVIRUS IN WUHAN, CHINA, BETWEEN JAN.2007 TO MAY 2010

Yuanhong Wang¹, Nobumichi Kobayashi², Xuan Zhou¹, Souvik Ghosh², Jinsong Peng¹, Shigeo Nagashima², Ting Yang³, Quan Hu¹, Dunjin Zhou¹

¹Wuhan Centers for Disease Prevention & Control, China, ²Department of Hygiene, Sapporo Medical University School of Medicine, ³Huazhong Normal University

VI-PO24-19

GENETIC DIVERSITY OF NOROVIRUS STRAINS AMONG CHILDREN AND ADULTS IN KOLKATA, INDIA

Nataraju Seegekote Mariyappa¹, Madhu Sudhan Pativada¹, Rahul Kumar¹, Anannya Bhattacharya¹, Ganesh Balasubramanian¹, Kobayashi Nobumichi², Triveni Krishnan¹

¹Division of Virology, National Institute of Cholera and Enteric Diseases, India, ²Department of Hygiene, Sapporo Medical University School of Medicine

VI-PO24-20

HUMAN SAPOVIRUS CLASSIFICATION SCHEME BASED ON PAIRWISE DISTANCE ANALYSIS OF COMPLETE CAPSID NUCLEOTIDE SEQUENCES

Tomoichiro Oka, Grant S Hansman, Kosuke Murakami, Reiko Todaka, Takaji Wakita, Kazuhiko Katayama, Sapovirus Study Group of Japan

Department of Virology II, National Institute of Infectious Diseases, Japan

VI-PO24-21

FULL GENOME SEQUENCING AND ANALYSES OF A GII-4 NOROVIRUS STRAIN CBNU2 ISOLATED FROM SOUTH KOREA IN 2007

Chan Hee Lee¹, Gyoo Seung Jung¹, Hyung Seok Kim¹, Jong Ik Kim¹, Ga Young Ji¹, Yu Young Kim¹, Wen Dan Wang¹, Keon Myung Lee², Young Min Lee³

¹Department of Microbiology, Chungbuk National University, Korea, South, ²Department of Computer Sciences, CBITRC, Chungbuk National University, ³School of Medicine, Chungbuk National University

VI-PO24-22

VISUALIZATION OF MURINE NOROVIRUS REPLICATION COMPLEX IN RAW264.7 CELLS

Takashi Shimoike¹, Hiroataka Takagi², Tomoichiro Oka¹, Kosuke Murakami¹, Takaji Wakita¹, Kazuhiko Katayama¹

¹Virology II, National Institute of Infectious Diseases, Japan, ²Biosafety Control and Research, National Institute of Infectious Diseases

VI-PO24-23

GENETIC HETEROGENEITY OF NOROVIRUS IDENTIFIED FROM PORCINE IN TAIWAN

Ju-Yu Wei, Day-Yu Chao

National Chung Hsing University, Graduate Institute of Microbiology and Public Health, Taiwan

VI-PO24-24

PREVALENCE OF SAPOVIRUS-RELATED COMMUNITY GASTROENTERITIS IN TOKYO FROM APRIL 2008 TO MARCH 2011

Kohji Mori¹, Tetsuya Akiba¹, Miyuki Nagano¹, Sanae Emura¹, Noriko Akamatsu¹, Katsushi Iwakoshi¹, Yukinao Hayashi¹, Akemi Kai¹, Mamoru Noda²

¹Department of Microbiology, Tokyo Metropolitan Institute of Public Health, Japan, ²Division of Biomedical Food Research, National Institute of Health Sciences

VI-PO24-25

FELINE CALICIVIRUS AND MURINE NOROVIRUS SHOWED DIFFERENT SENSITIVITY WITH ETHANOL TREATMENT

Hiroataka Takagi¹, Tomoichiro Oka¹, Yukinobu Tohya², Kazuyoshi Sugiyama¹, Kazuhiko Katayama¹

¹National Institute of Infectious Diseases, Japan, ²Nihon University

VI-PO24-26

DEVELOPMENT OF ULTRA-SENSITIVE BIOLUMINESCENCE ENZYME IMMUNOASSAY FOR NOROVIRUS CAPSID ANTIGEN

Nozomi Sakamaki, Yoshiyuki Ohiro, Mitsuki Ito, Tsubasa Ohta, Wataru Suzuki, Susumu Takayasu, Harufumi Tsuge

Eiken Chemical Co. Ltd, Japan

VI-PO24-27

NEWLY DEVELOPED A MULTIPLEX REAL-TIME RT-PCR METHOD TO DETECT NOROVIRUS AND SAPOVIRUS

Shinichiro Shibata¹, Akari Kodaira¹, Kohji Mori², Seiya Harada³, Tomoichiro Oka⁴, Kazuhiko Katayama⁴

¹Microbiology Department, Nagoya City Public Health Research Institute, Japan, ²Department of Microbiology Division of Virology, The Tokyo Metropolitan Institute of Public Health, ³Department of Microbiology, Kumamoto Prefectural Institute of Public Health and Environmental Science, ⁴Department of Virology II, National Institute of Infectious Diseases

VI-PO24-28

SURVIVAL OF NOROVIRUS (NOV) AND FCV IN MARINE ENVIRONMENTS AND PREDICTIONS FOR ELIMINATION OF NOV INFECTIVITY

Hisae Kasai, Matthura Labaiden, Shingo Hatanaka, Mamoru Yoshimizu

Faculty of Fisheries Sciences, Hokkaido University, Japan

VI-PO24-29

STRUCTURAL BASIS FOR RECOGNITION OF LEWIS A ANTIGEN BY NOROVIRUS

Yuichi Someya¹, Haruko Shirato¹, Akiko Kumagai¹, Hiromi Ito², Sanae Furukawa², Takaji Wakita¹, Koji Ishii¹, Hisashi Narimatsu², Tomomi Kubota²

¹Department of Virology II, National Institute of Infectious Diseases, Japan, ²Research Center for Medical Glycoscience, National Institute of Advanced Industrial Science and Technology

VI-PO64 Nidoviruses

Tuesday, 13 September

VI-PO64-1

EQUINE ARTERITIS VIRUS: EPIDEMIOLOGY AND VIRAL CHARACTERIZATION OF EUROPEAN STRAINS

Delphine Gaudaire¹, Fanny Lecouturier¹, Gaël Amelot¹, Claire Laugier¹, Stephan Zientara², Aymeric Hans¹

¹Anses, Laboratory for Equine Diseases, Virology Unit, France, ²Anses, Laboratory for Animal Health, UMR 1161 Virology

VI-PO64-2

PERSISTENCE-ASSOCIATED SINGLE AMINO ACID RESIDUES ON THE SPIKE GLYCOPROTEIN OF HUMAN RESPIRATORY CORONAVIRUS OC43 INFLUENCE HUMAN NEURONAL RESPONSE AND NEUROVIRULENCE IN MICE

Pierre J Talbot, Dominique J Favreau, Elodie Brison, Marc Desforges, Helene Jacomy

Laboratory of Neuroimmunovirology, INRS-Institut Armand-Frappier, Canada

VI-PO11 Alpha- and Rubiviruses

Tuesday, 13 September

VI-PO11-1

RETROSPECTIVE EVALUATION ON VIRUS GENOME DETECTION METHOD FOR FETAL RUBELLA INFECTION WITH 409 SUSPECTED CASES

Shigetaka Katow¹, Mitsuyo Tanemura², Masao Fukushima³, Hiroko Minahara¹, Yumiko Saito⁴, Yuji Hiramatsu⁵

¹Center of Research Network for Infectious Diseases, RIKEN, Japan, ²Tanemura Women's Clinic, ³Sumitomo Bakelite Co., Ltd, ⁴Fujirebio Inc., ⁵Okayama University

VI-PO11-2

THE SHORT N-TERMINAL REGION OF THE RUBELLA VIRUS CAPSID PROTEIN IS CRITICAL TO CO-LOCALIZE WITH THE NONSTRUCTURAL P150 PROTEIN

Masafumi Sakata, Kiyoko Okamoto, Noriyuki Otsuki, Hitoshi Abo, Makoto Takeda, Yoshio Mori

Department of Virology 3, National Institute of Infectious Diseases, Japan

VI-PO11-3

MUTATIONS OF SAGIYAMA VIRUS, A STRAIN OF GETAH VIRUS, WHICH ADAPT IT TO GROWTH IN DROSOPHILA S2 CELLS

Roghiyh Aliyari¹, Richard Digirolamo², Yukio Shirako³

¹Department of Microbiology and Plant Pathology, University of California-Riverside, USA, ²Graduate School of Agricultural and Life Sciences, University of Tokyo, ³Asian Natural Environmental Science Center, University of Tokyo

VI-PO11-4

ADAPTATIONS BY CHIKUNGUNYA VIRUS TO CIRCUMVENT THE ANTIVIRAL ACTIVITY OF 2'-5' OLIGOADENYLATE SYNTHETASES

Hans Henrik Gad¹, Marie-Mathilde Bonnet¹, Sylvie Paulous¹, Laure Diancourt¹, Valerie Caro¹, Beate Kümmerer², Anavaj Sakuntabhai¹, Philippe Despres¹

¹Department of Virology, Institut Pasteur, France, ²Institut für Virologie, Universitäts Klinikum Bonn

VI-PO11-5

PATHOGENESIS OF EPIDEMIC CHIKUNGUNYA VIRUS IN NONHUMAN PRIMATES

Chang-Kweng Lim¹, Yasuo Ami², Yoshiki Fujii^{1,3}, Meng Ling Moi¹, Kazutaka Kitaura^{1,3}, Akira Kotaki¹, Shigeru Morikawa¹, Masayuki Saijo¹, Ryuji Suzuki³, Ichiro Kurane¹, Tomohiko Takasaki¹

¹Department of Virology 1, National Institute of Infectious Diseases, Japan, ²Division of Experimental Animal Research, National Institute of Infectious Diseases, ³Department of Rheumatology and Clinical Immunology, Clinical Research Center for Allergy and Rheumatology, Sagami National Hospital, National Hospital Organization

VI-PO25 Transmission and Epidemiology of Arboviral Diseases

Tuesday, 13 September

VI-PO25-1

MULTIPLE GENOTYPES OF DENGUE VIRUS TYPE 2 WERE DETECTED IN AEDES AEGYPTI POPULATION DURING 2010 EPIDEMIC IN TAIWAN

Yi-Jung Liu¹, Day-Yu Chao¹, Char-Dong Chen²

¹Graduate Institute of Microbiology and Public Health, National
Chung-Hsing University, Taiwan, ²Public Health Bureau, Kaohsiung City
Government

VI-PO25-2

ISOLATION AND CHARACTERIZATION OF JAPANESE ENCEPHALITIS VIRUS FROM MOSQUITOES IN ISHIKAWA, JAPAN IN 2010

Manabu Murakami¹, Kiyoshi Kamimura², Yosaburo Oikawa³,
Tsutomu Takegami¹

¹Division of Molecular Oncology and Virology, Kanazawa-Medical Univ.
Medical Research Institute, Japan, ²Marusan Pharmaceutical Co., Ltd.,
³Medical Zoology, Kanazawa-Medical Univ.

VI-PO32 Viral Zoonoses

Tuesday, 13 September

VI-PO32-1

DETECTION AND MOLECULAR CHARACTERIZATION OF HEPATITIS E VIRUS IN CLINICAL AND ENVIRONMENTAL SAMPLES AND IN PUTATIVE ANIMAL RESERVOIRS

Setsuko Ishida¹, Shima Yoshizumi¹, Tetsuya Ikeda¹,
Masahiro Miyoshi¹, Akiko Goto¹, Keiji Matsubayashi²,
Hisami Ikeda², Shinichi Kudo¹

¹Department of Microbiology, Hokkaido Institute of Public Health,
Japan, ²Japanese Red Cross Hokkaido Blood Center

VI-PO32-2

SERO-SURVEILLANCE OF HANTAVIRUS IN RODENTS CAPTURED IN ZAMBIA, IN 2010

Ichiro Nakamura^{1,2}, Bernard M Hang'Ombe²,
Hirofumi Sawa^{2,3}, Ayato Takada^{2,4}, Kumiko Yoshimatsu⁵,
Jiro Arikawa⁵, Chihiro Sugimoto^{1,2}

¹Department of Collaboration and Education, Hokkaido University
Research Center for Zoonosis Control, Japan, ²School of Veterinary
Medicine, The University of Zambia, ³Department of Molecular
Pathobiology, Hokkaido University Research Center for Zoonosis
Control, ⁴Department of Global Epidemiology, Hokkaido University
Research Center for Zoonosis Control, ⁵Department of Microbiology,
Hokkaido University Graduate School of Medicine

VI-PO32-3

TSG101 AND VACUOLAR PROTEIN SORTING PATHWAY ARE REQUIRED FOR VIRION RELEASE OF HEPATITIS E VIRUS

Shigeo Nagashima¹, Masaharu Takahashi¹, Jirintai Suljid¹,
Toshinori Tanaka¹, Tsutomu Nishizawa¹, Jiro Yasuda²,
Hiroaki Okamoto¹

¹Division of Virology, Department of Infection and Immunity, Jichi
Medical University School of Medicine, Japan, ²Department of
Emerging Infectious Diseases, Institute of Tropical Medicine, Nagasaki
University

VI-PO32-4

MOLECULAR EPIDEMIOLOGY OF RABIES VIRUS IN THE CENTRAL, COPPERBELT AND LUSAKA PROVINCES OF ZAMBIA

Walter Muleya¹, Hirofumi Sawa¹, Paul Fandamu²,
Boniface Namangala³, Aaron Mweene³, Akihiro Ishii¹,
Takashi Kimura¹, Luke Zulu³

¹Department of Molecular Pathobiology, Research Center for Zoonosis
Control, Hokkaido University, Japan, ²National Livestock Epidemiology
and Information Center (NALEIC), ³School of veterinary medicine,
University of Zambia

VI-PO32-5

SCREENING FOR HEV RNA IN BLOOD DONORS IN HOKKAIDO, JAPAN

Hidekatsu Sakata¹, Keiji Matsubayashi¹, Ikuma Abe²,
Shinichiro Sato¹, Toshiaki Kato¹, Satoru Hino³, Hisami Ikeda¹

¹Japanese Red Cross Hokkaido Blood Center, Japan, ²Japanese Red
Cross Plasma Fractionation Center, ³Japanese Red Cross Blood Service
Headquarters

VI-PO32-6

ESTABLISHMENT OF AN IN VITRO CULTURE SYSTEM FOR HEV USING HEV-RNA-POSITIVE PLASMA OBTAINED FROM BLOOD DONORS IN JAPAN

Takashi Owada¹, Ko Suzuki¹, Chieko Matsumoto¹,
Masashi Igarashi¹, Rieko Sobata¹, Keiji Matsubayashi²,
Hisami Ikeda², Shigeharu Uchida¹, Masahiro Satake¹,
Kenji Tadokoro¹

¹Japanese Red Cross Society Central Blood Institute, Japan, ²Japanese
Red Cross Society Hokkaido Red Cross Blood Center

VI-PO32-7

PHYLOGENETIC COMPARISON OF NNV ISOLATES AMONG WILD AND CULTURED FISH IN TAIWAN

Kun Chan Tsai^{1,2}, Chi Shau Chi²

¹AVRDC - The World Vegetable Center, Taiwan, ²Institute of Zoology,
National Taiwan University

VI-PO32-8

SERO-PREVALENCE OF SWINE INFLUENZA VIRUSES IN THAI PIG POPULATION IN 2003-2010

Sujira Parchariyanon¹, Lamule Molee¹, Anchalee Srijangwad¹, Sureerat Hemngoen¹, Yuparat Inbumrung¹, Dearntem Tantiwattanapo¹, Nobuhiro Takemae^{2,3}, Yasuaki Hiromoto^{2,3}, Takehiko Saito^{2,3}

¹National Institute of Animal Health, Thailand, ²Thailand-Japan Zoonotic Diseases Collaboration Center (ZDCC), ³National Institute of Animal Health

VI-PO32-9

HIGH SIMILARITY BETWEEN ISOLATES OF HEPATITIS E VIRUS RECOVERED FROM HUMAN AND SWINE IN FRANCE BETWEEN 2008 AND 2009

Jerome Bouquet¹, Sophie Tesse², Aurelie Lunazzi¹, Marc Eloit¹, Nicolas Rose², Elisabeth Nicand², Nicole Pavio¹

¹UMR 1161 Virology, France, ²National Reference Center of Hepatitis E, HIA Val de Grace, ³Unite EBEP

VI-PO32-10

EMERGENCE OF RABIES IN THE GAUTENG PROVINCE, SOUTH AFRICA

Claude Sabeta¹, Peter Geetsema², Debra Mohale¹, Mmantshuruge Miyen¹, Jacqueline Weyer³, Lucille Blumberg³, Pat Leman³, Baby Phahladira¹, Wonderful Shumba¹, Johan Walters², Janusz Paweska³

¹OIE Rabies Reference Laboratory, Agricultural Research Council- Onderstepoort Veterinary Institute, South Africa, ²Gauteng Department of Veterinary Services, ³National Institute of Communicable Diseases

VI-PO32-11

SWINE INFLUENZA SURVEILLANCE IN THAILAND AND VIETNAM

Yasuaki Hiromoto^{1,2}, Nobuhiro Takemae^{1,2}, Sujira Parchariyanon³, Ruttapong Ruttanapum³, Tung Nguyen⁴, Do Thi Hoa⁴, Long Thanh Ngo⁵, Vu Phong Pham⁵, Ha Thi Hong Le⁵, Ha Truc Nguyen⁵, Vu Tri Le⁵, Binh Xuan Nguyen⁵, Nguyen Van Long⁶, Do Huu Dung⁶, Tsuyoshi Hayashi^{1,2}, Yuko Uchida^{1,2}, Takehiko Saito^{1,2}

¹National Institute of Animal Health, National Agriculture and Food Research Organization (NARO), Japan, ²Thailand-Japan Zoonotic Diseases Collaboration Center (ZDCC), ³National Institute of Animal Health, ⁴National Center for Veterinary Diagnostics, ⁵Center for Veterinary Diagnostics, Regional Animal Health Office No.6, ⁶Department of Animal Health

VI-PO23 Host Response and Resistance in Plant Viruses

Tuesday, 13 September

VI-PO23-1

FEW THYLAKOID MEMBRANES IN CHLOROPLASTS IS CORRELATED WITH LOW EXPRESSION OF PHOTOSYNTHESIS-RELATED GENES IN MOSAIC TISSUES OF CUCUMBER MOSAIC VIRUS-INFECTED TOBACCO

Tomofumi Mochizuki, Yuki Hirata, Satoshi T Ohki

Graduate School of Life and Environmental Sciences, Osaka Prefecture University, Japan

VI-PO23-2

INTERFERED CELL-TO-CELL MOVEMENT OF TOMATO MOSAIC VIRUS IN TRANSGENIC TOBACCO PLANTS OVER-EXPRESSING BCKELP, A BINDING FACTOR FOR VIRAL MOVEMENT PROTEINS

Nobumitsu Sasaki, Tatsuro Odawara, Hiroshi Nyunoya

Gene Research Center, Tokyo University of Agriculture and Technology, Japan

VI-PO23-3

TARGETING SPECIFIC GENES FOR RNA INTERFERENCE IS CRUCIAL TO THE DEVELOPMENT OF STRONG RESISTANCE TO RICE VIRUSES

Takumi Shimizu, Eiko Nakazono-Nagaoka, Tamaki Uehara-Ichiki, Takahide Sasaya, Toshihiro Omura

National Agricultural Research Center/Brain, Japan

VI-PO23-4

RAB GTPASE-LIKE PROTEIN FROM NICOTIANA BENTHAMIANA IS INVOLVED IN BAMBOO MOSAIC VIRUS INFECTION

Chi-Ping Cheng¹, Jia-Hua Jhuo¹, Ching-Hsiu Tsai²

¹Department of Life Science, Tzu Chi University, Taiwan, ²Graduate Institute of Biotechnology, National Chung Hsing University

VI-PO23-5

CHARACTERIZATION OF CITRUS TRISTEZA VIRUS ISOLATES FROM PENINSULAR MALAYSIA USING MAJOR COAT PROTEIN

Kavous Ayazpour¹, Kamaruzaman Sijam², Ganesan Vadamalai², Hawa Jaafar³

¹Department of Plant Pathology, Jahrom Branch, Islamic Azad University, Malaysia, ²Plant Protection Department, Faculty of Agriculture, University Putra Malaysia, ³Crop Science Department, Faculty of Agriculture, University Putra Malaysia

VI-PO23-6

BROAD-SPECTRUM TRANSGENIC RESISTANCE AGAINST DIFFERENT TOSPOVIRUSES AT THE GENUS LEVEL CONFERRED BY THE CONSERVED REGION OF L GENES

Shyi-Dong Yeh¹, Tsung-Chi Chen², Jui-Chu Peng^{1,3}

¹Department of Plant Pathology, National Chung Hsing University, Taiwan, ²Department of Biotechnology, Asia University, ³Division of Crop Environment, Tainan Distinct Agriculture Research and Extension Station

VI-PO23-7

CHARACTERIZATION AND FIELD ASSESSMENT OF L3-163, AN ATTENUATED STRAIN OF PEPPER MILD MOTTLE VIRUS

Rie Ogai, Ayami Kanda, Kenji Kubota, Shinya Tsuda

Plant Pathology, National Agricultural Research Center, Japan

VI-PO23-8

FUNCTIONAL ANALYSIS OF NTERF5 IN N GENE RESISTANCE AGAINST TMV

Ju-Yeon Yoon¹, Seung Kook Choi², Ki Hyun Ryu¹, Peter Palukaitis¹

¹Horticultural Science, Seoul Women's University, Korea, South,

²NIHHS, RDA

VI-PO23-9

CYCLIC NUCLEOTIDE-GATED ION CHANNEL-MEDIATED CELL DEATH MAY NOT PLAY A CRITICAL FOR R GENE-CONFERRED RESISTANCE TO CUCUMBER MOSAIC VIRUS IN ARABIDOPSIS THALIANA

Hideki Takahashi, Sugihiko Ando, Yoshinori Kanayama
Graduate School of Agricultural Science, Tohoku University, Japan

VI-PO23-10

GENOME-WIDE IDENTIFICATION OF HOST AND VIRAL TRANSCRIPTS TARGETED BY VIRAL SIRMAS IN VITIS VINIFERA

Vitantonio Pantaleo, Laura Miozzi, Giorgio Gambino, Jozsef Burgan
Istituto di Virologia Vegetale del CNR, Italy

VI-PO23-11

STUDYING THE ROLE OF CAPSID PROTEIN OF ODONTOGLOSSUM RINGSPOT TOBAMOVIRUS IN VIRUS SYSTEMIC MOVEMENT AND IDENTIFYING THE CP-INTERACTING HOST PROTEINS

Pin-Chun Lin¹, Shu-Chuan Lee¹, Shih-Shun Lin², Ya-Chun Chang¹

¹Department of Plant Pathology and Microbiology, National Taiwan University, Taiwan, ²Institute of Biotechnology, National Taiwan University

VI-PO23-12

A CO-EVOLUTIONARY ARMS RACE BETWEEN TOMATO MOSAIC VIRUS AND ITS RESISTANCE GENE TM-1

Kazuhiro Ishibashi¹, Natsuki Mawatari¹, Shuhei Miyashita^{1,2}, Tetsuo Meshi¹, Masayuki Ishikawa^{1,3}

¹Division of Plant Sciences, National Institute of Agrobiological Sciences, Japan, ²Japan Science and Technology Agency (JST), Precursory Research for Embryonic Science and Technology (PRESTO), ³Promotion of Basic Research Activities for Innovative Biosciences, Bio-oriented Technology Research Advancement Institution (BRAIN)

VI-PO23-13

POSSIBLE ROLE OF ENDOGENOUS ASCORBIC ACIDS IN BRASSICA RAPA IN DEFENCE AGAINST TURNIP MOSAIC VIRUS

Ayaka Fujiwara¹, Tsuyoshi Inukai², Chikara Masuta²

¹Graduate School of Agriculture, Hokkaido University, Japan, ²Research Faculty of Agriculture, Hokkaido University

VI-PO23-14

THE MUTATIONS IN P3 AND P3N-PIPO OF CLOVER YELLOW VEIN VIRUS AFFECT RESISTANCE BREAKING IN PEA

Sun Hee Choi, Atsumi Go, Ryoko Shimada, Kenji Nakahara, Ichiro Uyeda

The Graduate School of Agriculture, Hokkaido University, Japan

VI-PO29

Plant Virus Replication and Translation

Tuesday, 13 September

VI-PO29-1

TOMBUSVIRUSES REPLICASE PROTEINS PLAY IMPORTANT ROLES TARGETING AND ACTIVATION OF REPLICASE COMPLEX

Kai Xu, Peter D Nagy

Department of Plant Pathology, University of Kentucky, USA

VI-PO29-2

ORCHID FLECK VIRUS N AND P PROTEINS FORM INTRANUCLEAR VIROPLASM-LIKE STRUCTURES IN THE ABSENCE OF VIRAL INFECTION

Hideki Kondo, Chisa Hirokado, Mizuki Noda, Ida Bagus Andika, Tetsuo Tamada, Nobuhiro Suzuki

Okayama University, Institute of Plant Science and Bioresources, Japan

VI-PO29-3

A TRANSCRIPTION-DEPENDENT TRANSLATIONAL REGULATION IN THE SUBGENOMIC RNA OF MELANDRIUM YELLOW FLECK BROMOVIRUS

Taiki Narabayashi, Masanori Kaido, Tetsuro Okuno, Kazuyuki Mise

Plant Pathology, Division of Applied Biosciences, Graduate School of Agriculture, Kyoto University, Japan

VI-PO29-4

SEQUENCE ANALYSIS OF RNA1-ENCODED REPLICATION PROTEINS OF TOMATO RINGSPOT NEPOVIRUS ISOLATES

Ting Wei^{1,2}, Joan Chisholm¹, Helene Sanfacon¹

¹Agriculture and Agri-Food Canada, Pacific Agri-Food Research Centre, Canada, ²Dept of Botany, University of British Columbia

VI-PO29-5

A PUTATIVE 1-DEOXY-D-XYLULOSE-5-PHOSPHATE REDUCTOISOMRASE FROM NICOTIANA BETHAMIANA IS INVOLVING IN THE INFECTION CYCLE OF BAMBOO MOSAIC VIRUS

Shun-Fang Cheng, Yu-Shun Kao, Yau-Heiu Hsu, Ching-Hsiu Tsai

National Chung Hsing University, Taiwan

VI-PO29-6

ADP-RIBOSYLATION FACTOR 1 PLAYS AN IMPORTANT ROLE IN RNA REPLICATION OF RED CLOVER NECROTIC MOSAIC VIRUS

Kiwamu Hyodo, Akira Mine, Masanori Kaido, Kazuyuki Mise, Tetsuro Okuno

Laboratory of Plant Pathology, Graduate School of Agriculture, Kyoto University, Japan

VI-PO29-7

NATIVELY UNFOLDED VIRAL PROTEIN GENOME-LINKED (VPG) OF PEPPER VEIN BANDING VIRUS (PVBV) GAINS STRUCTURE & FUNCTION UPON INTERACTION WITH GLOBULAR PROTEASE DOMAIN (NIA-PRO)

Chhavi Mathur, Savithri S Handanahal

Department of Biochemistry, Indian Institute of Science, India

VI-PO29-8

CUCUMBER LEAF SPOT VIRUS REPLICATION ASSOCIATED PROTEIN P25 TARGETS THE ENDOPLASMIC RETICULUM

Kankana Ghoshal¹, Jane Theilmann², Ron Reade², D'Ann Rochon^{1,2}

¹University of British Columbia, Agriculture and Agri-Food, Canada,

²Agriculture and Agri-Food Canada, Pacific Agri-Food Research Centre

VI-PO29-9

OURMIA MELON VIRUS DETERMINANTS OF NECROTIC RESPONSE IN NICOTIANA BENTHAMIANA AND REVERSE GENETIC ANALYSES OF A PUTATIVE NUCLEOLAR LOCALIZATION SIGNAL OF ITS COAT PROTEIN

Marika Rossi, Marina Ciuffo, Massimo Turina

Ivv-Cnr Torino, Italy

VI-PO29-10

ARE UNTRANSLATED REGIONS OF SUGARCANE MOSAIC VIRUS INVOLVED IN HOST ADAPTABILITY?

Ricardo I Alcala-Briseno, Luis Dela, Laura Silva-Rosales

Genetic Engineering, Cinvestav Irapuato, Mexico

VI-PO29-11

NUCLEOTIDE SEQUENCE AND INFECTIOUS CDNA CLONE OF CHINESE YAM NECROTIC MOSAIC VIRUS

Toru Kondo¹, Takashi Fujita²

¹Agriculture Research Institute, Aomori Prefectural Industrial Technology Research Center, Japan, ²Faculty of Agriculture and Life Science, Hiroshima University

VI-PO33 Virus Movement in Plants

Tuesday, 13 September

VI-PO33-1

INVOLVEMENT OF FIBRILLARIN, A MAJOR PROTEIN OF THE NUCLEOLUS, IN HORDEIVIRUS INFECTION

Natalia O Kalinina¹, Jane Shaw², Daria Rakitina¹, Michael Taliansky²

¹A.N. Belozersky Institute of Physico-Chemical Biology, Moscow State University, Russia, ²Scottish Crop Research Institute, Dundee DD2 5DA

VI-PO33-2

SPECIFIC MUTATIONS ON COAT PROTEIN OF BAMBOO MOSAIC VIRUS SIMULTANEOUSLY DECREASE THE PROTEIN'S INTERACTION WITH THE HELICASE-LIKE DOMAIN OF THE VIRAL REPLICASE AND RESTRICT THE VIRAL CELL-TO-CELL MOVEMENT

Menghsiao Meng, Cheng-Cheng Lee, Yuan-Ning Ho, Yu-Ting Yen, Rei-Hsing Hu

Graduate Institute of Biotechnology, National Chung Hsing University, Taiwan

VI-PO33-3

CUCUMBER MOSAIC VIRUS EFFICIENTLY ESTABLISHES SYSTEMIC INFECTION BY SUPPRESSING INHIBITION IN XYLEM PARENCHYMA IN TOBACCO STEMS

Sachika Nishimura, Tomofumi Mochizuki, Satoshi T Ohki

Graduate School of Life and Environmental Science, Osaka Prefecture University, Japan

VI-PO33-4

SPATIAL EFFECTS OF THE 2B PROTEIN OF CUCUMBER MOSAIC VIRUS (CMV) ON VIRAL SPREAD IN INFECTION DYNAMICS

Minoru Takeshita¹, Emiko Koizumi¹, Makiko Noguchi¹, Kae Sueda², Hanako Shimura², Noriko Ishikawa³, Hideyuki Matsuura², Tomohide Natsuaki⁴, Kazusato Ohshima⁵, Shigeru Kuwata⁶, Naruto Furuya¹, Kenichi Tsuchiya¹, Chikara Masuta²

¹Agriculture, Kyushu University, Japan, ²Hokkaido University, ³Shizuoka University, ⁴Utsunomiya University, ⁵Saga University, ⁶Meiji University

VI-PO33-5

INVOLVEMENT OF SINGLE NUCLEOTIDE SUBSTITUTION IN REPLICASE GENES AND 5'- AND 3'- UNTRANSLATED REGIONS OF PAPRIKA MILD MOTTLE VIRUS JAPANESE STRAIN IN VIRUS MOVEMENT IN TOMATO PLANTS

Hirofumi Mizumoto, Kentaro Kimura, Akinori Kiba, Yasufumi Hikichi

Laboratory of Plant Pathology and Biotechnology, Kochi University, Japan

VI-PO33-6

PHOSPHORYLATION OF BAMV COAT PROTEIN BY PROTEIN KINASE CK2 NEGATIVELY REGULATES RNA BINDING AND AFFECTS VIRUS REPLICATION AND CELL-TO-CELL MOVEMENT

Chien-Jen Hung¹, Chung-Chi Hu¹, Na-Sheng Lin²,
Yau-Heiu Hsu¹

¹Graduate Institute of Biotechnology, National Chung Hsing University, Taiwan, ²Institute of Plant and Microbial Biology, Academia Sinica, Taipei

VI-PO33-7

A RAB-GTPASE ACTIVATION PROTEIN FROM NICOTIANA BENTHAMIANA IS INVOLVED IN THE MOVEMENT OF BAMBOO MOSAIC VIRUS

Ying-Ping Huang, Jao-Shien Chen, Yau-Heiu Hsu,
Ching-Hsiu Tsai

Graduate Institute of Biotechnology, National Chung Hsing University, Taiwan

VI-PO33-8

CHARACTERIZATION OF VIRAL FACTOR(S) REQUIRED FOR DIFFERENT SYMPTOM EXPRESSION IN *CHENOPODIUM QUINOA* BETWEEN *TOMATO BUSHY STUNT VIRUS* AND *GRAPEVINE ALGERIAN LATENT VIRUS*

Semin Kim¹, Hyeok-Geun Lee¹, Wonkyong Cho¹,
Seong-Han Sohn², Kook-Hyung Kim¹

¹Department of Agricultural Biotechnology, Seoul National University, Korea, South, ²National Academy of Agricultural Science, Rural Development Administration

VI-PO33-9

CHLOROPLASTIC GLYCERALDEHYDE 3-PHOSPHATE DEHYDROGENASE OF NICOTIANA BENTHAMIANA PLAYS A POSITIVE ROLE IN CELL-TO-CELL MOVEMENT OF RED CLOVER NECROTIC MOSAIC VIRUS

Masanori Kaido¹, Kazutomo Abe¹, Takako Taniguchi²,
Hisaaki Taniguchi², Kazuyuki Mise¹, Tetsuro Okuno¹

¹Graduate School of Agriculture, Kyoto University, Japan, ²Institute for Enzyme Research, The University of Tokushima

VI-PO15 Plant Virus-Vector Interactions

Tuesday, 13 September

VI-PO15-1

PLANT-MEDIATED INTERACTIONS BETWEEN *TOMATO SPOTTED WILT VIRUS* (TSWV) AND ITS INSECT VECTOR, *FRANKLINIELLA OCCIDENTALIS*

Dorith Rotenberg¹, Punya Nachappa¹, Anna E Whitfield¹,
David C Margolies², James R Nechols²

¹Department of Plant Pathology, Kansas State University, USA, ²Department of Entomology, Kansas State University

VI-PO5 Vaccines

Tuesday, 13 September

VI-PO5-1

COMPARISON OF WHITE SPOT SYNDROME VIRUS INACTIVATION BY ELECTRON BEAM AND FORMALIN

Farahnaz Motamedi^{1,3}, Mohamad Afsharnasab²,
Marzeih Heidareih¹, Vahid Yeganeh²,
Mohamad Hadi Razavi^{1,3}, Mahmood Tahami¹

¹Agriculture, Agricultural, Medical and Industrial Research School, Iran, ²Iran Fisheries Research Institute, ³Tarbiat Modares University

VI-PO5-2

PROTECTIVE EFFECT OF A PEPTIDE-BASED CTL VACCINE AGAINST INFLUENZA A VIRUS IN HLA-A*2402 HUMAN IMMUNITY MODEL

Toru Ichihashi, Kiichi Kajino

Hokkaido University Research Center for Zoonosis Control, Japan

VI-PO5-3

PROTECTION OF PIGS BY IMMUNIZATION WITH HUMAN ADENOVIRUS TYPE 5 RECOMBINANT VIRUS EXPRESSING THE E2 GLYCOPROTEIN OF CLASSICAL SWINE FEVER VIRUS

Chia-Yi Chang^{1,2}, Ming-Chung Deng¹, Yeou-Liang Huang¹,
Yeou-Liang Lin¹, Chin-Cheng Huang¹, Fun-In Wang²

¹Division of Hog Cholera, Animal Health Research Institute, Taiwan, ²School of Veterinary Medicine, National Taiwan University

VI-PO5-4

ASURVEY STUDY FOR THE VACCINATION PROGRAMS USED IN SOME BROILERS AND LAYERS FARMS IN NINEVEH PROVINCE

Fanar A Ishak

Microbiology, Assistant Prof., Iraq

VI-PO5-5

A NEW STRATEGY FOR PRODUCING VIRUS-LIKE PARTICLES WITH BACAM BACULOVIRUS SYSTEM

Xianchun Tang^{1,2}, Hairong Lu², Ted M Ross^{1,2}

¹Department of Microbiology and Molecular Genetics, University of Pittsburgh, USA, ²Center for Vaccine Research, University of Pittsburgh

VI-PO5-6

GENETIC STABILITY OF A LASSA VACCINE CANDIDATE (ML29) IN VACCINATED ANIMALS

Juan C Zapata¹, Gabriel Bedoya¹, Marco Goicochea²,
Joseph Bryant², David C Pauza², Lisa Sadzewicz³, Luke Tallon³,
Garry Myers³, Claire Fraser-Liggett³, Igor Lukashevich²,
Maria S Salvato²

¹Natural Sciences Department, University of Antioquia-Medellin-Colombia, Colombia, ²Institute of Human Virology-School of Medicine-University of Maryland-Baltimore-USA, ³The Institute for Genome Sciences-University of Maryland-Baltimore

VI-PO5-7

MASSIVELY PARALLEL SEQUENCING FOR ANALYSIS OF VIRAL QUASISPECIES AND MONITORING GENETIC CONSISTENCY OF LIVE VIRAL VACCINE

Konstantin Chumakov, Alexander Neverov

Office of Vaccines Research and Review, FDA Center for Biologics Evaluation and Research, USA

VI-PO5-8

ENHANCED PROTECTION IN C57BL/6 MICE IMMUNIZED WITH A SERUM-FREE VERO CELL-DERIVED JAPANESE ENCEPHALITIS VACCINE COMBINED WITH ADVAX™ ADJUVANT IS ASSOCIATED WITH INCREASED VIRUS-STIMULATED SPLENOCYTE IL-17 PRODUCTIONHiroko Toriniwa¹, Mario Lobigs², Nikolai Petrovsky³, Tomoyoshi Komiya¹¹The Kitasato Institute, Japan, ²The Australian National University,³Flinders Medical Centre/Flinders University

VI-PO5-9

STABLE EXPRESSION OF FOREIGN GENE IN NONESSENTIAL REGIONS OF NONSTRUCTURAL PROTEIN 2 (NSP2) OF PORCINE REPRODUCTIVE AND RESPIRATORY SYNDROME VIRUS

Guangzhi Tong, Yanzhao Xu, Yanjun Zhou, Shanrui Zhang, Yaxin Wang, Ling Li, Wu Tong, Jianping Zhu, Yifeng Jiang, Huanhuan Liu

Shanghai Veterinary Research Institute, China

VI-PO5-10

NEW VACCINES AGAINST FOOT-AND-MOUTH-DISEASE VIRUS: FROM CRYSTALLOGRAPHY TO IMMUNOLOGYClaudine Porta^{1,2}, Abhay Kotecha², Alison Burman¹, Veronica Carr¹, Ian M Jones³, Terry Jackson¹, Jinshan Ren², Elizabeth E Fry², David I Stuart², Bryan Charleston¹¹Institute for Animal Health, UK, ²Division of Structural Biology, The Wellcome Trust Centre for Human Genetics, ³School of Biological Sciences, University of Reading

VI-PO5-11

Withdrawn

VI-PO5-12

INTRANASAL IMMUNIZATION WITH FORMALIN INACTIVATED INFLUENZA A WHOLE-VIRION VACCINE ALONE INDUCES SUFFICIENT CROSS-PROTECTION, CORRELATING WITH CROSS-REACTIVE NEUTRALIZING ANTIBODY PRODUCTIONShigefumi Okamoto¹, Hiroshi Yamada¹, Sumiko Matsuoka¹, Ahmad M Haredy^{1,2}, Takeshi Tanimoto³, Yasuyuki Gomi³, Toyokazu Ishikawa³, Mitsuru Akashi⁴, Yoshinobu Okuno³, Yasuko Mori^{1,5}, Koichi Yamanishi⁶¹Laboratory of Virology and Vaccinology, National Institute of Biomedical Innovation, Japan, ²Department of Biotechnology, Osaka University Graduate School of Engineering, ³Kanorji Institute, The Research Foundation for Microbial Diseases of Osaka University, ⁴Department of Applied Chemistry, Osaka University Graduate School of Engineering, ⁵Department of Microbiology and Infectious Diseases, Kobe University Graduate School of Medicine, ⁶National Institute of Biomedical Innovation

VI-PO5-13

Withdrawn

VI-PO5-14

COMPARISON OF POTENCY OF WHOLE VIRUS PARTICLE AND ETHER SPLIT PANDEMIC INFLUENZA VACCINE PREPARED FROM A/SWINE/HOKKAIDO/2/1981 (H1N1)Masatoshi Okamatsu¹, Yoshihiro Sakoda¹, Takahiro Hiono¹, Naoki Yamamoto¹, Hiroshi Kida^{1,2}¹Laboratory of Microbiology, Department of Disease Control, Graduate School of Veterinary Medicine, Hokkaido University, Japan, ²Research Center for Zoonosis Control, Hokkaido University

VI-PO5-15

A STUDY FOR DEVELOPMENT OF A RECOMBINANT VARICELLA VACCINE EXPRESSING MUMPS VIRUS HEMMAGLUTININ-NEURAMINIDASE AND FUSION PROTEINSMasaaki Matsuura¹, Pranee Somboonthum¹, Megumi Ota¹, Yasuyuki Gomi², Michiaki Takahashi³, Koichi Yamanishi⁴, Yasuko Mori^{1,5}¹Laboratory of Virology and Vaccinology, National Institute of Biomedical Innovation, Japan, ²Kanorji Institute, the Research Foundation for Microbial Diseases of Osaka University, ³the Research Foundation for Microbial Diseases of Osaka University, ⁴National Institute of Biomedical Innovation, ⁵Division of Clinical Virology, Kobe University Graduate School of Medicine

VI-PO5-16

EVALUATION OF EXTRACELLULAR SUBVIRAL PARTICLES OF DENGUE TYPE 2 VIRUS PRODUCED BY INSECT CELLS FOR USE AS VACCINE AND DIAGNOSTIC ANTIGENSMiwa Kuwahara¹, Hideki Yamaji², Eiji Konishi^{1,3}¹Department of International Health, Kobe University Graduate School of Health Sciences, Japan, ²Department of Chemical Science and Engineering, Graduate School of Engineering, Kobe University, ³Division of Vaccinology, Center for Infectious Diseases, Kobe University Graduate School of Medicine

VI-PO5-17

EVALUATION OF LIVE ATTENUATED COLD ADAPTED (CA) PANDEMIC INFLUENZA VIRUS VACCINES IN AFRICAN GREEN MONKEYS (AGMS)Yumiko Matsuoka¹, Myeisha Paskel¹, Hong Jin², George Kamble², Kanta Subbarao¹¹NIH, USA, ²MedImmune

VI-PO5-18

NOVEL REPLIVAX® VACCINES AGAINST TICK-BORNE ENCEPHALITIS AND NON-FLAVIVIRUS PATHOGENSKonstantin Pugachev, Alexander Rumyantsev, Maryann Giel-Moloney, Ana Goncalvez, Qing-Sheng Gao, John Catalan, Yuxi Liu, Jeffrey Almond, Harold Kleanthous
Discovery-NA, Sanofi Pasteur, USA

VI-PO5-19

MOLECULAR MECHANISMS OF THE TEMPERATURE-SENSITIVE PHENOTYPE OF LIVE ATTENUATED JAPANESE RUBELLA VACCINES

Noriyuki Otsuki¹, Masafumi Sakata¹, Kiyoko Okamoto¹, Kaoru Fujii¹, Hitoshi Abo¹, Kazuhiko Kanou², Katsuhiro Komase¹, Makoto Takeda¹, Yoshio Mori¹

¹Department of Virology 3, National Institute of Infectious Diseases, Japan, ²Infectious Disease Surveillance Center, National Institute of Infectious Diseases

VI-PO5-20

A CUCUMBER MOSAIC VIRUS BASED EXPRESSION SYSTEM FOR THE PRODUCTION OF PORCINE CIRCOVIRUS SPECIFIC VACCINES

Ervin Balazs¹, Katalin Salanki², Tamas Tuboly³, Akos Gellert¹

¹Department of Applied Genomics, Agricultural Research Institute, Hungary, ²Agricultural Biotechnology Center, ³Szent Istvan University, Faculty of Veterinary Sciences

VI-PO5-21

A REPLICATION-INCOMPETENT VIRUS POSSESSING AN UNCLEAVABLE HA AS AN INFLUENZA VACCINE

Hiroaki Katsura¹, Kiyoko Iwatsuki-Horimoto¹, Satoshi Fukuyama², Shinji Watanabe², Saori Sakabe¹, Taisuke Horimoto¹, Yoshihiro Kawaoka^{1,2,3,4}

¹Division of Virology, Department of Microbiology and Immunology, The Institute of Medical Science, The University of Tokyo, Japan, ²ERATO Infectious-Induced Host Responses Project, ³Department of Special Pathogens, International Research Center for Infectious Disease, The Institute of Medical Science, The University of Tokyo, ⁴Department of Pathobiological Science, University of Wisconsin-Madison

VI-PO5-22

THE EVALUATION OF PEPTIDE-PULSED DENDRITIC CELL VACCINE IN HTLV-1-INFECTED RATS WITH WEAK T CELL RESPONSES AGAINST HTLV-1

Na Zeng¹, Atsuhiko Hasegawa¹, Yukiko Shimizu², Yotaro Tamai¹, Ayako Takamori¹, Amane Sasada¹, Mari Kannagi¹

¹Department of Immunotherapeutics, Tokyo Medical and Dental University, Japan, ²Department of Molecular Medical Science, Institute of Medical Science, St. University School of Medicine

VI-PO5-23

EFFICIENT PRODUCTION OF EXTRACELLULAR SUBVIRAL PARTICLES OF JAPANESE ENCEPHALITIS VIRUS BY RECOMBINANT INSECT CELLS

Hideki Yamaji¹, Takashi Nagasuga¹, Yusuke Takahashi¹, Masataka Nakamura¹, Tomohisa Katsuda¹, Miwa Kuwahara², Eiji Konishi^{2,3}

¹Department of Chemical Science and Engineering, Graduate School of Engineering, Kobe University, Japan, ²Department of International Health, Kobe University Graduate School of Health Sciences, ³Division of Vaccinology, Center for Infectious Diseases, Kobe University Graduate School of Medicine

VI-PO5-24

ADAPTATION MUTATION GLU345-LYS OF INFECTIOUS CDNA CLONE-DERIVED DENGUE TYPE 4 VACCINE VIRUS IN MRC-5 CELLS

Hsiang-Chi Lee¹, Hung-Ju Hsiao¹, Hsiao-Han Lin¹, Suh-Chin Wu^{1,2}

¹Institute of Biotechnology, National Tsing Hua University, Taiwan, ²Vaccine Research and Development Center, National Health Research Institutes

VI-PO5-25

MULTISEROTYPE PROTECTION ELICITED BY A COMBINATORIAL PRIME-BOOST VACCINATION STRATEGY AGAINST BTV

Javier Ortego¹, Eva Calvo-Pinilla¹, Nicolas Navasa², Juan Anguita²

¹CISA-INIA, Spain, ²University of Massachusetts

VI-PO5-26

AIK-C MEASLES VACCINE EXPRESSING FUSION PROTEIN OF RESPIRATORY SYNCYTIAL VIRUS INDUCES PROTECTIVE ANTIBODIES IN COTTON RATS

Akihito Sawada¹, Katsuhiro Komase², Tetsuo Nakayama¹

¹Laboratory of Viral Infection I, Kitasato Institute for Life Science, Kitasato University, Japan, ²Department of Virology III, National Institute of Infectious Diseases

VI-PO5-27

IRE5-CONTAINING VENEZUELAN EQUINE ENCEPHALITIS VIRUS IS AN EFFICACIOUS VACCINE CANDIDATE

Shannan L Rossi, Naomi A Forrester, Rodion Gorchakov, Scott C Weaver

Pathology, University of Texas Medical Branch- Galveston, USA

VI-PO5-28

COMPARING THE IMMUNOGENICITY OF RECOMBINANT H1 HEMAGGLUTININ (HA) PROTEIN AND BROMELAIN-CLEAVED HA FOR ANTISERUM PRODUCTION

Amorsolo L Suguitan, Weijia Wang, Hong Jin

Research, Medimmune, USA

VI-PO5-29

SYNTHETIC ANTIGEN VEHICLE SF-10 ADJUVANT, MIMICKING HUMAN PULMONARY SURFACTANT, FOR EFFECTIVE INTRANASAL FLU VACCINE

Dai Mizuno, Takashi Kimoto, Tsunetomo Takei, Takuya Kunimi, Shinji Ono, Wakako Shinahara, Hiroshi Kido
The Division of Enzyme Chemistry, Institute for Enzyme Research, The University of Tokushima, Japan

VI-PO5-30

MOLECULAR CHARACTERIZATION OF ROTAVIRUS STRAINS DETECTED DURING A CLINICAL TRIAL OF A HUMAN ROTAVIRUS VACCINE IN BLANTYRE, MALAWI

Toyoko Nakagomi¹, Osamu Nakagomi^{1,2}, Winifred Dove², Yen H Doan¹, Desiree Witte^{2,3}, Bagrey Ngwira⁴, Stacy Todd², A D Steele⁴, Kathleen M Neuzil⁴, Htay H Han⁵, Nigel A Cunliffe²

¹Department of Molecular Microbiology and Immunology, Nagasaki University, Japan, ²University of Liverpool, ³University of Malawi, ⁴PATH, ⁵GlaxoSmithKline Biologicals

VI-PO5-31

IMMUNOGENICITY OF LC16M8D VACCINIA PRIME/ SENDAI VIRUS VECTOR BOOST TARGETING THE ENVELOPE GLYCOPROTEIN OF HIV-1 AND CONTRIBUTION OF CD40LM

Tomoyoshi Sobue¹, Shun-Ichi Makino¹, Xianfeng Zhang¹, Takashi Ohashi¹, Kazunori Kato², Tatsuo Shioda³, Makoto Inoue⁴, Mamoru Hasegawa⁴, Hisatoshi Shida¹

¹Division of Molecular Virology, Institute for Genetic Medicine, Hokkaido University, Japan, ²Department of Immunology, Juntendo University, School of Medicine, ³Research Institute for Microbial Diseases, Osaka University, ⁴DNAVEC Corporation

VI-PO5-32

CO-DELIVERY OF TLR2 LIGAND AND LONG PEPTIDE INHIBITS HPV ASSOCIATED CANCER

Shih-Jen Liu^{1,2}, Kuan-Yin Shen^{2,3}, Yi-Hua Chen¹, Ying-Chyi Song¹, Sheng-Kuo Chiang¹, Hsin-Yu Liu¹, Pele Chong^{1,2}

¹Vaccine R&D Center, National Health Research Institutes, Taiwan, ²Graduate Institute of Immunology, China Medical University, ³Graduate Institute of Life Sciences of National Defense Medical Center

VI-PO5-33

INTRANASAL ADMINISTRATION OF 2009/10 ANNUAL INFLUENZA VACCINE INDUCE THE CROSS-PROTECTION AGAINST 2009 PANDEMIC INFLUENZA VIRUS INFECTION

Akira Aina^{1,2}, Ryo Ito^{2,3}, Hideki Asanuma¹, Tadaki Suzuki², Takeshi Tanimoto⁴, Takato Odagiri¹, Shin-Ichi Tamura², Tetsutaro Sata², Masato Tashiro¹, Hideki Hasegawa^{1,2}

¹Influenza Virus Research Center, National Institute of Infectious Diseases, Japan, ²Department of Pathology, National Institute of Infectious Diseases, ³Biological Science & Technology, Tokyo University of Science, ⁴The Research Foundation for Microbial Diseases of Osaka University

VI-PO5-34

INFLUENZA SPECIFIC IGA PRODUCING SERUM MEMORY B CELLS CORRELATE TO PROTECTIVE ANTIBODIES IN THE SERUM AS WELL AS LOCAL IGA RESPONSES

Elly van Riet¹, Akira Aina^{1,2}, Ryo Ito¹, Tadaki Suzuki², Shin-Ichi Tamura², Masato Tashiro¹, Hideki Hasegawa^{1,2}

¹Influenza Virus Research Center, National Institute of Infectious Diseases, Japan, ²Department of Pathology, National Institute of Infectious Diseases

VI-PO5-35

ANALYSIS OF THE IMMUNE RESPONSES AFTER INTRANASAL BOOSTER INFLUENZA VACCINE WITH HETEROLOGOUS VIRUS PRIMING

Ryo Ito¹, Akira Aina^{1,2}, Hideki Asanuma², Tadaki Suzuki¹, Joe Chiba³, Shin-Ichi Tamura¹, Masato Tashiro², Tetsutaro Sata¹, Hideki Hasegawa^{1,2}

¹Department of Pathology, National Institute of Infectious Diseases, Japan, ²Influenza Virus Research Center, National Institute of Infectious Diseases, ³Department of Biological Science and Technology, Tokyo University of Science

VI-PO5-36

POTENCY OF AN INACTIVATED AVIAN INFLUENZA VACCINE PREPARED FROM A NON-PATHOGENIC H5N1 VIRUS AGAINST THE CHALLENGE WITH AN ANTIGENICALLY DRIFTED HIGHLY PATHOGENIC AVIAN INFLUENZA VIRUS OF CLADE 2.3.4

Shintaro Shichinohe¹, Yoshihiro Sakoda¹, Naoki Yamamoto¹, Masatoshi Okamatsu¹, Yu Noda², Yuka Nomoto³, Takashi Honda², Yoshiyasu Takigawa³, Hiroshi Kida^{1,4}

¹Laboratory of Microbiology, Department of Disease Control, Graduate School of Veterinary Medicine, Hokkaido University, Japan, ²The Chemo-Sero-Therapeutic Research Institute, ³Research center for Biologicals, The Kitasato Institute, ⁴Research Center for Zoonosis Control, Hokkaido University

VI-PO5-37

CROSS-REACTIVITY OF HUMAN SERUM ANTIBODIES ELICITED BY TRIVALENT INFLUENZA VACCINE FOR 2010/11 SEASON AGAINST INFLUENZA A/H3N2 AND B VIRUSES ISOLATED IN EMBRYONATED EGGS AND MDCK CELLS

Noriko Kishida¹, Hong Xu¹, Hiromi Sugawara¹, Reiko Ito¹, Teruko Doi¹, Emi Takashita¹, Seiichi Fujisaki¹, Miho Ejima¹, Namhee Kim¹, Reiko Saito², Hideyuki Ikematsu³, Masato Tashiro¹, Takato Odagiri¹

¹Influenza Virus Research Center, National Institute of Infectious Diseases, Japan, ²Department of Public Health, Niigata University School of Medicine, ³Center for Advanced Medical Innovation, Kyusyu University

VI-PO5-38

APPLICATION OF VARICELLA-ZOSTER VIRUS AS A POLYVALENT LIVE VACCINE VECTOR

Pranee Somboonthum¹, Masaaki Matsuura^{1,4}, Megumi Ota^{1,2}, Shigefumi Okamoto¹, Yasuyuki Gomi⁴, Michiaki Takahashi⁵, Koichi Yamanishi³, Yasuko Mori^{1,2}

¹Virology and Vaccinology, National Institute of Biomedical Innovation, Japan, ²Clinical Virology, Kobe University Graduate School of Medicine, ³National Institute of Biomedical Innovation, ⁴Kanoni Institute, The Research Foundation for Microbial Diseases of Osaka University, ⁵The Research Foundation of Microbial Diseases of Osaka University

VI-PO5-39

PROTECTION OF MICE FROM LETHAL H5N1 HPAI INFECTION VIA THE NEUTRALIZING ANTIBODY-INDEPENDENT MECHANISM

Keisuke Munekata¹, Fumihiko Yasui¹, Yoshihiro Sakoda², Hiroshi Kida², Michinori Kohara¹

¹Department of Microbiology & Cell Biology, The Tokyo Metropolitan Institute Medical Science, Japan, ²Department of Disease Control, Graduate School of Veterinary Medicine, Hokkaido University

VI-PO5-40

DEVELOPMENT OF A UNIVERSAL INFLUENZA H5N1 VACCINE BASED ON THE NEUTRALIZING EPITOPES OF HEMAGGLUTININ

Prabakaran Mookkan, Jimmy Kwang

Animal Health Biotechnology, Temasek Lifesciences Laboratory, Singapore

VI-PO5-41

A NOVEL NA-DOMINANT VLP VACCINE ELICITED A BROAD-SPECTRUM CROSS-PROTECTIVE IMMUNITY AGAINST HOMOLOGOUS AND HETEROLOGOUS INFLUENZA VIRUSES

Chia-Ying Wu¹, Yi-Chun Yeh¹, Yu-Chih Yang¹, Ming-Tsan Liu², Ho-Sheng Wu², Jia-Tsong Chan³, Pei-Wen Hsiao¹

¹Agricultural Biotechnology Research Center, Academia Sinica, Taiwan,

²Center for Disease Control, Department of Health, ³Genomics Research Center, Academia Sinica

VI-PO5-42

SAFE AND HIGHLY EFFECTIVE VACCINE FOR PIG NIPAH VIRUS INFECTION USING RECOMBINANT PSEUDORABIES VIRUS

Misako Yoneda¹, Rie Mogi¹, Daichi Soda¹, Fusako Ikeda¹, Miho Ishii¹, Yasushi Kawaguchi², Hiroki Sato¹, Chieko Kai^{1,2}

¹Animal Research Center, The Institute of Medical Science, The University of Tokyo, Japan, ²International Research Center for Infectious Disease, The Institute of Medical Science, The University of Tokyo

VI-PO5-43

APPLICABILITY OF PLAQUE-CLONING METHOD TO A PREVENTION AGAINST GENETIC ALTERATION OF INFLUENZA VACCINE-SEED

Kazuya Nakamura, Yuichi Harada, Hitoshi Takahashi, Itsuki Hamamoto, Masato Tashiro, Norio Yamamoto

Center for Influenza Virus Research, National Institute of Infectious Diseases, Japan

VI-PO5-44

DEVELOPMENT OF A NOVEL PLATFORM FOR CTL-BASED INFLUENZA VACCINE USING VIRUS-LIKE PARTICLES OF SIMIAN VIRUS 40

Masaaki Kawano¹, Tatsuya Suda², Toshitaka Akatsuka², Hiroshi Handa³, Masanori Matsui²

¹Molecular and Cellular Biology, Saitama Medical University, Japan,

²Microbiology, Saitama Medical University, ³Solutions Research Laboratory, Tokyo Institute of Technology

VI-PO5-45

KINETICS OF ANTIBODY RESPONSES DURING INFLUENZA VACCINATION AMONG ELDERLY PERSONS LIVING IN THE COMMUNITY

Uraivan Kositanont¹, Prasert Assantachai², Chantapong Wasi¹, Pilaipan Puthavatana¹, Rungnirand Praditsuwan³

¹Microbiology, Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand, ²Preventive and Social Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University, ³Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University

VI-PO5-46

DEVELOPMENT OF ORAL VACCINE AGAINST AVIAN INFLUENZA USING TRANSGENIC POTATO

Yukihiro Miyoshi¹, Naomi Himeno¹, Kentaro Susa¹, Toru Gotanda¹, Yoshihiro Sakoda², Masatoshi Okamatsu², Saya Kuribayashi², Masayuki Motoshima², Hiroshi Kida², Atsuko Itakura³, Yuji Kikuchi³, Noriko Itchoda⁴, Yasushi Tasaka⁵, Shin-Ichiro Joh⁵, Akira Ito⁵, Takeshi Matsumura⁵

¹Research and Development Division, Research Center for Biologicals, The Kitasato Institute, Japan, ²Graduate School of Veterinary Medicine, Hokkaido University, ³Faculty of Pharmacy, Iwaki Meisei University, ⁴Hokkaido Green-Bio Institute, ⁵Bioproduction Research Institute, National Institute of Advanced Industrial Science and Technology

VI-PO5-47

A SINGLE IMMUNIZATION WITH HIGHLY ATTENUATED VACCINIA VIRUS DIS-BASED VACCINES INDUCE PROTECTIVE IMMUNITY AGAINST H5N1 AVIAN INFLUENZA VIRUS IN MICE

Sumiko Gomi¹, Satoshi Naganawa¹, Fumihiko Yasui¹, Keisuke Munekata¹, Koji Ishii², Yoshihiro Sakoda³, Hiroshi Kida³, Michinori Kohara¹

¹Department of Microbiology & Cell Biology, Tokyo Metropolitan Organization for Medical Research, Japan, ²Department of Virology II, National Institute of Infectious Diseases, ³Department of Disease Control, Graduate School of Veterinary Medicine, Hokkaido University

VI-PO5-48

SEROPREVALENCE AND ANTIBODY RESPONSES AGAINST 2009 PANDEMIC INFLUENZA H1N1 BEFORE AND AFTER THE VACCINATION AMONG SCHOOLCHILDREN IN TAIWAN

Zheng-Rong Tiger Li¹, Pui-I Ho¹, Hsiu-Pin Lin¹, Chuan-Liang Kao², Chwan-Chuen King¹

¹Institute of Epidemiology and Preventive Medicine, National Taiwan University, Taiwan, ²Department of Clinical Laboratory Sciences and Medical Biotechnology, National Taiwan University

VI-PO5-49

MOLECULAR DETERMANTS OF HIGH-GROWTH INFLUENZA H5N1 VACCINE VIRUS IN VERO CELLS

Pei-Yu Huang, Mei-Liang Huang, Wei-Zhou Yeh, Min-Shi Lee
Infectious Diseases Division, Taiwan National Health Research Institutes, Taiwan

VI-PO5-50

A MICROCARRIER-BASED VERO CELL CULTURE SYSTEM FOR PRODUCTION OF INFLUENZA H5N1 VACCINE

Wei-Zhou Yeh, Pei-Yu Huang, Mei-Liang Huang, Min-Shi Lee
Division of Infectious Diseases, National Health Research Institutes, Taiwan

VI-PO5-51

COMPARISON OF REACTOGENICITY IN HEALTHY INDIVIDUALS AND COPD PATIENTS WITH INJECTION OF INTRADERMAL AND INTRAMUSCULAR INFLUENZA VACCINATION

Tasneeya Suthamsmai¹, Uraiwan Kositanont², Benjamas Chuaychoo³, Prasert Auewarakul⁴, Arth Nana⁵, Khunnanta Maranetra⁶, Prasert Thongcharoen⁷

¹Department of Medicine, Siriraj Hospital, Mahidol University, Division of Respiratory Diseases, Thailand, ²Department of Microbiology, Faculty of Medicine Siriraj Hospital, Mahidol University, Division of Respiratory Diseases, ³Department of Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University, Division of Respiratory Diseases, ⁴Department of Microbiology, Faculty of Medicine Siriraj Hospital, Mahidol University, Division of Respiratory Diseases, ⁵Department of Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University, Division of Respiratory Diseases, ⁶Department of Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University, Division of Respiratory Diseases, ⁷Department of Microbiology, Faculty of Medicine Siriraj Hospital, Mahidol University, Division of Respiratory Diseases

VI-PO5-52

INTRANASAL ADMINISTRATION OF AN INACTIVATED WHOLE-VIRION INFLUENZA VACCINE EFFECTIVELY INDUCES THE NEUTRALIZING ANTIBODIES BOTH IN THE SERUM AND THE NASAL WASH IN HUMAN

Hideki Hasegawa¹, Akira Aina^{1,2}, Elly van Riet², Tadaki Suzuki¹, Ryo Ito^{1,3}, Takeshi Tanimoto⁴, Takato Odagiri², Masato Tashiro², Tetsutaro Sata¹, Takeshi Kurata¹, Shin-Ichi Tamura¹

¹Department of Pathology, National Institute of Infectious Diseases, Japan, ²Influenza Virus Research Center, National Institute of Infectious Diseases, ³Department of Biological Science and Technology, Tokyo University of Science, ⁴The Research Foundation for Microbial Diseases of Osaka University

VI-PO5-53

GROWTH ABILITY OF REVERSE GENETICALLY GENERATED INFLUENZA A/H1N1PDM09 VIRUSES IN MDCK AND LLC-MK2 CELL LINES.

Yuichi Harada, Hiroshi Takahashi, Masayuki Shirakura, Eri Nobusawa, Norio Yamamoto, Kazuya Nakamura, Itsuki Hamamoto, Hideki Asanuma, Takato Odagiri, Masato Tashiro, Shigeyuki Itamura

Center for Influenza Virus Research, National Institute of Infectious Diseases, Japan

VI-PO5-54

CHLOROQUINE IMPROVES CROSS-PRIMING OF CD8+ T CELLS TO INACTIVATED INFLUENZA VIRUS

Maria Rita Castrucci¹, Bruno Garulli^{1,2}, Giuseppina Di Mario¹, Ester Sciaraffia¹

¹Dept. of Infectious, Parasitic and Immune-Mediated Diseases, Istituto Superiore di Sanità, Italy, ²Dept. of Biology and Biotechnology Charles Darwin, ³University of Rome "La Sapienza"

VI-PO5-55

COMPARISON OF ANTIGENIC STABILITY OF INFLUENZA VIRUSES AND VACCINES AMONG DIFFERENT VACCINE VIRUSES

Noriko Shimasaki, Hitoshi Takahashi, Shigeyuki Itamura, Masato Tashiro

Center for Influenza Virus Research, National Institute of Infectious Diseases, Japan

VI-PO5-56

COMPARISON OF INFLUENZA A/H1N1PDM09 VACCINE PRODUCTIONS IN EGGS VERSUS CELL CULTURES AND THE PROTECTIVE IMMUNE RESPONSES INDUCE IN MICE

Hideki Asanuma¹, Mina Nakauchi¹, Kayoko Sato¹, Eri Nobusawa¹, Akira Aina¹, Norio Yamamoto¹, Nami Konomi², Hideki Hasegawa³, Masato Tashiro¹

¹Center for Influenza Virus Research, National Institute of Infectious Diseases, Japan, ²Nihon University (Takahashi Hospital), ³Department of Pathology, National Institute of Infectious Diseases

VI-PO5-57

EFFICACY OF A PAN-FILOVIRUS VLP-BASED VACCINE IN NONHUMAN PRIMATES

M. Javad Aman¹, John Dye², Dana L Swenson¹, Sergey Shulenin¹, Jay Wells², Sina Bavari², Kelly L Warfield¹

¹Integrated Biotherapeutics, Inc., USA, ²US Army Medical Research Institute of Infectious Diseases

VI-PO19 Gene Therapy

Tuesday, 13 September

VI-PO19-1

PASSIVE IMMUNOTHERAPY AGAINST INFLUENZA VIRUS INFECTION USING THE EXPRESSION OF NEUTRALIZING ANTI-HEMAGGLUTININ MONOCLONAL ANTIBODIES FROM PLASMIDS BY HYDRODYNAMICS-BASED PROCEDURE

Tatsuya Yamazaki¹, Yasutomo Teshima¹, Daisuke Ninomiya¹, Maria Nagashima¹, Yuka Arai¹, Akira Fujimoto¹, Akira Aina², Hideki Hasegawa², Joe Chiba¹

¹Department of Biological Science and Technology, Tokyo University of Science, Japan, ²Influenza Virus Research Center, National Institute of Infectious Diseases

VI-PO19-2

GENERATION AND CHARACTERIZATION OF RECOMBINANT BORNA DISEASE VIRUS LACKING BOTH MATRIX AND ENVELOPE GLYCOPROTEIN

Kan Fujino^{1,2}, Takuji Daito^{1,2}, Masayuki Horie^{1,2}, Yusuke Matsumoto^{1,2}, Keizo Tomonaga²

¹Department of Virology, Research Institute for Microbial Diseases (BIKEN), Osaka University, Japan, ²Department of Viral Oncology, Institute for Virus Research, Kyoto University

Poster 2

Discussion time: 10:15-11:15 / Thursday, 15 September

VI-PO59 Phage

Thursday, 15 September

VI-PO59-1

BACTERIOPHGE ENHANCES IMMUNOSTIMULATORY FUNCTION OF DENDRITIC CELLS

Sun-Joong Kim, Bo Hyun Yoon, Jong Sung Lee, Hyo Ihl Chang

College of Life Sciences & Biotechnology, Korea University, Korea, South

VI-PO62 Fungal Viruses

Thursday, 15 September

VI-PO62-1

POSTTRANSLATIONAL PROCESSING OF MAGNAPORTHE ORYZAE CHRYSOVIRUS 1 (MOCV1) DEPENDING ON IN VITRO CULTURAL DURATION OF THE HOST FUNGUS

Syunichi Urayama, Tomoko Ohota, Nobuya Onozuka, Toshiyuki Fukuhara, Tsutomu Arie, Tohru Teraoka, Hiromitsu Moriyama

Tokyo University of Agriculture and Technology, Japan

VI-PO62-2

OCCURRENCE OF CHRYSOVIRUS-LIKE PARTICLES AND DSRNAS IN FUSARIUM OXYSPORUM F. SP. MELONIS

Abbas Sharzei¹, Zia Banihashemi², Keramatollah Izadpanah², Alireza Afsharifar², Zahra Mohandesy²

¹Department of Plant Protection, Marvdasht Branch, Islamic Azad University, Iran, ²Department of Plant Protection, College of Agriculture, Shiraz University

VI-PO62-3

SEGMENTED DOUBLE-STRANDED RNA MYCOVIRUSES CAUSING HYPOVIRULENCE TO THE HOST RICE BLAST FUNGUS

Hiromitsu Moriyama, Syunichi Urayama, Tomoko Ohta, Nobuya Onozuka, Hirofumi Sakoda, Aya Kanemaki, Tomoya Higashiura, Toshiyuki Fukuhara, Tsutomu Arie, Tohru Teraoka

Graduate School for Agriculture, Tokyo University of Agriculture and Technology, Japan

VI-PO62-4

IDENTIFICATION OF CONSERVED SEQUENCES, MOTIFS AND STRUCTURES BETWEEN PLANT ENDORNAVIRUSES

Ryo Okada¹, Eri Kiyota¹, Sead Sabanadzovic², Rodrigo A Valverde³, Marilyn J Roossinck⁴, Toshiyuki Fukuhara¹, Hiromitsu Moriyama¹

¹Faculty of Agriculture, Tokyo University of Agriculture and Technology, Japan, ²Department of Biochemistry, Molecular Biology, Entomology and Plant Pathology, Mississippi State University, ³Department of Plant Pathology & Crop Physiology, Louisiana State University Agricultural Center, ⁴Plant Biology Division, The Samuel Roberts Noble Foundation

VI-PO62-5

CHARACTERIZATION OF A NOVEL BIPARTITE DSRNA MYCOVIRUS, ROSELLINIA NECATRIX MEGABIRNAVIRUS 1 WITH POTENTIAL VIROCONTROL POTENTIAL ISOLATED FROM THE WHITE ROOT ROT FUNGUS

Lakha Salaipeth¹, Sotaro Chiba¹, Yu-Hsin Lin¹, Atsuko Sasaki², Satoko Kanamatsu², Nobuhiro Suzuki¹

¹Group of Plant Microbe Interactions, Institute of Plant and Resources, Japan, ²National Institute of Fruit Tree Science, National Agricultural Research Organization

VI-PO62-6

MYCOVIRUSES THAT INFECT PLANT PATHOGEN SCLEROTINIA SCLEROTIUM

Daohong Jiang¹, Xiao Yu¹, Huiquan Liu¹, Bo Li¹, Jiatao Xie¹, Xueqiong Xiao¹, Yanping Fu¹, Guoqing Li¹, Said A Ghabrial²

¹Plant Pathology, College of Plant Science and Technology, State Key Laboratory of Agricultural Microbiology, Huazhong Agricultural University, China, ²Department of Plant Pathology, University of Kentucky

VI-PO62-7

A NOVEL QUADRIPARTITE DSRNA VIRUS ISOLATED FROM A PHYTOPATHOGENIC FILAMENTOUS FUNGUS, ROSELLINIA NECATIRX

Yu-Hsin Lin¹, Sotaro Chiba¹, Akio Tani¹, Hideki Kondo¹, Atsuko Sasaki², Satoko Kanematsu², Nobuhiro Suzuki¹

¹Institute of Plant Science and Resources, Okayama University, Japan, ²National Institute of Fruit Tree Science, National Agricultural Research Organization

VI-PO43 Viroid and Satellite Viruses

Thursday, 15 September

VI-PO43-1

SPREAD OF GRAPEVINE VIROIDS AND GRAPVINE FANLEAF VIRUS IN IRAN

Mohammad Hajizadeh¹, Nemat Sokhandan Bashir¹, Beatriz Navarro², Seyed Abolghasem Mohammadi³, Hamed Doulati Baneh⁴, Francesco Di Serio², Giovanni Paolo Martelli⁵

¹Department of Plant Protection, University of Tabriz, Iran, ²Istituto di Virologia Vegetale del CNR, UOS Bari, ³Department of Agronomy and Plant Breeding, University of Tabriz, ⁴Department of Seed and Plant Breeding, Agricultural and Natural Resource Research Center of West Azerbaijan, ⁵Dipartimento di Protezione delle Piante e Microbiologia Applicata, Univeristà degli Studi and Istituto di Virologia Vegetale CNR

VI-PO43-2

BIOLOGICAL AND PHYSICAL PROPERTIES OF TOMATO CHLOROTIC DWARF VIROID ISOLATED IN JAPAN

Yosuke Matsushita¹, Shohei Matsuura², Tomio Usugi³, Reiko Kozuka⁴, Shinya Tsuda³

¹National Institute of Floricultural Science, Japan, ²Hiroshima Prefectural Technology Research Institute, ³National Agricultural Research Center, ⁴Chiba Prefectural Agriculture and Forestry Research Center

VI-PO43-3

POPULATION DIVERSITY OF GRAPEVINE VIROIDS IN CHINA

Dongmei Jiang^{1,2}, Shifang Li¹, Hongqing Wang³, Shan Peng¹, Rui Guo¹, Zujian Wu², Lianhui Xie²

¹State Key Laboratory of Biology of Plant Diseases and Insect Pests, Institute of Plant Protection (IPP), Chinese Academy of Agricultural Sciences (CAAS), China, ²Institute of Plant Virology, Fujian Agriculture and Forestry University, ³Department of Fruit Science, College of Agronomy and Biotechnology, China Agricultural University

VI-PO43-4

VIROIDS OF COLEVIROID IN CHINA AND INDIA

Shifang Li¹, Fanghong Fu², Dongmei Jiang^{1,3}, Hongqing Wang², Wanying Hou¹, Feng Li¹

¹State Key Laboratory of Biology of Plant Diseases and Insect Pests, Institute of Plant Protection (IPP), Chinese Academy of Agricultural Sciences (CAAS), China, ²Department of Fruit Science, College of Agronomy and Biotechnology, China Agricultural University, ³Institute of Plant Virology, Fujian Agriculture and Forestry University

VI-PO43-5

DETECTION OF COLEUS BLUMEI VIROID 6 (CBVD 6) FROM COLEUS IN JAPAN AND SEED TRANSMISSION OF CBVD 1 AND 6

Taro Tsushima¹, Teruo Sano²

¹The United Graduate School of Agricultural Sciences, Iwate University, Japan, ²Faculty of Agriculture and Life Science, Hirosaki University

VI-PO43-6

SPECIFIC ARGONAUTE PROTEINS FROM ARABIDOPSIS BIND SMALL RNAs DERIVED FROM POTATO SPINDLE TUBER VIROID

Ricardo Flores¹, Sofia Minoia¹, Beatriz Navarro², Francesco Di Serio²

¹Instituto de Biología Molecular Y Celular de Plantas (UPV-CSIC), Spain, ²Istituto di Virologia Vegetale (CNR)

VI-PO43-7

A VIRAL SATELLITE RNA TARGETS A CHLOROPHYLL BIOSYNTHESIS-RELATED GENE BY USING THE RNA SILENCING MACHINERY, INDUCING YELLOW MOSAICS ON NICOTIANA TABACUM

Hanako Shimura¹, Vitantonio Pantaleo², Takeaki Ishihara¹, Nobutoshi Myojo¹, Jun-Ichi Inaba¹, Kae Sueda¹, Jozsef Burgan², Chikara Masuta¹

¹Research Faculty of Agriculture, Hokkaido University, Japan, ²Istituto di Virologia Vegetale, CNR

VI-PO57 Plant DNA Viruses

Thursday, 15 September

VI-PO57-1

TOMATO LEAF CURL JAVA VIRUS V2 PROTEIN IS A SUPPRESSION OF POSTTRANSCRIPTIONAL GENE SILENCING, VIRULENCE AND HYPERSENSITIVE RESPONSE

Muhammad Shafiq Shahid^{1,2,3}, Paradeep Sharma¹, Keiko Natsuaki², Masato Ikegami¹

¹NODAI Research Institute, Pakistan, ²Department of Biosciences, COMSATS Institute of Information Technology, ³Department of International Agricultural Development, Tokyo University of Agriculture

VI-PO57-2

SUBCELLULAR LOCALIZATION OF V2 PROTEIN OF TOMATO LEAF CURL JAVA VIRUS BY USING GREEN FLUORESCENT PROTEIN AND YEAST HYBRID SYSTEM

Muhammad Shafiq Shahid^{1,2}, P Sharma³, R K Gaur⁴, M Ikegami¹

¹NODAI Research Institute, Tokyo University of Agriculture, Japan, ²Department of Biosciences, COMSATS Institute of Information Technology, ³Division of Crop Improvement, Directorate of Wheat Research, ⁴Mody Institute of Science and Technology

VI-PO57-3

ISOLATES OF BANANA BUNCHY TOP VIRUS IN WEST SUMATRA ARE IN THE PROPOSED THIRD "ASIAN-ISLANDS" SUBGROUP

Yuya Chiaki¹, Nasril Nasir², Henny Herwina², Akira Uemura¹, Tomohiro Fukumoto¹, Masayuki Nakamura¹, Hisashi Iwai¹

¹Faculty of Agriculture, Kagoshima University, Japan, ²Faculty of Mathematic and Natural Sciences, Andalas University

VI-PO57-4

INFECTIVITY AND PATHOGENICITY OF TOMATO YELLOW LEAF CURL VIRUS ASSOCIATING WITH AGERATUM YELLOW VEIN BETASATELLITE IN TOMATO RESISTANT CULTIVARS

Shigenori Ueda¹, Masatoshi Onuki², Hirotaka Yamaguchi³, Youichi Yamato¹

¹Kurume Research Station, National Agricultural Institute for Kyushu Okinawa Region, Japan, ²Koshi, National Agricultural Institute for Kyushu Okinawa Region, ³National Agricultural Institute of Vegetable and Tea Science

VI-PO57-5

BANANA INFECTING BADNAVIRUS: THEIR OCCURRENCE, DETECTION AND HETEROGENEITY ON MUSA GENOTYPES IN THE PHILIPPINES

Marita S Pinili¹, Keiko T Natsuaki¹, Teodora O Dizon², Olivia P Damasco²

¹Graduate School of Agriculture, Department of Agriculture Laboratory of Tropical Plant Protection, Tokyo University of Agriculture, Japan, ²Institute of Plant Breeding, University of the Philippines-Los Banos

VI-PO57-6

ROLE OF PTGS SUPPRESSORS OF TOMATO LEAF CURL NEW DELHI VIRUS DURING PATHOGENESIS

Saumik Basu, Supriya Chakraborty

School of Life Sciences, Jawaharlal Nehru University, India

VI-PO57-7

ROLE OF BETASATELLITES ASSOCIATED WITH MONO- AND BI-PARTITE BEGOMOVIRUSES AFFECTING TOMATO IN INDIA

Palaiyur N Sivalingam, Anupam Varma

Advanced Centre for Plant Virology, Scientist, India

VI-PO57-8

PRODUCTION OF POLYCLONAL ANTIBODIES AGAINST THE RECOMBINANT COAT PROTEIN OF TWO BUNCHY TOP VIRUSES

Christina Lora M Leyson, Vermando M Aquino

National Institute of Molecular Biology and Biotechnology, University of The Philippines Diliman, Philippines

VI-PO57-9

EUROPEAN NANOVIRUSES: IDENTIFICATION OF THREE NEW SPECIES AND NEW DNA COMPONENTS

Ioana Grigoras¹, Tatiana Timchenko¹, Bruno Gronenborn¹, Heinrich-Josef Vetten²

¹Institut des Sciences du Végétal, Centre National de la Recherche Scientifique, France, ²Julius Kühn Institute, Federal Research Centre for Cultivated Plants (JKI), Institute of Epidemiology and Pathogen Diagnostics

VI-PO49 Plant Virus Expression Vectors

Thursday, 15 September

VI-PO49-1

THE CUCUMBER MOSAIC VIRUS VECTOR CAN INDUCE THE INHERITABLE TRANSCRIPTIONAL GENE SILENCING TARGETED TO AN ENDOGENOUS GENE WITH PHENOTYPIC CHANGES IN *PETUNIA HYBRIDA*

Jun-Ichi Inaba, Akira Kanazawa, Hanako Shimura, Shungo Otagaki, Sayuri Tsukahara, Akihiko Matsuzawa, Bo Min Kim, Kazunori Goto, Chikara Masuta

Research Faculty of Agriculture, Hokkaido University, Japan

VI-PO49-2

USE OF APPLE LATENT SPHERICAL VIRUS VECTOR EXPRESSING THE *ARABIDOPSIS THALIANA FT* GENE FOR PROMOTION OF FLOWERING IN VARIOUS PLANT SPECIES

Noriko Yamagishi¹, Shintarou Sasaki¹, Kousuke Yamagata¹, Sadao Komori², Momoyo Nagase², Masato Wada³, Toshiya Yamamoto⁴, Nobuyuki Yoshikawa¹

¹Plant Pathology Laboratory, Faculty of Agriculture, Iwate University, Japan, ²Horticulture Laboratory, Faculty of Agriculture, Iwate University, ³Department of Apple Research, National Institute of Fruit Tree Science, ⁴National Institute of Fruit Tree Science

VI-PO46 Emerging Viruses in Vegetable and Fruit Crops

Thursday, 15 September

VI-PO46-1

EMERGING COMOVIRUSES OF CRUCIFER VEGETABLES IN TAIWAN

Yuh-Kun Chen¹, Yi-Shan Chang¹, Chin-Chu Wang¹, Huey-Jun Bau²

¹Plant Pathology, National Chung Hsing University, Taiwan, ²Biotechnology, Transworld University

VI-PO46-2

MOLECULAR CHARACTERIZATION OF SECOVIRIDAE AND POTEXVIRUS INFECTING YAMS (*DIOSCOREA* SPP)

Pierre-Yves Teycheney¹, Fabiola Anzala², Denis Filloux³, Rose-Marie Gomez², Philippe Roumagnac³, Claudie Pavis²

¹Bios, CIRAD-Bios, UMR AGAP, Amélioration Génétique et Adaptation des Plantes Méditerranéennes et Tropicales, Station de Neufchâteau, France, ²INRA, UR1321 ASTRO AgroSystèmes Tropicaux, Domaine Duclos, ³CIRAD-Bios, UMR BGPI Biologie et Génétique des Interactions Plantes-Parasites, TA A-54 / K, Campus International de Baillarguet

VI-PO46-3

USE OF APPLE LATENT SPHERICAL VIRUS VECTORS AS PLANT VIRUS VACCINES FOR THE CONTROL OF PLANT VIRUS DISEASES

Nobuyuki Yoshikawa¹, Akihiro Tamura¹, Takao Kato¹, Ayano Taki¹, Noriko Yamagishi¹, Masamichi Iosgai¹, Bo-Song Ryo², Masashi Fijunaga³, Yoshitaka Kosaka⁴, Tomohide Natsuaki⁵, Kaoru Hanada⁶

¹Faculty of Agriculture, Iwate University, Japan, ²Kyoto Biken Laboratories, INC, ³Nagano Vegetable and Ornamental Crops Experiment Station, ⁴Kyoto Prefectural Institute of Agricultural Biotechnology, ⁵Faculty of Agriculture, Utsunomiya University, ⁶National Agricultural Research Center, NARC

VI-PO46-4

PROMPT IDENTIFICATION OF ASIAN-TYPE AND EUROAMERICAN-TYPE TOSPOVIRUSES USING MONOCLONAL ANTIBODIES AGAINST THE COMMON EPITOPES OF NSS PROTEINS

Ya-Chi Kang^{1,2}, Wei-Ting Tsai¹, Chung-Hao Huang¹, Ju-Ting Li^{2,3}, Jung-Shu Weng², Shyi-Dong Yeh¹, Tsung-Chi Chen²

¹Department of Plant Pathology, National Chung Hsing University, Taiwan, ²Department of Biotechnology, Asia University, ³Division of Pesticide Application, Taiwan Agricultural Chemicals and Toxic Substances Research Institute

VI-PO60

Virus Ecology and Tropical Viral Diseases

Thursday, 15 September

VI-PO60-1

PREVALENCE OF JAPANESE ENCEPHALITIS VIRUS IN MOSQUITOES AND PIGLETS DURING 2009-2010 IN WUHAN, CHINA

Quan Hu¹, Ze-Rong Zhu¹, Wei-Feng Tang¹, Jing-Song Peng¹, Nobumichi Kobayashi²¹Institute for Communicable Disease Control and Prevention, Wuhan Centers for Disease Control and Prevention, China, ²Department of Hygiene, Sapporo Medical University School of Medicine

VI-PO60-2

DESCRIPTION OF A NEW TOMATO DISEASE CAUSED BY A NOVEL TYMOVIRUS IN BRAZIL

Tatsuya Nagata¹, Felipe C Guimaraes², Virginia C Oliveira¹, Elliot W Kitajima³, Renato O Resende¹, Alice K Inoue-Nagata⁴¹Biologia Celular, Universidade de Brasília, Brazil, ²Biologia, UniCEUB, ³Fitopatologia, ESALQ, USP, ⁴Embrapa-Horticulture

VI-PO60-3

SURVIVABILITY OF KOI HERPESVIRUS (KHV) AND A NEW APPROACH FOR DISINFECTION OF KHV IN FISH BREEDING EFFLUENT WATER USING ANTI-KHV BACTERIA

Natsuko Yoshida, Hisae Kasai, Mamoru Yoshimizu
Faculty of Fisheries Sciences, Hokkaido University, Japan

VI-PO53 Virus Evolution

Thursday, 15 September

VI-PO53-1

INTRACELLULAR REPLICATION DYNAMICS AND WITHIN HOST EVOLUTION OF HEPATITIS VIRUS TYPE C (HCV)

Jun Nakabayashi

Department of Evolutionary Studies of Biosystems, Graduate University for Advanced Studies, Japan

VI-PO53-2

EVIDENCES THAT RICE DWARF VIRUS ORIGINATES IN VECTOR INSECTS

Toshihiro Omura¹, Yingying Pu^{1,2}, Fusamichi Akita¹, Takumi Shimizu¹, Osamu Netsu¹, Nobuhiro Suzuki³, Tamaki Uehara-Ichiki¹, Taiyun Wei¹, Yi Li², Takahide Sasaya¹¹National Agricultural Research Center, Japan, ²Peking-Yale Joint Center for Plant Molecular Genetics and Agrobiotech. Natl. Lab. Protein Engineering and Plant Genetic Engineering, College of Life Sciences, Peking University, ³Okayama University

VI-PO53-3

TAIWANESE INFECTIOUS BRONCHITIS VIRUSES HAD UNDERGONE BOTH RECOMBINATION AND POSITIVE SELECTION IN NUCLEOCAPSID

Shu-Ming Kuo^{1,2}, Hsiao-Wei Kao², Ming-Hon Hou³, Ching-Ho Wang⁴, Hong-Lin Su²¹Research Center for Emerging Viral Infections, Chang Gung University, Taiwan, ²Department of Life Sciences, National Chung Hsing University, ³Institute of Genomics and Bioinformatics, National Chung Hsing University, ⁴Department of Veterinary Medicine, National Taiwan University

VI-PO53-4

BIO-GEOGRAPHICAL DIVERSITY OF WILD YAM PLANTS AND THEIR INFECTING VIRUSES IN JAPAN AND SOUTH KOREA

Shin-Ichi Fuji¹, Naoto Okayama¹, Yasunori Yoshida¹, Mizuki Inoue¹, Young-Jin Koh², Takeshi Toda¹, Hiromitsu Furuya¹¹Faculty of Bioresource Sciences, Akita Prefectural University, Japan, ²College of Life Science and Natural Resources, Suncheon National University

VI-PO53-5

ECOLOGY AND EVOLUTION OF INFLUENZA A VIRUSES CIRCULATING IN THE POPULATIONS OF WILD BIRDS IN KAZAKHSTAN (2002-2009)

Aidyn Kydyrmanov, Marat Sayatov, Kobey Karamendin, Kainar Zhumatov, Nailya Ishmukhametova, Saule Assanova, Klara Daulbaeva

Laboratory of Viral Ecology, Institute of Microbiology and Virology, Kazakhstan

VI-PO53-6

GENETIC HETEROGENEITY IN POINSETTIA MOSAIC VIRUS

Yukari Okano, Yusuke Takinami, Ryo Iwai, Kazuya Ishikawa, Chihiro Miura, Takuya Shiraishi, Yutaro Neriya, Kensaku Maejima, Shigetou Namba

Department of Agricultural and Environmental Biology, Graduate School of Agricultural and Life Sciences, The University of Tokyo, Japan

VI-PO53-7

COMPARISONS OF THE GENETIC STRUCTURE OF POPULATIONS OF TURNIP MOSAIC VIRUS IN CHINA AND VIETNAM

Huy Duc Nguyen¹, Hoa Thi Nhu Tran², Kazusato Ohshima³¹Department of Applied Biological Sciences, Faculty of Agriculture, Saga University, Japan, ²Department of Applied Biological Sciences, Faculty of Agriculture, Saga University, ³Department of Applied Biological Sciences, Faculty of Agriculture, Saga University

VI-PO53-8

THE GENETIC STRUCTURES OF POPULATIONS OF CAULIFLOWER MOSAIC VIRUS IN GREECE, IRAN, JAPAN AND TURKEY

Shirin Farzadfar¹, Ali Reza Golnaraghi², Ryosuke Yasaka³, Reza Pourrahim⁴, Savas Korkmaz⁵, Nikos Katis⁶, Hideki Takahashi⁷, Kazusato Ohshima⁸

¹Department of Applied Biological Sciences, Faculty of Agriculture, Saga University, Japan, ²Science and Research Branch, Islamic Azad University, ³Department of Applied Biological Sciences, Faculty of Agriculture, Saga University, ⁴Iranian Research Institute of Plant Protection (IRIPP), ⁵Faculty of Agriculture, Canakkale Onsekiz Mart University, ⁶Faculty of Agriculture, Aristotle University of Thessaloniki, ⁷Faculty of Agriculture, Tohoku University, ⁸Department of Applied Biological Sciences, Faculty of Agriculture, Saga University

VI-PO53-9

MOLECULAR DATING IN THE EVOLUTION OF VERTEBRATE POXVIRUSES

Igor V Babkin, Irina N Babkina

Department of Molecular Immunology, Institute of Chemical Biology and Fundamental Medicine SB RAS, Russia

VI-PO53-10

SYLVILAGUS, LEPUS AND ORYCTOLAGUS TRIM5ALPHA PRYSPRY-DOMAIN DIVERGENT PATTERN SUSTAINS ENDOGENOUS RETROVIRUSES AS EVOLUTIONARY FORCES ACTING ON LEPORID TRIM5ALPHA

Ana C Lemos de Matos^{1,2,3}, Dennis K Lanning³, Wessel van der Loo¹, Pedro J Esteves^{1,4}

¹Genetic Aspects of The Host-Parasite Interaction, CIBIO-Universidade do Porto, Portugal, ²Departamento de Zoologia e Antropologia, Faculdade de Ciencias, Universidade do Porto, ³Department of Microbiology and Immunology, Stritch School of Medicine, Loyola University Chicago, ⁴Centro de Investigacao em Tecnologias da Saude, IPSN, CESPU

VI-PO53-11

THE PRESENCE OF GENOTYPE MIXTURES IN CITRUS TRISTEZA VIRUS ISOLATES FROM CHINA REVEALED BY MULTIPLE MOLECULAR MARKERS

Ni Hong, Guanwei Wu, Song Pan, Guoping Wang

College of Plant Science and Technology, Huazhong Agricultural University, China

VI-PO53-12

GENETIC AND PATHOGENIC CHARACTERIZATION OF H9N2 INFLUENZA A VIRUSES

Lu Lu, Yuhai Bi, Jing Li, Lei Sun, Wenjun Liu

Center for Molecular Virology, CAS Key Laboratory of Pathogenic Microbiology and Immunology, Institute of Microbiology, Chinese Academy of Sciences, China

VI-PO53-13

VIRAL FACTORS LIMITING SYSTEMIC INFECTION BY SOIL-BORNE WHEAT MOSAIC VIRUS TO AMBIENT TEMPERATURES BELOW 20°C

Yukio Shirako¹, Yuan You¹, Dipak Sharma-Poudyal²

¹Asian Natural Environmental Science Center, University of Tokyo, Japan, ²Department of Plant Pathology, Washington State University

VI-PO53-14

EFFECT OF N-GLYCOSYLATION ON NATURAL SELECTION AT ANTIGENIC SITES OF HUMAN INFLUENZA A VIRUS (SUBTYPE H3N2) HEMAGGLUTININ

Yuki Kobayashi, Yoshiyuki Suzuki

Graduate School of Natural Sciences, Nagoya City University, Japan

VI-PO53-15

OUTBREAKS OF H5N1 SUBTYPE HIGHLY PATHOGENIC AVIAN INFLUENZA VIRUS (HPAIV) IN POULTRY DURING 2010-2011 IN JAPAN

Yuko Uchida¹, Masaji Mase¹, Nobuhiro Takemae¹, Hirokazu Hikono², Katsushi Kanehira¹, Yuichi Tagawa³, Takehiko Saito¹

¹National Institute of Animal Health, Research Team for Zoonotic Diseases, Japan, ²Research Team for Advanced Biologicals, ³Research Manager

VI-PO53-16

ACQUISITION OF HUMAN-TYPE RECEPTOR BINDING SPECIFICITY BY NEW H5N1 INFLUENZA VIRUS SUBLINEAGES DURING THEIR EMERGENCE IN BIRDS IN EGYPT

Yohei Watanabe¹, Madiha S Ibrahim², Hanny F Ellakany³, Norihito Kawashita⁴, Hiroaki Hiramatsu⁵, Nogluk Sriwilaijaroen⁶, Yasuo Suzuki⁷, Kazuyoshi Ikuta⁸

¹Department of Virology, Research Institute for Microbial Diseases, Osaka University, Japan, ²Department of Microbiology, Faculty of Veterinary Medicine, Alexandria University, ³Department of Microbiology, Faculty of Veterinary Medicine, Alexandria University, ⁴Graduate School of Pharmaceutical Sciences, Osaka University, ⁵Health Scientific Hills, College of Life and Health Sciences, Chubu University, ⁶Health Scientific Hills, College of Life and Health Sciences, Chubu University, ⁷Health Scientific Hills, College of Life and Health Sciences, Chubu University, ⁸Department of Virology, Research Institute for Microbial Diseases, Osaka University

VI-PO53-17

DYNAMICS OF SEQUENCE VARIATION IN ANTIGENIC DOMAINS AND GLYCOSYLATION SITES OF HEMAGGLUTININ OF HUMAN H3N2 INFLUENZA VIRUSES

Manabu Igarashi¹, Ayato Takada¹, Hiroshi Kida^{1,2,3,4}, Kimihito Ito^{1,5}

¹Hokkaido University Research Center for Zoonosis Control, Japan, ²Department of Disease Control, Graduate School of Veterinary Medicine, Hokkaido University, ³OIE Reference Laboratory for Highly Pathogenic Avian Influenza, ⁴SORST, Japan Science and Technology Agency (JST), ⁵PRESTO, Japan Science and Technology Agency (JST)

VI-PO53-18

EMERGING HEMAGGLUTININ AND NEURAMINIDASE MUTANTS OF 2009 PANDEMIC INFLUENZA A (H1N1) VIRUSES WITH INCREASING EPIDEMIOLOGICAL SIGNIFICANCE IN TAIPEI AND KAOSHUNG, TAIWAN, 2009-2010

Chuan-Liang Kao^{1,2,3}, Chu-Han Tsai², Kuan-Ying Chu², Shu-Fang Chuang², Ta-Chien Chan¹, Chang-Jiunn Lee¹, Luan-Yin Chang⁴, Yea-Huei Shen⁵, Li-Min Huang⁴, Ping-Ing Lee⁴, Chwan-Chuen King¹

¹Institute of Epidemiology and Preventive Medicine, National Taiwan University, Taiwan, ²Dept. of Clinical Laboratory Sciences & Medical Biotechnology, NTU, ³Dept. of Laboratory Medicine, NTU Hospital, ⁴Dept. of Pediatrics, NTU Hospital, ⁵Dept. of Internal Medicine, Yuan's General Hospital

VI-PO53-19

POLYMERASE SUBUNIT COMPATIBILITY IS A KEY FACTOR IN THE REGULATION OF REASSORTMENT BETWEEN SWINE-ORIGIN H1N1 AND CONTEMPORARY H5N1 AND H1N1 INFLUENZA VIRUSES

Cassio P Octaviani¹, Makoto Ozawa^{2,4}, Shinya Yamada¹, Hideo Goto¹, Yoshihiro Kawaoka^{1,2,3,4}

¹Division of Virology, Department of Microbiology and Immunology, Institute of Medical Science, The University of Tokyo, Japan, ²Department of Special Pathogens, International Research Center for Infectious Diseases, Institute of Medical Science, The University of Tokyo, ³ERATO Infection-Induced Host Responses Project, Japan Science and Technology Agency, ⁴Influenza Research Institute, Department of Pathobiological Sciences, School of Veterinary Medicine, University of Wisconsin-Madison

VI-PO53-20

DEEP-SEQUENCING ANALYSIS - A NEW TOOL FOR STUDYING PLANT VIRAL EVOLUTION

Rosineide Souza Richards¹, Ian P Adams², Rachel H Glover², Adrian Fox², Neil Boonham², Matthew Dickinson¹

¹School of Biosciences, Plant and Crop Sciences Division, University of Nottingham, Sutton Bonington Campus, UK, ²The Food and Environment Research Agency

VI-PO53-21

MOLECULAR EVOLUTION OF INFLUENZA A VIRUS NUCLEOPROTEIN GENES IN TAIWAN

Hsin-Fu Liu^{1,2}, Jih-Hui Lin^{2,3}, Shu-Chun Chiu³, Ju-Chien Cheng⁴, Hui-Wen Chang³, Kuang-Liang Hsiao², Yung-Cheng Lin², Marco Salemi⁵

¹Department of Medical Research, Mackay Memorial Hospital Taipei, Taiwan, ²Institute of Bioscience and Biotechnology, National Taiwan Ocean University, ³Center for Research and Diagnostics, Centers for Disease Control, ⁴Department of Medical Laboratory Science and Biotechnology, China Medical University, ⁵Department of Pathology, Immunology and Laboratory Medicine, College of Medicine & Emerging Pathogens Institute, University of Florida

VI-PO53-22

STUDY ON THE EVOLUTION OF HIV-1 ENVELOPE GENE IN THAI PATIENTS

Masanori Kameoka^{1,2}, Samatchaya Boonchawalit¹, Duangrat Jullaksorn³, Jiraporn Uttiyoung⁴, Amara Yowang⁴, Nongkran Krathong⁵, Sununta Chautrakul⁵, Kazuyoshi Ikuta², Amornsak Roobsoong⁵, Sangkom Kanitvittaya⁴, Pathom Sawanpanyalert³

¹Thailand-Japan Research Collaboration Center On Emerging and Re-Emerging Infections (RCC-ERI), Thailand, ²Research Institute for Microbial Diseases, Osaka University, ³National Institute of Health, Department of Medical Sciences (DMSc), Ministry of Public Health (MOPH), ⁴Regional Medical Science Center Chiangrai, DMSc, MOPH, ⁵Mae-Soay Hospital

VI-PO53-23

IDENTIFICATION OF A NOVEL KOALA ENDOGENOUS RETROVIRUS

Shigeki Hoshino, Takuji Ohata, Takayuki Shojima, Takayuki Miyazawa

Institute for Virus, Kyoto University, Japan

VI-PO53-24

CODON USAGE AND EVOLUTIONARY RELATEDNESS OF PLANT AND FUNGAL PARTITIVIRUSES

Noemi Lukacs¹, Anita Szego¹, Zsolt Albert¹, Marta Ladanyi², Alexandra Galyasi¹

¹Dept. Plant Physiology and Plant Biochemistry, Corvinus University of Budapest, Faculty of Horticultural Sciences, Hungary, ²Corvinus University of Budapest, Faculty of Horticultural Sciences, Dept. Mathematics and Informatics

VI-PO53-25

BIOCHEMICAL IMPACT OF THE HOST ADAPTATION ASSOCIATED PB2 E627K MUTATION ON THE TEMPERATURE-DEPENDENT RNA SYNTHESIS KINETICS OF INFLUENZA A VIRUS POLYMERASE COMPLEX

Shilpa Aggarwal, Baek Kim

University of Rochester, USA

VI-PO53-26

HLA-ASSOCIATED VIRAL POLYMORPHISM IN CHRONICALLY HIV-1-INFECTED JAPANESE COHORT

Takayuki Chikata¹, Masao Hashimoto¹, Yoshiko Tamura¹, Takuya Naruto¹, Mohamed Ali Borghan^{1,3}, Hiroyuki Gatanaga^{1,2}, Shinichi Oka^{1,2}, Masafumi Takiguchi¹

¹Center for AIDS Research, Kumamoto University, Japan, ²AIDS Clinical Center, International Medical Center of Japan, ³Department of Biological Sciences, College of Arts and Sciences, University of Nizwa

VI-PO53-27

HETEROGENEITY OF APPLE CHLOROTIC LEAF SPOT VIRUS ISOLATES ORIGINATED IN LATVIA AND UKRAINE

Neda Pupola¹, Alina Gospodaryk²

¹Laboratory of Plant Pathology, Latvia State Institute of Fruit-Growing, Latvia, ²National Taras Shevchenko University of Kyiv, Educational and Scientific Centre Institute of Biology

VI-PO52 Emerging Viruses

Thursday, 15 September

VI-PO52-1

CARDIOMYOPATHY SYNDROME OF ATLANTIC SALMON (*SALMO SALAR* L.) IS CAUSED BY A DSRNA VIRUS OF THE TOTIVIRIDAE FAMILY

Oyvind Haugland¹, Paal Nilsen², Aase B Mikalsen¹, Karine Lindmo², Beate J Thu¹, Trygve M Eliassen², Norbert Roos³, Marit Rode², Oystein Evensen¹

¹Department of Basic Sciences and Aquatic Medicine, Norwegian School of Veterinary Science, Norway, ²PHARMAQ AS, ³Department of Molecular Biosciences, University of Oslo

VI-PO52-2

THE PSAP LATE DOMAIN OF THE NUCLEOPROTEIN NP CONTRIBUTES TO TSG101 RECRUITMENT AND TO THE RELEASE OF INFECTIOUS MARBURG VIRUS

Olga Dolnik, Dirk Becker, Larissa Kolesnikova, Stephan Becker

Virology, Philipps University Marburg, Germany

VI-PO52-3

Withdrawn

VI-PO52-4

CANINE PARVOVIRUS-2C: AN EMERGING VIRUS OF DOGS IN THE UNITED STATES OF AMERICA

Sanjay Kapil

OADDL, Center for Veterinary Health Sciences, USA

VI-PO52-5

EQUINE HERPESVIRUS 1 SPECIFIC ANTIBODY SERONEGATIVITY IS A SIGNIFICANT RISK FACTOR FOR DEVELOPING MYELOENCEPHALITIS

Michael J Studdert, Kemperly Dynon, Charles El-Hage, Garry A Anderson, Carol A Hartley

School of Veterinary Science, The University of Melbourne, Australia

VI-PO52-6

DETECTABILITY OF POTYVIRUSES BY TWO PAIRS OF DEGENERATE PRIMERS

Nemat Sokhandan Bashir, Aisan Ghasemzadeh, Reza Khakvar

Plant Protection, The University of Tabriz, Iran

VI-PO52-7

PENETRATION OF HPAI H5N1 2.3.2 GENOTYPE INTO THE SOUTH EASTERN PART OF NORTHERN EURASIA (2008 - 2010)

Dmitri K Lvov¹, Michail Yu Shchelkanov¹, Nikolai A Vlasov², Irina T Fedyakina¹, Alexei G Prilipov¹, Dmitri N Lvov¹, Eugeni I Samokhvalov¹, Sergei V Alkhovsky¹, Irina V Galkina¹, Elena S Proshina², Valeria A Aristova¹, Tatyana N Morozova¹, Petr G Deryabin¹, Alexei D Zaberezhny¹, Tatyana V Grebennikova¹, Taras I Aliper¹, David L Suarez³

¹D.I.Ivanovski Institute of Virology, Ministry of Health and Social Development, Russia, ²Federal Service for Veterinary and Phytosanitary Surveillance, Ministry of Agriculture, ³South East Poultry Research Laboratory

VI-PO52-8

INFECTIVITY OF XMRV TO HUMAN BLOOD CELLS

Rika A Furuta, Kazuta Yasui, Ayumu Kuroishi

Department of Research, Japanese Red Cross Osaka Blood Center, Japan

VI-PO52-9

VACCINATION AND HOMOTYPIC IMMUNITY RESTRAINS EMERGENCE POTENTIAL OF SYLVATIC DENGUE VIRUS TYPE 4 IN THE URBAN TRANSMISSION CYCLE

Nikos Vasilakis¹, Anna P Durbin², Sandra V Mayer¹, Shannan L Rossi¹, Josephina Duran-Bedolla³, Jose Ramos-Castaneda³, Eng Eong Ooi⁴, Jane Cardoso⁵, Jorge L Munoz-Jordan⁶, Robert B Tesh¹, Scott C Weaver¹

¹Pathology and Center for Biodefense and Emerging Infectious Diseases, University of Texas Medical Branch, USA, ²Center for Immunization Research, Department of International Health, Johns Hopkins Bloomberg School of Public Health, ³Centro de Investigaciones sobre Enfermedades Infecciosas, Instituto Nacional de Salud Publica, ⁴Emerging Infectious Diseases, Duke/National University, ⁵Institute of Health and Community Medicine, Universiti Malaysia Sarawak, ⁶Molecular Virology and Surveillance Laboratory, Centers for Disease Control and Prevention

VI-PO52-10

SEQUENCE COMPARISON OF DIFFERENT ISOLATES OF TOMATO YELLOW FRUIT RING VIRUS FROM SOYBEANS, A NEW EMERGING TOSPOVIRUS IN IRAN

Alireza Golnaraghi¹, Reza Pourrahim², Shirin Farzadfar², Kazusato Ohshima³

¹Department of Plant Protection, College of Agriculture and Natural Resources, Science and Research Branch, Islamic Azad University, Iran, ²Department of Plant Virology, Iranian Research Institute of Plant Protection, ³Laboratory of Plant Virology, Saga University

VI-PO52-11

PREVALENCE OF ARCTIC-LIKE RABIES IN BANGLADESH

Takashi Matsumoto¹, Kamruddin Ahmed², Moazzem Hossain³, Khondoker Mahabuba Jamil⁴, Mohammad Azmat Ali⁵, Sohrab Hossain⁶, Shakawet Hossain⁵, Aminul Islam⁵, Nasir Uddin⁵, Akira Nishizono^{1,2}

¹Department of Microbiology, Faculty of Medicine, Oita University, Japan, ²Research Promotion Project, Oita University, ³Ministry of Health and Family Welfare, ⁴Institute of Epidemiology, Diseases Control and Research, ⁵Dhaka City Corporation, ⁶Tongi Municipality

VI-PO52-12

EMERGENCE OF DENGUE IN KATHMANDU, NEPAL

Basu Dev Pandey^{1,2}, Yogendra Shah², Kishor Pandey², Takeshi Nabeshima³, Ichiro Kurane⁴, Kouichi Morita³

¹Medicine, Sukra Raj Tropical and Infectious Diseases Hospital, Nepal, ²Everest International Clinic and Research Center, ³Department of Virology, Institute of Tropical medicine, Nagasaki University, ⁴National Institute of Infectious Diseases

VI-PO52-13

VIROLOGICAL SURVEY OF MORBILLIVIRUS INFECTION IN CASPIAN SEALS

Aidyn Kydyrmanov¹, Kobey Karamendin¹, Susan Wilson², Mirgaliy Baimukanov³, Yermukhammet Kassymbekov¹, Simon Goodman⁴

¹Institute of Microbiology and Virology, Kazakhstan, ²Tara Seal Research Project, ³Institute of Hydrobiology and Ecology, ⁴Institute of Integrative & Comparative Biology, University of Leeds

VI-PO52-14

DETECTION OF PORCINE PICOBIRNAVIRUSES IN JAPAN

Mitsutaka Wakuda¹, Hiroshi Tsunemitsu², Ayako Miyazaki², Tomihiko Ide¹, Junichi Ishii³, Koki Taniguchi¹

¹Department of Virology and Parasitology, Fujita Health University School of Medicine, Japan, ²Research Team for Viral Diseases, National Institute of Animal Health, ³Department of Joint Research Laboratory of Clinical Medicine, Fujita Health University School of Medicine

VI-PO52-15

CHARACTERIZATION OF HUMAN DENGUE VIRUS ISOLATES FROM PATIENTS EXPERIENCING VARIOUS DEGREES OF DENGUE ILLNESS

Anne Tuiskunen^{1,2,3}, Philippe Buchy⁴, Isabelle Leparac-Goffart³, Åke Lundkvist¹

¹Analysis and Prevention, Swedish Institute for Communicable Disease Control, Sweden, ²Department of Microbiology Tumor and Cell Biology (MTC), Karolinska Institutet, ³Unité de virologie tropicale, IRBA, Antenne de Marseille, Institut de Médecine Tropicale du Service de Santé des Armées, ⁴Institute Pasteur in Cambodia

VI-PO52-16

HUMAN PARECHOVIRUS INFECTION IN CENTRAL NERVOUS SYSTEM RELATED DISEASES AND SEPSIS IN CHILDREN IN SHANGHAI, CHINA

Jin Xu, Huaqing Zhong, Liyun Su, Linfeng Cao, Yi Yang
Pediatric Institute of Children's Hospital, Fudan University, China

VI-PO52-17

THE AETIOLOGY OF HAND, FOOT AND MOUTH DISEASE IN WESTERN AUSTRALIA AND THE NORTHERN TERRITORY, 2007-2010

David T Williams^{1,2}, Avram Levy¹, Simon Williams¹, David Speers¹

¹Division of Microbiology and Infectious Diseases, PathWest Laboratory Medicine WA, Australia, ²School of Biomedical Sciences, Curtin University

VI-PO52-18

GLOBAL EMERGENCE OF THREATENING BEGOMOVIRUSES

Anupam Varma, Bikash Mandal, Manoj K Singh
Advanced Centre for Plant Virology, Adjunct Professor, India

VI-PO52-19

FIRST REPORT OF HEPATITIS E VIRUS INFECTION (GENOTYPE 3) IN COLOMBIA, SOUTH AMERICA

Maria-Cristina Navas¹, Julio C Rendon¹, Maria C Hoyos¹, Maria M Velasquez¹, Fabian Cortes-Mancer¹, Gonzalo Correa^{1,2}, Maria E Sepulveda^{1,2}, Nora L Yepes^{1,2}, Francisco J Diaz³, Maria P Arbelaez⁴, Sergio Jaramillo²

¹Grupo de Gastrohepatología, Universidad de Antioquia, Colombia, ²Hospital Pablo Tobon Uribe, ³Grupo de Inmunovirología, Universidad de Antioquia, ⁴Grupo de Epidemiología, Universidad de Antioquia

VI-PO52-20

GENETIC DIVERSITY OF THOTTAPALAYAM VIRUS, A HANTAVIRUS HARBORED BY THE ASIAN HOUSE SHREW (SUNCUS MURINUS) IN NEPAL

Richard Yanagihara¹, Hae Ji Kang¹, Michael Y Kosoy², Sanjaya K Shrestha³, Mrigendra P Shrestha³, Julie A Pavlin⁴, Robert V Gibbons⁵

¹University of Hawaii, USA, ²Centers for Disease Control and Prevention, ³Walter Reed-Armed Forces Research Institute of Medical Sciences Research Unit -Nepal, ⁴Uniformed Services University of the Health Sciences, ⁵Armed Forces Research Institute of Medical Sciences

VI-PO52-21

PROGRESSION OF PATHOGENIC EVENTS IN CYNOMOLGUS MACAQUES INFECTED WITH VARIOLA VIRUS

Victoria Wahl-Jensen¹, Jennifer A Cann¹, Kathleen H Rubins², John W Huggins³, Robert W Fisher³, Anthony J Johnson¹, Fabian de-Kok Mercado¹, Thomas Larsen³, JoLynne Raymond³, Lisa E Hensley³, Peter B Jahrling¹

¹Integrated Research Facility at Fort Detrick, National Institute of Allergy and Infectious Diseases, National Institutes of Health, USA, ²Whitehead Institute for Biomedical Research, Massachusetts Institute of Technology, ³United States Army Medical Research Institute of Infectious Diseases

VI-PO52-22

IMMUNE RESPONSES AGAINST EEV AND IMV IN NON-HUMAN PRIMATES INFECTED WITH MONKEYPOX VIRUS OR VACCINATED WITH A HIGHLY ATTENUATED SMALLPOX VACCINE LC16M8 AND PROTECTION FROM LETHAL MONKEYPOX

Masayuki Saijo¹, Yasushi Ami², Yuriko Suzuki², Noriyo Nagata³, Naoko Yoshikawa (Iwata)³, Hideki Hasegawa³, Shuetsu Fukushi¹, Tetsuya Mizutani¹, Tetsutaro Sata³, Ichiro Kurane¹, Shigeru Morikawa¹

¹Department of Virology 1, National Institute of Infectious Diseases, Japan, ²Laboratory of Animal Experimentation, National Institute of Infectious Diseases, ³Department of Pathology, National Institute of Infectious Diseases

VI-PO50 Virus Eradication

Thursday, 15 September

VI-PO50-1

MULTIPLE INDEPENDENT EMERGENCES OF RECOMBINANT TYPE 2 CIRCULATING VACCINE-DERIVED POLIOVIRUS LINEAGES DURING THE 2005--2010 OUTBREAK IN NORTHERN NIGERIA

Olen M Kew¹, Jing Shaw¹, Jaume Jorba¹, Jane Iber¹, David Bukbuk², Festus Adu³, Oyewale Tomori⁴, A. J Williams¹, Mark Pallansch¹, Cara C Burns¹

¹Division of Viral Diseases, Centers for Disease Control and Prevention, USA, ²National Polio Laboratory, University of Maiduguri, ³National Polio Laboratory, University of Ibadan, ⁴Redeemer's University

VI-PO50-2

ISOLATION AND IDENTIFICATION OF ENTEROVIRUSES FROM SEWAGE AND SEWAGE CONTAMINATED WATERS IN SOUTH-WESTERN NIGERIA

Temitope O C Faleye, Adekunle J Adeniji

Virology, University of Ibadan, Nigeria

VI-PO50-3

EFFICIENT ELIMINATION OF POLIOVIRUSES IN SEWAGE WATER AFTER ACTIVATED SLUDGE PROCESS, EVALUATED BY CELL CULTURE AND NEWLY DEVELOPED REAL-TIME PCR

Masae Iwai¹, Hiromu Yoshida², Mayumi Obara¹, Eiji Horimoto¹, Masatsugu Obuchi¹, Takeshi Kurata¹, Takenori Takizawa¹

¹Department of Virology, Toyama Institute of Health, Japan, ²National Institute of Infectious Diseases

VI-PO50-4

ANTI-INFLUENZA VIRUS ACTIVITY OF SILVER ZEOLITE (AGZ)

Yoko Yanagawa¹, Koji Tsukada², Keiko Shimizu³, Kohsuke Furuse⁴, Kazuo Tanaka¹

¹Microbiology and Immunology, Showa University School of Medicine, Japan, ²Biotechnology, Graduate School of Engineering, Osaka University, ³Nursing, Tokai University School of Health Science, ⁴Shimane University

VI-PO50-5

TARGETING TISSUE RESERVOIRS - ANTIRETROVIRAL THERAPY IN CHINESE RHESUS MACAQUES IN CHRONIC SIV INFECTION

Binhua Ling¹, Linda B Rogers¹, Mahesh Mohan¹, Andrew A Lackner¹, Michael Piatak², Jeffrey Lifson², Ronald S Veazey¹

¹Division of Comparative Pathology, Tulane National Primate Research Center, Tulane University, USA, ²SAIC-Frederick, Inc. National Cancer Institute, NIH

VI-PO50-6

STABILIZATION OF POLIOVIRUS ATTENUATION BY CODON DEOPTIMIZATION IS DRIVEN LARGELY BY DESUPPRESSION OF CPG AND UPA DINUCLEOTIDES WITHIN AND ACROSS SYNONYMOUS CAPSID REGION CODONS

Olen M Kew, Ray Campagnoli, Jing Shaw, Annelet Vincent, Jaume Jorba, Cara C Burns

Division of Viral Diseases, Centers for Disease Control and Prevention, USA

VI-PO50-7

SOLAR DISINFECTION (SODIS) OF WATER FOR INACTIVATION OF ENTERIC VIRUSES, AND ITS ENHANCEMENT BY RIBOFLAVIN

Mohammad Alotaibi, Wayne Heaselgrave

Dept. of Infection, Immunity and Inflammation, Medical Sciences Building, University of Leicester, Kuwait

VI-PO38 Viral Diagnosis

Thursday, 15 September

VI-PO38-1

USEFULNESS OF THE RAPID DETERMINATION SYSTEM OF VIRAL GENOME SEQUENCES IN HUMAN STOOL SPECIMENS

Masahiro Miyoshi, Shima Yoshizumi, Setsuko Ishida, Rika Komagome, Hideki Nagano, Shinichi Kudo, Motohiko Okano

Center for Infectious Diseases Control, Hokkaido Institute of Public Health, Japan

VI-PO38-2

DEVELOPMENT AND CLINICAL EVALUATION OF RAPID DIAGNOSTIC REAGENTS FOR MEASLES

Kei Numazaki

Division of International Infectious Diseases, International University of Health and Welfare Graduate School, Japan

VI-PO38-3

COMPARATIVE EVALUATION OF THE MAJOR CAPSID PROTEIN OF FIVE POLYOMAVIRUSES EXPRESSED IN PLASMID AND BACULOVIRUS BASED SYSTEMS IN INSECT CELLS AND THEIR APPLICATION IN SEROLOGICAL TESTS

Bahman Abedi Kiasari¹, Pamela J Vallely², Paul E Klapper^{2,3}

¹Human Viral Vaccine Department, Razi Vaccine & Serum Research Institute, Iran, ²Virology Department, School of Medicine, The University of Manchester, ³Clinical Virology, Manchester Medical Microbiology Partnership, Manchester Royal Infirmary

VI-PO38-4

RT-MULTIPLEX PCR FOR DETECTION OF DIARRHEAL VIRUSES

Hiroshi Ushijima^{1,3}, Pattara Khamrin², Ngan Thi Kim Pham³, Aksara Thongprachum³, Shoko Okitsu^{1,3}, Satoshi Hayakawa¹, Niwat Maneekarn²

¹Division of Microbiology, Department of Pathology and Microbiology, Nihon University School of Medicine, Japan, ²Department of Microbiology, Faculty of Medicine, Chiang Mai University, ³School of International Health, the University of Tokyo

VI-PO38-5

COMPETITIVE ELISA USING NEWLY DEVELOPED MONOCLONAL ANTIBODY AGAINST STRUCTURE PROTEIN OF WEST NILE VIRUS

Jiro Hirota, Shinya Shimizu

The Research Team for Advanced Biologicals, National Institute of Animal Health Japan, National Agriculture and Food Research Organization, Japan

VI-PO38-6

THE USE OF ESTABLISHED VIRUS SENSITIVE CELL LINES FACILITATES THE EFFECTIVE DIAGNOSIS OF WATERFOWL VIRUSES

Adam Balint¹, Renata Toth², Zsuzsa Veres², Ingo Jordan³, Zoltan Zadori²

¹Veterinary Diagnostic Directorate, Department of Virology, Central Agricultural Office, Hungary, ²Veterinary Medical Research Institute, Hungarian Academy of Sciences, ³ProBioGen AG

VI-PO38-7

DEVELOPMENT OF EASY AND SPEEDY DETECTION SYSTEM FOR NIPAH AND HENDRA VIRUS BY REVERSE TRANSCRIPTION SMART AMPLIFICATION PROCESS (RT-SMARTAMP)

Mutsumi Awano¹, Alexander Lezhava², Misako Yoneda¹, Yasumasa Kimura², Hiroki Satoh¹, Tomohisa Ishikawa², Yoshihide Hayashizaki², Chieko Kai¹

¹Laboratory Animal Research Center The Institute of Medical Science, The University of Tokyo, Japan, ²Omics research center, RIKEN Yokohama Institute

VI-PO38-8

THE MODERN METHODS OF INFLUENZA VIRUS DETECTION

Svetlana V Trushakova¹, A A Isakova², V T Ivanova¹, D D Abramov³, O A Raitman², V F Ivanov², V V Lavrisheva¹, N V Beliakova¹, E I Burtseva¹

¹D.I. Ivanovsky Research Institute of Virology, Russia, ²A.N. Frumkin Institute of Physical Chemistry and Electrochemistry, ³Institute of Immunology

VI-PO38-9

ETIOLOGY SPECTRUM OF INFANTILE ACUTE DIARRHEA IN BULGARIA

Zornitsa V Mladenova¹, Andrej Steyer², Adela Fratnik Steyer², Petar Petrov³, Tanja Tchervenjakova⁴, Neli Korsun¹

¹Department of Virology, National Center of Infectious and Parasitic Diseases, Bulgaria, ²University of Ljubljana, Faculty of Medicine, Institute of Microbiology and Immunology, ³Infectious Ward, University Hospital St. Anna, ⁴Infectious Wards, Specialized Hospital for Infectious and Parasitic Diseases Prof. Ivan Kirov

VI-PO38-10

SPECIFICITY AND SENSITIVITY OF THE DETECTION OF AN ORCHID-INFECTING RNA VIRUS BY REVERSE TRANSCRIPTION-LOOP MEDIATED ISOTHERMAL AMPLIFICATION ASSAY

Ming-Kuem Lin¹, Meng-Shiou Lee¹, Meng-Ja Yang¹, You-Cheng Hseu², Guan-Hua Lai¹, Wen-Te Chang¹, Yau-Heiu Hsu³

¹School of Chinese Pharmaceutical Sciences and Chinese Medicine Resources, China Medical University, Taiwan, ²Department of Cosmeceutics, College of Pharmacy, China Medical University, ³Graduate Institute of Biotechnology, National Chung Hsing University

VI-PO38-11

SENSITIVE DETECTION OF MULTIPLE HEPATITIS A VIRUS GENOTYPES WITH A SINGLE POLONY-BASED ASSAY

Haifeng Chen¹, Gary P Richards², Huijun Yan³, Xianghe Yan⁴, Chris A Elkins¹

¹Center for Food Safety and Applied Nutrition, U.S. Food and Drug Administration, USA, ²Agricultural Research Service, U.S. Department of Agriculture, Delaware State University, ³Department of Microbiology, Zhongshan School of Medicine, Sun Yet-Sen University, ⁴Agricultural Research Service, U.S. Department of Agriculture

VI-PO38-12

DEVELOPMENT AND EVALUATION OF A RAPID IMMUNOCHROMATOGRAPHIC TEST FOR THE DIRECT DETECTION OF RABIES VIRUS IN BRAIN SAMPLES FROM HUMANS AND ANIMALS

Kamruddin Ahmed¹, Omala Wimalaratne², Narapati Dahal³, Pakamat Khawplod⁴, Susilakanthi Nanayakkara², Karma Rinzin³, Devika Perera², Dushantha Karunanayake², Takashi Matsumoto⁵, Akira Nishizono⁵

¹Research Promotion Project, Oita University, Japan, ²Rabies Diagnostic Laboratory, Medical Research Institute, Ministry of Health, ³National Centre for Animal Health, Department of Livestock, Ministry of Agriculture, Royal Government of Bhutan, ⁴Queen Saobhaba Memorial Institute, ⁵Department of Microbiology, Faculty of Medicine, Oita University

VI-PO38-13

ELECTRIC CHARACTERIZATION OF HUMAN DNA HARBORING IMMUNODEFICIENCY VIRUS TYPE 1 AS A POSSIBLE CONFIRMATORY DIAGNOSTIC TEST

Jesus A Cabrera^{1,2}, Carlos A Andrade³, Carlos A Mendez³, Guillermo Bolanos³, Liliana Salazar³

¹Division of Persistent Oncogenic Viruses - Center for Chronic Viral Diseases, Kagoshima University, Japan, ²Research Group in Biochemistry-Genetic Studies, Chemistry Department - Narino University, ³Research Group in Physics of Low Temperatures - Cauca University

VI-PO38-14

DISCRIMINATION OF INFLUENZA VIRUS NUCLEOPROTEINS AMONG DIFFERENT SPECIES BY MONOCLONAL ANTIBODIES

Takashi Shirakawa, Yoshiaki Uchida, Nobuyuki Fujii, Katsutoshi Goishi, Kazuya Omi

FUJIREBIO Inc., Japan

VI-PO38-15

HIGH PREVALENCE OF NOROVIRUS AND ROTAVIRUS AS THE CAUSES OF ACUTE GASTROENTERITIS IN HOSPITALIZED CHILDREN IN SAO PAULO STATE, BRAZIL

Cibele D Ribeiro, Simone G Morillo, Adriana Luchs, Bethania C Vilanova, Maria do Carmo S. T Timenetsky, Rita de Cassia C Carmona

Enteric Disease Laboratory - Virology Center, Adolfo Lutz Institute, Brazil

VI-PO38-16

REVERSE TRANSCRIPTION-LOOP-MEDIATED ISOTHERMAL AMPLIFICATION ASSAY FOR RAPID DETECTION OF BLUETONGUE VIRUS AND EPIZOOTIC HEMORRHAGIC DISEASE VIRUS

Hiroaki Shirafuji¹, Tohru Yanase¹, Tomoko Kato¹, Ken-Ichiro Kameyama², Hiroshi Iseki², Makoto Yamakawa¹

¹Kyushu Research Station, National Institute of Animal Health, Japan, ²Research Team for Viral Diseases, National Institute of Animal Health

VI-PO38-17

ESTABLISHMENT OF A CELL LINE STABLY EXPRESSING JAPANESE ENCEPHALITIS VIRUS PRM-E PROTEIN AND APPLICATION FOR IGM CAPTURE ELISA

Fuxun Yu, Kenta Okamoto, Kouichi Morita

Department of Virology, Institute of Tropical Medicine, Nagasaki University, Japan

VI-PO38-18

PERFORMANCE OF A RAPID STRIP TEST IN DETECTING RABIES VIRUS IN DOG SALIVA

Songsri Kasempimolporn, Wachiraporn Saengseesom, Samrerng Huadsakul, Supatsorn Boonchang, Visith Sitprijia
Queen Saovabha Memorial Institute (WHO Collaborating Center for Research on Rabies), Thai Red Cross Society, Thailand

VI-PO38-19

DETECTION OF JC POLYOMAVIRUS DNA IN CEREBROSPINAL FLUIDS COLLECTED FROM PATIENTS SUSPECTED AS HAVING PROGRESSIVE MULTIFOCAL LEUKOENCEPHALOPATHY IN JAPAN

Kazuo Nakamichi, Ichiro Kurane, Masayuki Saijo

Department of Virology 1, National Institute of Infectious Diseases, Japan

VI-PO38-20

QUANTIFYING AND GENOTYPING HEPATITIS C VIRUS BY REAL-TIME RT-PCR IN VIETNAM

Thuy Ha Le, Thuy Tt Ho, Toan B Nguyen, Nga M Cao, Van Tt Vu

Biotechnology, Quantifying and Genotyping Hepatitis C Virus by Real-Time RT-PCR in Vietnam, Vietnam

VI-PO38-21

DEVELOPMENT OF A LOOP-MEDIATED ISOTHERMAL AMPLIFICATION (LAMP) SYSTEM FOR DETECTION OF BOVINE VIRAL DIARRHEA VIRUS

Ken-Ichiro Kameyama¹, Misako Konishi¹, Hiroshi Iseki¹, Hiroaki Shirafuji², Makoto Yamakawa², Kenji Murakami¹

¹Research Team for Viral Diseases, National Institute of Animal Health, Japan, ²Kyushu Research Station, National Institute of Animal Health

VI-PO38-22

DETECTION OF NOVEL ASTROVIRUSES OF MLB AND VA FROM WASTEWATER IN JAPAN BY NEWLY DEVELOPED NESTED-RT-PCR

Akihiko Hata, Masaaki Kitajima, Hiroyuki Katayama

Department of Urban Engineering, Graduate School of Engineering, The University of Tokyo, Japan

VI-PO38-23

EFFICIENT DETECTION AND PHYLOGENETIC ANALYSIS OF GARLIC VIRUSES IN JAPAN

Naoto Yoshida¹, Hanako Shimura¹, Kazuo Yamashita², Shuichi Tabuchi³, Yoshihiko Shiga⁴, Masahiko Suzuki¹, Chikara Masuta¹

¹Graduate School of Agriculture, Hokkaido University, Japan, ²Vegetable Research Institute, Aomori Prefectural Industrial Technology Research Center, ³JA Tokoro, ⁴Hokkaido Agricultural Laboratory for Business Development

VI-PO38-24

QUANTITATIVE DETECTION OF THE 275H WILD-TYPE AND 275Y OSELTAMIVIR-RESISTANT INFLUENZA A/H1N1PDM09 VIRUSES BY A REAL-TIME DUPLEX RT-PCR ASSAY

Ikuyo Takayama¹, Shinichi Shimada², Mina Nakauchi¹, Toshitaka Minegishi², Masato Tashiro¹, Tsutomu Kageyama¹

¹Influenza Virus Research Center, National Institute of Infectious Diseases, Japan, ²Saitama Institute of Public Health

VI-PO38-25

COMPARISON OF MICRO-FOCI REDUCTION ASSAY WITH PLAQUE REDUCTION NEUTRALIZATION FOR DENGUE VIRUS NEUTRALIZATION ANTIBODY DETECTION

Shu-Fang Chuang¹, Chuan-Liang Kao^{1,2,3}, Day-Yu Chao⁴, Gwong-Jen J Chang⁵, Chwan-Chuen King¹

¹Department of Clinical Laboratory Sciences and Medical Biotechnology, National Taiwan University, Taiwan, ²Institute of Epidemiology and Preventive Medicine, College of Public Health, NTU, ³Dept. of Laboratory Medicine, NTU Hospital, ⁴Graduate Institute of Microbiology and Public Health, College of Veterinary Medicine, National Chung-Hsing University, ⁵Arboviral Diseases Branch, Division of Vector-Borne Infectious Diseases, Centers for Disease Control and Prevention, Public Health Service, U.S. Department of Health and Human Services

VI-PO38-26

APPLICATION OF PHAGE DISPLAY TECHNOLOGY FOR GENERATION OF SPECIFIC MONOCLONAL RECOMBINANT ANTIBODIES AGAINST WITCHES' BROOM DISEASE OF LIME (WBDL)

Mohammad Reza Safarnejad¹, Fatemeh Shahriyari^{1,2}, Masoud Shamsbakhsh²

¹Microbial Biotechnology & Biosafety, Agricultural Biotechnology Research Institute of Iran (ABRII), Iran, ²Plant Pathology Dept, Tarbiat Moddares University

VI-PO38-27

CLINICAL AND VIROLOGICAL STUDY OF HCV AND HBV COINFECTION IN INDONESIAN HIV PATIENTS

Nungki Anggorowati^{1,2}, Yoshihiko Yano^{1,3}, Didik Setyo Heriyanto^{1,2}, Hanggoro Tri Rinonce^{1,2}, Takako Utsumi³, Deshinta Putri Mulya⁴, Yanri Wijayanti Subronto⁴, Yoshitake Hayashi^{1,3}

¹Division of Infectious Disease Pathology, Kobe University Graduate School of Medicine, Japan, ²Department of Anatomical Pathology, Gadjah Mada University Faculty of Medicine, ³Center for Infectious Diseases, Kobe University Graduate School of Medicine, ⁴Department of Internal Medicine, Gadjah Mada University Faculty of Medicine

VI-PO38-28

RELATIVE ROLES AND IMPORTANCE OF DIFFERENT ENTERIC VIRUSES, DETERMINED BY MORE CONVENTIONAL VERSUS ENHANCED DETECTION METHODS, IN ACUTE DIARRHOEA REQUIRING HOSPITALISATION IN MALAYSIAN CHILDREN

Nassar Bg Rasool¹, Rosfiza B Zuki¹, Mohd N Aziz², Lily X Pang³

¹Institute of Biological Sciences, University of Malaya, Malaysia, ²Pathology Laboratory, Kuala Lumpur Hospital, ³Department of Laboratory Medicine and Pathology, University of Alberta

VI-PO38-29

DETECTION AND QUANTIFICATION OF CUCURBIT CHLOROTIC YELLOWS VIRUS BY SEROLOGICAL AND RT-PCR METHODS

Jun Ohnishi¹, Kenji Kubota², Tomio Usugi², Yasuhiro Tomitaka², Shinya Tsuda²

¹National Institute of Vegetable and Tea Science, Japan, ²National Agricultural Research Center

VI-PO38-30

THE BINDING SPECIFICITY OF HIV-1 TO SUGAR-CHAINS AND THE CONCENTRATION OF HIV-1 USING HEPARIN-IMMOBILIZED GOLD NANO-PARTICLES TOWARD THE DISCOVERY OF ANTI-HIV-1 EFFECTS OF SUGAR-CHAINS AND A SUPER HIGH SENSITIVE DIAGNOSIS

Mika Okamoto¹, Xu Zhang², Takayuki Hamazaki¹, Yousuke Nishi¹, Yasuo Suda², Masanori Baba¹

¹Graduate School of Medical and Dental Sciences, Kagoshima University, Japan, ²Department of Chemistry, Biothechnology and Chemical Engineering, Kagoshima University

VI-PO38-31

DEVELOPING A PANEL OF REVERSE-TRANSCRIPTION LOOP-MEDIATED ISOTHERMAL AMPLIFICATION (RT-LAMP) ASSAYS FOR COMPREHENSIVE DETECTION OF CAUSING VIRUSES IN PEDIATRIC SEVERE PNEUMONIA

Toru Kubo¹, Hidekazu Nishimura², Hiroyuki Moriuchi³, Kouichi Morita¹

¹Department of Virology, Institute of Tropical Medicine, Nagasaki University, Japan, ²Virus Research Center, Clinical Research Division, Sendai Medical Center, National Hospital Organization, ³Department of Molecular Microbiology and Immunology, Nagasaki University Graduate School of Biomedical Sciences

VI-PO38-32

GENETIC VARIATION IN INFLUENZA A (H1N1) 2009 VIRUS REDUCE THE EFFICACY OF DIAGNOSTIC METHOD

Kim-Yoong Puong, Sook-Yin Lui, Poi-Wah Kwek, Eng-Hong Seng, Kwai-Peng Chan

Department of Pathology, Singapore General Hospital, Singapore

VI-PO38-33

QUALITY ASSURANCE AND STANDARDIZATION OF VIRUS DIAGNOSTICS FOR TRANSFUSION TRANSMITTED INFECTIONS AND EMERGING VIRUS DISEASES

Heinz Zeichhardt^{1,2}, Vanessa Lindig¹, Hans-Peter Grunert^{1,2}

¹Institute of Virology, Charité Berlin, Campus Benjamin Franklin, Germany, ²INSTAND e.V.

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DETECTION AND MOLECULAR CHARACTERIZATION OF PORCINE TYPE 3 ORTHOREOVIRUSES CIRCULATING IN SOUTH KOREA

Hyung-Jun Kwon¹, Ha-Hyun Kim¹, Hyun-Jeong Kim², Jun-Gyu Park², Kyu-Yeol Son², Woo Song Lee¹, Kyoung-Oh Cho², Mun-Il Kang², Su-Jin Park¹

¹Korea Research Institute of Bioscience and Biotechnology, Korea, South, ²Biotherapy Human Resources Center, College of Veterinary Medicine, Chonnam National University

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Thursday, 15 September

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AN ANTIVIRAL COUNTER-STRATEGY - TURNING A FLAVIVIRUS' ARSENAL AGAINST ITSELF

Anthony Jin Shun Chua^{1,2}, Patricia A Netto¹,
Terence Tze Tong Tan¹, Mary Mah Lee Ng^{1,2}

¹Microbiology, National University of Singapore, Singapore, ²NUS Graduate School for Integrative Sciences and Engineering, National University of Singapore

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HYDROLYZABLE TANNINS (CHEBULAGIC ACID AND PUNICALAGIN) TARGET VIRAL GLYCOPROTEIN-GLYCOSAMINOGLYCAN INTERACTIONS TO INHIBIT HERPES SIMPLEX VIRUS TYPE 1 ENTRY AND CELL-TO-CELL SPREAD

Ting-Ying Chen¹, Liang-Tzung Lin², Chueh-Yao Chung³,
Ryan S Noyce², T. Bruce Grindley⁴, McCormick Craig²,
Ta-Chen Lin⁵, Guey-Horng Wang⁶, Chun-Ching Lin^{1,3},
Christopher D Richardson²

¹School of Pharmacy, College of Pharmacy, Kaohsiung Medical University, Taiwan, ²Department of Microbiology & Immunology, Dalhousie University, ³Graduate Institute of Natural Products, College of Pharmacy, Kaohsiung Medical University, ⁴Department of Chemistry, Dalhousie University, ⁵Graduate Institute of Pharmaceutical Science and Technology, Central Taiwan University of Sciences and Technology, ⁶Department of Cosmetic Science, Chia Nan University of Pharmacy and Science

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IMIQUIMOD SUPPRESSES PROPAGATION OF HERPES SIMPLEX VIRUS TYPE 1 INDEPENDENT TO TYPE I INTERFERON INDUCTION

Tamaki Okabayashi¹, Yuji Kan², Shin-Ichi Yokota¹,
Toshiharu Yamashita², Nobuhiro Fujii¹

¹Microbiology, Sapporo Medical University School of Medicine, Japan, ²Dermatology, Sapporo Medical University School of Medicine

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DEVELOPMENT OF THE COMPOUNDS INHIBITING RNASE H ENZYMATIC ACTIVITY OF HIV-1 REVERSE TRANSCRIPTASE

Hiroshi Yanagita¹, Tyuji Hoshino¹, Masakazu Ogata¹,
Emiko Urano², Reiko Ichikawa², Tsutomu Murakami²,
Jun Komano²

¹Pharmaceutical Science, Chiba University, Japan, ²AIDS Research Center, National Institute of Infectious Diseases

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ANTIVIRAL ACTIVITIES OF POLYPHENOL TYPE-A POLYMERS FROM CINNAMON: SPECIAL REFERENCES WITH FELINE CALICIVIRUSES (FCV) REPLICATION

Yoshiyuki Yoshinaka¹, Katsuhiko Nakayama²,
Takanari Tominaga², Atsusi Shimizu², Tadahito Shionoda³,
Shoji Yamaoka¹

¹Department of Molecular Microbiology, Graduate School of Tokyo Medical and Dental University, Japan, ²Raffinee International Co., Ltd., ³Asahi Godo Inc.

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INHIBITORY EFFECT OF MARINE NATURAL PRODUCTS ON THE REPLICATION OF HEPATITIS C VIRUS

Yuusuke Fujimoto, Atsuya Yamashita, Kohji Moriishi

Department of Microbiology, Faculty of Medicine, University of Yamanashi, Japan

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A STUDY OF OSELTAMIVIR RESISTANT INFLUENZA VIRUSES IN THAILAND, 2008-2010

Malinee Chittaganpitch¹, Sunthareeya Waicharoen¹,
Jiranana Warachitdesilva¹, Krongkaew Supawat¹,
Sirima Pattamadilok¹, Busarawan Sriwantana¹,
Sonja J Olsen², Passakorn Akrasewi³,
Pathom Sawanpanyalert¹

¹Department of Medical Sciences, Ministry of Public Health, National Institute of Health, Thailand, ²Influenza Division, Centers for Disease Control and Prevention and International Emerging Infectious Program Thailand MOPH - U.S. CDC Collaboration, ³Department of Disease Control, Bureau of Epidemiology

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CHEBULAGIC ACID AND PUNICALAGIN AS BROAD-SPECTRUM ENTRY INHIBITORS AGAINST MULTIPLE VIRAL INFECTIONS

Chueh-Yao Chung¹, Liang-Tzung Lin^{2,3}, Ting-Ying Chen⁴,
Ayham Al-Afif³, Ta-Chen Lin⁵, Guey-Horng Wang⁶,
Robert Anderson³, Chun-Ching Lin^{1,4},
Christopher D Richardson^{2,3}

¹Graduate Institute of Natural Products, College of Pharmacy, Kaohsiung Medical University, Taiwan, ²Pediatrics, IWK Health Centre, ³Department of Microbiology & Immunology, Dalhousie University, ⁴School of Pharmacy, College of Pharmacy, Kaohsiung Medical University, ⁵Graduate Institute of Pharmaceutical Science and Technology, Central Taiwan University of Sciences and Technology, ⁶Department of Cosmetic Science, Chia Nan University of Pharmacy and Science

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A COMBINATION OF POLYMORPHIC MUTATIONS IN V3 LOOP OF HIV-1 GP120 CAN CONFER NONCOMPETITIVE RESISTANCE TO MARAVIROC

Keisuke Yusa¹, Yuhze Yuan², Yosuke Maeda³,
Hiromi Terasawa³, Shinji Harada³

¹Division of Biological Chemistry & Biologicals, National Institute of Health Sciences, Japan, ²Institute of Blood Transfusion, Chinese Academy of Medical Sciences, ³Graduate School of Medical Sciences, Kumamoto University

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A COMBINATION THERAPY OF POLYETHYLENIMINE WITH LIPOSOMES AND CHITOSAN FOR HERPES SIMPLEX VIRUS INFECTION

Kenji Ishigaki¹, Yuta Nakazawa¹, Daisuke Aragane¹,
Kyoko Hayashi², Takashi Kai³, Yoshie Maitani¹

¹Fine Drug Targeting Research Laboratory, Institute of Medicinal Chemistry, Hoshi University, Japan, ²Graduate School of Medicine & Pharmaceutical Sciences for Research, University of Toyama, ³Nippon Shokubai Co. Ltd

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CHARACTERIZATION OF A HIGHLY CATIONIC POLYETHYLENIMINE IN HERPES SIMPLEX VIRUS TYPE 2 INFECTION

Kyoko Hayashi¹, Hiroki Onoue¹, Kohei Sasaki¹, Yosie Maitani², Takashi Kai³, Toshimitsu Hayashi¹

¹Graduate School of Medicine and Pharmaceutical Sciences for Research, University of Toyama, Japan, ²Institute of Medicinal Chemistry, Hoshi University, ³Nippon Shokubai Co. Ltd.

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EFFICACY OF BRAZILIAN PROPOLIS AGAINST HERPES SIMPLEX VIRUS TYPE 1 INFECTION IN MICE AND THEIR MODES OF ANTI-HERPETIC EFFICACIES

Hiroki Yoshida¹, Hisahiro Kai², Shigetoshi Tsutsumi³, Ken Yasukawa⁴, Koji Matsuno², Wataru Watanabe⁵, Kimiyasu Shiraki⁶, Masahiko Kurokawa¹

¹Department of Biochemistry, School of Pharmaceutical Science, Kyushu University of Health and Welfare, Japan, ²Department of Pharmaceutical Health Sciences, School of Pharmaceutical Science, Kyushu University of Health and Welfare, ³Amazonfood Ltd., ⁴Department of Pharmacy, Nihon University, ⁵Department of Microbiology, School of Pharmaceutical Science, Kyushu University of Health and Welfare, ⁶Department of Virology, University of Toyama

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ANTIVIRAL ACTIVITIES OF CAMPTOTHECIN AND TUBERCIDIN AGAINST ENTEROVIRUS 71 IN HUMAN RHABDOMYOSARCOMA CELLS

Kan Xing Wu, Justin Jang-Hann Chu

Microbiology, National University of Singapore, Singapore

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NEURAMINIDASE INHIBITOR-RESISTANT INFLUENZA A VIRUSES DETECTED IN THE 2010/11 SEASON IN YOKOHAMA, JAPAN

Chiharu Kawakami¹, Emi Takashita², Miho Ejima², Seiichiro Fujisaki², Namhee Kim², Shuzo Usuku¹, Eishi Kurata¹, Mami Iwata³, Takahiro Toyozawa⁴, Takato Odagiri², Masato Tashiro²

¹Yokohama City Institute of Health, Japan, ²Influenza Virus Research Center National Institute of Infectious Diseases, ³Yokohama City Health and Social Welfare Bureau, ⁴Yokohama City Public Health Center

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DRUG SUSCEPTIBILITY OF INFLUENZA VIRUSES CIRCULATING IN RUSSIA

Elena S Shevchenko¹, Natalia V Beliakova¹, Valentina V Lavrisheva¹, Elena I Burtseva¹, Tiffany G Sheu², Larisa V Gubareva², Alexander I Klimov²

¹D.I. Ivanovsky Institute of Virology Mhds Rf, Russia, ²Influenza Division, Centers for Disease Control and Prevention

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PREVALENCE OF ANTIVIRAL DRUG-RESISTANT INFLUENZA A VIRUSES IN MYANMAR FROM 2007 TO 2010

Clyde Dapat¹, Reiko Saito¹, Isolde Dapat¹, Yasushi Suzuki¹, Makoto Naito², Yadanar Kyaw³, Yi Yi Myint⁴, Hiroshi Suzuki⁵

¹Department of Public Health, Niigata University, Japan, ²Division of Cellular and Molecular Pathology, Niigata University, ³Sanpya Hospital, ⁴Department of Medical Research (Central Myanmar), ⁵Department of Nursing, Niigata Seiryō University

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MARINE NATURAL PRODUCTS AS A SOURCE OF THE NOVEL ANTIVIRAL AGENT TARGETING TO HCV NS3 HELICASE

Atsuya Yamashita, Yuusuke Fujimoto, Kohji Moriishi

Department of Microbiology, Interdisciplinary Graduate School of Medicine and Engineering, University of Yamanashi, Japan

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CIRCULATION OF HUMAN INFLUENZA VIRUSES IN THE PANDEMIC (2009-2010) AND POST-PANDEMIC (2010-2011) SEASONS IN JAPAN

Isolde C Dapat¹, Tatiana Baranovich^{1,3}, Yasushi Suzuki¹, Clyde Dapat¹, Reiko Saito¹, Hiroshi Suzuki^{1,2}

¹Department of Public Health, Niigata University Graduate School of Medical and Dental Sciences, Japan, ²School of Nursing, Niigata Seiryō University, ³Infectious Diseases Department, St. Jude Children's Research Hospital

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ANTI-VIRUS EFFECT OF TRICIN, 4', 5, 7-TRIHYDROXY-3', 5'-DIMETHOXYFLAVONE, ON HUMAN CYTOMEGALOVIRUS

Tsugiya Murayama¹, Ying Li¹, Hidetaka Sadanari¹, Rie Yamada¹, Xin Zheng¹, Yuuzo Tuchida²

¹Department of Microbiology and Immunology, Faculty of Pharmaceutical Sciences, Japan, ²Hououdou Co. Ltd.

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STRUCTURE-ACTIVITY RELATIONSHIP OF ANTI-HIV-1 COMPOUND, LAMELLARIN SULFATES

Haruka Kamiyama¹, Yoshinao Kubo¹, Hironori Sato^{1,3}, Naoki Yamamoto^{1,4}, Tsutomu Fukuda², Masatomo Iwao²

¹Department of AIDS Research, Institute of Tropical Medicine, Nagasaki University, Japan, ²Department of Applied Chemistry, Faculty of Engineering, Nagasaki University, ³Pathogen Genomics Center, National Institute of Infectious Diseases, ⁴Department of Microbiology, National University of Singapore

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DETECTION OF ANTIVIRAL-RESISTANT PANDEMIC INFLUENZA A(H1N1)2009 (A/H1N1PDM09) VIRUSES BY A COMBINATION OF CHEMILUMINESCENT AND FLUORESCENT NEURAMINIDASE INHIBITOR SUSCEPTIBILITY ASSAYS IN JAPAN

Emi Takashita, Miho Ejima, Ikuyo Takayama, Mina Nakauchi, Seiichiro Fujisaki, Namhee Kim, Noriko Kishida, Hong Xu, Hiromi Sugawara, Reiko Itoh, Teruko Doi, Tsutomu Kageyama, Masato Tashiro, Takato Odagiri
Influenza Virus Research Center, National Institute of Infectious Diseases, Japan

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VIRUS INACTIVATION BY NON-CYTOTOXIC ARGININE-DERIVATIVES WITH DETERGENT ACTIVITY

Kazuko Tsujimoto¹, Keiko Ikeda^{1,2}, Hisashi Yamasaki¹, Mitsunori Nishide^{1,3}, Hiroshi Irie⁴, A. Hajime Koyama¹
¹Division of Virology, Wakayama Medical University Graduate School of Medicine, Japan, ²Wakayama Medical University, School of Health & Nursing Science, ³Wakayama Shin-Ai Women's Junior College, ⁴Teikyo University School of Medicine

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ANTIVIRAL USE OF ACIDIC ARGININE AGAINST THE INFECTION ON BODY SURFACE

Keiko Ikeda^{1,2}, Kazuko Tsujimoto¹, Hisashi Yamasaki¹, Yukikko Suzuki², Tsuyoshi Naito³, Hiroshi Irie⁴, A. Hajime Koyama¹
¹Division of Virology, Wakayama Medical University Graduate School of Medicine, Japan, ²Wakayama Medical University, School of Health & Nursing Science, ³Tokushima University, Graduate School of Medicine, ⁴Teikyo University, School of Medicine

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INHIBITION OF A MULTIPLICATION OF HERPES SIMPLEX VIRUS BY CAFFEIC ACID

Hisashi Yamasaki¹, Keiko Ikeda^{1,2}, Kazuko Tsujimoto¹, Misao Uozaki¹, Hiroshi Irie³, A. Hajime Koyama¹
¹Division of Virology, Wakayama Medical University Graduate School of Medicine, Japan, ²Wakayama Medical University, School of Health & Nursing Science, ³Teikyo University, School of Medicine

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ANTIVIRAL AND VIRUCIDAL ACTIVITIES OF COMMON VEGETABLES AND FRUITS IN WAKAYAMA

Mitsunori Nishide^{1,2}, Kazuko Tsujimoto¹, Keiko Ikeda¹, Hisashi Yamasaki¹, A. Hajime Koyama¹
¹Division of Virology, Wakayama Medical University Graduate School of Medicine, Japan, ²Wakayama Shin-Ai Women's Junior College

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EFFICACY OF A SINGLE INTRAVENOUS INJECTION OF PERAMIVIR (BCX-1812) COMPARED TO ORAL OSELTAMIVIR AGAINST SEASONAL INFLUENZA B VIRUS INFECTION IN FERRETS

Mitsutaka Kitano, Makoto Kodama, Kaoru Baba, Takahiro Noda, Mayumi Kakui, Hiroko Iwasaki, Ryu Yoshida, Akihiko Sato
Infectious Diseases, Medicinal Research Laboratories, Shionogi & Co., Ltd, Japan

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THERAPEUTIC EFFECT OF PERAMIVIR (BCX-1812) AFTER SINGLE INTRAVENOUS INFUSION IN MICE INFECTED WITH INFLUENZA A VIRUS WITH H274Y MUTATED NA

Noshi Takeshi, Mitsutaka Kitano, Makoto Kodama, Ryu Yoshida, Akihiko Sato
Medicinal Research Laboratories, Shionogi & Co., Ltd., Japan

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INHIBITION OF HIV-1 TAT-MEDIATED TRANSCRIPTION BY A COUMARIN DERIVATIVE BPRHIV001 THROUGH AKT PATHWAY

Sui-Yuan Chang^{1,3}, Pi-Han Lin¹, Yi-Yu Ke², Hsing-Pang Hsieh², Chun-Nan Lee^{1,3}, Chuan-Liang Kao^{1,3}
¹Department of Clinical Laboratory Sciences and Medical Biotechnology, National Taiwan University College of Medicine, Taiwan, ²Institute of Biotechnology and Pharmaceutical Research, National Health Research Institutes, ³Department of Laboratory Medicine, National Taiwan University Hospital

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LOW MOLECULAR WEIGHT COMPOUNDS AS ANTI-HIV CANDIDATES VIA CYP4 INHIBITION OBTAINED FROM IN SILICO SCREENING

Yushi Tian¹, Norihito Kawashita^{1,2}, Chris Verathamjamras², Kousuke Okamoto¹, Teruo Yasunaga², Masanori Kameoka², Tatsuya Takagi^{1,2}
¹Environmental Pharmacometrics, Graduate School of Pharmaceutical Sciences, Osaka University, Japan, ²Research Institute for Microbial Diseases, Osaka University

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ANTI-VIRAL ACTIVITY OF GALANGIN COMPOUND ISOLATED FROM ALPINIA OFFICINARUM HANCE

Waree Sookmai¹, Tipaya Ekalaksananan¹, Chamsai Pientong¹, Santi Sakdarat², Bunkerd Kongyingyoes³
¹Department of Microbiology Faculty of Medicine, Khon Kaen University, Thailand, ²School of Chemistry, Institute of Science, Suranaree University of Technology, ³Department of Pharmacology Faculty of Medicine, Khon Kaen University

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INHIBITORY EFFECTS OF CLINACANTHUS NUTANS AND ANDROGRAPHIS PANICULATA COMPOUNDS ON PROSTAGLANDIN E2 PRODUCTION IN DENGUE VIRUS INFECTED CELLS

Sujittraporn Sittiso¹, Tipaya Ekalaksananan¹, Chamsai Pientong¹, Chantana Aromdee², Santi Sakdarat³, Supawadee Seubsasana², Nicha Charoensri⁴, Bunkerd Kongyingyoes⁵
¹Department of Microbiology, Faculty of Medicine, Khon Kaen University, Thailand, ²Department of Pharmaceutical Chemistry, Faculty of Pharmaceutical Sciences, Khon Kaen University, ³School of Chemistry, Institute of Science, Suranaree University of Technology, ⁴Department of Clinical Microbiology, Faculty of Associated Medical Science, Khon Kaen University, ⁵Departments of Pharmacology, Faculty of Medicine, Khon Kaen University

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HIV-1 CDNA INTEGRATION AND PERSISTENT INFECTION BY DNA REPAIR SYSTEM

Hirota Ebina, Yuka Kanemura, Yasutsugu Suzuki, Kozue Urata, Yoshio Koyanagi

Institute for Virus Research, Kyoto University, Japan

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NEURAMINIDASE SEQUENCE ANALYSIS AND SUSCEPTIBILITIES TO NEURAMINIDASE (NA) INHIBITORS OF INFLUENZA VIRUS ISOLATED FROM PERAMIVIR CLINICAL STUDIES

Ryu Yoshida¹, Shigeru Kohno², Hiroshi Kida³, Norio Sugaya⁴

¹Medicinal Research Laboratories, Shionogi & Co., Ltd., Japan,

²2nd Department of Internal Medicine, Nagasaki University School

of Medicine, ³Department of Disease Control, Graduate School of Veterinary, Medicine, Hokkaido University, ⁴Department of Pediatrics, Keiyu Hospital

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BACTERIAL NEURAMINIDASE REDUCES THE ANTIVIRAL EFFECTS OF INFLUENZA VIRUS NEURAMINIDASE INHIBITOR

Tomoko Nishikawa^{1,4}, Keiko Toyosawa¹, Kazumichi Kuroda², Tatsuo Yamamoto¹, Nobuhiro Hanada³, Yoshiki Hamada⁴, Kazufumi Shimizu¹

¹SRBD Project, Division of Obstetrics and Gynecology, Nihon University School of Medicine, Japan, ²Division of Microbiology, Nihon University School of Medicine, ³Department of Translational Research, School of Dental Medicine, Tsurumi University, ⁴Department of Oral & Maxillofacial Surgery, School of Dental Medicine, Tsurumi University

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MOLECULAR CHAPERON INHIBITOR-BASED TREATMENT AGAINST ATL: ITS IN VITRO AND IN VIVO EVALUATION

Hidekatsu Iha¹, Emi Ikebe¹, Akira Kawaguchi^{2,3}, Shinya Taguchi¹, Akira Nishizono¹, Yuetsu Tanaka⁴, Hirofumi Sawa³, Masao Ogata⁵, Mitsuo Hori⁶, Jun-Ichi Fujisawa⁷, Hideki Hasegawa²

¹Department of Microbiology, Oita University Faculty of Medicine, Japan, ²Department of Pathology, National Institute of Infectious Diseases, ³Department of Molecular Pathobiology, and 21st Century COE Program for Zoonosis Control, Hokkaido University Research Center for Zoonosis Control, ⁴Department of Immunology, Graduate School of Medicine, University of the Ryukyus, ⁵Department of Hematology, Oita University Faculty of Medicine, ⁶Department of Transfusion, Ibaragi Prefectural Central Hospital, ⁷Department of Microbiology, Kansai Medical University

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EVALUATION OF THE RESPONSES OF RETICULAR ENDOTHELIAL SYSTEMS OF HIV POSITIVE PERSONS ON ANTIRETROVIRAL THERAPY

Ogbonnaya - Ogbu¹, Moses N Alo², Jessy C Uneke³, Ama U Ibiam⁴

¹Applied Microbiology, Ebonyi State University, Faculty of Biological Sciences, Nigeria, ²Medical Laboratory Sciences, Ebonyi State University, ³Medical Microbiology, Ebonyi State University, ⁴Biochemistry, Ebonyi State University

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Yusuke Takahara¹, Midori Nakamura^{1,2}, Ryo Higashi^{1,2}, Mariko Horiike³, Tomoyuki Miura³, Tatsuhiko Igarashi³, Taeko Naruse⁴, Akinori Kimura⁴, Tetsuro Matano^{1,2}, Saori Matsuoka^{1,2}

¹AIDS Research Center, National Institute of Infectious Diseases, Japan,

²Institute of Medical Science, University of Tokyo, ³Institute for Virus Research, Kyoto University, ⁴Medical Research Institute, Tokyo Medical and Dental University

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MECHANISM OF ANTI-HERPES SIMPLEX VIRUS ACTIVITY OF SPIRULINA PLATENSIS EXTRACT APOGEN

Pei-Yun Hung¹, Chuan-Liang Kao^{1,2}, Su-Yuan Chang^{1,2}, I-Chen Hu³, Chun-Nan Lee^{1,2}

¹Department of Clinical Laboratory Sciences and Medical Biotechnology, College of Medicine, National Taiwan University, Taiwan, ²Department of Laboratory Medicine, National Taiwan University Hospital, ³Far-East Biotechnology Corp.

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REVERSION OF CXCR4-USING CRF01_A/E TO CCR5-USING HIV-1 BY A CXCR4 ANTAGONIST IN VITRO

Yosuke Maeda, Hiromi Terasawa, Hisae Ishiguro, Yusuke Nakano, Shinji Harada

Department of Medical Virology, Kumamoto University, Faculty of Life Sciences, Japan

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ANTI-ROTAVIRUS ACTIVITY OF EXTRACTS OF PROTIUM HEPTAPHYLLUM (BURSERACEAE), A VENEZUELAN MEDICINAL PLANT

Fabian Michelangeli, Ana Roa, Omar Estrada, Franshelle Pena, Angel Fernandez, Silvia Frailes, Marie Christine Ruiz

Centro de Biofisica Y de Bioquimica, Instituto Venezolano de Investigaciones Cientificas, Venezuela

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INHIBITION OF HERPES SIMPLEX VIRUSES 1 AND 2 BY SHORT SYNTHETIC PEPTIDES

Blanca L Barron¹, Rogelio Lopez-Martinez¹, Abraham Cetina¹, Uriel Lopez-Sanchez¹, Miguel Torres¹, Alfonso Mendez-Tenorio², Elizabeth Ortega¹

¹Microbiology, Instituto Politecnico Nacional, Mexico, ²Biochemistry, Instituto Politecnico Nacional

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ISOLATION AND CHARACTERIZATION OF ANTI-INFLUENZA A SUBTYPE H5N1 NEUTRALIZING HUMAN MONOCLONAL FAB BY PHAGE DISPLAY SYSTEM

Genichiro Uechi¹, Mai Q Le², Kinuyo Ozaki³, Hiroki Takakuwa^{4,5}, Etsuro Ono³, Tetsu Yamashiro¹

¹Nagasaki University, Institute of Tropical Medicine, Japan, ²Department of Virology National Institute of Hygiene and Epidemiology, ³Graduate School of Medical Sciences, Kyushu University, ⁴Faculty of Life Sciences, Kyoto Sangyo University, ⁵Avian Influenza Research Centre, Kyoto Sangyo University

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DEVELOPMENT OF THE ANTI-VIRAL AGENTS BLOCKING THE FUNCTION OF HEMAGGLUTININ OF INFLUENZA VIRUS

Tyuji Hoshino¹, Hiroshi Yanagita¹, Hideyoshi Fuji¹, Xinli Liu¹, Norio Yamamoto²

¹Graduate School of Pharmaceutical Sciences, Chiba University, Japan, ²Influenza virus Research Center, National Institute of Infectious Diseases

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STRUCTURAL AND FUNCTIONAL ANALYSIS OF THE INFLUENZA NEURAMINIDASE: EVALUATION OF NOVEL INHIBITORS AND INVESTIGATIONS INTO THE ENZYME MECHANISM

Christopher J Vavricka^{1,2}, Hongna Huang^{1,2}, Yue Liu^{1,2}, Jianxun Qi^{1,2}, Qing Li^{1,2}, Yan Wu^{1,2}, George F Gao^{1,2}

¹Institute of Microbiology, Chinese Academy of Sciences, China, ²CAS Key Laboratory of Pathogenic Microbiology and Immunology

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ANTIVIRAL CANDIDATES AGAINST INFLUENZA VIRUS

Sangmoo Lee, Hyeun Hyun, Sam Shin, Yongkwan Won, Jinil Kim, Il-Seob Lee, Sehee Park, Min-Woong Hwang, Joon-Yong Bae, Man-Seong Park

Department of Microbiology, College of Medicine, Hallym University, Korea, South

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DISCOVERY OF ANTI-INFLUENZA VIRUS COMPOUNDS FROM MEDICINES ON THE MARKET

Mayuko Fukuoka^{1,2}, Moeko Minakuchi³, Atsushi Kawaguchi³, Kyosuke Nagata³, Yuji O Kamatari⁴, Kazuo Kuwata^{1,2}

¹United Graduate School of Drug Discovery and Medical Information Sciences, Gifu University, Japan, ²CREST, Japan Science and Technology Agency, ³Department of Infection Biology, Graduate School of Comprehensive Human Sciences, University of Tsukuba, ⁴Life Science Research Center, Gifu University

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INACTIVATION OF A BROAD RANGE OF PATHOGENIC VIRUSES BY EXTRACTS FROM PERSIMMON (DIOSPYROS KAKI) AND ITS POSSIBLE MECHANISM

Ryoko Kawabata, Kyoko Ueda, Takashi Irie, Takemasa Sakaguchi

Department of Virology, Graduate School of Biomedical Sciences, Hiroshima University, Japan

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IDENTIFICATION OF AN ANTIVIRAL COMPOUND THAT TARGETS THE VARICELLA-ZOSTER VIRUS MAJOR CAPSID PROTEIN (ORF40)

Naoki Inoue¹, Misato Matsushita^{1,2}, Yoshiko Fukui¹, Mihoko Tsuda¹, Chizuka Higashi^{1,2}, Toyofumi Yamaguchi²

¹Department of Virology I, National Institute of Infectious Diseases, Japan, ²Department of Biosciences, Teikyo University of Science and Technology

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AN IN VITRO CLEAVAGE ASSAY SYSTEM FOR XMRV PROTEASE BY WHEAT-GERM CELL FREE PROTEIN PRODUCTION

Satoko Matsunaga¹, Ayako Furukawa², Yoshitsugu Kojima¹, Ryo Morishita¹, Tatsuya Sawasaki³, Akifumi Takaori-Kondo⁴, Wataru Sugiura⁵, Masato Katahira², Akihito Ryo¹

¹Department of Microbiology, Yokohama City University, Japan, ²Institute of Advanced Energy, Kyoto University, ³Cell-Free Science and Technology Research Center, Ehime University, ⁴Department of Hematology and Oncology, Graduate School of Medicine, Kyoto University, ⁵National Hospital Organization Nagoya Medical Center

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A KINASE INHIBITOR DISLOCATES DENGUE VIRUS ENVELOPE PROTEIN FROM THE REPLICATION COMPLEX AND BLOCKS VIRUS ASSEMBLY

Azlanda Anwar¹, Takamitsu Hosoya², Kok Mun Leong¹, Hiroshi Onogi^{3,4}, Yukiko Okuna³, Toshiyuki Hiramatsu², Hiroko Koyoma⁵, Masaaki Suzuki⁶, Masatoshi Hagiwara^{3,7}, Mariano A Garcia-Blanco^{1,8}

¹Program in Emerging Infectious Diseases, Duke-NUS Graduate Medical School, Singapore, ²Laboratory of Chemical Biology, Tokyo Medical and Dental University, ³Laboratory of Gene Expression, Tokyo Medical and Dental University, ⁴KinoPharma, Inc., ⁵Division of Regeneration and Advanced Medical Science, Gifu University Graduate School of Medicine, ⁶RIKEN Center for Molecular Imaging Science, ⁷Department of Anatomy and Developmental Biology, Kyoto University Graduate School of Medicine, ⁸Center for RNA Biology, Departments of Molecular Genetics and Microbiology, and Medicine, Duke University School of Medicine

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INHIBITION OF REPLICATION OF AVIAN INFLUENZA VIRUSES BY A SYNTHETIC SIALYLGLYCOCONJUGATE

Takamitsu Tsuboi¹, Takashi Terabayashi², Minoru Morita³, Tomotaro Shoji¹

¹Tohoku Research Station, National Institute of Animal Health, Japan, ²Kitasato University, School of Science, ³Toko Pharmaceutical Industries Co., Ltd.

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PHARMACOKINETIC ASSESSMENT OF ANTIVIRAL EFFECT OF THE BIOCHEMICALS AGAINST PLANT VIRUS

Minho Lee^{1,2}, Nam Gyu Kim³, Jong Gwan Kim³, Cheol Jang³, In Cheon Hwang³, Beom Seok Kim², Ki Hyun Ryu⁴, Mun Il Ryoo²

¹Organic Agricultural Division, National Academy of Agricultural Science, RDA, Korea, South, ²College of Life Science & Biotechnology, Korea University, ³Central Research Institute, Kyung Nong Co., LTD., ⁴Division of Environmental & Life Sciences, Seoul Women's University

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IN VITRO INHIBITORY ACTIVITY OF *ALPINIA KATSUMADAI* EXTRACTS AGAINST INFLUENZA VIRUS INFECTION AND HEMAGGLUTINATION

Young Bae Ryu¹, Su-Jin Park¹, Hyung-Jun Kwon¹, Ha-Hyun Kim¹, So Young Yoon¹, Young Min Kim¹, Kyoung-Oh Cho², Woo Song Lee², Mun-Chual Rho²

¹Korea Research Institute of Bioscience and Biotechnology, Korea, South, ²Biotherapy Human Resources Center, College of Veterinary Medicine, Chonnam National University

VI-PO35-54

HOMOISOFLAVONOIDS FROM *CAESALPINIA SAPPA*: STRUCTURAL REQUIREMENT OF A, B-UNSATURATED CARBONYL GROUP FOR INHIBITION OF VIRAL NEURAMINIDASES

Young Min Kim, Hyung Jae Jeong, Jang Hoon Kim, Ji Young Kim, Su-Jin Park, Woo Song Lee, Young Bae Ryu

Korea Research Institute of Bioscience and Biotechnology, Korea, South

VI-PO36 Viral Glycoproteins

Thursday, 15 September

VI-PO36-1

CLINICAL AND EPIDEMIOLOGIC RELEVANCE OF A NOVEL 21 AMINO ACID DELETION IN GLYCOPROTEIN G OF CLINICAL HERPES SIMPLEX VIRUS TYPE 2 ISOLATES

Tohru Daikoku¹, Kazuhiro Horiba¹, Masaya Takemoto¹, Takehiro Himaki¹, Takashi Kawana², Masaru Hirano³, Kimiyasu Shiraki¹

¹Department of Virology, University of Toyama, Japan, ²Mizonokuchi Hospital, School of Medicine, Teikyo University, ³Denka Seiken, Co. LTD

VI-PO36-2

PROTEIN PREPARATION AND PRELIMINARY X-RAY CRYSTALLOGRAPHIC STUDY OF HEMAGGLUTININ FROM CANINE DISTEMPER VIRUS

Toyoyuki Ose¹, Miyuki Sako², Mizuho Kajikawa², Takao Hashiguchi³, Yuri Ito¹, Hideo Fukuhara¹, Makoto Takeda⁴, Yusuke Yanagi³, Katsumi Maenaka¹

¹Faculty of Pharmaceutical Sciences, Hokkaido University, Japan, ²Medical Institute of Bioregulation, Kyushu University, ³Faculty of Medicine, Kyushu University, ⁴National Institute of Infectious Diseases

VI-PO36-3

LOCALIZATION OF BORNA DISEASE VIRUS GLYCOPROTEIN AT THE NUCLEAR MEMBRANE

Takuji Daito^{1,2}, Kan Fujino^{1,2}, Keizo Tomonaga²

¹Department of Virology, Research Institute for Microbial Diseases (BIKEN), Osaka University, Japan, ²Department of Viral Oncology, Institute for Virus Research, Kyoto University

VI-PO58 Virus Entry, Trafficking and Membrane Fusion

Thursday, 15 September

VI-PO58-1

IMMUNOLocalIZATION OF INTRACELLULAR VIRUS LIFE CYCLES

Christopher K. E Bleck¹, Henning Stahlberg¹, Ari Helenius², Jason Mercer²

¹Center for Cellular Imaging and Nanoanalytics (C-CINA), Biozentrum, University of Basel, Switzerland, ²Institute of Biochemistry, ETH Zurich

VI-PO58-2

ATTACHMENT OF *CHLOROVIRUS* TO ITS *CHLORELLA* HOST IS REVERSIBLE AND CAN BE SEPARATED FROM CELL WALL DIGESTION BY PRESENCE OR ABSENCE OF CA⁺⁺

Irina V Agarkova¹, Brigitte Hertel², Laslie C Lane¹, Gerhard Thiel², James L Van Etten^{1,3}

¹Plant Pathology Department, University of Nebraska-Lincoln, USA, ²Institute of Botany, Darmstadt University of Technology, ³Nebraska Center for Virology, University of Nebraska-Lincoln

VI-PO58-3

ANTIVIRAL EFFICACY OF PERAMIVIR (BCX-1812) AGAINST HIGHLY PATHOGENIC AVIAN INFLUENZA VIRUSES (H5N1) WITH OR WITHOUT THE H274Y MUTATION IN MOUSE

Makoto Kodama¹, Takeshi Noshi¹, Masanori Kobayashi¹, Ryu Yoshida¹, Akihiko Sato¹, Naoki Nomura², Kosuke Soda², Masatoshi Okamatsu², Yoshihiro Sakoda², Hiroshi Kida²

¹Medical Research Laboratories, Shionogi Co. & Ltd., Japan, ²Graduate School of Veterinary Medicine, Hokkaido University

VI-PO58-4

ANTI-BETANODAVIRUS MECHANISM OF SHEWANELLA STRAIN 0409 ISOLATED FROM GROUPER INTESINE

Chia-Hong Tsai¹, Shau-Chi Chi^{1,2}

¹Institute of Zoology, National Taiwan University, Taiwan, ²Department of Life Science, National Taiwan University

VI-PO58-5

UNPROCESSED CATHEPSIN L IS ACTIVE IN XC CELLS IN WHICH XMRV INFECTION IS PH-INDEPENDENT

Yoshinao Kubo¹, Haruka Kamiyama¹, Katsura Kakoki^{1,2}, Tsukasa Igawa², Hideki Sakai², Naoki Yamamoto^{1,3}

¹Department of AIDS Research, Institute of Tropical Medicine, Nagasaki University, Japan, ²Department of Urology, Nagasaki University, ³Department of Microbiology, National University of Singapore

VI-PO58-6

STRUCTURES OF INTERMEDIATE STATES IN RETROVIRUS SPIKE ACTIVATION

Kimmo Rantalainen, Mathilda SjBerg, Kejun Li, Maria Ekstrom, Henrik Garoff

Department of Biosciences and Nutrition, Karolinska Institute, Sweden

VI-PO39 Structure and Assembly: Non-Enveloped Viruses

Thursday, 15 September

VI-PO39-1

CO-PACKAGING OF GENOMIC RNAs AND VIRION ACCUMULATION ARE AFFECTED BY LYSINE TO ALANINE SUBSTITUTIONS WITHIN THE N-TERMINUS OF THE RED CLOVER NECROTIC MOSAIC VIRUS CAPSID PROTEIN

Sang-Ho Park¹, Tim L Sit², Steven A Lommel², Kook-Hyung Kim¹

¹Department of Agricultural Biotechnology, Seoul National University, Korea, South, ²Department of Plant Pathology, North Carolina State University

VI-PO39-2

THE C-TERMINAL DOMAIN OF THE 2B PROTEIN OF CUCUMBER MOSAIC VIRUS IS STABILIZED BY METAL ION COORDINATION

Akos Gellert, Ervin Balazs

Department of Applied Genomics, Agricultural Research Institute of The Hungarian Academy of Sciences, Hungary

VI-PO39-3

STRUCTURAL AND FUNCTIONAL INSIGHTS INTO VIROPLASM MATRIX PROTEIN PNS9 OF RICE GALL DWARF VIRUS

Fusamichi Akita¹, Naoyuki Miyazaki², Hiroyuki Hibino¹, Takumi Shimizu¹, Akifumi Higashiura², Tamaki Uehara-Ichiki¹, Takahide Sasaya¹, Tomitake Tsukihara^{2,3}, Atsushi Nakagawa², Kenji Iwasaki², Toshihiro Omura¹

¹National Agricultural Research Center, Japan, ²Institute for Protein Research, Osaka University, ³Department of Life Science, University of Hyogo

VI-PO39-4

JC POLYOMAVIRUS CAPSID ASSEMBLY AT THE PROMYELOCYTIC LEUKEMIA NUCLEAR BODY (PML-NBS)

Yukiko Shishido-Hara

Department of Pathology, Kyorin University School of Medicine, Japan

VI-PO39-5

MOLECULAR CLONING AND CHARACTERIZATION OF BANANA BRACT MOSAIC VIRUS (BBRMV) COAT PROTEIN GENE

Katherine R Ramirez, Vermando M Aquino

National Institute of Molecular Biology and Biotechnology, Philippines

VI-PO51 Immune Responses to Virus Infection

Thursday, 15 September

VI-PO51-1

MOLECULAR CHARACTERIZATION OF IMMUNOINHIBITORY MOLECULES PD-1/PD-L1 IN BOVINE LEUKEMIA VIRUS-INFECTED CATTLE

Ryoyo Ikebuchi¹, Satoru Konnai¹, Yuji Sunden², Shiro Murata¹, Misao Onuma¹, Kazuhiko Ohashi¹

¹Laboratory of Infectious Diseases, Department of Disease Control, Graduate School of Veterinary Medicine, Hokkaido University, Japan, ²Laboratory of Comparative Pathology, Department of Veterinary Clinical Sciences, Graduate School of Veterinary Medicine, Hokkaido University

VI-PO51-2

INVESTIGATION OF THE HLA-ASSOCIATED CHANGES IN GAG-MEDIATED VIRAL REPLICATION CAPACITY IN TREATMENT-NAIVE JAPANESE PATIENTS

Keiko Sakai¹, Mari Hasegawa¹, Takayuki Chikata¹, Hiroyuki Gatanaga^{2,3}, Shinichi Oka^{2,3}, Masafumi Takiguchi¹

¹Takiguchi Project Laboratory, Center for AIDS Research, Kumamoto University, Japan, ²Infectious Diseases, Center for AIDS Research, Kumamoto University, ³AIDS Clinical Center, National Center for Global Health and Medicine

VI-PO51-3

ANALYSIS OF ANTIGENIC SITES ON THE HA PROTEIN OF PANDEMIC INFLUENZA H1N1PDM09 VIRUS, RECOGNIZED BY HUMAN ANTIBODY

Mina Nakauchi¹, Emi Takashita¹, Masato Tashiro¹, Hidekazu Nishimura², Eri Nobusawa¹

¹Influenza Virus Research Center, National Institute of Infectious Diseases, Japan, ²Virus Research Center, Clinical Research Division, Sendai Medical Center

VI-PO51-4

MOLECULAR BASIS FOR IMMUNORECEPTOR RECOGNITION BY MIR2 UBIQUITIN LIGASE OF KSHV

Mizuho Kajikawa¹, Eiji Goto¹, Pai-Chi Li^{1,2}, Naoyuki Miyashita², Masami Aoki-Kawasumi¹, Mari Mito-Yoshida¹, Yuji Sugita², Satoshi Ishido¹

¹RIKEN Research Center for Allergy and Immunology, Japan, ²RIKEN Advanced Science Institute

VI-PO51-5

NUCLEOCYTOPLASMIC TRAFFICKING OF VIRAL INTERFERON ANTAGONIST PROTEINS: A KEY VIRULENCE FACTOR AND POTENTIAL THERAPEUTIC TARGET

Gregory W Moseley¹, Naoto Ito², Linda Wlitzer¹, Sibil Oksayan¹, Michelle Audsley¹, Caitlin L Rowe¹, Aaron Brice¹, Glenn Marsh³, Lin Fa Wang³, Danielle Blondel⁴, David A Jans¹

¹Dept. of Biochemistry and Molecular Biology, Monash University, Australia, ²Laboratory of Zoonotic Diseases, Faculty of Applied Biological Sciences, Gifu University, ³Australian Animal Health Laboratory, CSIRO, ⁴Unite de Virologie Moléculaire et Structurale, CNRS

VI-PO51-6

HUMORAL IMMUNE RESPONSE TO INFLUENZA A/CALIFORNIA/07/2009(H1N1) IN PATIENTS WITH NATURAL INFECTION AND IN VACCINE RECIPIENTS

Takuji Kumagai¹, Tetsuo Nakayama², Yoshinobu Okuno³, Tetsuo Kase⁴, Naoko Nishimura⁵, Takao Ozaki⁵, Hiroyuki Tsutsumi⁶, Masatoshi Okamatsu⁷, Yoshihiro Sakoda⁷, Hiroshi Kida⁷, Hitoshi Kamiya⁸

¹Kumagai Pediatric Clinic, Japan, ²Laboratory of Viral Infection I, Kitasato Institute for Life Sciences, ³Kanonji Institute, The Research Foundation for Microbial Diseases of Osaka University, ⁴Osaka Prefectural Institute of Public Health, ⁵Department of Pediatrics, Konan Kosei Hospital, ⁶Department of Pediatrics, Sapporo Medical University, ⁷Department of Microbiology, Graduate School of Veterinary Medicine, Hokkaido University, ⁸Department of Pediatrics, National Hospital Organization Mie National Hospital

VI-PO51-7

INNATE ANTIVIRAL IMMUNITY IS IMPAIRED IN YOUNG PATIENTS WITH HAND FOOT AND MOUTH DISEASES

Yi Yang, Jiande Chen, Bingbing Wu

Children's Hospital of Fudan University, China

VI-PO51-8

DEVELOPMENT OF THE METHOD FOR MONITORING CYTOTOXIC T LYMPHOCYTE (CTL) RESPONSES TO HANTAVIRUS IN LABORATORY RATS

Shumpei P Yasuda, Kumiko Yoshimatsu, Rika Endo, Kenta Shimizu, Takaaki Koma, Rie Isozumi, Jiro Arikawa

Department of Microbiology, Graduate School of Medicine, Hokkaido University, Japan

VI-PO51-9

IMMUNE INDUCED EVOLUTIONARY SELECTION FOCUSED ON A SINGLE READING FRAME IN OVERLAPPING HBV PROTEINS

Yoram Louzoun, Yaacov Maman

Mathematics, Bar Ilan University, Israel

VI-PO51-10

CURDLAN, A TH17 CELL INDUCER, WAS BOTH DETRIMENTAL AND PROTECTIVE IN THEILER'S VIRUS INFECTION

Fumitaka Sato¹, Nicholas E Martinez¹, Seiichi Omura¹, Jonathan S Alexander², Ikuo Tsunoda¹

¹Microbiology and Immunology, Louisiana State University Health Sciences Center, USA, ²Department of Molecular and Cellular Physiology, Louisiana State University Health Sciences Center

VI-PO51-11

SEROPREVALENCE AND SEVERITY OF 2009 PANDEMIC INFLUENZA A H1N1 IN TAIWAN

Chih-Jung Chen¹, Shih-Cheng Chang², Yhu-Chering Huang¹, Cheng-Hsun Chiu¹, Tzou-Yien Lin¹

¹Pediatrics, Chang Gung Memorial Hospital, Taiwan, ²Research Center for Emerging Viral Infections, Chang Gung University

VI-PO51-12

VIROLOGIC AND IMMUNOLOGIC INDICATORS OF CHRONIC TICK-BORNE ENCEPHALITIS

Rafail Z Kuzyaev¹, Liliya P Bykova¹, Anatoliy P Godovalov²

¹Microbiology and Virology, E.A. Wagner Perm State Medical Academy, Russia, ²Immunology, E.A. Wagner Perm State Medical Academy

VI-PO51-13

EFFECTS OF THE NANOPARTICLES OF TITANIUM DIOXIDE ON THE IMMUNE RESPONSE TO RESPIRATORY SYNCYTIAL VIRUS (RSV) INFECTION IN MACROPHAGES IN VITRO AND MOUSE MODEL IN VIVO

Wataru Watanabe¹, Hiroki Yoshida², Akihiko Hirose³, Katsuhiko Konno², Masahiko Kurokawa²

¹Department of Microbiology, School of Pharmaceutical Sciences, Kyushu University of Health and Welfare, Japan, ²Department of Biochemistry, School of Pharmaceutical Sciences, Kyushu University of Health and Welfare, ³Biological Safety Research Center, National Institute of Health Sciences

VI-PO51-14

IDENTIFICATION OF PANDEMIC INFLUENZA VIRUS NP PEPTIDES BOUND TO CYNOMOLGUS MACAQUE MHC CLASS I MAFA-A1*5202 AND STIMULATING CTL RESPONSES

Yasushi Itoh¹, Masahiko Arikata¹, Toshinaga Maeda², Takashi Shiina³, Hirohito Ishigaki¹, Ayato Takada⁴, Masatoshi Okamatsu⁴, Yoshihiro Sakoda⁴, Misako Nakayama¹, Hiroshi Kida⁴, Kazumasa Ogasawara¹

¹Department of Pathology, Shiga University of Medical Science, Japan, ²Department of Biochemistry, Shiga University of Medical Science, ³Tokai University, ⁴Hokkaido University

VI-PO51-15

THE IMMUNE RESPONSE OF LUNG MACROPHAGES TO INFLUENZA VIRUS INFECTION

Satoshi Fukuyama¹, Ryo Takano², Jason Shoemaker¹, Izumi Ishikawa¹, Naomi Fujimoto¹, Yukiko Matsuoka¹, Hiroaki Kitano¹, Yoshihiro Kawaoka^{1,2,3,4}

¹ERATO Infection-Induced Host Response Project, Japan Science and Technology Agency, Japan, ²Division of Virology, Department of Microbiology and Immunology, Institute of Medical Science, University of Tokyo, ³Department of Pathobiological Sciences, School of Veterinary Medicine, University of Wisconsin-Madison, ⁴International Research Center for Infectious Diseases, Institute of Medical Science, University of Tokyo

VI-PO51-16

POST-INFECTION PASSIVE IMMUNIZATION OF SIVMAC239-SPECIFIC, NON-NEUTRALIZING ANTIBODIES DOES NOT CONTROL VIRUS REPLICATION IN VIVO

Taku Nakane^{1,2}, Tetsuro Matano^{1,2}, Hiroyuki Yamamoto^{1,2}

¹AIDS Research Center, National Institute of Infectious Diseases, Japan, ²Institute of Medical Science, University of Tokyo

VI-PO51-17

NEUTRALIZING ANTIBODY AND CELL-MEDIATED IMMUNE RESPONSES TO PANDEMIC H1N1-2009 VIRUS BEFORE AND AFTER H1N1-2009 VACCINATION IN ELDERLY SUBJECTS AND HEALTHCARE WORKERS IN SINGAPORE

Jung Pu Hsu¹, Yan Wu¹, Meng Chee Phoon¹, Mark Chen², Gerald Koh³, Yee Sin Leo², Vincent TK Chow¹

¹Department of Microbiology, National University of Singapore, Singapore, ²Department of Infectious Diseases, Communicable Disease Centre, Tan Tock Seng Hospital, ³Department of Epidemiology and Public Health, Yong Loo Lin School of Medicine, National University of Singapore

VI-PO51-18

EFFICACY OF ORAL ADMINISTRATION OF HEAT-KILLED PROBIOTICS FROM MONGOLIAN DAIRY PRODUCTS AGAINST INFLUENZA INFECTION IN MICE

Shiro Takeda^{1,2}, Masahiko Takeshita¹, Yuki Haru Kikuchi¹, Bumbein Dashnyam³, Satoshi Kawahara⁴, Hiroki Yoshida⁵, Wataru Watanabe⁵, Michio Muguruma^{2,4}, Masahiko Kurokawa⁵

¹Reserch Division, Minami Nippon Dairy Co-Op Co. Ltd., Japan, ²Interdisciplinary Graduate School of Agriculture and Engineering, University of Miyazaki, ³Mongolian Biotechnology Association, ⁴Department of Biochemistry and Applied Biosciences, Faculty of Agriculture, University of Miyazaki, ⁵Department of Biochemistry and Microbiology, School of Pharmaceutical Sciences, Kyushu University of Health and Welfare

VI-PO51-19

CLEARANCE OF SARS-COV BY COOPERATION OF ANTIBODIES AND PHAGOCYTES

Fumihiko Yasui¹, Chieko Kai², Kouichi Morita³, Michinori Kohara¹

¹Tokyo Metropolitan Institute of Medical Science, Japan, ²The Institute of Medical Science, The University of Tokyo, ³Institute of Tropical Medicine, Nagasaki University

VI-PO51-20

REGULATORY T CELLS PLAY A DETRIMENTAL ROLE IN A VIRAL MODEL FOR MULTIPLE SCLEROSIS

Nicholas E Martinez¹, Fridrik Karlsson², Fumitaka Sato¹, Seiichi Omura¹, Mathew B Grisham², Ikuo Tsunoda¹

¹Microbiology and Immunology, LSUHSC-S, USA, ²Molecular and Cellular Physiology, LSUHSC-S

VI-PO51-21

INDUCTION OF INNATE ANTI-VIRAL RESPONSE BY XMRV INFECTION

Kosuke Miyauchi^{1,2}, Emiko Urano¹, Jun Komano¹

¹AIDS Research Center, National Institute of Infectious Diseases, Japan, ²Japan Foundation for AIDS Prevention

VI-PO51-22

GRANULAR-LIKE ACCUMULATION OF RIG-I-LIKE RECEPTORS IN VIRUS-INFECTED CELLS

Michihiko Jogi^{1,2}, Koji Onomoto¹, Takashi Fujita^{2,3}, Mitsutoshi Yoneyama¹

¹Division of Molecular Immunology, Medical Mycology Research Center, Chiba University, Japan, ²Laboratory of Molecular Cell Biology, Graduate School of Biostudies, Kyoto University, ³Department of Molecular Genetics, Institute for Virus Research, Kyoto University

VI-PO51-23

A COMMUNITY-BASED SURVEY OF VARICELLA-ZOSTER VIRUS-SPECIFIC IMMUNE RESPONSES IN THE HEALTHY ELDERLY

Huamin Tang¹, Eiko Moriishi², Shigefumi Okamoto², Yoshinobu Okuno⁴, Hiroyasu Iso⁵, Hideo Asada⁶, Koichi Yamanishi³, Yasuko Mori^{1,2}

¹Kobe University Graduate School of Medicine, Division of Clinical Virology, Japan, ²Laboratory of Virology and Vaccinology, Division of Biomedical Research, National Institute of Biomedical Innovation, ³National Institute of Biomedical Innovation, ⁴The Research Foundation for Microbial Diseases of Osaka University, ⁵Public Health, Department of Social and Environmental Medicine, Osaka University, ⁶Nara Medical University School of Medicine

VI-PO51-24

FUNCTIONAL IMPAIRMENT OF TAX-SPECIFIC BUT NOT CMV-SPECIFIC CD8⁺ T-CELLS IN A MINOR POPULATION OF ASYMPTOMATIC HTLV-1-CARRIERS

Ayako Takamori¹, Atsuhiko Hasegawa¹, Atee Utsunomiya², Yasuhiro Maeda³, Yoshihisa Yamano⁴, Yukiko Shimizu⁴, Ilseung Choi⁵, Naokuni Uike⁵, Jun Okamura⁶, Toshiki Watanabe⁷, Mari Kannagi¹

¹Department of Immunotherapeutics, Tokyo Medical and Dental University, Japan, ²Department of Hematology, Imamura Bun-in Hospital, ³Division of Hematology, Department of Internal Medicine, Kinki University School of Medicine, ⁴Department of Molecular Medical Science, Institute of Medical Science, St. University School of Medicine, ⁵Department of Hematology, National Kyushu Cancer Center, ⁶Institute for Clinical Research, National Kyushu Cancer Center, ⁷Laboratory of Tumor Cell Biology, Department of Medical Genome Science, Graduate School of Frontier Sciences, The University of Tokyo

VI-PO51-25

STUDY ON ANTI-HIV-1 HUMORAL IMMUNE RESPONSES IN HIV-1-INFECTED THAI PATIENTS

Sompong Sapsutthipas¹, Naho Tsuchiya², Panita Pathipavanich³, Koya Ariyoshi², Pathom Sawanpanyalert⁴, Panasda Isarangkura-Na-Ayuthaya⁴, Masanori Kameoka^{1,5}

¹Thailand-Japan Research Collaboration Center On Emerging and Re-emerging Infections (RCC-ERI), Thailand, ²Institute of Tropical Medicine, Nagasaki University, ³Lampang Hospital, ⁴National Institute of Health, Department of Medical Sciences, Ministry of Public Health, ⁵Research Institute for Microbial Diseases, Osaka University

VI-PO51-26

NATURAL ADAPTIVE IMMUNE CAPACITIES OF RESIDENT OF KARACHI, PAKISTAN AGAINST AVIAN INFLUENZA VIRUS SUBTYPES H5, H7, H9 AND OTHER AVIAN VIRUSES

Hawa Siraj, Nusrat Jamil

Microbiology, University of Karachi, Pakistan

VI-PO56 Adenoviruses

Thursday, 15 September

VI-PO56-1**EFFECT OF HIGH HYDROSTATIC PRESSURE ON HUMAN ADENOVIRUS INFECTIVITY AND GENOME INTEGRITY**

Katarina Kovac, Marta Diez-Valcarce, Marta Hernandez, David Rodriguez-Lazaro

*Instituto Tecnológico Agrario (ITA), Spain***VI-PO56-2****NOVEL ADENOVIRUSES DETECTED IN BATS IN HUNGARY**

Marton Z Vidovszky, Balazs Harrach

*Comparative Virology, Veterinary Medical Research Institute, Hungarian Academy of Sciences, Hungary***VI-PO56-3****GENOME ORGANIZATION OF BOVINE ADENOVIRUS 6**

Noemi Erdei, Reka Szathmary, Maria Benko

*Veterinary Medical Research Institute, Hungarian Academy of Sciences, Hungary***VI-PO56-4****GENOTYPING OF HUNGARIAN FOWL ADENOVIRUS ISOLATES AND OTHER BIRD ADENOVIRUSES FROM CENTRAL EUROPE**Gyozo L Kajan¹, Balazs Harrach¹, Sandor Kecskemeti², Maria Benko¹¹Molecular Virology, Veterinary Medical Research Institute, Hungarian Academy of Sciences, Hungary, ²Veterinary Diagnostic Directorate, Hungarian Central Agricultural Office**VI-PO56-5****BODY FLUID FACTORS INFLUENCING ADENOVIRUS INFECTION OF HUMAN EPITHELIAL CELLS**

Mari I Nygren

*Virology, Umeå University, Sweden***VI-PO56-6****BOVINE ADENOVIRUS (BADV)-3 PROTEIN VIII IS TRANSPORTED TO NUCLEUS VIA AN IMPORTIN ALPHA/BETA DEPENDENT PATHWAY**Lisanework E Ayalew^{1,2}, Suresh K Tikoo^{1,2,3}¹Vaccine and Infectious Disease Organization, Canada, ²Veterinary Microbiology, ³School of Public Health, University of Saskatchewan**VI-PO56-7****DOWN-REGULATION OF SURFACE CLASS I MAJOR HISTOCOMPATIBILITY COMPLEX (MHC-I) BY FOWL ADENOVIRUSES**

Bryan D Griffin, Eva Nagy

*Pathobiology, University of Guelph, Canada***VI-PO42 Cytomegaloviruses**

Thursday, 15 September

VI-PO42-1**NEONATAL MASS-SCREENING ON CONGENITAL CYTOMEGALOVIRUS INFECTION IN NAGASAKI, JAPAN: A PILOT STUDY**Masako Moriuchi¹, Shin Koyano², Naoki Inoue³, Hiroyuki Moriuchi^{1,4}¹Department of Molecular Microbiology and Immunology, Nagasaki University Graduate School of Biomedical Sciences, Japan, ²Department of Pediatrics, Asahikawa Medical University, ³Department of Virology I, National Institute of Infectious Diseases, ⁴Department of Pediatrics, Nagasaki University Hospital**VI-PO42-2****DETECTION OF HUMAN CYTOMEGALOVIRUS DNA IN THE URINE FROM INFANTS BY REAL-TIME PCR**Chikara Kohda¹, Katsumi Mizuno², Chiaki Maekawa³, Takaharu Negoro³, Yasuko Nakano³, Kazuo Tanaka¹¹Department of Microbiology and Immunology, Showa University School of Medicine, Japan, ²Department of Pediatrics, Showa University School of Medicine, ³Department of Pharmacogenomics, Showa University School of Pharmaceutical Science**VI-PO42-3****INHIBITORY EFFECT OF STATINS ON EXPRESSION OF THE MAJOR IMMEDIATE-EARLY GENE OF HUMAN CYTOMEGALOVIRUS (HCMV) IN HCMV-INFECTED CELLS**Hidetaka Sadanari¹, Zheng Xin^{2,3}, Rie Yamada², Keiko Matsubara², Takashi Takahashi⁴, Tsugiya Murayama²¹Center of Development for Education, Hokuriku University, Japan, ²Department of Microbiology and Immunology, Faculty of Pharmaceutical Sciences, Hokuriku University, ³Department of Microbiology and Immunology, Osaka University Graduate School of Medicine, ⁴Laboratory of Infectious Diseases, Graduate School of Infection Control Sciences, Kitazato University**VI-PO42-4****MODULATION OF CELL CYCLE PROGRESSION BY HUMAN CYTOMEGALOVIRUS**

Shang-Kwei Wang, Shin-Rung Lin, Voon-Kwan Siew

*Department of Microbiology, Kaohsiung Medical University, Taiwan***VI-PO42-5****ANALYSIS FOR CELL-TO-CELL SPREAD OF HCMV IN EPITHELIAL CELLS BY USING THE PML ASSAY**Jun Sasaki¹, Tomonori Ueno¹, Harutaka Katano², Tetsutaro Sata², Kiyoko Ogawa-Goto^{1,2}¹Nippi Research Institute of Biomatrix, Japan, ²National Institute of Infectious Disease

VI-PO41 HIV/SIV Pathogenesis

Thursday, 15 September

VI-PO41-1

SELECTION OF HIV-1 MUTANTS IN HIV-1-INFECTED HLA-B*51:01 TRANSGENIC HUMANIZED MICE

Yoshinori Sato, Sayaka Nagata, Masafumi Takiguchi
Center for AIDS Research, Kumamoto University, Japan

VI-PO41-2

A SMALL MOLECULE COMPOUND THAT TARGETS THE HIV-1 PROTEIN NEF REDUCES THE INFECTIVITY OF HIV-1

Nopporn Chutiwitoonchai, Shinya Suzu
Center for AIDS Research, Kumamoto University, Japan

VI-PO41-3

QUANTIFYING VIRAL DYNAMICS BASED ON IN VITRO EXPERIMENTS AND MATHEMATICAL MODELING

Shingo Iwami^{1,2,3}, Catherine Beauchemin⁴, Tetsuko Tada³, Tatsuhiko Igarashi³, Tomoyuki Miura³
¹PRESTO, Japan Science and Technology Agency, Japan, ²Graduate School of Mathematical Sciences, The University of Tokyo, ³Institute for Virus Research, Kyoto University, ⁴Department of Physics, Ryerson University

VI-PO41-4

NEF ACTIVITY IN ENHANCEMENT OF VIRION INFECTIVITY IS IMPAIRED IN HIV ELITE CONTROLLERS

Philip Mwimanzzi¹, Tristan Markle², Michiyo Tokunaga¹, Toshiyuki Miura³, Eric Martin², Florencia Pereyra⁴, Bruce Walker⁴, Zabrina Brumme², Mark Brockman², Takamasa Ueno¹
¹Ueno Project Lab, Center for AIDS Research, Kumamoto University, Japan, ²Simon Fraser, ³University of Tokyo, ⁴Ragon Institute of Massachusetts General Hospital

VI-PO41-5

ADJUVANT MOLECULE AG85B CDNA INSERTION INTO LIVE ATTENUATED SIMIAN-HUMAN IMMUNODEFICIENCY VIRUS ENHANCES THE SHIV-SPECIFIC IMMUNE RESPONSES IN CYNOMOLGUS MONKEYS

Tomotaka Okamura¹, Yuya Shimizu¹, Kazuhiro Matsuo^{1,2}, Yasuhiro Yasutomi¹
¹National Institute of Biomedical Innovation, Japan, ²Research and Development Department, Japan BCG Laboratory

VI-PO41-6

IDENTIFICATION OF NOVEL DRUG-RESISTANCE MUTATIONS SELECTED DURING ABACAVIR+LAMIVUDINE+LOPINAVIR/R THERAPY IN HIV-2 CRF01_AB INFECTION

Shiro Ibe¹, Takashi Masaoka¹, Yoshiyuki Yokomaku¹, Yasumasa Iwatani^{1,2}, Wataru Sugiura^{1,2}
¹Clinical Research Center, National Hospital Organization Nagoya Medical Center, Japan, ²Department of AIDS Research, Nagoya University Graduate School of Medicine

VI-PO41-7

INTERACTION BETWEEN NUCLEOCAPSID AND TAT PROTEIN OF HUMAN IMMUNODEFICIENCY VIRUS TYPE 1 (HIV-1) AND ITS EFFECT ON TAT-MEDIATED TRANSCRIPTION

Hye-Won Hong, Kyoung Eun Cha, Heejoon Myung
Dept. of Bioscience and Biotechnology, Hankuk University of Foreign Studies, Korea, South

VI-PO41-8

HIV-1 TAT INTERACTS WITH AND REGULATES THE LOCALIZATION AND PROCESSING OF AMYLOID PRECURSOR PROTEIN

Jiyoung Kim¹, Jee-Hyun Yoon², Yeon-Soo Kim^{1,2}
¹Indang Institute of Molecular Biology, Inje University, Korea, South, ²Dept. of Smart Foods and Drugs, Inje University

VI-PO47 Picornaviruses

Thursday, 15 September

VI-PO47-1

SAFFOLD CARDIOVIRUSES IN PEDIATRIC PATIENTS WITH DIARRHEA, THAILAND

Pattara Khamrin¹, Natthawan Chaimongkol¹, Nattika Nantachit², Shoko Okitsu³, Hiroshi Ushijima³, Niwat Maneekarn¹
¹Department of Microbiology, Faculty of Medicine, Chiang Mai University, Thailand, ²Department of Microbiology, Faculty of Science, Mahidol University, ³Department of Developmental Medical Sciences, Graduate School of Medicine, The University of Tokyo

VI-PO47-2

SUSTAINED HIGH LEVELS OF IL-6 CONTRIBUTE TO THE PATHOGENESIS OF ENTEROVIRUS 71 IN A NEONATE MOUSE MODEL

Wei Xin Khong^{1,6}, Damian G.W Foo^{1,2}, Scott L Trasti³, Eng Lee Tan^{4,5}, Sylvie Alonso¹
¹Department of Microbiology, Immunology Programme, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, ²Ministry of Health, College of Medicine Building, ³Comparative Medicine, National University of Singapore, ⁴School of Chemical and Life Sciences, Singapore Polytechnic, ⁵Department of Paediatrics, National University of Singapore, ⁶NUS Graduate School for Integrative Science and Engineering, National University of Singapore

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SYNTHESIS OF INFECTIOUS SAFFOLD VIRUS TYPE 3 RNA BY T7 RNA POLYMERASE IS TERMINATED BY A HUMAN PREPROPARATHYROID HORMONE (PTH) SIGNAL IN THE VIRAL GENOME

Toshiki Himeda¹, Takushi Hosomi², Naeem Asif³, Hiroyuki Shimizu³, Takako Okuwa¹, Yasushi Muraki¹, Yoshiro Ohara¹
¹Department of Microbiology, Kanazawa Medical University School of Medicine, Japan, ²The Public Health Institute of Kochi Prefecture, ³Department of Virology II, National Institute of Infectious Diseases

VI-PO47-4

EPIDEMIOLOGY AND DISEASE ASSOCIATION OF HUMAN PARECHOVIRUS IN NIIGATA, JAPANKanakō Watanabe¹, Masahiro Fujii²¹Virology Section, Niigata Prefectural Institute of Public Health and Environmental Sciences, Japan, ²Division of Virology, Niigata University Graduate School of Medical and Dental Sciences

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MOLECULAR CHARACTERIZATION OF VP1 REGION OF PORCINE KOBUVIRUSShoko Okitsu¹, Pattara Khamrin², Aksara Thongprachum³, Satoshi Hayakawa¹, Niwat Maneekarn², Hiroshi Ushijima^{1,3,4}¹Division of Microbiology, Department of Pathology and Microbiology, Nihon University School of Medicine, Japan, ²Department of Microbiology, Faculty of Medicine, Chiang Mai University, ³Department of Developmental Medical Sciences, School of International Health, Graduate School of Medicine, The University of Tokyo, ⁴Aino University

VI-PO47-6

CLEAVAGE SITES IN THE NONSTRUCTURAL POLYPROTEIN PRECURSOR OF DICISTROVIRUSES

Nobuhiko Nakashima, Yuri Nakamura, Jun Ishibashi

National Institute of Agrobiological Sciences, Japan

VI-PO47-7

DETECTION AND NUCLEOTIDE SEQUENCE ANALYSIS OF NEW AICHI VIRUS IN WASTEWATER SAMPLES

Teruo Yamashita, Emi Mizutani, Hirokazu Adachi, Miyabi Ito, Akira Fujiura, Hiroko Minagawa

Microbiology and Medical Zoology, Aichi Prefectural Institute of Public Health, Japan

VI-PO47-8

SELECTION OF RNA APTAMERS THAT SPECIFICALLY BIND DOMAIN V OF ENTEROVIRUS 71 INTERNAL RIBOSOMAL ENTRY SITE (IRES) AND INHIBITS THE VIRAL TRANSLATIONSzu-Hao Kung¹, Kun-Pi Li¹, Bin-Hsin Kao¹, Chia-Hung Cheng¹, Cheng-Wen Lin², Wu-Tse Liu¹¹Department of Biotechnology and Laboratory Science in Medicine, National Yang-Ming University, Taiwan, ²Department of Medical Laboratory Science and Biotechnology, China Medical University

VI-PO47-9

PREVALENCE OF NEUTRALIZING ANTIBODY AGAINST SAFFOLD VIRUS GENOTYPES 2 AND 3 IN KOCHI, JAPANTakushi Hosomi¹, Tami Nabeshima¹, Tae Taniwaki¹, Kazushige Matsumoto¹, Aki Fujito¹, Isao Geshi¹, Michiaki Matsumoto¹, Toyokazu Morihata², Atsushi Imai¹¹The Public Health Institute of Kochi Prefecture, Japan, ²Morihata Pediatric Clinic

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RHINOVIRUS REPLICATION KINETICS: AN IN VITRO MODEL SYSTEM FOR THE STUDY OF HOST-PATHOGEN INTERACTIONS

Michelle Wong, Igge Gustafsson, Thomas Tolfvenstam, Kristina Broliden

Department of Medicine, Infection and Immunology Unit, Karolinska Institutet, Sweden

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THE OCCURRENCE OF NON-PATHOGENIC PORCINE TESCHOVIRUSES, SAPELOVIRUSES AND ENTEROVIRUSES B IN DOMESTIC PIGS (SUS SCROFA F. DOMESTICA) AND WILD BOARS (SUS SCROFA) IN THE CZECH REPUBLIC

Jana Prodelalova

Virology and Diagnostics, Veterinary Research Institute, Czech Republic

VI-PO47-12

MUTATIONS IN VP2 AND VP1 CAPSID PROTEINS INCREASE CYTOTOXICITY AND MOUSE LETHALITY OF ENTEROVIRUS 71 BY VIRUS BINDING AND RNA ACCUMULATION ENHANCEMENTSheng-Wen Huang¹, Ya-Fang Wang², Chun-Keung Yu³, Ih-Jen Su^{2,4}, Jen-Ren Wang^{1,2,5}¹The Institute of Basic Medical Sciences, National Cheng Kung University, Taiwan, ²Division of Infectious Diseases, National Health Research Institutes, ³Department of Microbiology and Immunology, National Cheng Kung University, ⁴Department of Pathology, National Cheng Kung University, ⁵Department of Medical Laboratory Science and Biotechnology, National Cheng Kung University

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ANTIVIRAL EFFECT OF NITRIC OXIDE ON ENTEROVIRUS 71 REPLICATIONJen-Ren Wang^{1,2,3}, Yen-Chang Tuan¹, Sheng-Wen Huang²¹Department of Medical Laboratory Science and Biotechnology, National Cheng Kung University, Taiwan, ²Institute of Basic Medical Sciences, National Cheng Kung University, ³Division of Infectious Diseases, National Health Research Institutes

VI-PO47-14

KINETIC DISTRIBUTION OF REPLICATION OF EACH SEROTYPE OF POLIOVIRUS AFTER ORAL POLIO VACCINE ADMINISTRATION

Kazuko Araki, Keiko Tanaka Taya, Hiroshi Satoh, Yuko Murakami, Tamie Sugawara, Nobuhiko Okabe

Infectious Disease Surveillance Center, National Institute of Infectious Diseases, Japan

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CROSS-REACTIVE NEUTRALIZING ANTIBODY RESPONSES TO ENTEROVIRUS 71 INFECTION IN TAIWANESE YOUNG CHILDRENMei-Liang Huang^{1,2}, Pai-Shan Chiang¹, Shu-Ting Luo¹, Kuo-Chien Tsao³, Tzou-Yien Lin³, Luan-Yin Chang², Min-Shi Lee¹¹National Health Research Institutes (NHRI), Taiwan, ²National Taiwan University Hospital, ³Chang Gung Memorial Hospital (CGMH)

VI-PO47-16

ROLE OF IMPORTED SEAFOOD AS A VEHICLE OF HEPATITIS A VIRUS

Mamoru Noda¹, Masashi Uema¹, Noriko Aoki², Satomi Aoki², Yumiko Furuya³, Osamu Nishio⁴, Shinichiro Shibata⁵, Akari Kodaira⁵, Koji Ishii⁶, Yasutaka Yamasita²

¹Division of Biomedical Food Research, National Institute of Health Science, Japan, ²Microbiology Division, Ehime Prefecture Institute of Public Health and Environmental Science, ³Department of Microbiology, Kanagawa Prefectural Institute of Public Health, ⁴Department of Public Health, Aichi Medical University School of Medicine, ⁵Microbiology Department, Nagoya City Public Health Research Institute, ⁶Department of Virology II, National Institute of Infectious Diseases

VI-PO47-17

FOOD HYGIENIC INVESTIGATION OF HEPATITIS A CASES IN THE SPRING OF 2010 IN JAPAN

Mamoru Noda¹, Yuki Tada², Masashi Uema¹, Kazutoshi Nakashima², Tomoe Shimada², Naomi Nakamura³, Tomoko Kiyohara⁴, Koji Ishii⁴

¹Division of Biomedical Food Research, National Institute of Health Sciences, Japan, ²Infectious Disease Surveillance Center, National Institute of Infectious Diseases, ³Field Epidemiology Training Program, National Institute of Infectious Diseases, ⁴Department of Virology II, National Institute of Infectious Diseases

VI-PO47-18

THE INHIBITION TEST OF ANTIVIRAL AGENTS AGAINST FOOT-AND-MOUTH DISEASE VIRUS

Su-Mi Kim, Jong-Hyeon Park, Kwang-Nyeong Lee, Se-Kyeong Kim, Young-Joon Ko, Hyang-Sim Lee, In-Soo Cho
National Veterinary Research and Quarantine Service, Ministry for Food, Agriculture, Forestry and Fisheries, Korea, South

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ECTROPIS OBLIQUE PICORNA-LIKE VIRUS CDNA VECTOR

YuanYang Hu, Meijuan Lin, Congyi Zheng, Jiamin Zhang
State Key Laboratory of Virology, College of Life Sciences, Wuhan University, China

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VIRAL LOAD OF ENTEROVIRUS IN CEREBROSPINAL FLUID MEASURED BY QUANTITATIVE ASSAY AND CLINICAL SYMPTOMS

Masahiro Amaha, Hisashi Kawashima, Takami Takeshi, Kouji Takekuma, Akinori Hoshika
Pediatrics, Tokyo Medical University, Japan

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A GOLGI PROTEIN INTERACTING WITH 2B, 2BC, 2C, 3A AND 3AB IS A HOST FACTOR REQUIRED FOR AICHI VIRUS RNA REPLICATION

Kumiko Ishikawa, Jun Sasaki, Yoshimasa Maeno, Kyoko Moriguchi, Satoshi Komoto, Koki Taniguchi
Virology and Parasitology, Fujita Health University, Japan

VI-PO47-22

DISCRIMINATIVE SURVEY OF DISTRIBUTION OF KAKUGO VIRUS AND DEFORMED WING VIRUS IN HONEYBEE (*APIS MELLIFERA CARNICA*) COLONIES IN GERMANY

Tomoko Fujiyuki^{1,3}, Hildburg Beier², Klara Azzami², Juergen Tautz², Takeo Kubo¹

¹Department of Biological Sciences, Graduate School of Science, The University of Tokyo, Japan, ²BEEgroup Biocenter, University of Wuerzburg, ³Department of Special Pathogens, International Research Center for Infectious Diseases, The Institute of Medical Science, The University of Tokyo

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VI-PO45-1

EPITOPE MAPPING AND ENGINEERING A VACCINE STRAIN OF CLASSICAL SWINE FEVER VIRUS WITH ALTERED ANTIGENIC SPECIFICITY

Alexei D Zaberezhny, Eugene A Nepoklonov, Taras I Aliper, Tatyana V Grebennikova, Alexei Yu Kozlov, Ludmila V Kostina, Vadim V Grabovetski, Natalia I Bounkova, Dmitri K Lvov

D.I.Ivanovski Institute of Virology, Ministry of Health and Social Development, Russia

VI-PO45-2

A RECOMBINANT TETRAVALENT LIVE ATTENUATED DENGUE VACCINE BASED ON THE 3'-UTR DELTA-30 MUTATION IS SAFE AND INDUCES A BALANCED IMMUNE RESPONSE AGAINST ALL 4 SEROTYPES IN HUMANS

Stephen Whitehead¹, Anna Durbin², Beth Kirkpatrick³, Daniel Elwood², Kristen Pierce³, Cecilia Tiber², Kimberli Wanionek², Bhavin Thumar², Marya Carmolli³, Catherine Luke¹, Kanta Subbarao¹

¹Laboratory of Infectious Diseases, NIAID, NIH, USA, ²Johns Hopkins Bloomberg School of Public Health, ³University of Vermont

VI-PO45-3

DETECTION OF HIGHER LEVELS OF DENGUE VIREMIA USING FCγR-EXPRESSING BHK-21 CELLS THAN FCγR NEGATIVE CELLS IN SERUM SAMPLES FROM PATIENTS WITH SECONDARY INFECTION BUT NOT IN THOSE WITH PRIMARY INFECTION

Meng Ling Moi, Chang-Kweng Lim, Akira Kotaki, Tomohiko Takasaki, Ichiro Kurane

Virology 1, National Institute of Infectious Diseases, Japan

VI-PO45-4

MULTIPLE MECHANISMS OF SEVERE DISEASE FOLLOWING JAPANESE ENCEPHALITIS VIRUS INFECTION

Daisuke Hayasaka¹, Yoshiki Fujii², Noriyo Nagata³, Dihn Tuan Duc¹, Yuki Takamatsu¹, Kazutaka Kitaura², Kanae Tanaka¹, Tetsutaro Sata³, Ryuji Suzuki², Kouichi Morita¹

¹Department of Virology, Institute of Tropical Medicine, GCOE Program, Nagasaki University, Japan, ²Clinical Research Center, National Hospital Organization Sagami Hospital, ³Department of Pathology, National Institute of Infectious Diseases

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Withdrawn

VI-PO45-6

CONSTRUCTION AND CHARACTERIZATION OF CHIMERIC VIRUS BETWEEN TICK-BORNE ENCEPHALITIS VIRUS AND OMSK HEMORRHAGIC FEVER VIRUSKentaro Yoshii¹, Yuji Sunden², Kana Yokozawa¹, Hiroaki Kariwa¹, Michael R Holbrook^{3,4}, Ikuo Takashima¹¹Laboratory of Public Health, Graduate School of Veterinary Medicine, Hokkaido University, Japan, ²Laboratory of Comparative Pathology, Graduate School of Veterinary Medicine, Hokkaido University, ³Department of Pathology, The University of Texas Medical Branch, ⁴NIAID Integrated Research Facility

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FIRST SEROLOGICAL EVIDENCE OF BORDER DISEASE VIRUS AMONG SHEEP FROM NORTHERN JAPANMassimo Giangaspero¹, Giorgia Ibata², Giovanni Savini³, Takeshi Osawa⁴, Shingo Tatami⁵, Eishu Takagi⁶, Hiroaki Moriya⁷, Norimoto Okura⁸, Kazuo Kato⁹, Atsushi Kimura¹⁰, Ryô Harasawa¹¹Department of Veterinary Microbiology, Iwate University, Japan, ²Virology Department, Veterinary Laboratories Agency, ³Istituto Zooprofilattico Sperimentale dell' Abruzzo e Molise, ⁴Department of Veterinary Theriogenology, Iwate University, ⁵Dounan Agricultural Mutual Aid Association, ⁶Dairy Farm Research, Kitami, ⁷Tokachi Agricultural Mutual Aid Association, ⁸Kamikawa Chuo Agricultural Mutual Aid Association, ⁹Nemuro-chiku Agricultural Mutual Aid Association, ¹⁰Morioka-chiiki Agricultural Mutual Aid Association

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INVOLVEMENT OF CYCLOPHILIN B IN THE REPLICATION OF JAPANESE ENCEPHALITIS VIRUSHiroto Kambara¹, Hideki Tani¹, Yoshio Mori², Takayuki Abe¹, Hiroshi Katoh¹, Takasuke Fukuhara¹, Shuhei Taguwa¹, Kohji Moriishi³, Yoshiharu Matsuura¹¹Department of Molecular Virology, Research Institute for Microbial Diseases, Osaka University, Japan, ²Department of Virology III, National Institute of Infectious Diseases, ³Department of Microbiology, School of Medicine, University of Yamanashi

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Withdrawn

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Withdrawn

VI-PO45-11

DISPLACEMENT OF THE PREDOMINANT DENGUE VIRUS IN SURABAYA, INDONESIA: STATUS IN 2008-2010Atsushi Yamanaka^{1,2}, Kris C Mulyatno², Helen Susilowati², Eryk Hendrianto², Amor P Ginting², Dian D Sary², Fedik A Rantam², Soegeng Soegijanto², Eiji Konishi^{1,2,3}¹Center for Infectious Diseases, Kobe University Graduate School of Medicine, Indonesia, ²Indonesia-Japan Collaborative Research Center for Emerging and Re-emerging Infectious Diseases, Institute of Tropical Disease, Airlangga University, ³International Health, Kobe University Graduate School of Health Sciences

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GEOGRAPHIC DISTRIBUTION OF SUBCLUSTERS OF JAPANESE ENCEPHALITIS VIRUS GENOTYPE 1Mika Saito¹, Douangdao Souk Aloun², Khampe Phonsavath³, Bounlay Phommasack⁴, Sithat Insisiengmay⁴, Yoshihiro Makino⁵¹Department of Microbiology and Oncology, Graduate School of Medicine, University of The Ryukyus, Japan, ²Mahosot Hospital, ³Sethathirath Hospital, ⁴Ministry of Public Health, ⁵Sato Hospital

VI-PO45-13

PHYLOGENETIC ANALYSIS OF DENGUE VIRUSES PREVALENT IN DELHI DURING 2007-2009

Anita Chakravarti, Mayank S Chauhan, Preena Bhalla, Monika Matlani

Microbiology, Maulana Azad Medical College, India

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OCCURRENCE OF CLASSICAL SWINE FEVER IN ASSAM AND OTHER NORTH EASTERN STATES, INDIA DURING 2005-2010

Dilip Kumar Sarma

Department of Microbiology, Assam Agricultural University, India

VI-PO45-15

MONOCLONAL ANTIBODIES TO DENGUE VIRUS TYPES 1 AND 3 EXHIBIT NEUTRALIZING AND ENHANCING ACTIVITIES DEPENDING ON EPITOPES ON ENVELOPE PROTEIN AND SUBCLASS OF IGGTomohiro Kotaki¹, Shoko Takeda¹, Eiji Konishi^{1,2}¹Department of International Health, Kobe University Graduate School of Health Sciences, Japan, ²Division of Vaccinology, Center for Infectious Diseases, Kobe University Graduate School of Medicine

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SMALL CARBOHYDRATE INHIBITOR TARGETING DENGUE VIRUS E PROTEINShota Era¹, Kazuya I.P.J Hidari¹, Ippei Watanabe¹, Kiyoshi Ikeda², Kouichi Morita³, Takashi Suzuki¹¹Department of Biochemistry, School of Pharmaceutical Sciences, University of Shizuoka, and Global COE Program for Innovation in Human Health Sciences, Japan, ²Department of Pharmaceutical Sciences, Faculty of Pharmaceutical Sciences, Hiroshima International University, ³Department of Virology, Institute of Tropical Medicine, Nagasaki University

VI-PO45-17

ISOLATION AND CHARACTERIZATION OF TICK-BORNE ENCEPHALITIS VIRUS IN HOKKAIDO, JAPAN IN 2008

Shoko Yamazaki, Kentaro Yoshii, Keita Mottate, Ryo Murata, Takahiro Sanada, Hiroaki Kariwa, Ikuo Takashima

Laboratory of Public Health, Graduate School of Veterinary Medicine, Hokkaido University, Japan

VI-PO45-18

NATURAL INFECTION WITH JAPANESE ENCEPHALITIS VIRUS IN INHABITANTS OF KUMAMOTO PREFECTURE, JAPAN, FROM 2004 THROUGH 2010

Eiji Konishi^{1,2}, Yoko Kitai¹, Koichi Nishimura³, Seiya Harada³

¹Department of International Health, Kobe University Graduate School of Health Sciences, Japan, ²Center for Infectious Diseases, Kobe University Graduate School of Medicine, ³Division of Microbiology, Kumamoto Prefectural Institute of Public Health and Environmental Science

VI-PO45-19

BIOCHEMICAL PROPERTIES OF N-LINKED GLYCOSYLATION OF DENGUE VIRUS NS1 PROTEIN

Katsuki Ekawa¹, Kazuya I.P.J Hidari¹, Kouichi Morita², Takashi Suzuki¹

¹Department of Biochemistry, School of Pharmaceutical Sciences, University of Shizuoka, and Global COE Program for Innovation in Human Health Sciences, Japan, ²Department of Virology, Institute of Tropical Medicine, Nagasaki University

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ROLE OF THE N-LINKED GLYCAN OF ENVELOPE PROTEIN OF TICK-BORNE ENCEPHALITIS VIRUS IN THE VIRUS REPLICATION AND PATHOGENICITY

Natsumi Yanagihara¹, Kentaro Yoshii¹, Akiko Goto^{1,2}, Ayae Ikawa¹, Mariko Ishizuka¹, Hiroaki Kariwa¹, Ikuo Takashima¹

¹Laboratory of Public Health, Graduate School of Veterinary Medicine, Hokkaido University, Japan, ²Hokkaido Institute of Public Health

VI-PO45-21

CHARACTERIZATION OF THE STRAINS OF TICK-BORNE ENCEPHALITIS VIRUS OF THE FAR-EASTERN SUBTYPE ISOLATED FROM PATIENTS WITH DIFFERENT FORMS OF INFECTION

Galina N Leonova¹, Elena V Pavlenko¹, Natalya V Krylova¹, Sergey I Belikov², Ilya G Kondratov²

¹Laboratory of Tick-Borne Encephalitis, Institute of Epidemiology and Microbiology, SB RAMS, Russia, ²Laboratory of Analytical Bio-Organic Chemistry, Limnological Institute SB RAS

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MOLECULAR GENETIC CHARACTERISTICS OF TICK-BORNE ENCEPHALITIS VIRUS SIBERIAN SUBTYPE

Nina V Kulakova¹, Elena V Romanova¹, Elena A Sidorova², Tatyana I Borisova², Evgenii I Andaev², Anna G Trukhina², Eugene V Chausov³, Vladimir A Ternovoi³, Galina N Leonova⁴, Sergei I Belikov¹, Sergei V Balakhonov²

¹Limnological Institute SB RAS, Russia, ²Irkutsk Anti-plague Research Institute of Siberia and Far East, ³State Research Center of Virology and Biotechnology Vector, ⁴Research Institute of Epidemiology and Microbiology of SB RAMS

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THE INFLUENCE OF TICK-BORNE ENCEPHALITIS VIRUS GENOME MUTATIONS ON THE PATHOGENICITY

Sergei I Belikov¹, Galina N Leonova², Ilya G Kondratov¹, Elena V Romanova¹, Ulyana V Potapova¹, Elena V Pavlenko²

¹Limnological Institute of SB RAS, Russia, ²Research Institute of Epidemiology and Microbiology of SB RAMS

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BOVINE VIRAL DIARRHEA VIRUS QUASISPECIES DETECTED IN AN RK13 CELL LINE ORIGINATING IN A RABBIT KIDNEY

Mahmod Muhsen, Hiroshi Aoki, Akio Fukusho

Nippon Veterinary and Life Science University, Faculty of Veterinary Science, Japan

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PIVOTAL ROLE OF ANTIBODY AND SUBSIDIARY CONTRIBUTION OF CD8+ T CELLS TO RECOVERY FROM INFECTION IN A MURINE MODEL OF JAPANESE ENCEPHALITIS

Maximilian Larena, Matthias Regner, Eva Lee, Mario Lobigs

Department of Emerging Pathogens and Vaccines, John Curtin School of Medical Research, The Australian National University, Australia

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PREPARATION OF HUMAN MONOCLONAL ANTIBODIES AGAINST DENGUE VIRUS USING PBMCs DERIVED FROM DENGUE-INFECTED PATIENTS AT ACUTE PHASES AND CONVALESCENT PHASE

Tadahiro Sasaki^{1,5}, Chayanee Setthapramote^{2,5}, Orapim Puiprom^{1,3}, Mikiko Sasayama^{1,3}, Kriengsak Limkittikul^{2,5}, Pannamthip Pitsaksajakul^{2,5}, Chonlatip Pipattanaboon^{2,5}, Motoki Kuhara^{4,5}, Takeshi Kurosu^{1,5}, Pongrama Ramasoota^{2,5}, Kazuyoshi Ikuta^{1,3,5}

¹Department of Virology, Research Institute for Microbial Diseases, Osaka University, Japan, ²Faculty of Tropical Medicine, Mahidol University, ³Mahidol-Osaka Center for Infectious Diseases (MOCID), ⁴Medical & Biological Laboratories Co. Ltd (MBL), ⁵JST-JICA SATREPS Project

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A NOVEL APPROACH TO DETECT VIRAL ANTIGENS IN PATIENTS WITH ACUTE DENGUE VIRUS INFECTION

Wen-Fan Shen¹, Day-Yu Chao¹, Han-Chung Wu², Chwan-Chuen King³, Gwong-Jeng Chang⁴

¹Graduate Institute of Microbiology and Public Health, College of Veterinary Medicine, National Chung-Hsing University, Taiwan, ²Institute of Cellular and Organismic Biology, Academia Sinica, ³Institute of Epidemiology, School of Public Health, National Taiwan University, ⁴Division of Vector-Borne Infectious Diseases, Centers for Disease Control and Prevention

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INFECTION OF MOUSE CELLS WITH DENGUE VIRUS AND JAPANESE ENCEPHALITIS VIRUS

Takeshi Kurosu¹, Sabar Pambudi¹, Omokoko Magot¹, Chidchanok Khamlert¹, Supranee Phanthanawiboon¹, Surapee Anantapreecha², Kazuyoshi Ikuta¹

¹Virology, Research Institute for Microbial Diseases, Osaka University, Japan, ²National Institute of Health, Department of Medical Sciences

VI-PO45-29

EFFICIENT SCREENING OF PROTEASE INHIBITOR AGAINST DENGUE VIRUS NS3 BY STRUCTURE-BASED STUDY

Sabar Pambudi¹, Norihito Kawashita^{2,3}, Rie Kashiwada², Tatsuya Takagi^{2,3}, Takeshi Kurosu¹, Kazuyoshi Ikuta¹

¹Department of Virology, Osaka University, Japan, ²Graduate School of Pharmaceutical Sciences, Osaka University, ³Genome Information Research Center, Research Institute for Microbial Diseases, Osaka University

VI-PO45-30

DOGS ARE GOOD SENTINELS FOR JAPANESE ENCEPHALITIS VIRUS INFECTION IN RURAL/RESIDENTIAL AREAS

Hiroshi Shimoda, Seiji Tamaru, Masayuki Shimojima, Ken Maeda

Laboratory of Veterinary Microbiology, Yamaguchi University, Japan

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AN INVOLVEMENT OF PHOSPHATIDYL SERINE-DEPENDENT APOPTOTIC PLATELET CLEARANCE IN THE MECHANISMS OF TRANSIENT THROMBOCYTOPENIA IN SECONDARY DENGUE VIRUS INFECTION

Maria Terrese G Alonzo¹, Talitha Lea Lacuesta², Lady-Anne Suarez³, Cynthia Mapua³, Takeshi Kurosu⁴, Yukihiro Akeda¹, Efren Dimaano², Filipinas Natividad³, Shigekazu Nagata⁵, Kazunori Oishi¹

¹International Research Center for Infectious Diseases, Research Institute for Microbial Diseases, Japan, ²Department of Blood Borne Diseases, San Lazaro Hospital, ³Research and Biotechnology Division, St. Luke's Medical Center, ⁴Department of Virology, Research Institute for Microbial Diseases, Osaka University, ⁵Graduate School of Medicine, Kyoto University

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ANALYSIS OF CROSS-REACTIVE MOUSE MONOCLONAL ANTIBODIES AGAINST DENGUE VIRUS NS1 IN VITRO AND IN VIVO

Magot Omokoko Diata, Promsin Masrinoul, Sabar Pambudi, Supranee Phanthanawiboon, Takeshi Kurosu, Kazuyoshi Ikuta

Department of Virology, Research Institute for Microbial Diseases, Osaka University, Japan

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LOSS OF T-CELL CONTROL DURING INFECTION WITH RUSSIAN SPRING-SUMMER ENCEPHALITIS AND OMSK HEMORRHAGIC FEVER VIRUSES

Mike Holbrook^{1,2}, Bersabeh Tigabu², Alexander N Freiberg²

¹Niaid Integrated Research Facility, USA, ²The University of Texas Medical Branch

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CHANGES IN THE BLOOD-BRAIN BARRIER DURING TICK-BORNE ENCEPHALITIS

Daniel Ruzek¹, Jiri Salat^{1,2}, Sunit K Singh³, Jan Kopecky¹

¹Institute of Parasitology, Biology Centre of The Academy of Sciences of The Czech Republic, Czech Republic, ²Veterinary Research Institute, ³Centre of Cellular and Molecular Biology

VI-PO45-35

MOLECULAR EPIDEMIOLOGICAL STUDY OF INFECTIOUS DISEASES DERIVED FROM WILD BIRDS IN HOKKAIDO

Masayoshi Isezaki, Shiro Murata, Satoru Konnai, Kazuhiko Ohashi

Graduate School of Veterinary Medicine, Hokkaido University, Japan

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INHIBITION OF IFN-BETA PROMOTER ACTIVATION BY TICK-BORNE ENCEPHALITIS VIRUS PRM AND NS1 PROTEINS

Suvi Kuivanen¹, Pasi Kaukinen², Nathalie Y Uzcategui¹, Antti Vaheri^{1,3}, Ilkka Julkunen², Olli Vapalahti^{1,3,4}

¹Department of Virology, Haartman Institute, University of Helsinki, Finland, ²Department of Vaccination and Immune Protection, National Institute for Health and Welfare, ³Department of Virology, Helsinki University Hospital Laboratory, ⁴Division of Microbiology and Epidemiology, Department of Basic Veterinary Sciences

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CONSECUTIVE DENGUE INFECTIONS DURING A DENV-1 AND DENV-4 CO-EPIDEMIC

Fatiha Najioullah¹, Yves Hatchuel², Andre Cabie³, Laurent Thomas⁴, Raymond Cesaïre¹

¹Virology and Immunology Department and Ea 4537, University Hospital of Fort-de-France, France, ²Department of Pediatrics, University Hospital of Fort-de-France, ³Department of Infectious and Tropical Diseases, and CIE 802 INSERM, University Hospital of Fort-de-France, ⁴Emergency Department, University Hospital of Fort-de-France

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INFLUENCE OF DENGUE VIRUS SEROTYPES AND PREVIOUS DENGUE INFECTIONS ON SEVERITY OF ILLNESSES IN ADULT DENGUE PATIENTS

Laurent Thomas¹, Fatiha Najioullah², Victor Moravie¹, Francois Besnier¹, Stephane Kaidomar¹, Francois Lengelle¹, Raymond Cesaïre², Andre Cabie³

¹Emergency Department, University Hospital of Fort-de-France, France, ²Virology and Immunology Department and EA 4537, University Hospital of Fort-de-France, ³Department of Infectious and Tropical Diseases and CIE 802 INSERM, University Hospital of Fort-de-France

VI-PO45-39

IMPORTANCE OF THE VIRAL GENOTYPES FROM WHICH ELISA ANTIGENS ARE DERIVED FOR SEROSURVEILLANCE OF JAPANESE ENCEPHALITIS VIRUS

Tomohiro Ishikawa^{1,2}, Michiaki Masuda¹, Eiji Konishi²

¹Microbiology, Dokkyo Medical University School of Medicine, Japan, ²International Health, Kobe University Graduate School of Health Sciences

VI-PO45-40

EFFECTS OF A SINGLE AMINO ACID SUBSTITUTION (S123N) OF THE JAPANESE ENCEPHALITIS VIRUS E PROTEIN ON ITS GROWTH IN VITRO

Yukie Yamaguchi^{1,2}, Akira Kotaki¹, Kyoko Sawabe³, Haruo Watanabe^{2,4}, Ichiro Kurane¹, Tomohiko Takasaki¹, Shigeru Tajima¹

¹Department of Virology 1, National Institute of Infectious Diseases, Japan, ²Department of Pathology, Immunology and Microbiology, Graduate School of Medicine, The University of Tokyo, ³Department of Medical Entomology, National Institute of Infectious Diseases, ⁴National Institute of Infectious Diseases

VI-PO45-41

A NOVEL STRATEGY FOR THE EXPRESSION OF THE YELLOW FEVER NS1 PROTEIN IN EUKARIOTIC CELLS

Lorena CS Chaves¹, Daniel MP Ardisson-Araujo², Fabricio S Morgado², Bergmann M Ribeiro³

¹Brasília University Medical School - Graduate Program in Molecular Pathology, University of Brasília, Brazil, ²Institute of Biological Sciences - Graduate Program in Molecular Biology, University of Brasília, ³Department of Cell Biology, University of Brasília

VI-PO45-42

DENGUE PRIMARY INFECTIONS OBSERVED AMONG DENGUE HAEMORRHAGIC FEVER/DENGUE SHOCK SYNDROME CASES IN UPPER MYANMAR

Mya Myat Ngwe Tun¹, Kyaw Zin Thant^{2,3}, Shingo Inoue¹, Yae Kurosawa⁴, Yee Yee Lwin³, Sanda Lin³, Kay Thi Aye⁵, Pe Thet Khin⁶, Tin Myint⁷, Khin Htwe⁸, Kouichi Morita¹

¹Department of Virology, Institute of Tropical Medicine, Nagasaki University, Japan, ²Department of Molecular Epidemiology, Institute of Tropical Medicine, Nagasaki University, ³Virology Research Division, Department of Medical Research (Upper Myanmar), ⁴Pentax Co. Ltd., ⁵Virology Research Division, Department of Medical Research (Lower Myanmar), ⁶Department of Child Health, University of Medicine, ⁷University of Medicine (II), ⁸Department of Child Health, University of Medicine (I)

VI-PO45-43

(2) PHYSIOLOGICAL FUNCTION OF JAPANESE ENCEPHALITIS VIRUS PROTEIN NS4A

Tsutomu Takegami¹, Manabu Murakami¹, Souichi Nukuzuma², Yasuhito Ishigaki¹

¹Div of Mol Oncology and Virology, Medical Res Inst, Kanazawa Medical University, Japan, ²Dept of Microbiology, Kobe Inst of Health

VI-PO45-44

CO-EXISTENCE OF MAJOR AND MINOR VIRAL POPULATIONS WITH TWO DIFFERENT ORIGINS IN THE SAME PATIENTS WHO SECONDARILY INFECTED WITH DENGUE VIRUS SEROTYPE 2 IN BANGKOK IN 2010

Akifumi Yamashita^{1,2}, Orapim Puiprom^{2,4}, Mikiko Sasayama^{2,3}, Kriengsak Limkittikul^{4,5}, Khwanchit Boonha^{2,4}, Akanitt Jittmitraphap^{4,5}, Pornsawan Leungwutiwong^{4,5}, Takeshi Kurosu^{2,3,5}, Pongrama Ramasoota^{4,5}, Kazuyoshi Ikuta^{2,3,5}

¹Graduate School of Life Science, Tohoku University, Japan, ²Mahidol-Osaka Center for Infectious Diseases, ³Department of Virology, Research Institute for Microbial Diseases, Osaka University, ⁴Faculty of Tropical Medicine, Mahidol University, ⁵JST/JICA, Science and Technology Research Partnership for Sustainable Development (SATREPS)

VI-PO45-45

CHARACTERIZATION OF DENGUE 1 EPIDEMIC STRAINS PROLIFERATED IN HANOI, VIETNAM IN 2009

Futoshi Hasebe^{1,2}, Takeshi Nabeshima¹, Kenta Okamoto¹, Toru Kubo¹, Takashi Tsunoda³, Guillermo Posadas Herrera¹, Thuy Thi Thu Nguyen⁴, Yen Thi Nguyen⁵, Mai Thi Quynh Le⁴, Kouichi Morita¹

¹Virology, Institute of Tropical Medicine, Nagasaki University, Japan, ²Center of International Collaborative Research, Nagasaki University, ³Vector Ecology and Environment, Institute of Tropical medicine, Nagasaki University, ⁴Virology, National Institute of Hygiene and Epidemiology, ⁵Entomology, National Institute of Hygiene and Epidemiology

VI-PO45-46

JAPANESE ENCEPHALITIS VIRUS ESTABLISHES PERSISTENT INFECTION BY KNOCKING DOWN HEAT SHOCK PROTEIN 70 IN CONJUNCTION WITH DEFECTIVE-INTERFERING VIRUS PARTICLES IN BHK-21

Soo Young Park, Hey Rhyoung Lyoo, Yong Seok Jeong
Department of Biology, Kyung Hee University, Korea, South

VI-PO61 Hantaviruses and West Nile Virus

Thursday, 15 September

VI-PO61-1

ANALYSIS OF PULMONARY EDEMA IN HANTAVIRUS-INFECTED SCID MOUSE

Takaaki Koma, Kumiko Yoshimatsu, Kenta Shimizu, Shumpei P Yasuda, Rie Isozumi, Jiro Arikawa

Department of Microbiology, Graduate School of Medicine, Hokkaido University, Japan

VI-PO61-2

DEVELOPMENT OF THE LETHAL ANIMAL MODEL OF HUMAN HANTAVIRUS INFECTION

Takahiro Seto¹, Noriyo Nagata², Keisuke Yoshikawa¹, Osamu Ichii³, Takahiro Sanada¹, Ngonda Saasa¹, Yasunori Kon³, Kentaro Yoshii¹, Hiroaki Kariwa¹

¹Graduate School of Veterinary Medicine, Hokkaido University, Laboratory of Public Health, Japan, ²National Institute of Infectious Diseases, Department of Pathology, ³Graduate School of Veterinary Medicine, Hokkaido University, Laboratory of Anatomy

VI-PO61-3

HIGH SUSCEPTIBILITY OF CULTURED CELLS DERIVED FROM THE KIDNEY OF GRAY RED-BACKED VOLE (*MYODES RUFOCANUS*) TO PUUMALA VIRUS AND OTHER HANTAVIRUSES

Takahiro Sanada, Takahiro Seto, Yuka Ozaki, Ngonda Saasa, Kentaro Yoshii, Hiroaki Kariwa

Lab. of Public Health, Dept. of Environmental Veterinary Sciences, Graduate School of Veterinary Medicine, Hokkaido University, Japan

VI-PO61-4

EPIZOOTIOLOGICAL INVESTIGATION OF HANTAVIRUS INFECTION IN JAPAN AND GENETIC VARIATION OF HOKKAIDO VIRUS IN *MYODES RUFOCANUS*

Yuka Ozaki¹, Takahiro Sanada¹, Takahiro Seto¹, Kyle Taylor¹, Leonid I Ivanov², Kentaro Yoshii¹, Toshio Tsubota¹, Yoshinori Ikenaka¹, Mayumi Ishizuka¹, Jiro Arikawa³, Hiroaki Kariwa¹

¹Graduate School of Veterinary Medicine, Hokkaido University, Japan,

²Plague Control Station of Khabarovsk, ³Graduate School of Medicine, Hokkaido University

VI-PO61-5

THE IDENTIFICATION OF THE RODENT RESERVOIR OF MONTANO VIRUS, A NOVEL HANTAVIRUS IN MEXICO

Ngonda Saasa¹, Cornelio Sanchez-Hernandez², Maria de Lourdes Romero-Almaraz², Haruka Yoshida¹, Takahiro Sanada¹, Takahiro Seto¹, Kentaro Yoshii¹, Kumiko Yoshimatsu³, Jiro Arikawa³, Ikuo Takashima¹, Hiroaki Kariwa¹

¹Graduate School of Veterinary Medicine, Hokkaido University, Japan,

²Universidad Nacional Autonoma de Mexico, ³Graduate School of Medicine, Hokkaido University

VI-PO61-6

MODERN VIEW ON NATURAL FOCUS OF HANTAVIRUS INFECTION IN THE SOUTH OF FAR EASTERN RUSSIA

Galina G Kompanets, Raisa A Slonova, Tatyana V Kushnareva, Irina G Maksyoma, Olga V Iunikhina
Laboratory of Hemorrhagic Fever with Renal Syndrome, Institute of Epidemiology and Microbiology, SB RAMS, Russia

VI-PO61-7

INTERFERON-BETA RESPONSE IN A549 CELLS FOLLOWING PUUMALA VIRUS INFECTION

So Hee Shim¹, Man-Seong Park², Jin-Won Song¹, Ki-Joon Song¹, Luck Ju Baek¹

¹Microbiology, Korea University, Korea, South, ²Microbiology, Hallym University

VI-PO61-8

SMALL INTERFERING RNA INHIBITION OF ANDES VIRUS REPLICATION IN VITRO

Cheng-Feng Chiang, Punya Shrivastava-Ranjan, Christina F Spiropoulou

Viral Special Pathogens Branch, Centers for Disease Control and Prevention, USA

VI-PO61-9

PUUMALA HANTAVIRUS IN LATVIA: PHYLOGENETIC EVIDENCE FOR A NOVEL LINEAGE CO-CIRCULATING WITH THE COMMON RUSSIAN LINEAGE

Maria Razzauti¹, Angelina Plyusnina¹, Jukka Nienimaa², Heikki Henttonen², Alexander Plyusnin¹

¹Department of Virology, Infection Biology Research Program, Haartman Institute, FI-00014 University of Helsinki, Finland, ²Finnish Forest Research Institute, Vantaa Research Unit

VI-PO61-10

HEMORRHAGIC FEVER WITH RENAL SYNDROME IN US SOLDIERS AND SURVEILLANCE FOR HANTAVIRUS INFECTION OF RODENT, SOUTH KOREA

Jin-Won Song¹, Se Hun Gu¹, Sung-Sil Moon², Ki-Joon Song¹, Luck Ju Baek¹, Richard Yanagihara³, Heung-Chul Kim⁴, Terry A Klein⁴

¹Department of Microbiology, College of Medicine, Korea University, Korea, South, ²Centers for Disease Control and Prevention, ³John A. Burns School of Medicine, University of Hawaii at Manoa, ⁴Force Health Protection and Preventive Medicine, U.S. Army

VI-PO61-11

DISTINCT LINEAGES OF SEEWIS VIRUS IN THE EURASIAN COMMON SHREW (*SOREX ARANEUS*) IN CENTRAL AND SOUTHEASTERN POLAND

Pawel P Liberski¹, Hae Ji Kang², Janusz Markowski³, Beata Sikorska¹, Richard Yanagihara²

¹Department of Molecular Pathology and Neuropathology, Medical University of Lodz, Poland, ²Pacific Center for Emerging Infectious Diseases Research, John A. Burns School of Medicine, University of Hawaii at Manoa, ³Department of Teacher Training and Biodiversity Studies, Faculty of Biology and Environmental Protection, University of Lodz

VI-PO61-12

T CELLS ARE NOT REQUIRED FOR HANTAVIRUS PULMONARY SYNDROME PATHOGENESIS

Jay W Hooper, Christopher D Hammerbeck

Molecular Virology, USAMRIID, USA

VI-PO61-13

ISOLATION AND CHARACTERIZATION OF HANTAVIRUSES FROM WILD RODENTS AND EPIDEMIOLOGY OF HEMORRHAGIC FEVER WITH RENAL SYNDROME IN RUSSIA

Hiroaki Kariwa¹, Takahiro Seto¹, Keisuke Yoshikawa¹, Evgeniy A Tkachenko², Vyacheslav G Morozov³, Leonid I Ivanov⁴, Raisa Slonova⁵, Tatyana A Zakharycheva⁶, Kentaro Yoshii¹, Ikuo Takashima¹

¹Graduate School of Veterinary Medicine, Hokkaido University, Japan, ²Chumakov Institute of Polyomyelitis and Viral Encephalitis, ³Medial Company Hepatolog Incorporated, ⁴Plague Control Station of Khabarovsk, ⁵Research Institute of Epidemiology and Microbiology, Siberian Branch of, ⁶Far Eastern State Medical University

VI-PO61-14

PHOSPHATIDYLINOSITOL 3-KINASE SIGNALING CONTRIBUTES TO HANTAVIRUS PATHOGENESIS

Shannon L McNulty, Stuart T Nichol, Christina F Spiropoulou
Special Pathogens Branch, The Centers for Disease Control and Prevention, USA

VI-PO61-15

WEST NILE VIRUS-INDUCED CYCLOOXYGENASE-2 PROMOTES INFLAMMATION IN THE BRAIN

Saguna Verma
University of Hawaii, USA

VI-PO65 Coronaviruses

VI-PO65-1

RAPID INFECTION OF FELINE INFECTIOUS PERITONITIS VIRUS TO FC RECEPTOR-EXPRESSING CELLS BY ADDITION OF ANTIBODY

Masayuki Shimojima¹, Yuto Shiozaki¹, Nozomi Shiba¹, Hiroshi Shimoda¹, Takuya Mizuno², Tsutomu Hohdatsu³, Ken Maeda¹
¹Laboratory of Veterinary Microbiology, Faculty of Agriculture, Yamaguchi University, Japan, ²Laboratory of Veterinary Internal Medicine, Faculty of Agriculture, Yamaguchi University, ³Laboratory of Veterinary Infectious Disease, School of Veterinary Medicine, Kitazato University

VI-PO65-2

GENETIC EVIDENCE OF TYPE II FELINE CORONAVIRUS EMERGED BY RECOMBINATION BETWEEN TYPE I FELINE CORONAVIRUS AND CANINE CORONAVIRUS IN INDIVIDUAL CATS

Ken Maeda¹, Nobutaka Matsui¹, Yuto Shiozaki¹, Masami Mochizuki², Masayuki Shimojima¹
¹Laboratory of Veterinary Microbiology, Yamaguchi University, Japan, ²Kyoritsu Seiyaku

VI-PO65-3

INTERFERON GAMMA PROTECTS ADULT BALB/C MICE FROM LETHAL RESPIRATORY ILLNESS AFTER MOUSE-ADAPTED SARS-COV INFECTION

Noriyo Nagata¹, Naoko Iwata¹, Hideki Hasegawa¹, Yuko Sato¹, Shigeru Morikawa², Tetsutaro Sata¹
¹Department of Pathology, National Institute of Infectious Diseases, Japan, ²Department of Virology I, National Institute of Infectious Diseases

VI-PO65-4

CIRCUMVENTION OF THE TRANSLATIONAL SHUT-OFF IN CELLS INFECTED WITH SARS CORONAVIRUS THROUGH THE INTERACTION OF NSP1 WITH 5' UTR OF VIRAL MRNA

Tomohisa Tanaka¹, Yoshiharu Matsuura², Wataru Kamitani¹
¹Global COE Program, Research Institute for Microbial Diseases, Osaka University, Japan, ²Department of Molecular Virology, Research Institute for Microbial Diseases, Osaka University

VI-PO65-5

EPIDEMIOLOGICAL STUDY ON BAT CORONAVIRUS IN PHILIPPINES

Shumpei Tsuda¹, Shumpei Watanabe², Joseph S Masangkay³, Phillip Alviola⁴, Naoya Ueda⁵, Koichiro Iha⁵, Satoshi Taniguchi⁵, Hikaru Fujii⁶, Kentaro Kato¹, Taisuke Horimoto¹, Tetsuya Mizutani⁷, Yumi Une⁸, Shigeru Kyuwa⁵, Yasuhiro Yoshikawa⁹, Hiroommi Akashi¹
¹Department of Veterinary Microbiology, Graduate School of Agricultural and Life Sciences, University of Tokyo, Japan, ²Department of Virology, Faculty of Medicine, Kyushu University, ³College of Veterinary Medicine, University of the Philippines Los Banos, ⁴Museum of Natural History, University of the Philippines Los Banos, ⁵Department of Biomedical Science, Graduate School of Agricultural and Life Sciences, University of Tokyo, ⁶Division of Viral Infection, Department of Infectious Disease Control, International Research Center for Infectious Diseases, The Institute of Medical Science, The University of Tokyo, ⁷Department of Virology 1, National Institute of Infectious Diseases, ⁸Laboratory of Veterinary Pathology, Azabu University, ⁹Laboratory of Zoonoses, School of Veterinary Medicine Kitazato University

VI-PO65-6

INHIBITION OF SARS CORONAVIRUS REPLICATION BY ANTISENSE PEPTIDE NUCLEIC ACIDS TARGETING THE VIRAL RIBOSOMAL FRAMESHIFTING SIGNAL

Wooseong Lee, Dae-Gyun Ahn, Jin-Kyu Choi, Jong-Won Oh
Department of Biotechnology, Yonsei University, Korea, South

VI-PO65-7

NEUROPATHOGENESIS OF MOUSE-ADAPTED PORCINE EPIDEMIC VIRUS INFECTION IN SUCKLING MOUSE

Osamu Kotani¹, Kazuya Shirato², Noriyo Nagata², Ayako Miyazaki³, Hidetoshi Ikeda¹, Fumihiko Taguchi¹, Kimimasa Takahashi¹
¹Department of Veterinary Science, Nippon Veterinary and Life Science University, Japan, ²National Institute of Infectious Diseases, ³National Institute of Animal Health

VI-PO65-8

RECEPTOR-INDEPENDENT INFECTION DETECTED BY SPINOCULATION WITH ULTRAVIOLET RADIATION IN MUTANT VIRUSES IMMIGERED FROM THE NEUROPATHOGENIC MOUSE HEPATITIS VIRUS SRR7

Rihito Watanabe, Masatoshi Kakizaki, Risa Nomura, Hiromi Kashiwazaki
Department of Bioinformatics, Soka University, Japan

VI-PO66 Arteriviruses and Toroviruses

Thursday, 15 September

VI-PO66-1

PATHOGENICITY OF EMERGING PORCINE REPRODUCTIVE AND RESPIRATORY SYNDROME VIRUS IN VIETNAM

Michihiro Takagi¹, Hiroshi Iseki¹, Kenji Kawashima¹, Tomoyuki Shibahara¹, Tung Nguyen², Ken Inui², Hoan Van Nam³, Yoshiko Kuroda¹, Hiroshi Tsunemitsu¹
¹National Institute of Animal Health, Japan, ²National Centre for Veterinary Diagnostics, ³Department of Animal Health

VI-PO54 Hepatitis C

Thursday, 15 September

VI-PO54-1**INCREASED RISK OF STROKE AMONG PEOPLE WITH HEPATITIS C**Chien-Chang Liao^{1,2}, Ta-Liang Chen^{1,2}, Wan-Hsin Chou¹¹Department of Anesthesiology, Taipei Medical University Hospital, Taiwan, ²Division of Anesthesiology, School of Medicine, Taipei Medical University**VI-PO54-2****APPLICATION OF DHCR24 FOR THE DIAGNOSIS OF HEPATOCELLULAR CARCINOMA (HCC)**Nagla Elwy Salem^{1,3,4}, Tomhiro Nishimura¹, Makoto Saito¹, Michinori Kohara², Shinji Harada³, Ahmed El-Gohary^{4,5}, Kyoko Kohara¹¹Experimental Phylaxiology, Kumamoto University, Faculty of Life Sciences, Japan, ²Department of Microbiology and Cell Biology, Tokyo Metropolitan Institute of Medical Science, ³Department of Medical Virology, Faculty of Life Sciences, Kumamoto University, ⁴Department of Clinical Pathology, Faculty of Medicine Suez Canal University, ⁵President of Fayum University**VI-PO54-3****MIR122 FACILITATES REPLICATION OF HEPATITIS C VIRUS IN NON-HEPATIC CELLS**

Takasuke Fukuhara, Mai Shiokawa, Akinori Ninomiya, Hiroto Kambara, Hiroshi Katoh, Eiji Morita, Wataru Kamitani, Yoshiharu Matsuura

Department of Molecular Virology, Research Institute for Microbial Diseases, Osaka University, Japan

VI-PO54-4**LONG-TERM PERSISTENT GBV-B INFECTION AND DEVELOPMENT OF A PROGRESSIVE CHRONIC HEPATITIS C-LIKE DISEASE IN MARMOSETS**Hirofumi Akari¹, Yuki Iwasaki^{2,3}, Ken-Ichi Mori⁴, Koji Ishii⁵, Noboru Maki⁴, Sayuki Iijima², Tomoyuki Yoshida¹, Sachi Okabayashi⁶, Yuko Katakai⁶, Young-Jung Lee², Akatsuki Saito¹¹Primate Research Institute, Kyoto University, Japan, ²Tsukuba Primate Research Center, National Institute of Biomedical Innovation, ³Department of Immunotherapeutics, Graduate School of Medicine and Dentistry, Tokyo Medical and Dental University, ⁴Advanced Life Science Institute, ⁵Department of Virology II, National Institute of Infectious Diseases, ⁶Corporation for Production and Research of Laboratory Primates**VI-PO54-5****OVEREXPRESSION OF 3BETA-HYDROXYSTEROL DELTA24-REDUCTASE IS INDUCED BY HEPATITIS C VIRUS INFECTION THROUGH OXIDATIVE STRESS-MEDIATED SP1 ACTIVATION**Makoto Saito¹, Michinori Kohara², Kyoko Tsukiyama-Kohara¹¹Department of Experimental Phylaxiology, Faculty of Life Sciences, Kumamoto University, Japan, ²Department of Microbiology and Cell Biology, Tokyo Metropolitan Institute of Medical Science**VI-PO54-6****MOLECULAR MECHANISMS INVOLVED IN HCV INFECTION-INDUCED HEPATIC GLUCONEOGENESIS**Lin Deng¹, Ikuko Shoji¹, Wataru Ogawa², Shusaku Kaneda¹, Tomoyoshi Soga³, Da-Peng Jiang¹, Yoshi-Hiro Ide¹, Hak Hotta¹¹Division of Microbiology, Kobe University Graduate School of Medicine, Japan, ²Division of Diabetes, Metabolism and Endocrinology, Kobe University Graduate School of Medicine, ³Institute for Advanced Biosciences, Keio University**VI-PO54-7****POLYMORPHISMS OF SERINE PROTEASE-DOMAIN OF NS3 AND CORE PROTEIN OF HEPATITIS C VIRUS GENOTYPE 1B ASSOCIATE WITH HEPATOCELLULAR CARCINOMA DEVELOPMENT**Ahmed M El-Shamy¹, Ikuko Shoji¹, Takafumi Saito², Yoshi-Hiro Ide¹, Lin Deng¹, Sumio Kawata², Hak Hotta¹¹Division of Microbiology, Kobe University Graduate School of Medicine, Japan, ²Department of Gastroenterology, Yamagata University School of Medicine**VI-PO54-8****HEPATITIS C VIRUS PROTEINS IN PERIPHERAL BLOOD MONONUCLEAR CELLS: CORRELATION WITH ACTIVITY AND STAGE OF CHRONIC HEPATITIS**Olga V Masalova¹, Tatyana V Vishnevskaya¹, Aleksey V Pichugin², Sergey V Alkhovsky¹, Tatyana V Shkurko¹, Ravshan I Ataullakhanov², Alla A Kushch¹¹The D.I. Ivanovsky Institute of Virology of The Ministry of Health and Social Development of The Russian Federation, Russia, ²Institute of Immunology, Russian FMBA**VI-PO54-9****ACTIVATION OF THE CONNECTIVE TISSUE GROWTH FACTOR (CTGF) -TRANSFORMING GROWTH FACTOR B (TGF-B) AXIS IN HEPATITIS C VIRUS-EXPRESSING HEPATOCYTES**Nagaraja Tirumuru¹, Chen Li², Anuradha Balasubramanian³, Groopman E Jerome³, Leask Andrew⁴, David R Brigstock², Anand R Appakkudal¹, Ramesh K Ganju¹¹Pathology, Ohio State University, USA, ²Center for clinical and Translational research; Nationwide children hospital, ³Division of Experimental Medicine, Beth Israel Deaconess, Harvard Medical School Boston, ⁴Schulich School of Medicine and Dentistry, University of Western Ontario**VI-PO54-10****DEVELOPMENT OF HCV JFH-1 REPORTER ASSAY SYSTEMS USING DIFFERENT HUMAN HEPATOMA CELL LINES**Midori Takeda¹, Masanori Ikeda¹, Yasuo Ariumi¹, Takaji Wakita², Nobuyuki Kato¹¹Tumor Virology, Okayama University Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences, Japan, ²Department of Virology II, National Institute of Infectious Diseases

VI-PO54-11

NOVEL PHENANTHRIDINONE DERIVATIVES AS SELECTIVE INHIBITORS OF HCV REPLICATION

Mohammed Ta Salim

Antiviral Chemotherapy, Kagoshima University, Japan

VI-PO54-12

INHIBITION OF HEPATITIS C VIRUS REPLICATION THROUGH AMP-ACTIVATED PROTEIN KINASE-DEPENDENT AND -INDEPENDENT PATHWAYS

Kenji Nakashima¹, Kenji Takeuchi^{1,2}, Kazuyasu Chihara^{1,2}, Hak Hotta³, Kiyonao Sada^{1,2}

¹Division of Microbiology, Department of Pathological Sciences, Faculty of Medical Sciences, University of Fukui, Japan, ²Organization for Life Science Advancement Programs, University of Fukui, ³Division of Microbiology, Center for Infectious Diseases, Kobe University Graduate School of Medicine

VI-PO54-13

HEPATITIS C VIRUS INFECTION SUPPRESSES GLUCOSE TRANSPORTER 2 GENE EXPRESSION BY DOWNREGULATION OF HEPATOCYTE NUCLEAR FACTOR 1A

Chieko Matsui, Ikuo Shoji, Shusaku Kaneda, Lin Deng, Da-Peng Jiang, Yoshi-Hiro Ide, Hak Hotta

Division of Microbiology, Kobe University Graduate School of Medicine, Japan

VI-PO54-14

INVESTIGATION OF NEUTRALIZING ANTIBODIES AGAINST HEPATITIS C VIRUS IN HEALTHY BLOOD DONORS

Ayumu Kuroishi, Kazuta Yasui, Harumichi Matsukura, Rika A Furuta

Osaka Red Cross Blood Center, Japan

VI-PO54-15

DEVELOPMENT OF HEPATOCELLULAR CARCINOMA IN TRANSGENIC MICE EXPRESSING THE NS3 PROTEIN OF HEPATITIS C VIRUS

Yoshi-Hiro Ide¹, Tatsuya Maebo¹, Chunying An², Dapeng Jiang¹, Lin Deng¹, Ikuo Shoji¹, Hak Hotta¹

¹Division of Microbiology, Kobe University Graduate School of Medicine, Japan, ²Department of Oral Anatomy, Osaka Dental University

VI-PO54-16

ISOLATION AND CHARACTERIZATION OF A HIGHLY INFECTIOUS HEPATITIS C VIRUS WITH ADAPTIVE MUTATIONS

Yoshitaka Shirasago^{1,2}, Kyoko Saito², Yuko Murakami⁵, Hidesuke Fukazawa⁵, Tetsuro Suzuki³, Takaji Wakita⁴, Kentaro Hanada², Joe Chiba¹, Masayosi Fukasawa²

¹Department of Biological Science and Technology, Tokyo University of Science, Japan, ²Department of Biochemistry and Cell biology, National Institute of Infectious Diseases, ³Department of Infectious Diseases, Hamamatsu University School of Medicine, ⁴Department of Virology II, National Institute of Infectious Diseases, ⁵Department of Bioactive molecules, National Institute of Infectious Diseases

VI-PO54-17

HEPATITIS C VIRUS REGULATES P62 METABOLISM

Yoshiyasu Shinohara^{1,2}, Koji Fujita¹, Kento Imajo¹, Hironori Mawatari¹, Masato Yoneda¹, Kengo Funakoshi², Masanori Ikeda³, Nobuyuki Kato³, Shin Maeda¹, Atushi Nakajima¹, Saito Satoru¹

¹Gastroenterology Division, Yokohama City University, Japan, ²Neuroanatomy, Yokohama City University, ³Tumor Virology, Okayama University

VI-PO54-18

EVALUATION OF HCV-INACTIVATION IN BLOOD PRODUCTS

Takashi Shimoike¹, Kiyoko Nojima², Takaji Wakita¹, Yoshiaki Okada²

¹Virology II, National Institute of Infectious Diseases, Japan, ²Safety Research on Blood and Biological Products, Institute of Infectious Diseases

VI-PO54-19

PRODUCTION OF INFECTIOUS HCV PARTICLES BY TRANSCOMPLEMENTATION USING NON-STRUCTURAL PROTEIN 5A

Tae Kyu Lim, Jong-Ho Lee, Heejoon Myung

Dept. of Bioscience and Biotechnology, Hankuk University of Foreign Studies, Korea, South

VI-PO54-20

DEGRADATION OF AIMP1/P43 INDUCED BY HEPATITIS C VIRUS E2 LEADS TO UPREGULATION OF TGF- β SIGNALING AND INCREASE IN SURFACE EXPRESSION OF GP96

Min Soo Kim, Heejoon Myung

Dept. of Bioscience and Biotechnology, Dept. of Bioscience and Biotechnology, Hankuk University of Foreign Studies, Korea, South

VI-PO54-21

ANALYSIS OF INFECTION EFFICIENCY OF NEWLY CLONED HCV GENOTYPE 1A STRAIN HCV-RMT IN VITRO AND IN VIVO USING ADAPTIVE MUTATIONS

Masaaki Arai^{1,2}, Yuko Tokunaga², Asako Nakaya^{1,2}, Yoshimi Tobita², Chise Mukaidani³, Michinori Kohara²

¹Advanced Medical Research Laboratories, Mitsubishi Tanabe Pharma Corporation, Japan, ²Tokyo Metropolitan Institute of Medical Science, ³PhoenixBio

VI-PO54-22

FREQUENCY OF HEPATITIS C VIRUS GENOTYPE IN REFEREES TO THE BLOOD TRANSFUSION ORGANIZATIONS IN WESTERN OF IRAN

Pakzad Iraj^{1,3}, Hassan Maleki Mohamad¹, Sadeghifard Nourkhoda², Taheri Kalani Morovat⁴, Ghafouryan Sobhan⁵, Maleki Abbas⁶, Hossaini Shiva⁷

¹Dep. Microbiology, Dep. Microbiology, Ilam University of Medical Sciences, Iran, ²Azad University, Zanjan Branch, ³Dep. Microbiology, Faculty of Medicine and Clinical Microbiology Research Center, Ilam University of Medical Sciences, ⁴Dep. Microbiology, Faculty of Medicine and Clinical Microbiology Research Center, Ilam University of Medical Sciences, ⁵Dep. Microbiology, Faculty of Medicine and Clinical Microbiology Research Center, Ilam University of Medical Sciences, ⁶Dep. Microbiology, Faculty of Medicine and Clinical Microbiology Research Center, Ilam University of Medical Sciences, ⁷Dep. Microbiology, Faculty of Medicine and Clinical Microbiology Research Center, Ilam University of Medical Sciences

VI-PO54-23

STABLE GROWTH OF HEPATITIS C VIRUS IN CELL CULTURE: REVELATION OF EMERGENCE OF SUPERINFECTION EXCLUSION IN HCV HIGHLY REPLICATING CELLS

Steve S Chen, Po-Yuan Ke

Institute of Biomedical Sciences, Academia Sinica, Taiwan

VI-PO54-24

HUH-7 SUBCLONE THAT SUPPORTS HIGH HCV PRODUCTION DUE TO HIGH VIRUS ASSEMBLY

Asako Murayama¹, Nao Sugiyama¹, Seiko Yoshimura², Mitsuko Ishihara-Sugano², Takaji Wakita¹, Takanobu Kato¹

¹Department of Virology II, National Institute of Infectious Diseases, Japan, ²Corporate Research and Development Center, Toshiba Corporation

VI-PO54-25

INHIBITION OF HEPATITIS C VIRUS REPLICATION BY SIRNAS TARGETING PROTEIN KINASE C-RELATED KINASE 2

Eun-Jung Kim, Song-Hee Han, Mi-Gyeong Kim, Jong-Won Oh

Department of Biotechnology, Yonsei University, Korea, South

VI-PO54-26

STRAIN SPECIFIC SUSCEPTIBILITY TO THE HEPATITIS C VIRUS NS5A INHIBITOR

Yuka Okamoto¹, Takahiro Masaki¹, Asako Murayama¹, Akio Nomoto², Takaji Wakita¹, Takanobu Kato¹

¹Department of Virology II, National Institute of Infectious Diseases, Japan, ²Institute of Microbial Chemistry

VI-PO54-27

MODULATION OF MIR-122 EXPRESSION BY HEPATITIS C VIRUS CORE PROTEIN AFFECTS VIRAL GENOME REPLICATION

Geon-Woo Kim, Song-Hee Han, Seung-Hoon Lee, Jong-Won Oh

Department of Biotechnology, Yonsei University, Korea, South

VI-PO54-28

ROLES OF THE CLEAVED FORM OF INTERFERON-BETA PROMOTER STIMULATOR IN HEPATITIS C VIRUS PROPAGATION

Seung-Hoon Lee, Jung-Hee Kim, Eun-Jung Kim, Woosong Lee, Jong-Won Oh

Department of Biotechnology, Yonsei University, Korea, South

VI-PO54-29

CHARACTERIZATION OF HCV VIRAL POPULATION BY USING MULTIPLE SEQUENCING TECHNOLOGIES

Tomomi Ando¹, Hideki Aizaki¹, Masaya Sugiyama², Masashi Mizokami², Tuyoshi Sekizuka³, Makoto Kuroda³, Takaji Wakita¹

¹Department of Virology II, National Institute of Infectious Diseases, Japan, ²National Center for Global Health and Medicine, ³Pathogen Genomics Center, National Institute of Infectious Diseases

VI-PO54-30

DEVELOPMENT OF A NOVEL INFECTIOUS HCV SURROGATE VIRUS BASED ON A RECOMBINANT VIRUS EXPRESSING HCV ENVELOPE GLYCOPROTEINS

Kazu Okuma¹, Linda Buonocore², Koji Fukagawa^{1,3}, Takuya Kohma^{1,3}, Hideki Kusunoki¹, John K Rose², Toshiaki Mizuochi¹, Isao Hamaguchi¹

¹Department of Safety Research on Blood and Biological Products, National Institute of Infectious Diseases, Japan, ²Department of Pathology, Yale University School of Medicine, ³Technology and Product Development Division, Diagnostic Reagent Development, Sysmex Corporation

VI-PO54-31

ESTABLISHMENT OF HIGHLY SENSITIVE DETECTION METHOD OF SMALL AMOUNT OF BLOOD BORNE VIRUSES TO ENSURE THE SAFETY OF BLOOD AND BLOOD PRODUCTS

Kiyoko Nojima, Hideki Kusunoki, Saeko Mizusawa, Isao Hamaguchi, Yoshiaki Okada

Department of Safety Research on Blood and Biological Products, National Institute of Infectious Diseases, Japan

VI-PO54-32

IDENTIFICATION AND ANALYSIS OF ENVELOPE N-GLYCANS REQUIRED FOR HCV LIFECYCLE

Noriyuki Watanabe, Asako Murayama, Tomoko Date, Takanobu Kato, Hideki Aizaki, Takaji Wakita

Virology II, National Institute of Infectious Diseases, Japan

VI-PO54-33

ANTIVIRAL ACTIVITY OF GLICYRRHIZIN AGAINST HEPATITIS C VIRUS IN VITRO

Yoshihiro Matsumoto^{1,2}, Koichi Watashi¹, Ryosuke Suzuki¹, Tomokazu Matsuura³, Tetsuro Suzuki⁴, Tatsuo Miyamura¹, Kenjiro Wake⁵, Takaji Wakita¹, Hideki Aizaki¹

¹Virology II, National Institute of Infectious Diseases, Japan, ²Division of Gastroenterology and Hepatology, Department of Internal Medicine, Jikei University School of Medicine, ³Department of Laboratory Medicine, The Jikei University School of Medicine, ⁴Department of Infectious Diseases, Hamamatsu University School of Medicine, ⁵Liver Research Unit, Minophagen Pharmaceutical Co., Ltd.

VI-PO54-34

HEPATITIS C VIRUS CORE PROTEIN STIMULATES CELL GROWTH BY DOWN-REGULATING P16 EXPRESSION VIA DNA METHYLATION

Kyung Lib Jang, **Joo-Song Lim**, Young-Ju Woo
Microbiology, Pusan National University, Korea, South

VI-PO44 Rhabdoviruses

Thursday, 15 September

VI-PO44-1

RABIES IN RUSSIA: CURRENT EPIZOOTIC AND EPIDEMIOLOGICAL SITUATION

Artashes A Movsesyants

L.A. Tarashevitch State Research Institute, Center for Rabies Control, Russia

VI-PO44-2

ALL VIRAL GENES CONTRIBUTE TO DIFFERENT PATHOGENICITIES OF RABIES VIRUS NISHIGAHARA AND NI-CE STRAINS

Satoko Yamaoka¹, Naoto Ito^{1,2}, Tatsunori Masatani¹, Masako Abe¹, Keisuke Nakagawa¹, Kota Okadera¹, Makoto Sugiyama^{1,2}

¹The United Graduate School of Veterinary Sciences, Gifu University, Japan, ²Laboratory of Zoonotic Diseases, Faculty of Applied Biological Sciences, Gifu University

VI-PO44-3

IDENTIFICATION OF AMINO ACID SEQUENCE MOTIFS REQUIRED FOR THE UNCONVENTIONAL MRNA CAPPING ACTIVITY OF THE VESICULAR STOMATITIS VIRUS L PROTEIN

Tomoaki Ogino¹, Satya P Yadav², Amiya K Banerjee¹

¹Department of Molecular Genetics, Lerner Research Institute, Cleveland Clinic, USA, ²Molecular Biotechnology Core, Lerner Research Institute, Cleveland Clinic

VI-PO44-4

SINGLE INFECTIOUS CDNA CLONES OF RABIES VIRUS

Alexander Ghanem, Karl-Klaus Conzelmann

Max von Pettenkofer-Institute & Gene Center, Ludwig-Maximilians-Universitaet Muenchen, Germany

VI-PO55 Orthomyxoviruses: Pathogenesis

Thursday, 15 September

VI-PO55-1

ROLE OF THE PB1-F2 PRO-INFLAMMATORY MOTIF IN H3N2 INFLUENZA A VIRUS PATHOGENICITY

Irina V Alymova, Julie L McAuley, Amanda Green, Jonathan A McCullers

Infectious Diseases, St. Jude Children's Research Hospital, USA

VI-PO55-2

CHARACTERIZATION OF THE INFECTED BY AVIAN AND SWINE INFLUENZA VIRUSES BY USING WELL-DIFFERENTIATED PORCINE AIRWAY EPITHELIAL CELLS

Darsaniya Punyadarsaniya¹, Isabel Hennig-Pauka², Christine Winter^{1,3}, Christel Schwegmann-Wessels¹, Georg Herrler¹

¹Institut of Virology, University of Veterinary Medicine Hannover, Germany, ²Clinic for swine, small ruminants and forensic medicine, University of Veterinary Medicine Hannover, ³Clinic for Poultry, University of Veterinary Medicine Hannover

VI-PO55-3

EPITOPE MAPPING OF HUMAN MONOCLONAL ANTIBODY NEUTRALIZING 2009 PANDEMIC INFLUENZA A VIRUS

Mayo Yasugi¹, Anariwa Du^{1,2}, Norihito Kawashita³, Ritsuko Koketsu^{1,2,4}, Takaaki Nakaya^{2,5}, Motoki Kuhara^{2,6}, Naphatsawan Boonsathorn^{2,7}, Pathom Sawanpanyalert^{2,7}, Kazuyoshi Ikuta^{1,2}

¹Department of Virology, Research Institute for Microbial Diseases, Osaka University, Japan, ²JST-JICA SATREPS project, ³Genome Information Research Center, Research Institute for Microbial Diseases, Osaka University, ⁴The Research Foundation for Microbial Diseases of Osaka University, ⁵International Research Center for Infectious Diseases, Research Institute for Microbial Diseases, Osaka University, ⁶Medical & Biological Laboratories, Co., Ltd, ⁷Department of Medical Sciences, Ministry of Public Health

VI-PO55-4

HA1 RECEPTOR- BINDING SITE OF A /H1N1/V AMONG PATIENTS WITH LETHAL AND NOT-LETHAL OUTCOME IN RUSSIA (2009 - 2011)

Dmitri K Lvov¹, Nikolai V Bovin², Alexei G Prilipov¹, Valentina S Bogdanova¹, Ludmila V Kolobukhina¹, Michail Yu Shchelkanov¹, Elena I Burtseva¹, Eugeni I Samokhvalov¹, Sergei V Alkhovsky¹, Valentina V Lavrishcheva¹, Nikolai A Malyshev³, Vladimir E Malikov³, Marina V Bazarova³, Irina T Fedyakina¹, Petr G Deryabin¹, Taras I Aliper¹, Alexei D Zaberezhny¹, Marina M Zhuravleva¹

¹D.I. Ivanovsky Institute of Virology, Ministry of Health and Social Development, Russia, ²M. M. Shemyakin and Yu.A. Ovchinnikov Institute of Bioorganic Chemistry, RAS, ³First Infectious Hospital

VI-PO55-5

WIDE-RANGED CELL TROPISM OF ASIAN-H5N1 VIRUSES IN HUMAN AIRWAY EPITHELIAL CELLS

Tomo Daidoji¹, Madiha Salah Ibrahim², Yohei Watanabe², Mayo Yasugi², Cheng-Son Yang^{1,2}, Kazuyoshi Ikuta², Takaaki Nakaya¹

¹Laboratory of Viral Pathogenesis, International Research Center for Infectious Diseases, Research Institute for Microbial Diseases, Osaka University, Japan, ²Department of Virology, Research Institute for Microbial Diseases, Osaka University

VI-PO55-6

IMMUNOPROTECTIVE EPITOPES OF PANDEMIC 2009 H1N1 INFLUENZA VIRUS

Elena A Govorkova, Alexey M Khlenkov, Scott A Brown, Ashley Prevost, Bindumadhav M Marathe, Paul Thomas, Richard J Webby, Robert G Webster

Department of Infectious Diseases, St. Jude Children's Research Hospital, USA

VI-PO55-7

RAPID REPLICATION OF H7 HIGHLY PATHOGENIC AVIAN INFLUENZA VIRUS INDUCES HYPER EXPRESSION OF CYTOKINE MRNAS, LEADING SUDDEN DEATH OF CHICKENS

Saya Kuribayashi¹, Yoshihiro Sakoda¹, Masatoshi Okamatsu¹, Takashi Umemura², Hiroshi Kida^{1,3}

¹Laboratory of Microbiology, Department of Disease Control, Graduate School of Veterinary Medicine, Hokkaido University, Japan, ²Laboratory of Comparative Pathology, Department of Veterinary Clinical Science, Graduate School of Veterinary Medicine, Hokkaido University, ³Research Center for Zoonosis Control, Hokkaido University

VI-PO55-8

SEQUENCE ANALYSIS OF THE HEMAGGLUTININ GENE OF THE H9N2 AVIAN INFLUENZA VIRUSES ISOLATED IN SHIRAZ-IRAN

Mohammad J Mehrabanpour¹, Vajihe Fatalizadeh², Abdololah Rahimian¹, Hamidreza Farzin¹, Shahla Shahsavandi¹

¹Virology, Razi Vaccine and Serum Research Institute, Iran, ²Azad University of Jahrom

VI-PO55-9

DETERMINANTS OF VIRULENCE OF PANDEMIC INFLUENZA A 2009 VIRUS

Yoshimi Tsuda, Dawn Clifton, Carla Weisend, Emmie de Wit, Vincent J Munster, David Safronetz, Barry Rockx, Friederike Feldmann, Hideki Ebihara, Heinz Feldmann

Laboratory of Virology, Division of Intramural Research, NIAID, NIH, USA

VI-PO55-10

2009 PANDEMIC INFLUENZA A (H1N1) VIRUSES WITH D222G AND Q223R HEMAGGLUTININ MUTATIONS EXIST AS A MINOR POPULATION IN HUMAN UPPER AIRWAYS

Takaaki Nakaya¹, Mayo Yasugi¹, Shota Nakamura¹, Tomo Daidoji¹, Ririn Ramadhany¹, Cheng-Song Yang¹, Teruo Yasunaga¹, Tetsuya Iida¹, Toshihiro Horii¹, Kazuyoshi Ikuta¹, Kazuo Takahashi²

¹Research Institute for Microbial Diseases (RIMD), Osaka University, Japan, ²Osaka Prefectural Institute of Public Health

VI-PO55-11

A POTENTIAL MECHANISM OF ARISING VIRAL HEMAGGLUTININ MUTATIONS IN PANDEMIC (H1N1) 2009 VIRUSES

Kyoko Shinya¹, Akiko Makino¹, Teridah E Ginting¹, Motoko Tanaka¹, Takaaki Nakaya², Shota Nakamura², Yasuhisa Abe³, Hiroyuki Yoshida³, Ichiro Morioka³, Soichi Arakawa³, Yasuhiro Takeshima⁴, Kentaro Iwata⁵, Yoshihiro Kawaoka^{1,6,7}

¹Dept of Microbiology and Infection, Div. of Zoonoses, Kobe University, Graduate School of Medicine, Japan, ²Research Institute for Microbial Diseases, Osaka University, ³Department of Infection Control and Prevention, Kobe University Hospital, ⁴Department of Pediatrics, Kobe University Hospital, ⁵Division of Infectious Diseases, Kobe University Hospital, ⁶Influenza Research Institute, University of Wisconsin-Madison, ⁷Department of Infection and Immunity, University of Tokyo

VI-PO55-12

INFLUENZA A VIRUS SUPPRESSION OF AUTOPHAGOSOME MATURATION AND ITS REVERSAL BY MAOTO, A TRADITIONAL HERBAL MEDICINE

Shigeki Nabeshima^{1,2}, Kei Yamauchi², Shinta Masui², Kazunari Ishii², Toshinori Soejima², Kenji Hiromatsu²

¹General Medicine, Fukuoka University Hospital, Japan, ²Department of Microbiology and Immunology, Fukuoka University School of Medicine

VI-PO55-13

TYPE II MEMBRANE-BOUND PROTEASES, MSPL AND TMRSS13, CLEAVE HEMAGGLUTININ OF HIGHLY PATHOGENIC AVIAN INFLUENZA VIRUSES AND INDUCE THEIR MULTICYCLE REPLICATION

Etsuhisa Takahashi¹, Yuushi Okumura^{1,2}, Irene Lorinda Indalao¹, Mihiro Yano¹, Hiroshi Kido¹

¹Institute for Enzyme Research, The University of Tokushima, Japan, ²Institute of Health Biosciences

VI-PO55-14

Withdrawn

VI-PO55-15

THE ASSOCIATION BETWEEN VIRAL LOAD IN NASOPHARYNGEAL-THROAT SWAB AND CLINICAL CHARACTERISTICS AMONG PATIENTS WITH PANDEMIC H1N1 2009 INFLUENZA INFECTION

Keiko Nakata^{1,3}, Noriko Kojimahara², Satoko Ohfuji³, Yoshio Hirota³, Tetsuo Kase¹

¹Department of Infectious Diseases, Virology Division, Osaka Prefectural Institute of Public Health, Japan, ²Department of Hygiene and Public Health II, Tokyo Women's Medical University School of Medicine, ³Department of Public Health, Osaka City University Graduate School of Medicine

VI-PO55-16

INFLUENZA VIRUS-CYTOKINE-PROTEASE CYCLE AND MITOCHONDRIAL ATP DEPLETION ARE PRINCIPAL RISK FACTORS OF MULTI-ORGAN FAILURE AND INFLUENZA-ASSOCIATED ENCEPHALOPATHY OF PATIENTS WITH SEVER INFLUENZA

Junji Chida, Siye Wang, Hai-Yan Pan, Dengbing Yao, Min Yao, Hiroshi Kido

Enzyme Chemistry, Institute for Enzyme Research, The University of Tokushima, Japan

VI-PO55-17

PATHOGENIC POTENTIAL OF H7N6 SUBTYPE AVIAN INFLUENZA VIRUS ISOLATED FROM QUAIL

Tatsufumi Usui^{1,2}, Yoshikazu Fujimoto^{1,3}, Yukiko Uno², Hiroshi Ito^{1,3}, Toshihiro Ito^{1,3}, Tsuyoshi Yamaguchi^{1,2}

¹Avian Zoonosis Research Center, Tottori University, Japan, ²Laboratory of Veterinary Hygiene, Department of Veterinary Medicine, Faculty of Agriculture, Tottori University, ³Laboratory of Veterinary Public Health, Department of Veterinary Medicine, Faculty of Agriculture, Tottori University

VI-PO55-18

CHARACTERIZATION OF LOW PATHOGENIC AVIAN INFLUENZA VIRUSES ISOLATED FROM DOMESTIC DUCKS IN VIETNAM IN 2009 AND 2010

Naoki Nomura¹, Yoshihiro Sakoda¹, Mayumi Endo¹, Hiromi Yoshida¹, Naoki Yamamoto¹, Masatoshi Okamatsu¹, Kenji Sakurai², Hiroshi Kida^{1,3}

¹Microbiology, Hokkaido University, Japan, ²OIE Regional Representation for Asia and the Pacific, ³Research Center for Zoonosis Control, Hokkaido University

VI-PO55-19

SERO-PREVALENCE OF PANDEMIC (H1N1) 2009 INFLUENZA A VIRUS AMONG SCHOOLCHILDREN AND THEIR PARENTS IN TOKYO, JAPAN

Kiyoko Iwatsuki-Horimoto¹, Taisuke Horimoto², Daisuke Tamura¹, Maki Kiso¹, Eiryo Kawakami¹, Shuji Hatakeyama¹, Yasuhiro Ebihara³, Tomohiko Koibuchi⁴, Takeshi Fujii⁴, Kazuo Takahashi⁵, Masayuki Shimojima⁶, Yuko Sakai-Tagawa¹, Mutsumi Ito¹, Saori Sakabe¹, Ayaka Iwasa¹, Kei Takahashi¹, Takashi Ishii¹, Takeo Gorai¹, Koichiro Tsuji³, Aikichi Iwamoto⁴, Yoshihiro Kawaoka^{1,7,8,9}

¹Division of Virology, Institute of Medical Science, University of Tokyo, Japan, ²Department of Veterinary Microbiology, Graduate School of Agricultural and Life Sciences, University of Tokyo, ³Department of Pediatric Hematology/Oncology, Institute of Medical Science, University of Tokyo, ⁴Division of Infectious Diseases, Institute of Medical Science, University of Tokyo, ⁵Department of Infectious Diseases, Osaka Prefectural Institute of Public Health, ⁶Department of Veterinary Microbiology, Faculty of Agriculture, Yamaguchi University, ⁷Department of Special Pathogens, International Research Center for Infectious Diseases, Institute of Medical Science, University of Tokyo, ⁸Department of Pathobiological Sciences, University of Wisconsin-Madison, ⁹ERATO Infection-Induced Host Responses Project

VI-PO55-20

LOSS-OF-FUNCTION MUTATION ON NS1 GENE ENHANCES THE VIRULENCE OF INFLUENZA VIRUS IN MICE

Kazufumi Shimizu^{1,2}, Toshikatsu Shibata^{1,2,3}, Tomoko Nishikawa^{1,2}, Keiko Toyosawa^{1,2}, Yutaka Sasaki², Torahiko Tanaka^{1,4}, Kazumichi Kuroda^{1,3}, Reiko Todaka⁵, Masamichi Oshima⁵, Tatsuo Yamamoto^{1,2}

¹SRB Project, Nihon University School of Medicine, Japan, ²Division of Obstetrics and Gynecology, Nihon University School of Medicine, ³Division of Microbiology, Nihon University School of Medicine, ⁴Division of Biochemistry, Nihon University School of Medicine, ⁵Department of Immunology, National Institute of Infectious Diseases

VI-PO55-21

SERUM OXIDATIVE STRESS MARKERS AND CYTOKINE PROFILES IN PEDIATRIC PATIENTS WITH PANDEMIC INFLUENZA VIRAL PNEUMONIA

Yoshiharu Nagaoka, Yousuke Fujii, Yukie Saito, Mitsuru Tsuge, Masato Yashiro, Nobuko Yamashita, Hirokazu Tsukahara, Tsuneo Morishima

Department of Pediatrics, Okayama University Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences, Japan

VI-PO55-22

IDENTIFICATION OF NOVEL VIRULENCE DETERMINANTS IN PANDEMIC H1N1 INFLUENZA VIRUSES ORIGINATING FROM MEXICO

Alex Silaghi^{1,2,4,5}, Todd Cutts², Anders Leung², Sarah Bow^{1,2}, Steven Theriault^{2,3}, Darwyn Kobasa^{1,2,5}

¹Dept. of Medical Microbiology, Faculty of Medicine, University of Manitoba, Canada, ²Special Pathogens Program, National Microbiology Laboratory, Public Health Agency of Canada, ³Dept. of Microbiology, Faculty of Science, University of Manitoba, ⁴MD/PhD Program, University of Manitoba, ⁵International Infectious Diseases & Global Health Training Program

Outreach Program for Members of the Public

IUMS is the acronym for the International Union of Microbiological Societies, which is a unique federation of global academic societies and associations engaged in the field of microbiology. The scope of the IUMS covers an incredibly broad range, including viruses, fungi (mold, yeast etc.), bacteriology and applied microbiology.

The IUMS Congresses are being held in Japan (and in Asia) for the first time in 21 years, and it will be the first time for the event to be held in Sapporo.

Utilizing the opportunity provided by the IUMS Congresses we will be holding a number of public events (symposium, exhibition, lectures, etc.) free of charge, as a means of conveying to the members of the public Japan's wide-ranging contribution to all areas of microbiology and the current status of research and activities.

Public Symposium:

9 September 16:30-19:30, Room A

[Jokichi Takamine - Shibasaburo Kitasato Symposium]

Transformative Moments in the History of Microbiology: The Contributions of Takamine and Kitasato

Simultaneous interpretation provided

This symposium (Plenary Lecture 10) is designed to honor the two great Japanese scientists who are among the most important pioneers in microbiology and microbial technology, Dr. Jokichi Takamine, the father of modern biotechnology and Dr. Shibasaburo Kitasato, the founder and pioneer of medical microbiology.

Speakers: Joan W Bennett, Yutaka Yamamoto, Tomio Taki, Jörg Hacker and Takayuki Mori

Public Exhibition:

6-11 September (except on 10 afternoon) 9:30-16:30, Conference Hall

- Exhibits relating to Dr. Jokichi Takamine
(From DAIICHI SANKYO CO., LTD., NPO Dr. Jokichi Takamine Research Foundation, etc.)
- Exhibits relating to Dr. Shibasaburo Kitasato
(From Kitasato University, The Kitasato Institute, and Mr. Ichiro Kitasato)

Public Forum:

11 September 10:00-16:00, Room D

"The Unlimited World of Microbes"

Japanese interpretation provided

It is the very good opportunity for the general public to learn about science and technology. Although microbiology deals with very minute organisms that cannot be seen with the naked eyes, these minute microbes have huge power over our everyday life.

Program:

Opening Remarks	Seigo Hirowatari
"Contributions of Microbial Biotechnology to Human Welfare"	Arnold L Demain
"Exploring <i>Terra Incognita</i> , the New Microbial World"	Teruhiko Beppu
"How to Control Avian and Pandemic Influenza"	Hiroshi Kida
"Climate, Oceans, Infectious Diseases, and Human Health"	Rita Colwell
"Bioterrorism: What is it?"	Shigeru Morikawa
"Emerging and Re-emerging Infectious Diseases - Can We Control?"	Takeshi Kurata
"Interactions between Crops and Plant Pathogens"	Ichiro Uyeda
Closing Remarks	Sumio Shinoda

On-site Visit Lectures:

6, 7 and 15 September

On-site visit lectures will be implemented for elementary, junior high and high schools in Sapporo and Muroran cities.

Hokkaido is often referred to as a "bio-island" thanks to the robust bioscience-related social and economic infrastructure that is located there. Microbiology holds a tremendously important position in the field of bioscience and it is for this reason that the on-site visit lectures will seek to inform the younger generation about the great contribution being made by microbiology to the agriculture and livestock, fisheries and food industries. The lecturers are include famous scholars from Japan and overseas.

The on-site visit lectures will not only tour a number of elementary and junior high schools within the Sapporo city limits, but will also be held in high schools outside Sapporo.

Lectures:

- For elementary school students
"Travels of Bob: The Soil Bacterium" by Cindy Nakatsu
- For junior high school students
"Jokichi Takamine: Japanese Father of American Biotechnology" by Joan W Bennett
- For high school students
"Old and New Viruses: A Challenge for Medicine" by Heinz Zeichhardt

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XV International Congress of Virology