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

IUMS 2011 Sapporo

FINAL PROGRAM

International Union of Microbiological Societies 2011 Congress

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

IUMS

The Unlimited World of Microbes

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

XV International Congress of Virology

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

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

Contents

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.

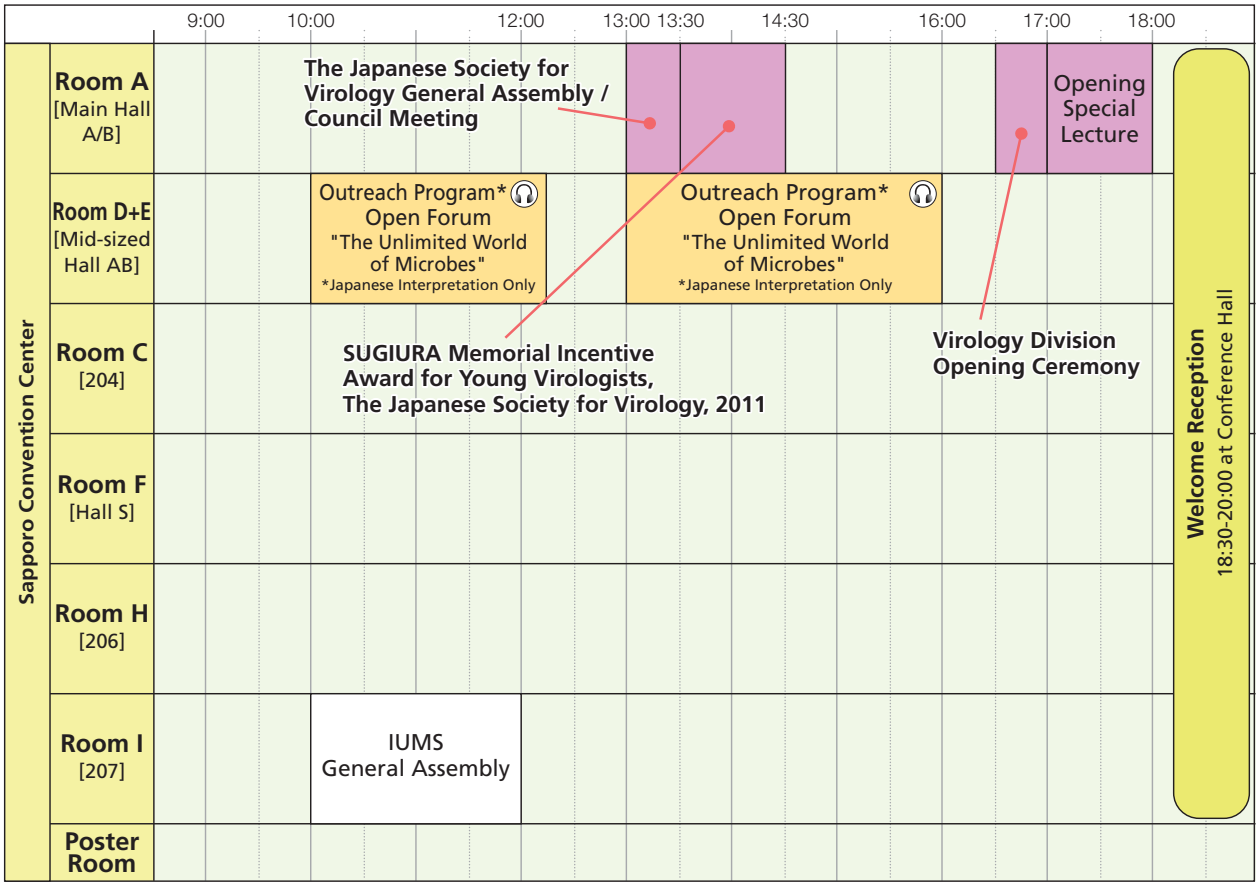
Finally, we welcome you all again to the exciting congresses and to the beautiful city of Sapporo, the capital of Hokkaido, and to the beautiful Fall season of the North island.

Fusao Tomita
Chairperson
National Organizing
Committee for
IUMS 2011 Congress

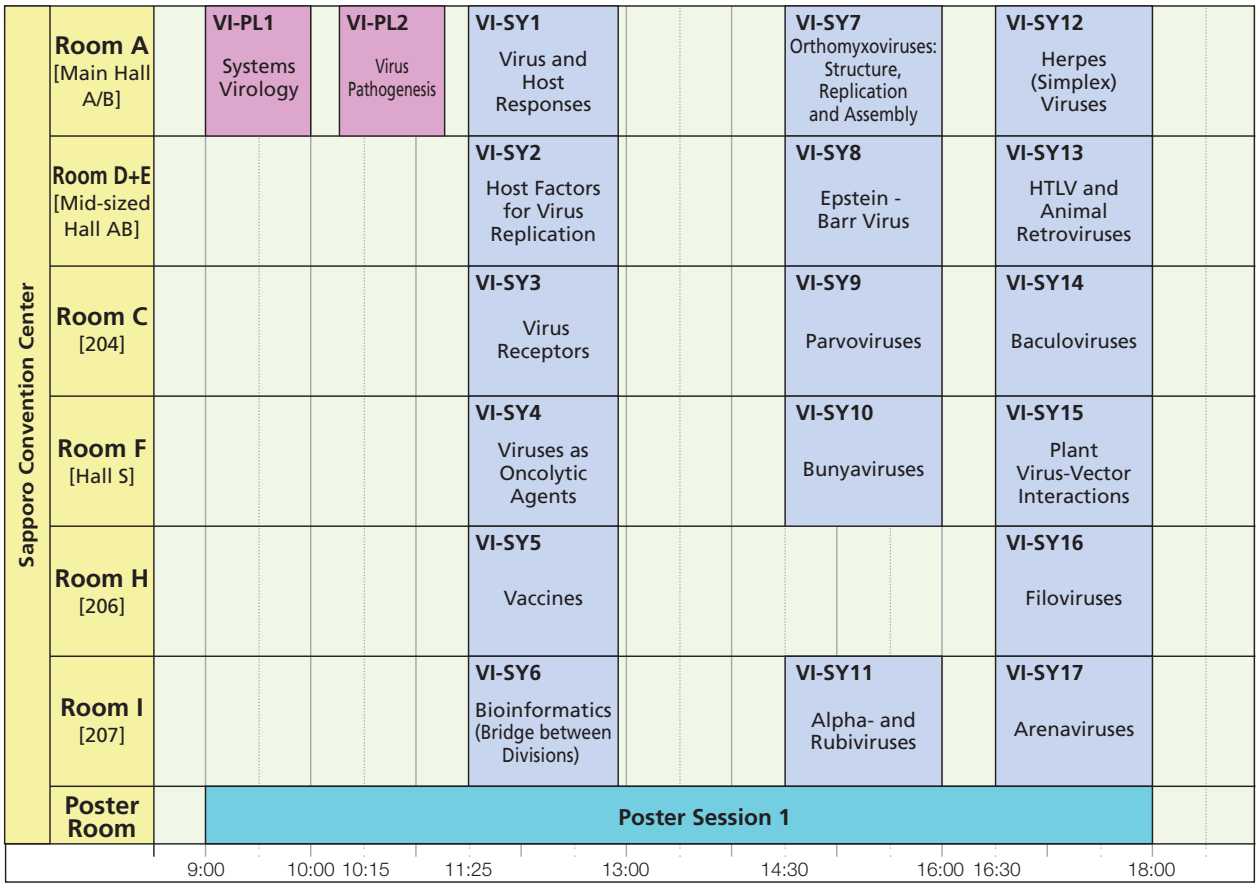
Daniel O Sordelli
President
IUMS

Program at a Glance

[Sunday, 11 September]

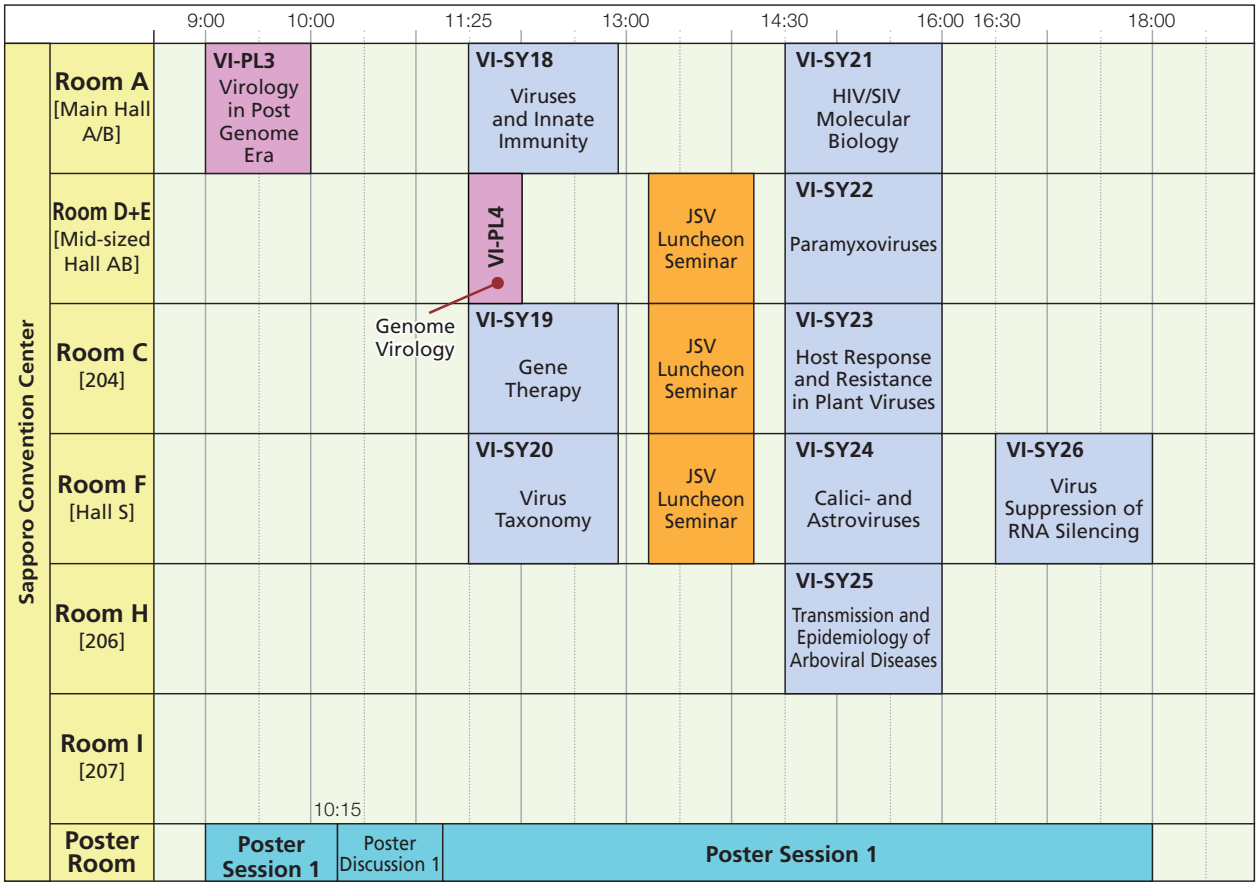


[Monday, 12 September]

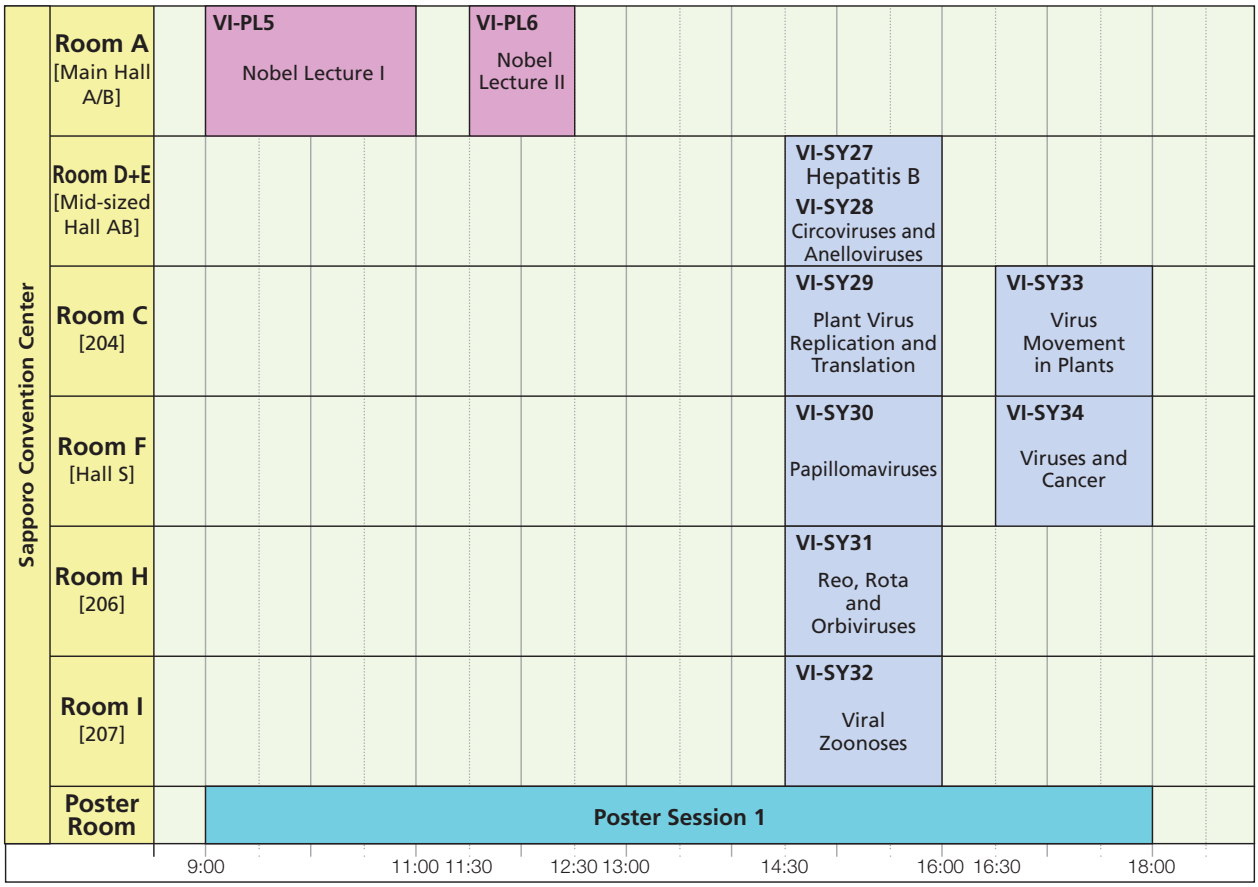


Program at a Glance

[Tuesday, 13 September]

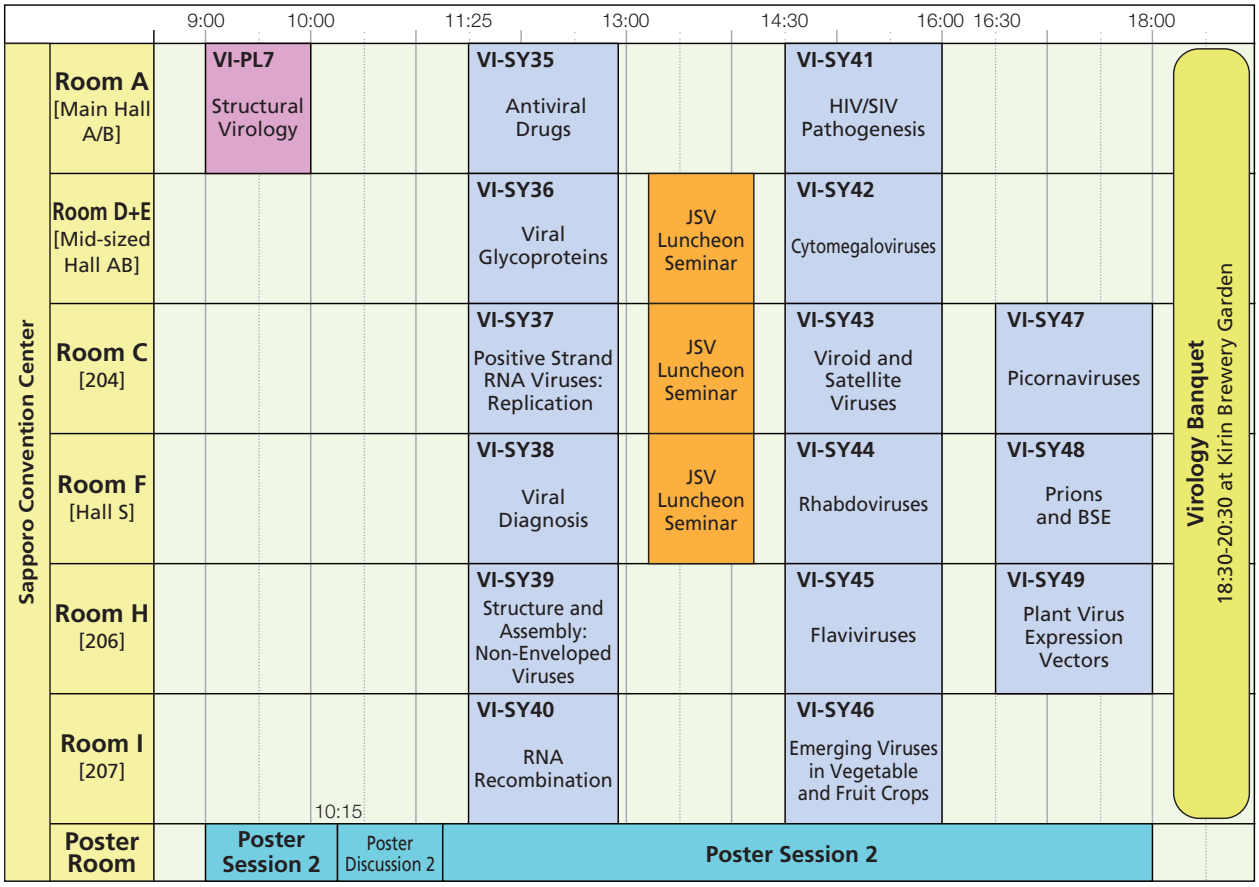


[Wednesday, 14 September]

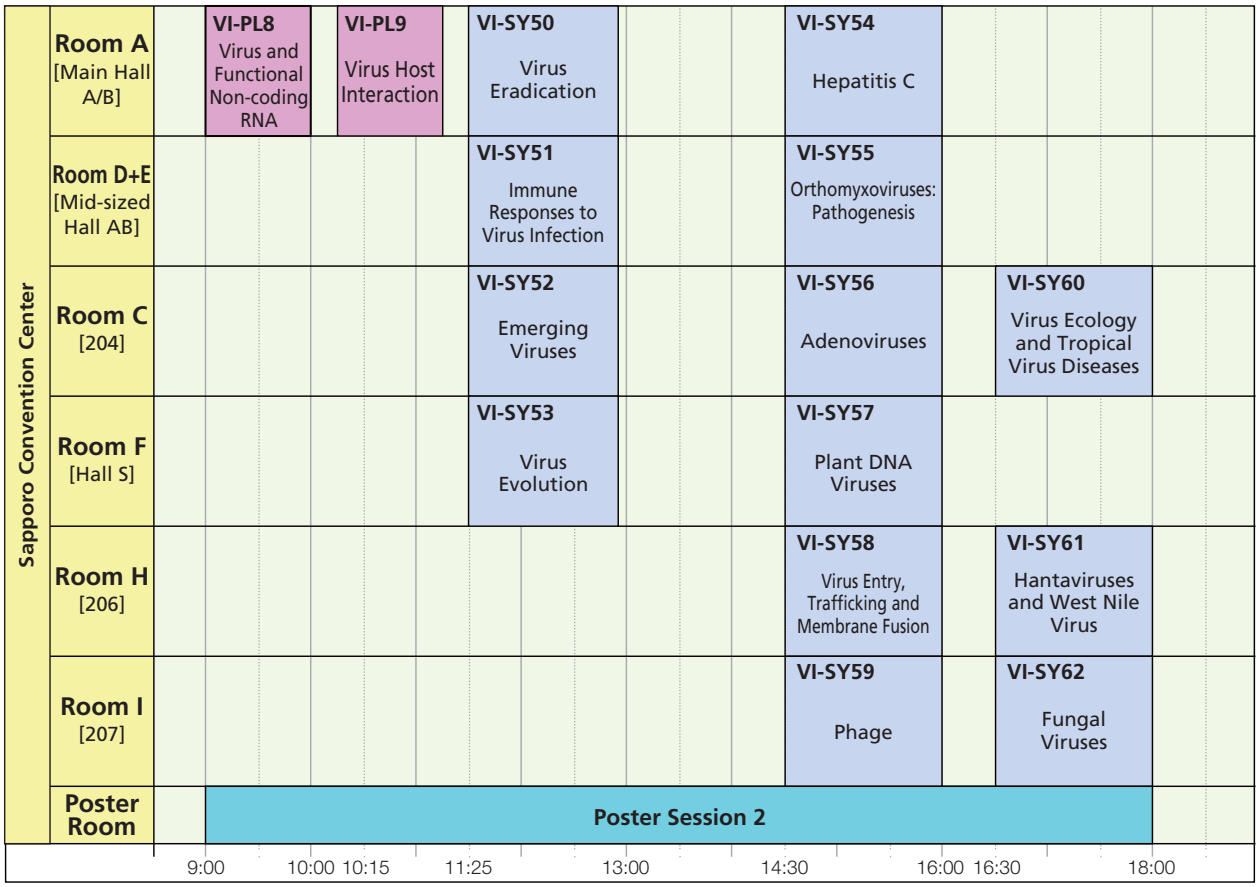


Program at a Glance

[Thursday, 15 September]



[Friday, 16 September]



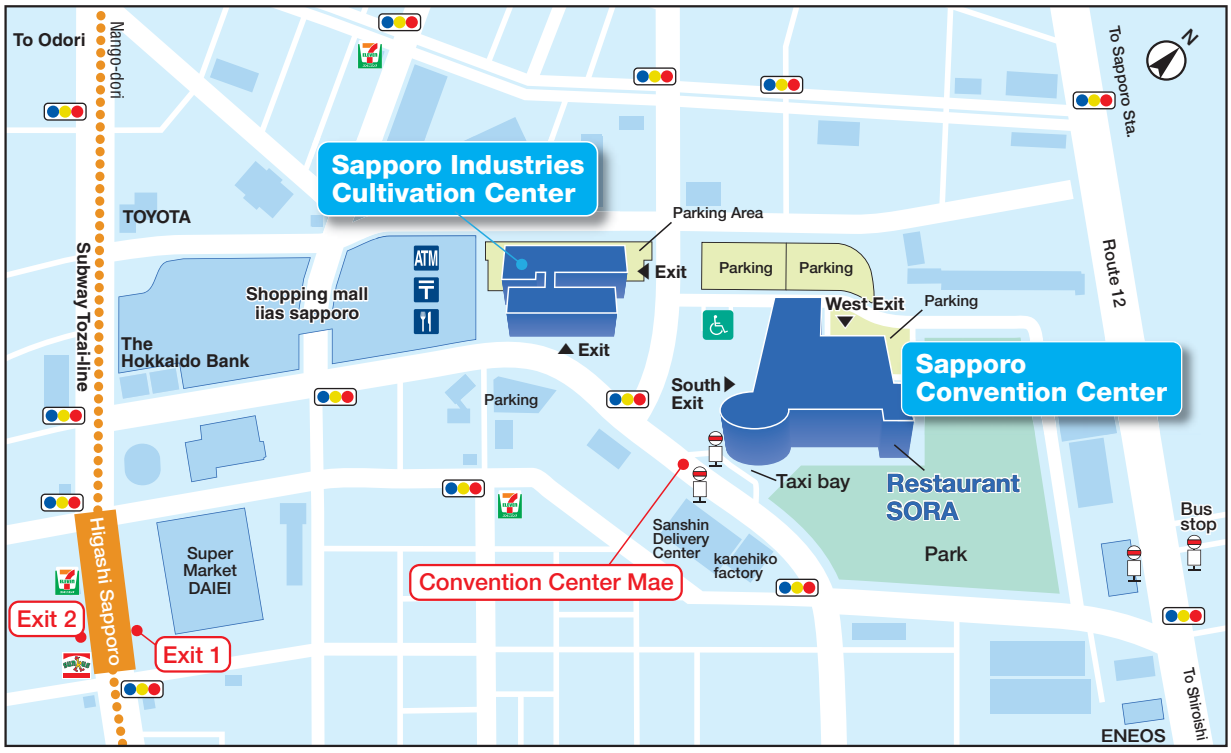
Access

Sapporo Convention Center

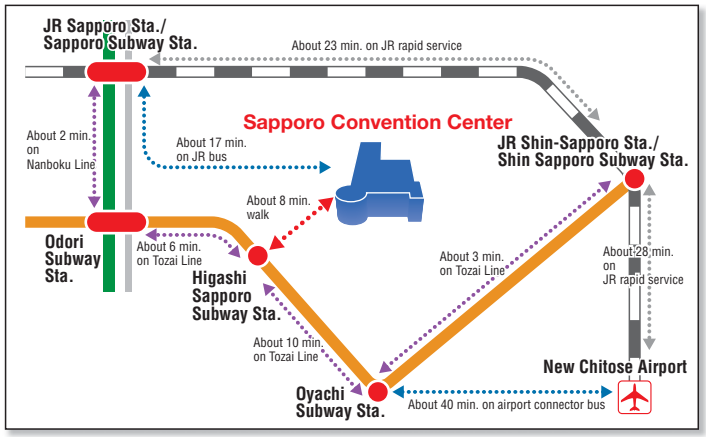
6-jo 1-chome, Higashi-Sapporo, Shiroishi-ku, Sapporo, 003-0006 Japan

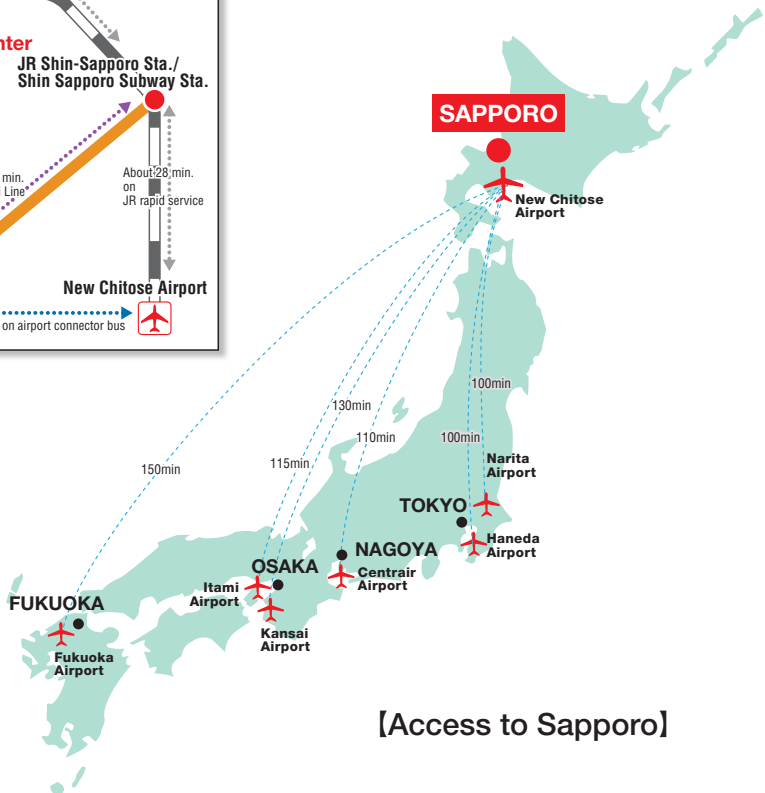
Sapporo Business Innovation Center

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



【Transportation to Sapporo Convention Center】

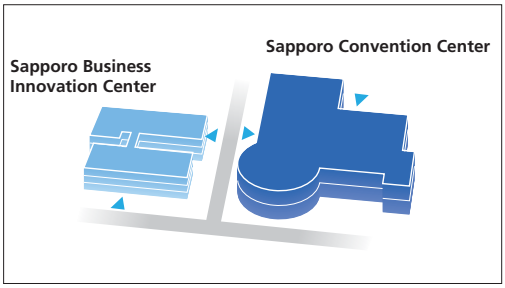




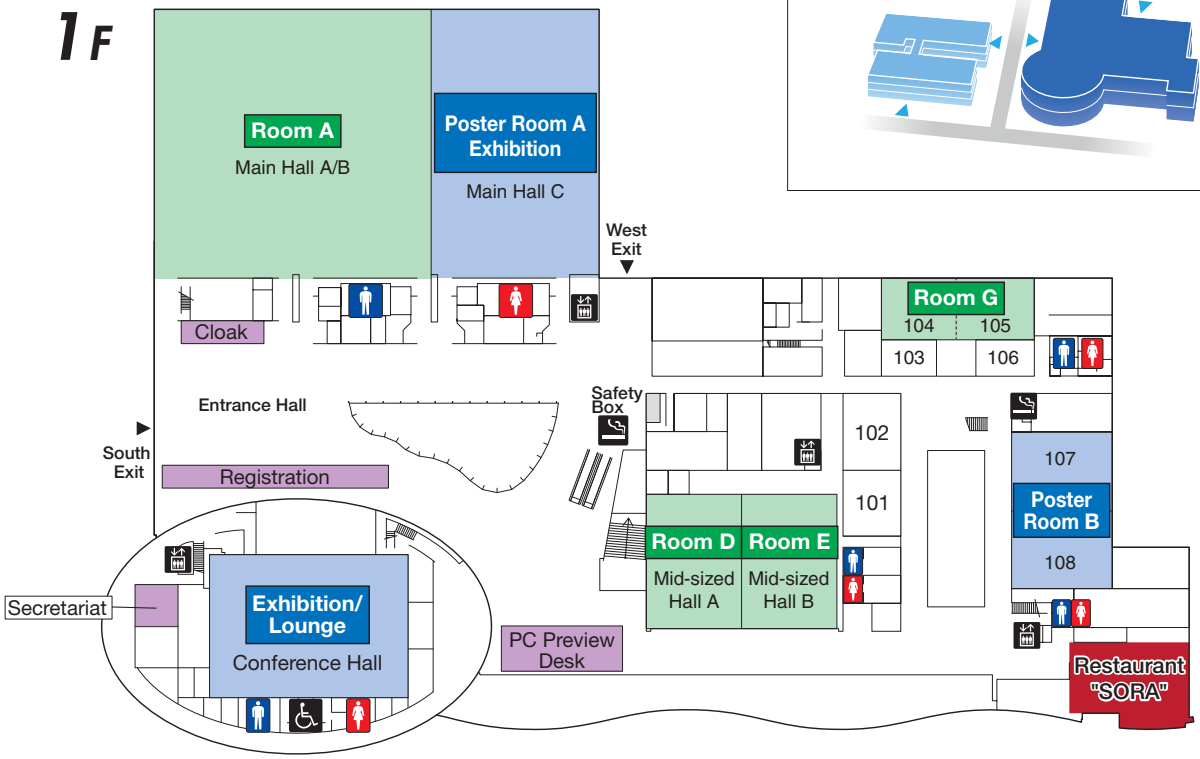
【Access to Sapporo】

Floor Plan

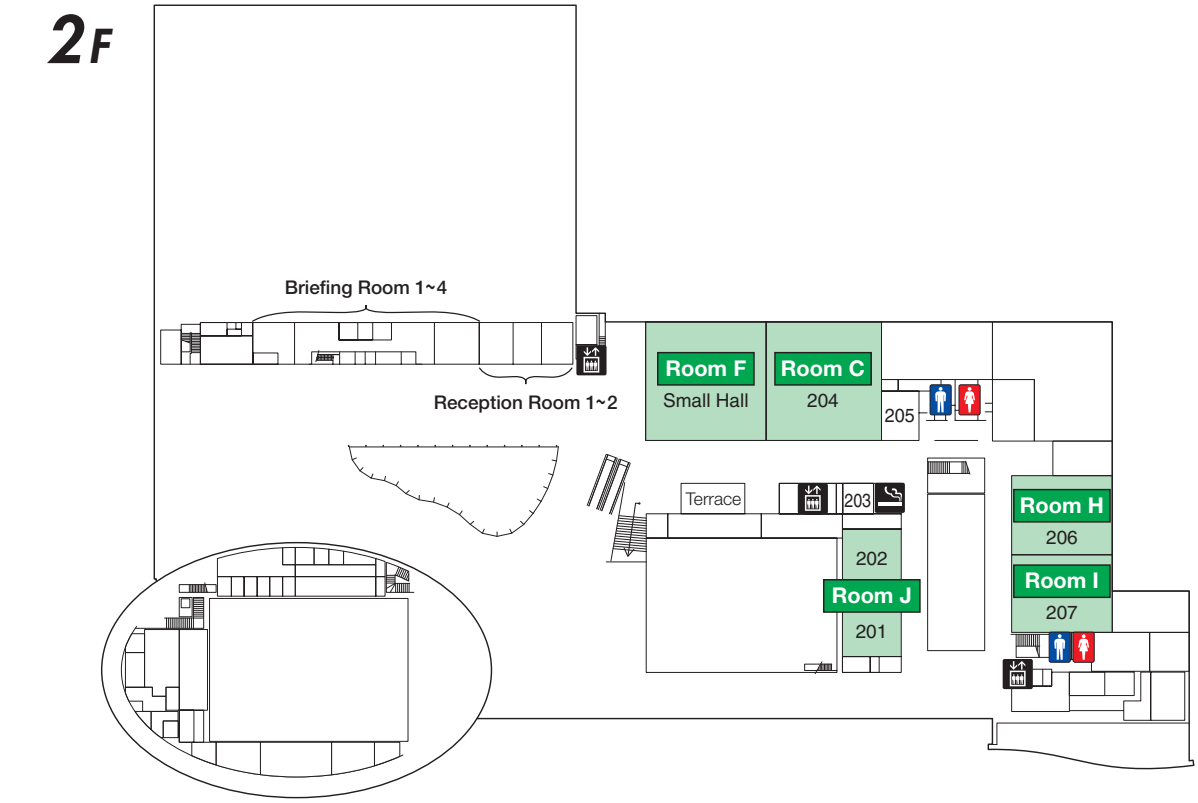
Sapporo Convention Center



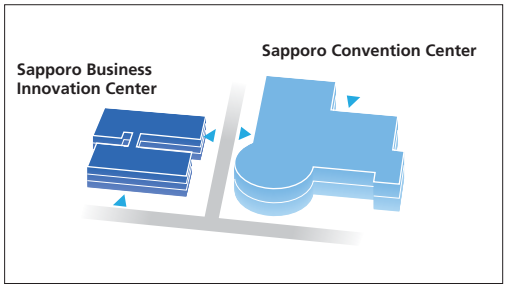
1F



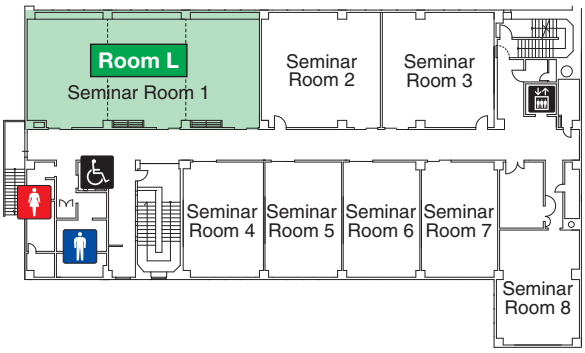
2F



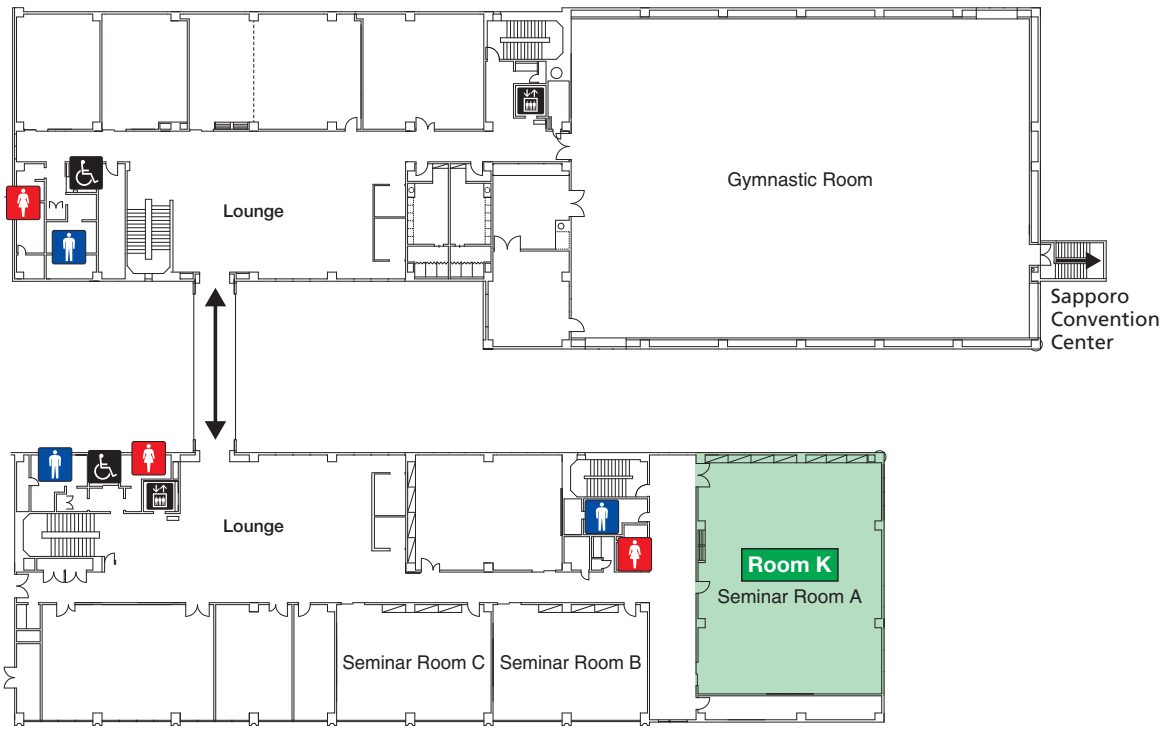
Sapporo Business Innovation Center



3F Skill Training Building



2F Skill Training Building



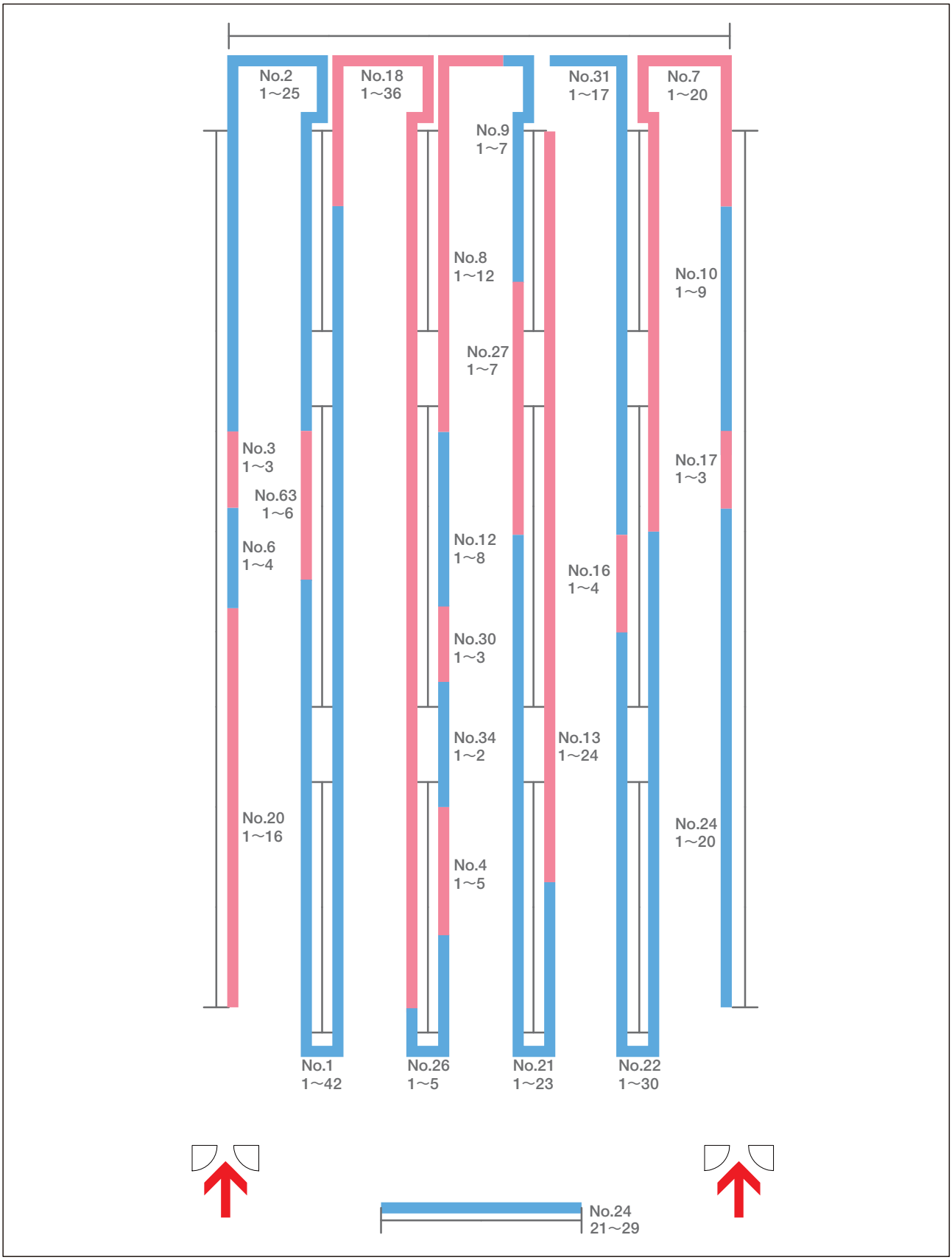
Industrial Development Building

Presentations

Posters or Exhibition

Poster Layout

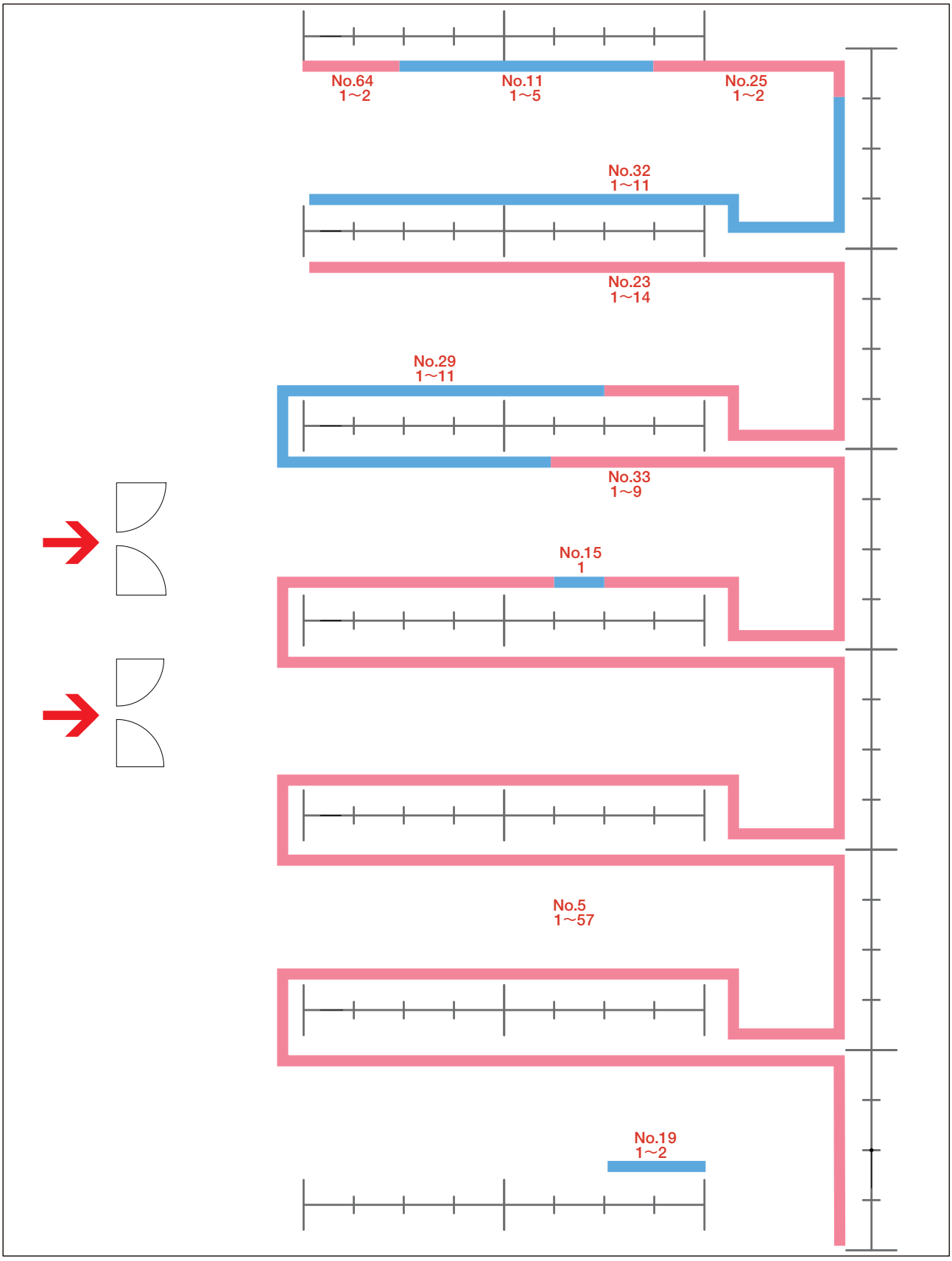
Poster Room A (Main Hall C, 1st floor, Sapporo Convention Center)
[11-16 September / Poster 1]



Poster Layout

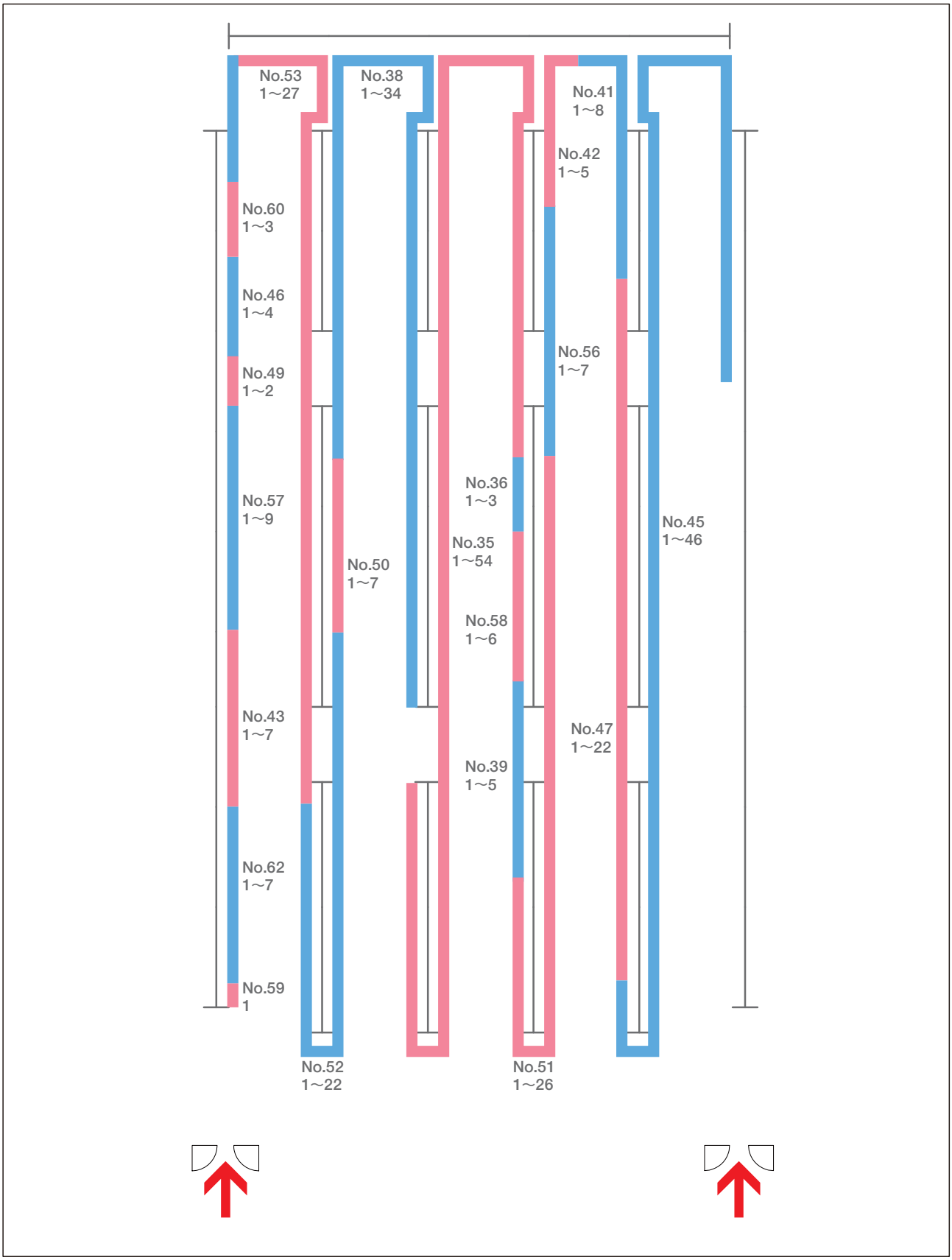
Poster Room B (107/108, 1st floor, Sapporo Convention Center)

[11-16 September / Poster 1]



Poster Layout

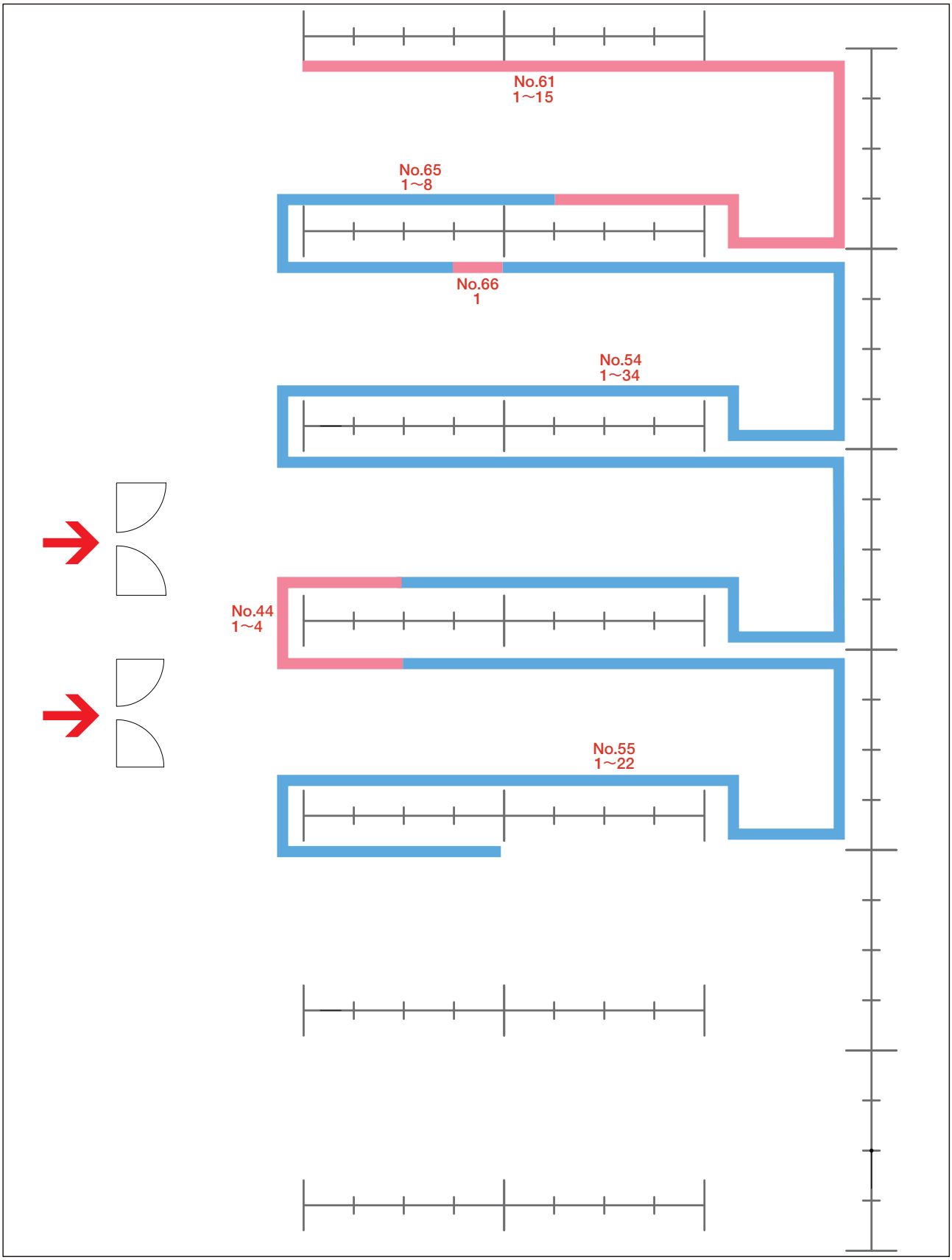
Poster Room A (Main Hall C, 1st floor, Sapporo Convention Center)
[11-16 September / Poster 1]



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

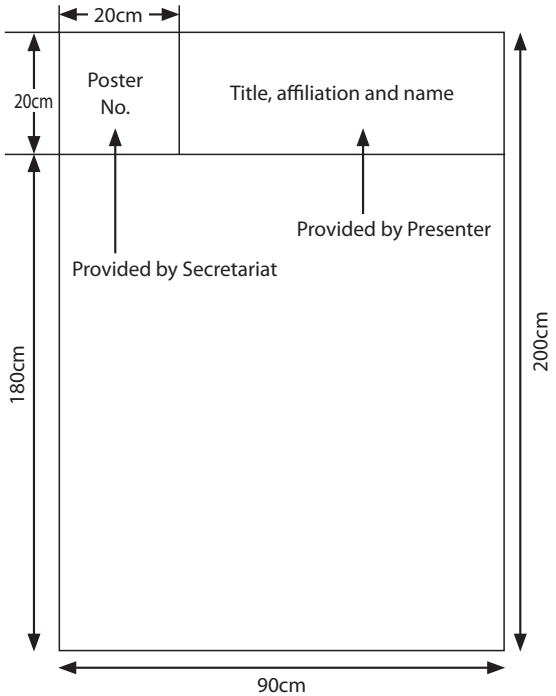
Poster Mounting	12 September	8:00 - 9:00
Poster Session	12, 13 and 14 September	9:00 - 18:00
Poster Discussion	13 September	10:15 - 11:15
Poster Removal	14 September	18:00 - 19:00

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.

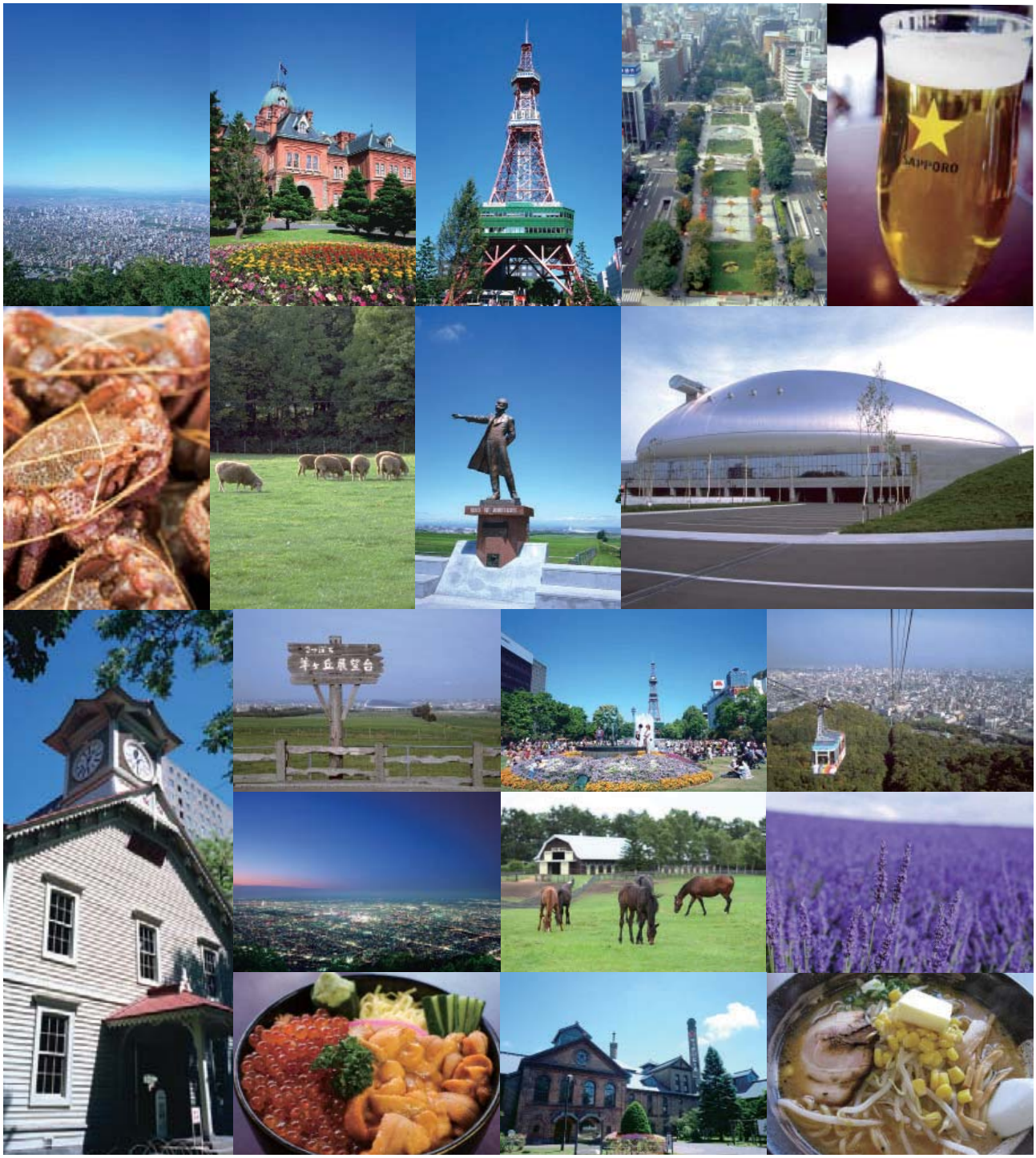
Historical Buildings

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 *Halobacteriaceae* and *Halomonadaceae*
14:00-18:30	International Journal of Systematic and Evolutionary Microbiology Editional Board Meeting

Wednesday, 7 September

11:00-13:00	ICSP Subcommittee on Taxonomy of *Flavobacterium* and *Cytophaga*-like Bacteria
14:00-16:00	ICSP Subcommittee on Taxonomy of *Aeromonadaceae*, *Vibrionaceae* 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 Micrococcineae

Saturday, 10 September

7:00- 9:00	ICSP Subcommittee for the Taxonomy of *Enterobacteriaceae*
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

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

Sponsored Session

Luncheon Seminar

Thursday, 8 September

13:00-14:00 Room A

JSB Luncheon Seminar Sponsored by SHIONOGI & CO., LTD

Convener: Yasuyoshi Ike

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 Sponsored by Roche Diagnostics K.K.

Convener: Shuolin Song

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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1996	Jerusalem
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2008	Istanbul

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Date: Sunday July 27th to Friday August 1st, 2014
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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
Center for the History of Science, The Royal Swedish Academy of Sciences, Sweden

Plenary Lecture

Monday, 12 September 9:00-10:00 Room A

VI-PL1 Systems Virology

Conveners: Robert Lamb *USA*
Yoshihiro Kawaoka *USA*

VI-PL1-1 **SYSTEMS BIOLOGY APPROACHES TO VIRAL PATHOGENESIS AND IMMUNITY: WHERE ARE GOOGLE AND IBM?**
Michael G Katze
Microbiology, University of Washington, USA

VI-PL1-2 **VIRUSES IN THE SEA: A VAST RESERVIOR OF GENETIC DIVERSITY AND DRIVERS OF GLOBAL PROCESSES**
Curtis A Suttle
Earth & Ocean Sciences, Microbiology & Immunology and Botany, University of British Columbia, Canada

Monday, 12 September 10:15-11:15 Room A

VI-PL2 Virus Pathogenesis

Conveners: Heinz Zeichhardt *Germany*
Yoshiyuki Nagai *Japan*

VI-PL2-1 **MECHANISMS OF BLOODSTREAM SPREAD OF REOVIRUS**
Terence S Dermody
Pediatrics and Microbiology and Immunology, Vanderbilt University School of Medicine, USA

VI-PL2-2 **HIV-2 INFECTION: A MODEL FOR PROTECTIVE IMMUNITY?**
Sarah L Rowland-Jones
Nuffield Department of Clinical Medicine, Oxford University, UK

Tuesday, 13 September 9:00-10:00 Room A

VI-PL3 Virology in Post Genome Era

Conveners: Diane E Griffin *USA*
Kyosuke Nagata *Japan*

VI-PL3-1 **BLUETONGUE VIRUS IN POST-GENOMIC ERA**
Polly Roy
Department of Infectious & Tropical Diseases, London School of Hygiene & Tropical Medicine, UK

VI-PL3-2 **DISCOVERING NEW HOST FACTORS INVOLVED IN VIRAL REPLICATION USING HIGH-THROUGHPUT RNAI SCREENING**
Sara Cherry
University of Pennsylvania, USA

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]

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VI-SY1-2 MATRIX PROTEIN-SPECIFIC IMMUNOGLOBULIN A ANTIBODY NEUTRALIZES MEASLES VIRUS REPLICATION INSIDE EPITHELIAL CELLS

Huimin Yan

Mucosal Immunity Research Group, The State Key Laboratory of Virology, Wuhan Institute of Virology, Chinese Academy of Sciences, China

VI-SY1-3 UBE2L6 DOWN-REGULATES INFLUENZA VIRUS REPLICATION

Yoshitaka Shimotai[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]

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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]

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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]

[1]Graduate School of Agriculture, Kyoto University, Japan, [2]Institute for Enzyme Research, University of Tokushima

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]

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

VI-SY2-3 INVOLVEMENT OF PSF IN THE RECOGNITION OF HDV RNA PROMOTERS BY RNA POLYMERASE II

Martin Pelchat

Biochemistry, Microbiology and Immunology, University of Ottawa, Canada

VI-SY2-4 **A DNA REPAIR PROTEIN NBS1 REGULATES MLV INTEGRATION SITE SELECTION**

Yasuteru Sakurai[1], Fumiaki Sato[2], Takeshi Fujiwara[2], Chizuko Hirano[2], Gozoh Tsujimoto[3], Kenshi Komatsu[4], Masao Matsuoka[1]

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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]

[1]Centro Nacional de Biotecnologia C.S.I.C. Madrid, Spain, [2]Ciber 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 Suzuki[1], Nongluk Sriwilaijaroen[1,2], Sachiko Kondo[3,4], Hirokazu Yagi[3], Nobuhiro Takemae[5,6], Takehiko Saito[5,6], Hiroaki Hiramatsu[1], Koichi Kato[3,4]

[1]College of Life and Health Sciences, Chubu University, Japan, [2]UniversityThammasat Univ.,[3]Nagoya City University, [4]GLYENCE Co. Ltd., [5]Thailand-Japan Zoonotic Dis. Collaboration Center, [6]National 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 HEMAGGLUTINI**

Yi Shi[1], Wei Zhang[1,2], Jianxun Qi[1], Qing Li[1], George Fu Gao[1,2,3,4]

[1]CAS Key Laboratory of Pathogenic Microbiology and Immunology, Institute of Microbiology, Chinese Academy of Sciences, China, [2]Graduate University, Chinese Academy of Sciences, [3]China-Japan Joint Laboratory of Molecular Microbiology and Molecular Immunology, Institute of Microbiology, Chinese Academy of Sciences, [4]Research 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 Mistry[1], Hirotoshi Inoue[1], Fariba Jamshidi[1], Rickard Storm[1], Yorihiro Nishimura[2], Hiroyuki Shimizu[2], Satoshi Koike[3], Niklas Arnberg[1]

[1]Dept. of Virology, Umea Universitet, Sweden, [2]Department of Virology II, National Institute of infectious Diseases, [3]Tokyo Metropolitan Institute of Medicine Science

VI-SY3-4 **DEN2 STRAIN DERIVED FROM DHF PATIENT UTILIZES SDC2 FOR INFECTION IN ERYTHROID CELLS**

Kenta Okamoto[1], Muhareva Rawekiensya[1], Daisuke Kimura[2], Katsuyuki Yui[2], Mohammed Alimul Islam[3], Futoshi Hasebe[1], Kouichi Morita[1]

[1]Department of Virology, Institute of Tropical Medicine, Japan, [2]Department of Molecular Microbiology and Immunology, Nagasaki University, [3]Department 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 Arnberg[1], Emma Nilsson[1], Rickard Storm[1], Johannes Bauer[2], Susanne MC Johansson[1], Aivar Lookene[3], Lars Frangsmyr[1], Simon Rinaldi[4], Hugh J Willison[4], Fatima Pedrosa Domellof[5], Thilo Stehle[2]

[1]Department of Clinical Microbiology, Umea University, Sweden, [2]Interfaculty Institute of Biochemistry, University of Tuebingen, [3]Department of Chemistry, Tallin University of Technology, [4]Institute of Infection, Immunity and Inflammation, University of Glasgow, [5]Departments 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 Suenaga[1], Fuminori Arisawa[1], Yasuko Mori[3,4], Hisashi Arase[1,2]

[1]Department of Immunochemistry, Research Institute for Microbial Diseases, Osaka University, Japan, [2]Immunochemistry, WPI Immunology Frontier Research Center, Osaka University, [3]Division of Clinical Virology, Kobe University Graduate School of Medicine, [4]Laboratory 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 Brassard[2], Pascal Lapierre[1], Laurent Poliquin[1,2], **Alain Lamarre**[1,2]

[1]Immunovirology, INRS-Institut Armand-Frappier, Canada, [2]Biomed 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 Hikichi[1], Minoru Kidokoro[2], Hisatoshi Shida[3], Hideaki Tahara[1], **Takafumi Nakamura**[1,4]

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

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

Manbok Kim[1], Garant Katy[2], Patrick Lee[2], Young-Seok Kim[3], Randal N Johnston[4]

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

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

Kathryn Ottolino-Perry[1], Nan Tang[2], Renee Head[2], Calvin Ng[2], Fernando Angarita[1], Sergio Acuna[1], Ralph Dacosta[3], J Andrea McCart[1,2,4]

[1]Institute of Medical Science, University of Toronto, Canada, [2]Division of Experimental Therapeutics, Toronto General Research Institute, University Health Network, [3]Department of Medical Biophysics, Ontario Cancer Institute, University Health Network, [4]Division 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 Knudsen[1], Karl Ljungberg[1], Daniel X Johansson[1], Maria Kakoulidou[1], Tomas Hanke[2], Peter Liljestrom[1]

[1]Department of Microbiology, Tumor and Cell Biology, Karolinska Institutet, Sweden, [2]MRC 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 Golden[1], Jay W Hooper[1], T.C Wu[2], Peter Loudon[3]

[1]Molecular Virology, United States Army Medical Research Institute of Infectious Diseases, USA, [2]Johns Hopkins University, [3]Pfizer

VI-SY5-4 **CONTROLLING HENIPAVIRUS DISEASE AND TRANSMISSION THROUGH VACCINATION AND THERAPEUTICS**

Jackie A Pallister[1], Deborah J Middleton[1], Reuben Klein[1], Manabu Yamada[2], Jessica M Haining[1], Rachel L Robinson[1], **Yan-Ru Feng**[3], Zhu Zhongyu[4,5], Dimiter S Dimitrov[4], Christopher C Broder[3], Lin-Fa Wang[1]

[1]Australian Animal Health Laboratory, Csiro Livestock Industries, Australia, [2]National Institute of Animal Health, [3]Uniformed Services University, [4]Protein Interactions Group, CCRNP, CCR, NCI-Frederick, National Institutes of Health, [5]BRP, SAIC-Frederick, Inc.

VI-SY5-5 **DEVELOPMENT OF CHIKUNGUNYA VIRUS WITH A PROGRAMMED, ATTENUATED, CELL TYPE-RESTRICTED PHENOTYPE**

Ilya Frolov[1], Dal Young Kim[1], Svetlana Atasheva[1], Niall J Foy[1], Eryu Wang[2], Elena I Frolova[1], Scott C Weaver[2]

[1]Microbiology, University of Alabama at Birmingham, USA, [2]Pathology, 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 Lehrer[1], Michael M Lieberman[2], Tom Humphreys[3], Stephen Margosiak[1], Gary S Bignami[1], Teri-Ann S Wong[1], John M Dye[4], Mary Kate Hart[4], Ricardo Carrion[5], Andrea Marzi[6], Heinz Feldmann[6]

[1]Panthera Biopharma, LLC, USA, [2]Lieberman Consulting, [3]University of Hawaii, [4]US Army Medical Research Institute for Infectious Diseases, [5]Texas Biomedical Research Institute, [6]Laboratory 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 Seto[1], James Chodosh[2], David Dyer[3], Morris S Jones[4]

[1]Bioinformatics and Computational Biology, George Mason University, USA, [2]Dept. of Ophthalmology Howe Laboratory, Massachusetts Eye and Ear Infirmary, [3]Dept. of Microbiology and Immunology, University of Oklahoma Health Sciences, [4]Viral 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 Ishibashi[2], Hirohisa Kishino[3], Masayuki Ishikawa[2]
[1]Presto, Japan Science and Technology Agency (JST), Japan, [2]National Institute of Agrobiological Sciences (NIAS), [3]University of Tokyo

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

Weifeng Shi[1], Michael J Carr[2], Linda M Dunford[2], Chaodong Zhu[3], Fumin Lei[3], Jun Yin[1], William W Hall[2], Desmond G Higgins[1]
[1]The Conway Institute, University College Dublin, Ireland, [2]National Virus Reference Laboratory, University College Dublin, [3]Institute of Zoology, Chinese Academy of Sciences

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

Kimihito Ito[1,2], Manabu Igarashi[1], Yutaka Miyazaki[3], Teiji Murakami[4], Sayaka Iida[1], Hiroshi Kida[4,5,6,7], Ayato Takada[8,9]
[1]Department of Bioinformatics, Hokkaido University Research Center for Zoonosis Control, Japan, [2]PRESTO, Japan Science ant Technology Agency (JST), [3]Faculty of Liberal Arts and Sciences, Osaka University of Economics and Law, [4]Hokkaido University Research Center for Zoonosis Control, [5]Department of Disease Control, Graduate School of Veterinary Medicine, [6]OIE Reference Laboratory for Highly Pathogenic Avian Influenza, [7]SORST, Japan Science and Technology Agency (JST), [8]Department of Global Epidemiology, Hokkaido University Research Center for Zoonosis Control, [9]School 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 Wakai[1], Kiyohisa Mizumoto[2,3], Kyosuke Nagata[1]
[1]Department of Infection Biology, Graduate School of Comprehensive Human Sciences, University of Tsukuba, Japan, [2]Department of Biochemistry, School of Pharmaceutical Sciences, Kitasato University, [3]Laboratory 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 Nagata[1]
[1]Department of Infection Biology, Graduate School of Comprehensive Human Sciences, University of Tsukuba, Japan, [2]Graduate School of Infection Control Science, Kitasato University, [3]JSPS Research Fellow, [4]Laboratory of Cellular Biochemistry, RIKEN, [5]PRESTO, Japan Sci. and Tech. Agenecy

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 Watanabe[1], George P Leser[2], Robert A Lamb[2]
[1]Veterinary Medicine, Tokyo University of Agriculture and Technology, Japan, [2]Howard 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 Kimura[1], Kensei Gotoh[2], Seiji Maruo[3], Kenzo Takada[3], Seiko Iwata[1], Fumi Goshima[1], Yukihiro Nishiyama[1], Yoshinori Ito[2]
[1]Department of Virology, Nagoya University Graduate School of Medicine, Japan, [2]Department of Pediatrics, Nagoya University Graduate School of Medicine, [3]Department 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 Maruo[1], Bo Zhao[2], Eric Johannsen[2], Elliott Kieff[2], James Zou[2], Kenzo Takada[1]
[1]Institute for Genetic Medicine, Hokkaido University, Japan, [2]Brigham 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 Yoshiyama[1], Asuka Nanbo[2], Masahisa Jinushi[1], Kenzo Takada[3]
[1]Research Center for Infection-Associated Cancer, Institute for Genetic Medicine, Hokkaido University, Japan, [2]Department of Immunology, Graduate School of Pharmaceutical Sciences, Hokkaido University, [3]Department 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 Seto[1], Andreas Moosmann[2], Sebastian Groemminger[3], Nicole Walz[4], Adam Grundhoff[4], Wolfgang Hammerschmidt[5]
[1]Department of Molecular Immunology and Inflammation, Research Institute, National Center for Global Health and Medicine, Japan, [2]Clinical Cooperation Group Molecular Oncology, Ludwig Maximilians-University Munich and Helmholtz Zentrum Muenchen, German Research Center for Environment and Health, [3]Institute for Clinical and Molecular Biology, Helmholtz Zentrum Muenchen, German Research Center for Environment and Health, [4]Heinrich-Pette-Institute for Experimental Virology and Immunology, [5]Department 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 Nishiyama[2], Tatsuya Tsurumi[1]
[1]Division of Virology, Aichi Cancer Center Research Institute, Japan, [2]Department 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 Puentes[1], Natasha Eliopulos[1], Ruben Perez[2], Gabriela Franco[1], Katia Sosa[2], Pablo Bianchi[2], Agustin Furtado[1], Silvia Hubner[3], Paulo Esteves[4]
[1]Microbiological Science, Facultad de Veterinaria - Universidad de la Republica Oriental del Uruguay, Uruguay, [2]Genetic section. Facultad de Ciencias - Universidad de la Republica Oriental del Uruguay, [3]Faculdade de Veterinaria - Universidade Federal de Pelotas - RS, [4]EMBRAPA - 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 Choi[1], Subbiah Jeeva[1], Ju Hee Jung[1], Yong Seok Lee[2]
[1]Department of Microbiology, Pukyong National University, Korea, South, [2]Department 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 Slavov[1], Simone Kashima[1,2], Ana Cristina S Pinto[1], Dimas T Covas[1,3]
[1]Regional Blood Center of Ribeirão Preto, Faculty of Medicine in Ribeirão Preto, University of São Paulo, Brazil, [2]Faculty of Pharmaceutical Sciences in Ribeirao Preto, University of Sao Paulo-USP, [3]Faculty of Medicine in Ribeirao Preto-FMRP, University of Sao Paulo-USP

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

Johnson A Adeniji[1], Adedayo O Faneye[1], Judith M Heubeshen[2]
[1]Department of Virology, Department of Virology, College of Medicine University of Ibadan, Nigeria, [2]Institute 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 Schlatermund, 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 Tan[3], Ali Mirazimi[1,2]
[1]Swedish Institute for Communicable Disease Control, Sweden, [2]MTC/ karolinska Institute, [3]Department 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 Lihoradova[1], Birte Kalveram[1], Terence Hill[2], Chien-Te K Tseng[2,3,4]
[1]Department of Pathology, University of Texas Medical Branch, USA, [2]Department of Microbiology and Immunology, University of Texas Medical Branch, [3]The Sealy Center for Vaccine Development, University of Texas Medical Branch, [4]The 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 Firth[1], Dal Young Kim[2], Svetlana Atasheva[2], Elena I Frolova[2], Ilya Frolov[2]
[1]Department of Pathology, University of Cambridge, UK, [2]Department 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 Willows[1], Carolina S Ilkow[1], **Tom C Hobman**[1,2]
[1]Cell Biology, University of Alberta, Canada, [2]Li 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 Harden[1]
[1]Virology and Immunology, Texas Biomedical Research Institute, USA, [2]Graduate 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 Kato[1], Masaaki Oyama[1], Hiroko Kozuka-Hata[2], Takahiko Imai[2], Yasushi Kawaguchi[1]

[1]Division of Viral Infection, Department of Infectious Disease Control, International Research Center for Infectious Diseases, The Institute of Medical Science, The University of Tokyo, Japan, [2]Medical 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**

Tsunehisa Nagamori, Shin Koyano

Department of Pediatrics, Asahikawa Medical University, Japan

VI-SY12-4 **ANTIHERPES ACTIVITY OF THE CARDENOLIDES GLUCOEVATROMONOSIDE AND CONVALLATOXIN**

Caroline Rigotto[1], Annelise de Carvalho[1], Jessica W Bertol[2], Wolfgang Kreis[3], Celia RM Barardi[2], Fernao C Braga[4], Claudia MO Simoes[1]

[1]Department of Pharmaceutical Sciences, Federal University of Santa Catarina, Brazil, [2]Department of Microbiology, Immunology and Parasitology, Federal University of Santa Catarina, [3]Friedrich Alexander Universitat, Erlangen Nurnberg, [4]Departatment 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 Arii[1,2], Yasushi Kawaguchi[1]

[1]International Research Center for Infectious Diseases, The Institute of Medical Science, University of Tokyo, USA, [2]Present 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-κB PATHWAY**

Junichiro Yasunaga[1], Frank C Lin[1], Xiongbin Lu[2], Kuan-Teh Jeang[1]

[1]Laboratory of Molecular Microbiology, NIAID, NIH, Japan, [2]University 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 Cesaire[1], Gildas Belrose[1], Antoine Gross[2], Stephane Olindo[3], Agnes Lezin[1], Maryvonne Dueymes[1], Didier Smadja[3], Yuetsu Tanaka[4], Luc Willems[5], Jean-Michel Mesnard[2], Jean-Marie Peloponese[2]

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

VI-SY13-5 **NOVEL ESCAPE MUTANTS SUGGEST AN EXTENSIVE TRIM5α BINDING SITE SPANNING THE ENTIRE OUTER SURFACE OF THE MURINE LEUKAEMIA VIRUS CAPSID PROTEIN**

Sadayuki Okura[1], David C Goldstone[2], Melvyn W Yap[1], Kate Holden-Dye[1], Ian A Taylor[2], Jonathan P Stoye[1]

[1]Division of Virology, MRC National Institute for Medical Research, UK, [2]Division 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 Jong[1], David A Theilman[2], Basil M Arif[3], **Peter J Krell**[1]

[1]Molecular and Cellular Biology, University of Guelph, Canada, [2]Pacific Agri-Food Research Centre, Agriculture and Agri-Food, [3]Great 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 NUCELOPOLYHEDOVIRUS(AGMNPV) RECOMBINANTS**

Anabele A Lima[1], Bergmann M Ribeiro[2]

[1]Brasilia University Medical School - Graduate Program in Molecular Pathology, University of Brasilia, Brazil, [2]Department of Cell Biology, University of Brasilia

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

Jun Kobayashi[1,2], Kuni Sasaki[1], Yasuhiro Tsuda[1], Mio Katsuki[1], Hiroshi Mitsutake[2], Yuanjiao Huang[3], Xueying Wang[4]

[1]Faculty of Agriculture, Yamaguchi University, Japan, [2]The United Graduate School of Agricultural Sciences, Tottori University, [3]Guangxi Medical University, [4]Shenyang 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 Nakayama[1], Ayaka Yokoyama[1], Hiroko Miyamoto[1], Manabu Igarashi[2], Noriko Kishida[3], Keita Matsuno[1], Andrea Marzi[4], Heinz Feldmann[4], Kimihito Ito[2], Masayuki Saijo[5], Ayato Takada[1]

[1]Department of Global Epidemiology, Hokkaido University Research Center for Zoonosis Control, Japan, [2]Department of Bioinformatics, Hokkaido University Research Center for Zoonosis Control, [3]Laboratory of Influenza Virus Surveillance, Center for Influenza Virus Research, National Institute of Infectious Diseases, [4]Laboratory of Virology, Division of Intramural Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rocky Mountain Laboratories, [5]Department 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 Fukushi[1], Tetsuya Mizutani[1,3], Masayuki Saijo[1], Ichiro Kurane[1], Shigeru Kyuwa[2], Hiroomi Akashi[3], Yasuhiro Yoshikawa[2], Shigeru Morikawa[1,2]

[1]Department of Virology 1, National Institute of Infectious Diseases, Japan, [2]Department of Biomedical Science, Graduate School of Agricultural and Life Sciences, University of Tokyo, [3]Department 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 Matthias[1], Joseph E Blaney[2], Christoph Wirblich[1], Amy B Papaneri[2], Reed F Johnson[2], Carey J Meyers[1], Michael R Holbrook[3,4], Alexander N Freiberg[4,5], John G Bernbaum[3], Peter B Jahrling[1,3], Jason Paragas[1]

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

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

Mayra Garcia[1], Arik Cooper[1], Wei Shi[1], William Bornmann[2], Daniel Kalman[3], Gary J Nabel[1]

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

Monday, 12 September 16:30-18:15 Room I

VI-SY17 Arenaviruses

Conveners: Sean P.J 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 Moonga[2], Ichiro Nakamura[1,2], Aiko Ohnuma[1], Bernard Hang'Ombe[2], Ayato Takada[1,2,3], Aaron Mweene[2], Hirofumi Sawa[1,2,3]

[1]Research Center for Zoonosis Control, Hokkaido University, Japan, [2]School of Veterinary Medicine, University of Zambia, [3]Global 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 Whelan[1], Philip J Kranzusch[1], Bo Liang[1], Benjamin Morin[1], Amal A Rahmeh[1], Geri Tekes[1], Andreas Schenck[2], 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 *Germany*
Takashi Fujita *Japan*

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
Department of Virology, Institute for Medical Microbiology & Hygiene, University Medical Center Freiburg, University of Freiburg, Germany

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 Fujtia
Department of Molecular Genetics, Institute for Virus Research, Kyoto University, Japan

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 *Japan*
Dorothee von Laer *Germany*

VI-SY19-1 APPLICATION OF HUMAN HERPESVIRUS-6 (HHV-6) FOR THE GENE THERAPY VECTOR

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

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
Division of Genetic Therapeutics, Jichi Medical University, Japan

VI-SY19-3 DEVELOPMENT OF AN ARTIFICIAL CONTROLLABLE SENDAI VIRUS-BASED GENE EXPRESSION SYSTEM AND ITS APPLICATION TO THE FIELD OF REGENERATIVE MEDICINE

Hiroshi 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 FEEICIENCY OF VIRAL REPLICATION IN HUMAN GLIOMA CANCER MODEL**

Ayoung Song[1], Moonkyung Kang[2], Yeon-Soo Kim[1,2]
[1]Dept. of Smart Foods and Drugs, Inje University, Korea, South, [2]Indang 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 Mizukami[1], Jun Mimuro[2], Akira Ishiwata[2], Hiroya Yagi[1], Tsukasa Ohmori[2], Seiji Madoiwa[2], Tomonori Tsukahara[1], Masashi Urabe[1], Akihiro Kume[1], Yoichi Sakata[2], Keiya Ozawa[1]
[1]Div. Genetic Therapeutics, Jichi Medical University, Japan, [2]Div. 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 Laer[1], **Janine Kimpel**[1], Lisa Egerer[1], Sebastian Newrzela[1], Jan van Lunzen[2], Boris Fehse[2]
[1]Division for Virology, Innsbruck Medical University, Austria, [2]University 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 Hosseini[1], Mina Koohi Habibi[2], Keramat Izadpanah[3], Gholamhossein Mosahebi[2], Concepsion Rubies Autonell[4], Claudio Ratti[4]
[1]Department of Plant Protection, Vali-E-Asr University of Rafsanjan, Iran, [2]Department of Plant Protection, University College,of Agriculture and Natural Resources, University of Tehran, [3]Department of Plant Protection, College of Agriculture, Shiraz University, [4]DiSTA, Patologia Vegetale, Universita` di Bologna

VI-SY20-4 **BIOLOGICAL AND MOLECULAR CHARACTERIZATION OF A NEW ISOLATE OF CUCUMBER GREEN MOTTLE MOSAIC VIRUS (CGMMV) IN INDONESIA**

Budi S Daryono[1], Tri Joko[2], Alin L Liana[1], Utari Saraswati[1]
[1]Faculty of Biology, Gadjah Mada University, Indonesia, [2]Faculty 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 Kim[1], Tae-Young Roh[3], Jihwan Park[3], Joo-Shil Lee[1], Sang-Yun Choi[2], Sungsoon Kim[1], Byeong-Sun Choi[1]
[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
Program in Gene Function and Expression, UMass Medical School, USA

VI-SY21-3 THE HEMATOPOIETIC CELL-SPECIFIC RHO GTPASE INHIBITOR ARHGDIB/D4GDI LIMITS HIV-1 REPLICATION
Tadashi Watanabe[1], Emiko Urano[2], Kosuke Miyauchi[2], Reiko Ichikawa[2], Makiko Hamatake[2], Kei Sato[1], Hirotaka Ebina[1], Yoshio Koyanagi[1], Jun Komano[2]
[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 Sukegawa[1], Ryuta Sakuma[1], Seiga Ohmine[2], Yasuhiro Ikeda[2], Shoji Yamaoka[1]
[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 Waki[1], Scott Butler[2], Eric O Freed[1]
[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 Yokoyama[1], Satoshi Naganawa[2], Kazuhisa Yoshimura[3], Shuzo Matsushita[3], **Hironori Sato**[1]
[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
Department of Virology, Faculty of Medicine, Kyushu University, Japan

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 Mckaigue[2], Peter V Coyle[3], Michael D Shields[1,2], Ultan F Power[1]
[1]Centre for Infection & Immunity, Queens University Belfast, UK, [2]The Royal Belfast Hospital for Sick Children, [3]The Regional Virus Laboratory, Belfast Trust

VI-SY22-3 NIPAH VIRUS INFECTION OF HUMAN MONOCYTE DERIVED DENDRITIC CELLS
Manisha Gupta[1], Michael Lo[2], Christina F Spiropoulou[1]
[1]Viral Special Pathogens Branch, Centers for Disease Control and Prevention, USA, [2]Measles, Mumps, Rubella, and Herpesvirus Laboratory Branch, Centers for Disease Control and prevention

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

Sarah Hinkelmann[1], Florian Klauschies[1], Veronika von Messling[2], Georg Herrler[1], Ludwig Haas[1]
[1]Institute of Virology, University for Veterinary Medicine Hannover, Foundation, Germany, [2]INRS-Institut Armand-Frappier, University of Quebec

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

Jianbao Dong[1], Wei Zhu[2], Akatsuki Saito[2], Yoshitaka Goto[2], Takeshi Haga[2]
[1]JSPS Research Fellow DC (The United Graduate School of Veterinary Science, Yamaguchi University), Japan, [2]Department 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 Schuhmann[1], Christian K Pfaller[2], Karl-Klaus Conzelmann[1]
[1]Max von Pettenkofer Institute & Gene Center, Ludwig Maximilians-University Munich, Germany, [2]Department 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 Kobayashi[1], Reiko Tomita[2], Hui Chen[1], Hiroyuki Mizumoto[3], Go Atsumi[2], Akinori Kiba[3], Naoto Yamaoka[1], Yasufumi Hikichi[3], Masamichi Nishiguchi[1], Ken-Taro Sekine[2]
[1]Faculty of Agriculture, Ehime University, Japan, [2]Iwate Biotechnology Research Center, [3]Faculty 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 Sanfacon[1]
[1]Agriculture and Agri-Food Canada, Pacific Agri-Food Research Centre, Canada, [2]Department 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 Yeh[1], Chin-Chih Chen[2], **Joseph A. J Raja**[1], Chun-Huei Huang[2]
[1]Department of Plant Pathology, National Chung Hsing University, Taiwan, [2]Division 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 ZOONOTIC 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 *Japan*
Ikuo Takashima *Japan*

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 Sceinces, 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 (WNF) 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-Ciro[2], Lissethe C Pardo[1], Cristina Domingo[3], Gloria J Rey-Benito[1], Juan A Sanchez[4], Antonio Tenorio[5], Juan C Gallego-Gomez[2]

[1]Virology Lab, National Institute of Health, Colombia, [2]Viral Vector Core and Gene Therapy, Neurosciences Group, Sede de Investigación Universitaria, Universidad de Antioquia, [3]Robert Koch Institute, [4]Departamento de Ciencias Biológicas-Facultad de Ciencias, Laboratorio BIOMMAR, Universidad de LOS Andes, [5]Laboratorio de Arbovirus y Enfermedades Víricas 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 Mackenzie[1], David T Williams[1,2], Sinead M Diviney[1,2], Aziz Niazi[1,2], Belinda Herring[3], Cheryl A Johansen[4]

[1]Faculty of Health, Curtin University, Australia, [2]School of Biomedical Sciences, Curtin University, [3]Discipline of Infectious Diseases and Immunology, University of Sydney, [4]Arbovirus 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 King[1], Tsai-Ying Yen[1], Day-Yu Chao[2], Chuan-Liang Kao[3], Shu-Fang Chuang[3], Zheng-Rong Tiger Li[1], Betty Wu-Hsieh[4], Chia-Chi Ku[4], Tzai-Hung Wen[5], Kun-Hsieh Tsai[1], Jeff GJ Chang[6]

[1]Public Health, Institute of Epidemiology and Preventive Medicine, National Taiwan University, Taiwan, [2]National Chung Hsing University, [3]Department of Clinical Laboratory Sciences and Medical Biotechnology, National Taiwan University, [4]Department of Immunology, National Taiwan University, [5]National Taiwan University, [6]Center 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 Biotecnologia (CNB-CSIC), Spain

VI-SY26-3 AN RGS-CAM-MEDIATED COUNTERMEASURE FOR RNAI-BASED ANTIVIRAL IMMUNITY IN TOBACCO

Kenji Nakahara[1], Chikara Masuta[1], Syouta Yamada[1], Hanako Shimura[1], Tomoko S Wada[1], Ayano Meguro[1], Kae Sueda[1], Kazunori Goto[1], Manabu Igarashi[2], Richard W Carthew[3], Ichiro Uyeda[1]

[1]Research Faculty of Agriculture, Hokkaido University, Japan, [2]Department of Global Epidemiology, Hokkaido University Research Center for Zoonosis Control, [3]Department 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 Liang[1], Kouichi Kitamura[1], Weixin Fu[1], Guangyan Liu[1], Zhe Wang[1], Tasuku Honjo[2], Masamichi Muramatsu[1]
[1]Department of Molecular Genetics, Kanazawa University Graduate School of Medical Science, Japan, [2]Department 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 Kochneva[1], Victor Manuilov[2], Ludmila Osipova[3], Elena Chub[4], Sergey Netesov[5]
[1]Biological, Novosibirsk State University, Russia, [2]Medical, Joint Stock Company Helicon, [3]Genetic, Institute of Cytology and Genetics of SB RAS, [4]Hepatic, Joint Stock Company Vector-Best, [5]Hepatic, 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 Yano[1], Takako Utsumi[1,3], Maria Inge Lusida[3], Soetjipto[3], Catharina Triwikatmani[4], Neneng Ratnasari[4], Sutanto Maduseno[4], Putut Bayu Purnama[4], Siti Nurdjanah[4], Yoshitake Hayashi[1]
[1]Center for Infectious Disease, Graduate School of Medicine, Kobe University, Japan, [2]Department of Anatomical Pathology, Faculty of Medicine, Gadjah Mada University, [3]Indonesia-Japan Collaborative Research Center for Emerging and Re-emerging Infectious Diseases, Institute of Tropical Disease, Airlangga University, [4]Gastroenterohepatology 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 Utsumi[1], **Yoshihiko Yano**[1], Maria Inge Lusida[2], Nasronudin[2], Mochamad Amin[2], Soetjipto[2], Hak Hotta[1], Yoshitake Hayashi[1]
[1]Center for Infectious Diseases, Kobe University Graduate School of Medicine, Indonesia, [2]Indonesia-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 Saha[1], Uladzimir U Karniychuk[1], Marc Geldhof[1], Richard Decatelle[2], Jan Van Doorsselaere[3], **Hans J Nauwynck**[1]
[1]Virology, Parasitology and Immunology, Laboratory of Virology, Faculty of Veterinary Medicine, Ghent University, Belgium, [2]Department of Pathology, Bacteriology and Poultry Diseases, Faculty of Veterinary Medicine, Ghent University, [3]Department 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]
[1]Animal Health Biotechnology, Temasek Life Sciences Laboratory, Singapore, [2]Department 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 Kraft[2], Zhaohui Wang[1], Marc Parisien[3], Krzysztof Treder[1]
[1]Plant Pathology, Iowa State University, USA, [2]Biochemistry, Biophysics & Molecular Biology, Iowa State University, [3]Biochemistry & 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-Oki Iwakawa[1,2], Yuri Tajima[1], Takako Taniguchi[3], Masanori Kaido[1], Kazuyuki Mise[1], Hisaaki Taniguchi[3], Tetsuro Okuno[1]
[1]Laboratory of Plant Pathology, Graduate School of Agriculture, Kyoto University, Japan, [2]Institute of Molecular and Cellular Biosciences, The University of Tokyo, [3]Institute 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 Zhu[1], Jianbao Dong[1,2], Erika Shimizu[3], Yoshitaka Goto[1], Takeshi Haga[1]
[1]Department of Veterinary Microbiology, University of Miyazaki, Japan, [2]JSPS Research Fellow DC (The United Graduate School of Veterinary Science, Yamaguchi University), [3]Miyazaki 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 Matsushita[1], **Azumi Ishizaki**[1], Huyen TT Hoang[1,3,4], Dorothy M Agdamag[1], Toshiyuki Sasagawa[2], Vuong Thi Tran[1,3], Cuong Hung Nguyen[1,3], Van Thanh Ta[4], Thuc Van Pham[3], Xiuqiong Bi[1], Hiroshi Ichimura[1]

[1]Department of Viral Infection and International Health, Graduate School of Medical Science, Kanazawa University, Japan, [2]Department of Reproductive and Perinatal Medicine, Kanazawa Medical University, [3]Hai Phong University, [4]Hanoi 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 Sakai[1]

[1]Dept. Viral Oncol., Inst. Virus Res., Kyoto Univ., Japan, [2]Grad. Sch. Biostudies., Kyoto Univ., [3]Cent. Emerging Virus Res., Kyoto Univ., [4]Dept. Genetic Biochemistry, Kyoto Univ., [5]Grad. 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 Miura[1], Kei Kawana[1], Tomoyuki Fujii[1], Danny J Schust[2], Tetsu Yano[1], Shiro Kozuma[1], Yuji Taketani[1]

[1]Department of Obstetrics and Gynecology, Faculty of Medicine, University of Tokyo, Japan, [2]Department 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 Tanaka[1], Nobuhiro Suzuki[1], Lying Sun[2]

[1]Institute of Plant Science and Bioresources, Okayama University, Japan, [2]Institute of Virology and Biotechnology, Zhejiang Academy of Agricultural Sciences

VI-SY31-3 **THE INHIBITORY ACTIVITIES OF BOVINE LACTOPHORIN AGAINST ROTAVIRUS INFECTIONS**

Mizuho Inagaki[1], Tomio Yabe[1], Tohru Suzuki[2], Takeshi Takahashi[3], Tsukasa Matsuda[4], Osamu Nakagomi[5], Toyoko Nakagomi[5], Yoshihiro Kanamaru[1]

[1]Faculty of Applied Life Science, Gifu University, Japan, [2]United Graduate School of Agricultural Science, Gifu University, [3]Food Science Institute, Division of Research and Development, Meiji dairies Co., Ltd., [4]Depeartment of Applied Molecular Biosciences, Graduate School of Bioagricultural Sciences, Nagoya University, [5]Department 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 Hoshino[3]

[1]Department of Pediatrics, Iwamizawa Municipal General Hospital, Japan, [2]Department of Pediatrics, Sapporo Medical University, [3]Rotavirus Vaccine Development Section, Laboratory of Infectious Diseases, NIAID, NIH

VI-SY31-5 ANTIGENEMIA DURING ROTAVIRUS DIARRHEA DOES NOT REPRESENT VIREMIA

Kamruddin Ahmed[1], Gulendam Bozdayi[2], Marcelo T Mitui[3], Selim Ahmed[4], Luthful Kabir[4], Dalgic Buket[5], Ilknur Bostanci[6], Akira Nishizono[3], Osamu Nakagomi[7]

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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 Couteaudier[1], Jean-Baptiste Pons[2], Nadége Mollard[1], Franck Boue[3], D Augot[4], Dominique Pontier[2], Philippe Marianneau[1,5], Franck Sauvage[2], **Noël Tordo**[1]

[1]Virology, Natl. Ref. Centre for Viral Hemorrhagic Fevers / UBIVE, Institut Pasteur, France, [2]UMR- CNRS 5558 Université de Lyon, [3]Natl. Lab for Rabies and Wildlife Diseases Research, Anses, [4]E 2533-USC Anses, [5]Virology 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 Kajihara[1], Keita Matsuno[1], Edgar Simulundu[1], Mieko Muramatsu[1], Osamu Noyori[1], Rashid Manzoor[1], Manabu Igarashi[2], Masatoshi Okamatsu[3], Yoshihiro Sakoda[3], Hiroshi Kida[1,3,4,5], Ayato Takada[1,6]

[1]Department of Global Epidemiology, Hokkaido University Research Center for Zoonosis Control, Japan, [2]Department of Bioinformatics, Hokkaido University Research Center for Zoonosis Control, [3]Department of Disease Control, Graduate School of Veterinary Medicine, Hokkaido University, [4]OIE Reference Laboratory for Animal Influenza, [5]Japan Science and Technology Agency Basic Research Programs, [6]School 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 Mweene[1], Ayato Takada[2,3], Chihiro Sugimoto[2,3], Hirofumi Sawa[2,3], Edgar Simulundu[3], Yuka Suzuki-Thomas[2,3], Bernard Hang'Ombe[1], Boniface Namangala[1], Emiko Nakagawa[2,3], Akihiko Ishii[2,3], Hirohito Ogawa[2,3]

[1]Department of Disease Control, School of Veterinary Medicine, University of Zambia, Zambia, [2]Research Centre for Zoonosis Control, Hokkaido University, [3]Hokudai 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]
[1]Institut de Biologie Moleculaire des Plantes (IBMP), CNRS-UPR2357, Centre Nationale de la Recherche Scientifique (CNRS), France, [2]Institute of Botany, Department of Plant Physiology, University of Basel

VI-SY33-2 THE CELL NUCLEUS AND PLANT VIRUS SYSTEMIC INFECTIONS
Michael Taliansky[1], Jane Shaw[1], Sang Hyon Kim[1], Natalia O Kalinina[2], Stuart MacFarlane[1], John W.S Brown[1]
[1]Plant Pathology, Scottish Crop Research Institute, UK, [2]AN 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 Lim[1], MiYeon Lee[2], Jennifer Bragg[2], Uma Ganesan[2], Brian Kim[2], John Hammond[3], Andrew O Jackson[2]
[1]Department of Applied Biology, Chungnam National University, Korea, South, [2]Department of Plant and Microbial Biology, University of California, [3]USDA-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 Fujimuro[1], Chie Suzuki[2]
[1]Mol. Cell Biol., Sch. of Med., Univ. of Yamanashi, Japan, [2]Biochem., Sch. of Pharm., Hokkaido Univ.

VI-SY34-3 DEVELOPMENT OF THE NOVEL STRATEGY FOR THE TREATMENT OF PRIMARY EFFUSION LYMPHOMA

Chizuka Higashi[1], Yamada Koji[2], Masahiro Fujimuro[1]

[1] Mol. Cell Biol., Sch. of Med., Univ. of Yamanashi, Japan, [2]Biochemistry, Sch. of Pharm., Hokkaido Univ.

VI-SY34-4 HCV NS3 AND NS5B INDUCES IRF-2 EXPRESSION IN B CELL LINE

Masahiko Ito[1], Atsuko Masumi[2], Toshiaki Mizuochi[2], Tetsuro Suzuki[1]

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VI-SY34-5 STABILIZATION OF AU-RICH ELEMENT CONTAINING MRNA MEDIATED BY ADENOVIRUS GENE PRODUCT CONTRIBUTES TO CELL TRANSFORMATION

Takeshi Kuroshima[1], Motoaki Yasuda[2], Tetsuya Kitamura[1], Aya Yanagawa-Matsuda[1], Masanobu Shindoh[1], **Fumihiro Higashino**[1]

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Thursday, 15 September 11:25-12:55 Room A

VI-SY35 Antiviral Drugs

Conveners: Eric de Clercq *Belgium*
Charles Boucher *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 Arita[1], Hirotatsu Kojima[2], Tetsuo Nagano[2], Takayoshi Okabe[2], Takaji Wakita[1], Hiroyuki Shimizu[1]
[1]National Institute of Infectious Diseases, Japan, [2]Chemical 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 Liu[1], Sheng Xiong[1,2], Yang Fei Xiang[2], Chao Wan Guo[1], Feng Ge[1], Chong Ren Yang[3], Ying Jun Zhang[3], Yi Fei Wang[2], Kaio Kitazato[1]
[1]Department of Molecular Microbiology and Immunology, Nagasaki University, Graduate School of Biomedical Sciences, Japan, [2]Biomedical R&D Center, Guangdong Provincial Key Laboratory of Bioengineering Medicine, National Engineering Research Center of Genetic Medicine, Jinan University, [3]Kunming 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 Fairlie[3], Martin J Stoermer[3], Alexander A Khromykh[1,2], Roy A Hall[1,2]
[1]School of Chemistry and Molecular Biosciences, University of Queensland, Australia, [2]Australian Infectious Diseases Research Centre, University of Queensland, [3]Institute 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 Strand[1], Christopher T Oberg[2], Emma K Andersson[1], Karin Edlund[1], Kristina Lindman[1], Nam Phuong[2], Ya-Fang Mei[1], Mikael Elofsson[2], Goran Wadell[1]
[1]Virology, Department of Virology, Umea University, Sweden, [2]Department 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 Boucher[1], Martin Schutten[1], Regina Dutkowski[2], Klaus Klumpp[2], Bruno Lina[3], Ann Nist[2], Albert Osterhaus[1], Jonathan Nguyen-Van-Tam[4], Xiao Tong[2], Richard J Whitley[5]
[1]Erasmus Medical Centre, Netherlands, [2]Hoffmann-La Roche Inc., [3]University of Lyon, [4]University of Nottingham, [5]University of Alabama at Birmingham

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

Yurie Motohashi[1], Masatoshi Okamatsu[1], Yoshihiro Sakoda[1], Takeshi Noshi[2], Ryu Yoshida[2], Hiroshi Kida[1,3]
[1]Laboratory of Microbiology, Department of Disease Control, Graduate School of Veterinary Medicine, Hokkaido University, Japan, [2]Shionogi Discovery Research Laboratories, [3]Research 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 Long[2], Fanxia Meng[2], Naoyuki Kondo[3], Aikichi Iwamoto[4]
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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 Tsurudome[1], Mito Nakahashi[1], Yoshiaki Matsushima[1], Machiko Nishio[1], Mitsuo Kawano[1], Hiroshi Komada[2], Tetsuya Nosaka[1]
[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 Kawabata[1], Hiroko Oyaizu[2], Huamin Tang[2], Mayuko Hayashi[1], Koichi Yamanishi[3], 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, Katsuhiro 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 Yoshida[1], Disuke Tomabechi[1], Manabu Igarashi[2], Hiroko Miyamoto[1], Ayaka Yokoyama[1], Tetsuo Kase[3], Hiroshi Kida[4,5], Ayato Takada[1]
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Thursday, 15 September 11:25-12:55 Room C

VI-SY37 Positive Strand RNA Viruses: Replication

Conveners: Bert L Semler *USA*
James H Strauss *USA*

VI-SY37-1 HOST ESCRT PROTEINS ARE ESSENTIAL FOR BROMOVIRUS RNA REPLICATION COMPARTMENT ASSEMBLY

Paul Ahlquist[1,2], Arturo Diaz[1], Xiaofeng Wang[3]
[1]Institute for Molecular Virology, University of Wisconsin - Madison, USA, [2]Howard Hughes Medical Institute, [3]Texas AgriLife Research and Dept of Plant Pathology & Microbiology, Texas A&M University System

VI-SY37-2 ROLE OF MEMBRANES IN DENGUE VIRUS REPLICATION

Richard J Kuhn[1,2], Rushika Perera[1], Catherine Riley[1], Jiraphan Junjhon[1], Thomas J Edwards[1], Amber Hopf-Jannasch[2], Giorgis I Mezengie[3], Thomas O Metz[3], Ronald J Moore[3], Ljiljana Pasa-Tolic[3], Jiri Adamec[2]

[1]Biological Sciences, Purdue University, USA, [2]Bindley Bioscience Center, Purdue University, [3]Pacific Northwest National Laboratory

VI-SY37-3 ALPHAVIRUS NSP3 PROMOTES VIRAL RNA REPLICATION BY BINDING AND RECRUITING HOST CELL AMPHIPHYSINS

Tero Ahola[1], Maarit Neuvonen[1], Arunas Kazlauskas[2], Kalle Saksela[2]

[1]Institute of Biotechnology, University of Helsinki, Finland, [2]Department 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 Leen[1], King R Kwok[2], James R Birtley[1], Sean Prater[1], Yasmin Goodfellow[3], Ian Goodfellow[3], Lisa O Roberts[4], Pete J Simpson[2], Steve J Matthews[2], Stephen Curry[1]

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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 Tamura[1], Yoshihiro Sakoda[1], Fumi Yoshino[1], Takushi Nomura[1], Naoki Yamamoto[1], Masatoshi Okamatusu[1], Nicolas Ruggli[2], Hiroshi Kida[1,3]

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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 Yang[3], Kate Moody[1], David T Williams[1,4], Scott Basehore[3], Natalia Novoradovskaya[3], Russell McInnes[3], Craig Monell[3], Gavin Fischer[3]

[1]Microbiology and Infectious Diseases, PathWest Laboratory Medicine WA, Australia, [2]School of Pathology and Laboratory Medicine and School of Biomedical, Biomolecular and Chemical Sciences, University of Western Australia, [3]Life Sciences Group, Agilent Technologies, [4]School 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 Akiat[3], Lady-Anne C Suarez[1], Mary Jane Gregorio[1], Mark Pierre S Dimamay[1,2], Corazon C Buerano[1,4], Ronald R Matias[1,2,5], Filipinas F Natividad[1,2]

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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 Mizutani[1], Masako Abe[2], Naoto Ito[2], Kouji Sakai[3], Yoshihiro Kaku[4], Mami Oba[1], Momoko Ogata[1], Ichiro Kurane[1], Masayuki Saijo[1], Shigeru Morikawa[1], Makoto Sugiyama[2]
[1]Virology 1, National Institute of Infectious Diseases, Japan, [2]The United Graduate School of Veterinary Sciences, Gifu University, [3]Virology 3, National Institute of Infectious Diseases, [4]Veterinary 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 Weerachatyanukul[5], Selina Poon[1,2], Kitty Y Cheng[1], Juan Espinoza[1], Gregory Mcnerney[6], Thomas Huser[6], Varpu Marjomaki[4], Anders Vahlne[2], Holland R Cheng[1]
[1]Molecular and Cellular Biology, University of California Davis, USA, [2]Karolinska Institutet Structural Virology F68 University Hospital, [3]Department of Anatomy, Faculty of Dentistry Mahidol University, [4]Department of Environmental and Biological Science/Nanoscience Center, University of Jyvaskyla, [5]Department of Anatomy, Faculty of Science, Mahidol University, [6]Center for Biophotonics Science and Technology, University of California

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

Shintaro Kobayashi[1], Tadaki Suzuki[2], Manabu Igarashi[3], Noriko Ohtake[4], Keita Nagakawa[4], Kenichi Niikura[5], Takashi Kimura[1], Harumi Kasamatsu[6], Hirofumi Sawa[1,7]
[1]Molecular Pathobiology, Hokkaido University Research Center for Zoonosis, Japan, [2]Pathology, National Institute of Infectious Diseases, [3]Bioinfomatics, Hokkaido University Research Center for Zoonosis Control, [4]Graduate School of Science, Hokkaido University, [5]Nanotechnology Research Center, Research Institute for Electronic Science, Hokkaido University, [6]Molecular, Cell and Developmental Biology and Molecular Biology Institute, University of California, [7]Global COE Program for Zoonosis Control

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

Vijay S Reddy[1], Kundhavai S Natchiar[1], Tina-Marie Mullen[2], Glen R Nemerow[2]
[1]Department of Molecular Biology, The Scripps Research Institute, USA, [2]Department 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 Lommel[1], Stanton Martin[1], Lilin He[3], Richard H Guenther[1], Flora Meilleur[2,3], William Heller[3], Tim Sit[1]
[1]Department of Plant Pathology, North Carolina State University, USA, [2]Center for Structural Molecular Biology, Neutron Scattering Science Division, Oak Ridge National Laboratory, [3]Department 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 Li[1], Kumiko Yoshimatsu[4], Shumpei P Yasuda[4], Jiro Arikawa[4], Michiyo Kataoka[2], Yasushi Ami[3], Yuriko Suzaki[3], Takaji Wakita[1]
[1]Department of Virology 2, National Institute of Infectious Diseases, Japan, [2]Department of Pathology, National Institute of infectious Diseases, [3]Division of Experimental Animals Research, National Institute of infectious Diseases, [4]Department 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-Acosta[3], Carlos Amero[2], Jaime Ruiz-Garcia[3], Laura Silva-Rosales[4], Mauricio Carrillo-Tripp[1]

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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-Solinska[1], Aleksandra M Dzianott[1]

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

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

Kazushi Motomura[1], Masaru Yokoyama[1], Tomoichiro Oka[2], Kazuhiko Katayama[2], Mamoru Noda[3], Tomoyuki Tanaka[4], Hironori Sato[1]

[1]Pathogen Genomics Center, National Institute of Infectious Diseases, Japan, [2]Department of Virology II, National Institute of Infectious Diseases, [3]National Institute of Health Sciences, [4]Sakai 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-Ruiz[1], Arturo Diaz[2], **Paul Ahlquist**[2]

[1]Donald Danforth Plant Science Center, USA, [2]Institute 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 Mitsuki[1], Kentaro Shibusawa[1], Kazutaka Terahara[1], Kazuo Kobayashi[1], Yuko Morikawa[2], Tetsuo Nakayama[3], Makoto Takeda[4], Yusuke Yanagi[5], Yasko Tsunetsugu Yokota[1]

[1]Immunology, National Institute of Infectious Diseases, Japan, [2]Viral Infection II, Kitasato Institute for Life Sciences, Kitasato University, [3]Viral Infection I, Kitasato Institute for Life Sciences, Kitasato University, [4]Virology III, National Institute of Infectious Diseases, [5]Virology, 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 Resarch, Kumamoto University, Japan

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

Takushi Nomura[1], Hiroyuki Yamamoto[1,2], Syoi Shi[1,2], Nami Iwamoto[1,2], Tetsuro Matano[1,2]

[1]AIDS Research Center, National Institute of Infectious Diseases, Japan, [2]Institute 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 Nomaguchi[4], Ken Kono[5], Emi E Nakayama[5], Tatsuo Shioda[5], Tomoyuki Yoshida[1], Yasuhiro Yasutomi[3], Tetsuro Matano[2], Akio Adachi[4], Hirofumi Akari[1,3]

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

Michio Yasunami[1], Nuanjun Wichukchinda[2], Panita Pathipvanich[3], Reiko Miyahara[1], Masahiko Mori[1], Naho Tsuchiya[1], Archawin Rojanawiwat[2], Pathom Sawanpanyalert[2], Koya Ariyoshi[1]

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Thursday, 15 September 14:30-16:00 Room D+E

VI-SY42 Cytomegaloviruses

Conveners: Klaus Frueh *USA*
Jin Hyun Ahn *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 Liao[1], Jung-Hyun Lee[2], Naoki Inoue[3], Kenji Miyado[4], Shigeyoshi Fujiwara[1], Hiroyuki Nakamura[1]

[1]Department of Infectious Diseases, National Research Institute for Child Health and Development, Japan, [2]Department of Pediatrics, College of Medicine, The Catholic University of Korea, [3]Department of Virology I, National Institute of Infectious Diseases, [4]Department 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 Ahn[1], Young-Eui Kim[1], Jin-Hyoung Lee[1], Eui Tae Kim[1], Su Yeon Gu[1], Hyang Sook Seol[1], Paul Ling[2], Chan Hee Lee[3]

[1]Department of Molecular Cell Biology, Sungkyunkwan University School of Medicine, Korea, South, [2]Department of Molecular Virology and Microbiology, Baylor College of Medicine, [3]Division of Life Sciences, Chungbuk National University

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

Hideya Kawasaki[1], Isao Kosugi[1], Yoshifumi Arai[1], Toshihide Iwashita[1], Yoshihiro Tsutsui[2]

[1]Second Department of Pathology, Hamamatsu University School of Medicine, Japan, [2]Faculty 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 Ikuta[1], Ken Ishioka[1], Takashi Imamura[2], Kimisato Asano[3], Tetsushi Yoshikawa[4], Hiroyuki Moriuchi[5], Shigeyoshi Fujiwara[6], Takahiko Kubo[7], Shin Koyano[8], Naoki Inoue[9], Tatsuo Suzutani[1]

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

Yoriko Yamashita[1], Hiroki Isomura[2], Yoshinori Ito[3], Kazuya Motomura[4], Atsushi Natsume[4], Toshihiko Wakabayashi[4], Shinya Toyokuni[1], Tatsuya Tsurumi[2]

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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 Sano[1], Takahiro Matsuda[1], Adkar-Purushothama Charith Raj[1], Zhi-Xiang Zhang[2], Shi-Fang Li[2]

[1]Hirosaki University, Faculty of Agriculture and Life Science, Japan, [2]State 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 Lin[1], Hsin-Chuan Chen[1], Chi-Ping Cheng[1], Ting-Yu Yeh[1], Yau-Heiu Hsu[2]

[1]Institute of Plant and Microbial Biology, Academia Sinica, Taiwan, [2]Graduate 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 Owens[1], Akito Taneda[2], Mineo Senda[3], Kimberly Tech[1], Jacyn C Baker[1], **Teruo Sano**[3]

[1]USDA/ARS, Molecular Plant Pathology Laboratory, USA, [2]Hirosaki University, Graduate school of Science and Technology, [3]Hirosaki 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 Martin[2], Kristin Kopperud[2], Michael M Goodin[2]

[1]Queensland Alliance for Agriculture and Food Innovation Institute, The University of Queensland, Australia, [2]Department 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 Nakagawa[1], Naoto Ito[1,2], Tatsunori Masatani[1], Masako Abe[1], Satoko Yamaoka[1], Kota Okadera[1], Makoto Sugiyama[1,2]

[1]The United Graduate School of Veterinary Sciences, Gifu University, Japan, [2]Laboratory 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 Yamada[1], Kazuko Noguchi[2], Takashi Matsumoto[2], Takahiro M Mitsui[2], Kamruddin Ahmed[1], Akira Nishizono[1,2]

[1]Research Promotion Project, Oita University, Japan, [2]Department 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 Hiraguri[1], Osamu Netsu[1], Takumi Shimizu[1], Tamaki Uehara-Ichiki[1], Toshihiro Omura[1], Nobumitsu Sasaki[2], Hiroshi Nyunoya[2], Takahide Sasaya[1]

[1]National Agricultural Research Center/BRAIN, Japan, [2]Gene 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 Bettadapura[3], Eva Lee[1], Mario Lobigs[1]

[1]Emerging Pathogens and Vaccines Program, John Curtin School of Medical Research, Australian National University, Australia, [2]Faculty of Science and Technology, Universiti Malaysia Terenggan, [3]Institute 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 Xu[1], Robert Anderson[2], Tom C Hobman[1,3]

[1]Department of Cell Biology, University of Alberta, Canada, [2]Department of Microbiology and Immunology, Dalhousie University, [3]Li 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 Debreczeni[1], Jose Aramburu[2], Carmelo Lopez[3], Belen Belliure[1], Luis Galipienso[2], Salvador Soler[3], **Luis Rubio**[1]
[1]Ivia, Spain, [2]IRTA, [3]COMAV-UPV

VI-SY46-3 TOWARDS THE ELIMINATION OF INFECTIOUS ENDOGENOUS BANANA STREAK VIRUS SEQUENCES FROM MUSA BALBISIANA

Pierre-Yves Teycheney[1,2], Marie Umber[2], Benoit Farinas[2], Lydiane Bonheur[2], Christophe Jenny[2]
[1]Bios, CIRAD, Guadeloupe, [2]CIRAD-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 Atsumi[1], Ken-Taro Sekine[1], Yasuya Iwadate[2], Reiko Tomita[1], Ken-Ichi Chiba[2], Shiho Akasaka[2], Kazumichi Fujiwara[2], Naoto Yamaoka[3], Masahiro Nishihara[1], Hideyuki Takahashi[1], Masamichi Nishiguchi[3], Kappei Kobayashi[1,3]
[1]Iwate Biotechnology Research Center, Japan, [2] Iwate Agricultural Research Center, [3]Faculty 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 Chen[1], Ju-Ting Li[1,2], Li-Hsin Huang[2], Jung-Shu Weng[1], Yuan-Fu Cheng[1], Jui-Chu Peng[3,4], Shyi-Dong Yeh[4]
[1]Department of Biotechnology, Asia University, Taiwan, [2]Division of Pesticide Application, Taiwan Agricultural Chemicals and Toxic Substances Research Institute, [3]Division of Crop Environment, Tainan Distinct Agricultural Research and Extension Station, [4]Department 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 Yamayoshi[1], Setsuko Iizuka[2], Teruo Yamashita[3], Hiroko Minagawa[3], anako Sanjoh[4], Noriko Katsushima[5], Tsutomu Itagaki[6], Katsumi Mizuta[7], Yukio Nagai[8], Michiko Okamoto[9], Hidekazu Nishimura[9], Ken Fujii[1], Satoshi Koike[1]
[1]Neurovirology Project, Tokyo Metropolitan Institute of Medical Science, Japan, [2]Shimane prefectural Institute of Public Health and Environmental Science, [3]Laboratory of Virology, Department of Microbiology and Medical Zoology, Aichi Prefectural Institute of Public Health, [4]Sanjoh Clinic, [5]Katsushima Pediatric Clinic, [6]Yamanobe Pediatric Clinic, [7]Department of Microbiology, Yamagata Prefectural Institute of Public Health, [8]Nagai Children's Clinic, [9]Virus 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 Qi[1], Zhujun Chen[3], Xiang Xu[3], Feng Gao[4], Jinghua Yan[1], George Fu Gao[1,2,5,6]
[1]CAS Key Laboratory of Pathogenic Microbiology and Immunology (CASPMI), Institute of Microbiology, Chinese Academy of Sciences, China, [2]Graduate University, Chinese Academy of Sciences, [3]College of Life Science, Anhui Agricultural University, [4]National Laboratory of Macromolecules, Institute of Biophysics, Chinese Academy of Sciences, [5]China-Japan Joint Laboratory of Molecular Immunology and Molecular Microbiology, Institute of Microbiology, Chinese Academy of Sciences, [6]Beijing 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 Lin[1], Nicolas Locker[4], Yu-An Kung[1,3], Chuan-Tien Hung[1,3], Jhao-Yin Lin[1,3], Hsing-I Huang[1,2], Mei-Ling Li[5]
[1]Research Center for Emerging Viral Infections, Chang Gung University, Taiwan, [2]Department of Medical Biotechnology and Laboratory Science, Chang Gung University, [3]Graduate Institute of Biomedical Science, Chang Gung University, [4]Division of Microbial Sciences, Faculty of Health and Medical Sciences, University of Surrey, [5]Department 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 Ishii[1], Tomoko Kiyohara[1], Sayaka Yoshizaki[1], Takaji Wakita[1], Tomoe Shimada[2], Naomi Nakamura[2], Yuki Tada[2], Mamoru Noda[3]
[1]Department of Virology II, National Institute of Infectious Diseases, Japan, [2]Infectious Disease Surveillance Center, National Institute of Infectious Diseases, [3]Division of Biomedical Food Research, National Institute of health Sciences

VI-SY47-6 **COMPREHENSIVE FULL LENGTH SEQUENCE ANALYSIS OF SAFFOLD VIRUSES: RE-EVALUATING CLASSIFICATION**

Naeem Asif[1], Takushi Hosomi[2], Yorihiro Nishimura[1], Muhammad M Alam[3], Tomoichiro Oka[1], Sohail Zaidi[3], Hiroyuki Shimizu[1]
[1]Department of Virology II, National Institute of Infectious Diseases, Japan, [2]The Public Health Institute of Kochi Prefecture, [3]Department of Virology, National Institute of Health

Thursday, 15 September 16:30-18:00 Room F

VI-SY48 Prions and BSE

Conveners: 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 Yamasaki[1], Gerald S Baron[2], Motohiro Horiuchi[1]
[1]Laboratory of Veterinary Hygiene, Graduate School of Veterinary Medicine, Hokkaido University, Japan, [2]Laboratory 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 Uraki[1], Akikazu Sakudo[1], Kosuke Michibata[2], Yasuhisa Ano[1], Jyuri Kono[3], Masayoshi Yukawa[3], Takashi Onodera[1]

[1]Department of Molecular Immunology, Graduate School of Agricultural and Life Sciences, University of Tokyo, Japan, [2]Laboratory of Biometabolic Chemistry, School of Health Sciences, Faculty of Medicine, University of the Ryukyus, [3]Department 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 Satoh[1], Yuji Kamatari[3], Ryuichiro Atarashi[1], Noriyuki Nishida[1]

[1]Department of Molecular Microbiology and Immunology, Nagasaki University Graduate School of Medical Sciences, Japan, [2]Research Fellow of the Japan Society for the Promotion of Science, [3]Center 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 Fukuzawa[1], Noriko Itchoda[2], Takeaki Ishihara[2], Chikara Masuta[3], Takeshi Matsumura[1]

[1]Bioproduction Research Institute, National Institute of Advanced Industrial Science and Technology, Japan, [2]Agricultural Research Institute, HOKUREN Federation of Agricultural Cooperatives, [3]Graduate 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 Itchoda[1], Kazunori Goto[1], Sakiko Tamura[1], Kiichi Kajino[2], Chihiro Sugimoto[2], Kenji Nakahara[3], Chikara Masuta[3], Takeshi Matsumura[4]

[1]HOKUREN Federation of Agricultural Cooperatives, Japan, [2]Research Center for Zoonosis Control, Hokkaido University, [3]Graduate School of Agriculture, Hokkaido University, [4]National 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 Kouiavskaia[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]Immunologyand 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 Inoue[3], Akihiro Iida[3], Hiroto Hara[3], Shu Tsugumine[3], Mamoru Hasegawa[3], Taeko Naruse[4], Akinori Kimura[4], Tetsuro Matano[1,2]

[1]AIDS Research Center, National Institute of Infectious Diseases, Japan, [2]Institute of Medical Science, University of Tokyo, [3]DNAVEC Corporation, [4]Medical 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 Yoshikawa[1], Terence E Hill[1], Cristi L Galindo[4], Harold R Garner[4], Tehsheng Chan[1], Clarence J Peters[1,5], Chien-Te K Tseng[1,5]

[1]Microbiology and Immunology, University of Texas Medical Branch, USA, [2]Department of Virology I, National Institute of Infectious Diseases, [3]Department of Pathology, National Institute of Infectious Diseases, [4]Virginia Bioinformatics Institute, Virginia Polytechnic and State University, [5]Center 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 *Japan*
Alexander E Gorbalenya *Netherlands*

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
Laboratory of Influenza Virus Surveillance, Influenza Virus Research Center, National Institute of Infectious Diseases, Japan

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
Microbiology, University of Alabama at Birmingham, USA

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 *USA*

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 Kasama[1], Satoshi Sekiguchi[2], Makoto Saito[1], Masaaki Satoh[1], Kazuhiko Kuwahara[1], Motohiro Takeya[1], Nobuo Sakaguchi[1], Michinori Kohara[2], Kyoko Tsukiyama-Kohara[1]
[1]Faculty of Life Sciences, Kumamoto University, Japan, [2]The Tokyo Metropolitan Institute

VI-SY54-4 **VIRAL AND CELLULAR DETERMINANTS OF HEPATITIS C VIRUS INFECTION AND ASSEMBLY**

Guangxiang G Luo[1,2], Jieyun Jiang[1], Wei Cun[1], Shuang Shi[2], Jia Liu[2]
[1]Microbiology, Immunology and Molecular Genetics, University of Kentucky College of Medicine, USA, [2]Department 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**

Ikuo Shoji[1], Noriko Okada[1], Xiang Gan[1,2], Shoji Miyagawa[1], Miho Makimoto[1], Ahmed El-Shamy[1], Lin Deng[1], Da-Peng Jang[1], Yoshi-Hiro Ide[1], Hak Hotta[1]
[1]Division of Microbiology, Kobe University Graduate School of Medicine, Japan, [2]Faculty 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 Gorai[1], Shinji Watanabe[2], Tokiko Watanabe[2], Hideo Goto[1], Yoshihiro Kawaoka[1,2,3,4]
[1]Division of Virology, Department of Microbiology and Immunology, Institute of Medical Science, University of Tokyo, Japan, [2]ERATO Infection-Induced Host Responses Project, Japan Science and Technology Agency, [3]Department of Pathobiological Sciences, School of Veterinary Medicine, University of Wisconsin-Madison, [4]International 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 Sakoda[1], Hiroshi Ito[2], Yuko Uchida[3], Takehiko Saito[3], Toshihiro Ito[2], Hiroshi Kida[1,4]
[1]Laboratory of Microbiology, Department of Disease Control, Graduate School of Veterinary Medicine, Hokkaido University, Japan, [2]The Avian Zoonosis Research Center, Faculty of Agriculture, Tottori University, [3]Research Team for Zoonotic Diseases, National Institute of Animal Health, [4]Research 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 Subbarao[1], Amorsolo L Suguitan, Jr.[2], Yumiko Matsuoka[1], Yuk-Fai Lau[1], Celia P Santos[1], Leatrice N Vogel[1], Hong Jin[2], George Kemble[2]
[1]Laboratory of Infectious Diseases, NIAID, National Institutes of Health, USA, [2]MedImmune, 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 Schmolke[1], Balaji Manicassamy[1], Lindomar Pena[2], Troy Sutton[2], Rong Hai[1], Zsuzsanna T Varga[1], Benjamin G Hale[1], John Steel[3], Daniel R Perez[2], Adolfo Garcia-Sastre[1]

[1]Microbiology, Mount Sinai School of Medicine, USA, [2]Veterinary Medicine, University of Maryland, [3]Microbiology 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 Yashiro[1], Hirokazu Tsukahara[1], Akihiro Matsukawa[2], Yousuke Fujii[1], Yoshiharu Nagaoka[1], Mitsuru Tsuge[1], Nobuko Yamashita[1], Hiroshi Masutani[3], Junji Yodoi[3], Yuma Hoshino[4], Tsuneo Morishima[1]

[1]Pediatrics, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Japan, [2]Pathology & Experimental Medicine, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, [3]Laboratory of infection and Prevention,Departments of Biological Response, Institute for Virus Research, Kyoto University, [4]Departments of Respiratory Medicine, Graduate School of Medicine, Kyoto University

Friday, 16 September 14:30-16:00 Room C

VI-SY56 Adenoviruses

Conveners: Niklas Arnberg *Sweden*
Albert Heim *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 Storm[1], Emma C Nilsson[1], Johannes Bauer[2], Sara Spjut[3], Susanne M.C Johansson[1], Aviar Lookene[4], Weixing Qian[3], Lars Frängsmyr[1], Mikael Elofsson[3], Thio Stehle[2], Niklas Arnberg[1]

[1]Division of Virology, Department of Clinical Microbiology, Umeå University, Sweden, [2]Interfaculty Institute for Biochemistry, University of Tübingen, [3]Department of Chemistry, Umeå University, [4]Department 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], Lisanework E Ayalew[2,3]

[1]School of Public Health, University of Saskatchewan, Saskatoon Canada, Canada, [2]VIDO-InterVac, University of Saskatchewan, [3]Veterinary 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 Gonzalez[1], Koki Aoki[2], Kanako O Koyanagi[1], Nobuyoshi Kitaichi[4], Shigeaki Ohno[3], Hisatoshi Kaneko[5], Hiroaki Ishiko[6], Susumu Ishida[2], Hidemi Watanabe[1]

[1]Graduate School of Information Science and Technology, Hokkaido University, Japan, [2]Ophthalmology, Graduate School of Medicine, Hokkaido University, [3]Ocular Inflammation and Immunology, Graduate School of Medicine, Hokkaido University, [4]Ophthalmology, Health Sciences University of Hokkaido, [5]Microbiology, Fukushima Medical University School of Medicine, [6]Host 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 Gronenborn[1], Ioana Grigoras[1], Ana Grande-Perez[2], Tatiana Timchenko[1], Lina Katul[3], Heinrich-Josef Vetten[3]

[1]Institut des Sciences du Vegetal, Centre National de la Recherche Scientifique, France, [2]Instituto de Hortofruticultura Subtropical y Mediterranea, [3]Julius Kuhn Institute (JKI), Bundesforschungsinstitut fur Kulturpflanzen, Institut fur Epidemiologie und Pathogendiagnostik

VI-SY57-2 FUNCTIONAL STUDIES OF GEMINIVIRUS VIRAL SENSE PROMOTERS

Garry Sunter[1], Ho Yong Chung[1], Mary Berger[1], Janet L Sunter[1], Gabriela Lacatus[2], Kavitha Rao[3]

[1]Biology, UT San Antonio, USA, [2]Tumor Virology Program, Greheey Children's Cancer Research Institute, The University of Texas Health Sciences Center, [3]Penn 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 Hayakawa[1], Masashi Suzuki[1], Masashi Ugaki[1], Kazuyuki Hiratsuka[2]

[1]Integrated Biosciences, The University of Tokyo, Japan, [2]Graduate 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 Jain[2], Supriya Chakraborty[1]

[1]School of Life Sciences, JNU, Jawaharlal Nehru University, India, [2]Department of Biotechnology, Jamia Hamdard University

VI-SY57-5 ENDOGENOUS DIONYVIRUS SEQUENCES ARE WIDESPREAD IN PLANT GENOMES

Pierre-Yves Teycheney[1], Andrew D.W Geering[2], Nathalie Choisne[3], Simone Sclabrin[4], Matthias Zytnicki[3], Silvia Vezzuli[5], Riccardo Velasco[5], Hadi Quesneville[3]

[1]Bios, CIRAD, Guadeloupe, [2]Queensland Alliance for Agriculture and Food Innovation (QAAFI), Ecosciences Precinct, [3]URGI, INRA Versailles, [4]Istituto di Genomica Applicata, Parco Scientifico e Tecnologico di Udine Luigi Danieli, [5]IASMA 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 REPLCATION 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 φEF24C CAUSED BY A POINT MUTATION IN A TAIL FIBER GENE**

Jumpei Uchiyama[1], Iyo Takemura[1], Miho Satoh[2], Shin-Ichiro Kato[2], Takako Ujihara[2], Kazue Akechi[1], Shigenobu Matsuzaki[1], Masanori Daibata[1]
[1]Department of Microbiology and Infection, Faculty of Medicine, Kochi University, Japan, [2]Science 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 Uchiyama[1], Miho Satoh[2], Shin-Ichiro Kato[2], Takako Ujihara[2], Shigenobu Matsuzaki[1], Tetsuro Sugiura[3], Masanori Daibata[1]
[1]Department of Microbiology and Infection, Faculty of Medicine, Kochi University, Japan, [2]Science Research Center, Kochi University, [3]Clinical 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 Jalasvuori[1], Ilona Rissanen[1], Karl Harlos[2], Reetta Penttinen[1], David Stuart[2], Jaana Bamford[1]
[1]University of Jyvaskyla, Finland, [2]University 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 Arisaka[1], Moh Lan Yap[1], Yasunori Monzaki[1], Kazuhiro Mio[2], Shuji Kanamaru[1]
[1]Life Science, Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology, Japan, [2]National 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 Torrance[1], Hassan Were[2]
[1]Plant Pathology, Scottish Crop Research Institute, UK, [2]Masinde 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 King[1], **Chang-Chun Lee**[1], Kuan-Yin Chu[1], Ming-Der Liu[1], Molly Tsai[1], C Y Chiang[2], Chuan-Liang Kao[3], Chinglai Yang[4], Richard W Compans[4]
[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 Ogo[1], Louis H Nel[2], Claude T Sabeta[3]
[1]Rabies Unit, Viral Research Division, National Veterinary Research Institute, Nigeria, [2]Microbiology and Plant Pathology, University of Pretoria, [3]Rabies Unit, Ondersterpoort 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 Arai[1], Se Hun Gu[2], Luck Ju Baek[2], Kenji Tabara[3], Hong-Shik Oh[4], Nobuhiro Takada[5], Hae Ji Kang[6], Keiko Tanaka-Taya[1], Shigeru Morikawa[1], Nobuhiko Okabe[1], Richard Yanagihara[6], Jin-Won Song[2]
[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 Gu[1], Hae Ji Kang[1,2], Luck Ju Baek[1], Ji Yun Noh[1], Heung-Chul Kim[3], Terry A Klein[3], Richard Yanagihara[2], Jin-Won Song[1]
[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 Pahogens 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 Gumarang[1], Lying Sun[2], Yukio Shirako[3], Nobuhiro Suzuki[1]
[1]Institute of Plant Science and Resources, Okayama University, Japan, [2]Institute of Virology and Biotechnology, Zhejing Acad. Agric. Sci., [3]ANESC, 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 Jing[1], Jing Zhang[1,2], Guoqing Li[1,2], Daohong Jiang[1,2]
[1]Department of Plant Protection, Huazhong Agricultural University, China, [2]The 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 Kanematsu[1], Hajime Yaegashi[1], Atsuko Sasaki[1], Nobuhiro Suzuki[2]
[1]National Institute of Fruit Tree Science, NARO, Japan, [2]Institute of Plant Science and Resources, Okayama University

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

Kenichi Ikeda[1], Kanako Inoue[1,3], Satoko Kanematsu[2,3], Pyoyun Park[1,3]
[1]Graduate School of Agricultural Science, Kobe University, Japan, [2]National Institute of Fruit Tree Science, NARO, [3]Promotion 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-PO6	Bioinformatics (Bridge between Divisions)
VI-PO3	Virus Receptors
VI-PO2	Host factors for Virus Replication
VI-PO63	Structure and Assembly: Enveloped Viruses
VI-PO1	Virus and Host Responses
VI-PO18	Viruses and Innate Immunity
VI-PO26	Virus Suppression of RNA Silencing
VI-PO4	Viruses as Oncolytic Agents
VI-PO34	Viruses and Cancer
VI-PO30	Papillomaviruses
VI-PO12	Herpes (Simplex) Viruses
VI-PO8	Epstein - Barr Virus
VI-PO9	Parvoviruses
VI-PO27	Hepatitis B
VI-PO21	HIV/SIV Molecular Biology
VI-PO13	HTLV and Animal Retroviruses
VI-PO31	Reo, Rota and Orbiviruses
VI-PO16	Filoviruses
VI-PO22	Paramyxoviruses
VI-PO7	Orthomyxoviruses: Structure, Replication and Assembly
VI-PO10	Bunyaviruses
VI-PO17	Arenaviruses
VI-PO24	Calici- and Astroviruses
VI-PO64	Nidoviruses
VI-PO11	Alpha- and Rubiviruses
VI-PO25	Transmission and Epidemiology of Arboviral Diseases
VI-PO32	Viral Zoonoses
VI-PO23	Host Response and Resistance in Plant Viruses
VI-PO29	Plant Virus Replication and Translation
VI-PO33	Virus Movement in Plants
VI-PO15	Plant Virus-Vector Interactions
VI-PO5	Vaccines
VI-PO19	Gene Therapy

Poster 2

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

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

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 Daryono[1], Tri Joko[2], Ganda D Untara[3], Alin Liana Liana[4]

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

VI-PO20-2

BLUEBERRY VIRUSES DETECTED IN BLUEBERRY TREES IN JAPAN

Masamichi Isogai, Saki Muramatu, 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-Bakhsh[1], Shaheen Nourinejhad Zarghani[1], Neda Zand[1], Nemat Sokhandan Bashir[2], Maghsoud Pazhouhandeh[3]

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VI-PO20-5

UTILITY OF DNA POLYMERASE SEQUENCES IN HERPESVIRUS CLASSIFICATION

Andrew J Davison[1], Derek Gatherer[1], Paul M Sharp[3], Bernhard Ehlers[2]

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VI-PO20-6

GENOTYPING OF BK VIRUS DETECTED FROM RENAL TRANSPLANT PATIENTS IN SYDNEY

Evelyn B Bernardo[1], Rati Sinha[2], Brett Neilan[2], Christian Nelson[3], Raymond Chan[1]

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VI-PO20-7

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

Reza Pourrahim[1], Shirin Farzadfar[2], Alireza Golnaraghi[3], Sahar Vahid Hosseinia[4], Kazusato Ohshima[5]

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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 Kim[1], **Yeon Sook Song**[1], Bong Nam Chung[2], Ki Hyun Ryu[1]

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VI-PO20-13

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

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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

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VI-PO20-15

CURRENT AND FUTURE TAXONOMY OF THE PICORNAVIRIDAE

Nick J Knowles[1], Tapani Hovi[2], Timo Hyypia[3], Andrew MQ King[1], A Michael Lindberg[4], Mark A Pallansch[5], Ann C Palmenberg[6], Peter Simmonds[7], Tim Skern[8], Glyn Stanway[9], Teruo Yamashita[10]

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VI-PO20-16

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

Yoshitaka Sano[1], Akira Masubara[1], Genki Mimuro[2], Takahiro Watanabe[3]

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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 Rizki[1], Tri Wibawa[1], Nastiti Wijayanti[2], Soetaryo Soetaryo[3]

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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 Gong**[3], Marc A Suchard[4]

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VI-PO6-4

VIPR: AN OPEN COMPREHENSIVE BIOINFORMATICS DATABASE AND ANALYSIS RESOURCE FOR THE VIROLOGY RESEARCH COMMUNITY

Brett E Pickett[1], Eva Rab[1], Yun Zhang[1], Jyothi Noronha[1], Burke Squires[1], Victoria Hunt[1], Mengya Liu[2], Monnie Mcgee[2], Chris Larson[3], Edward B Klem[4], Richard H Scheuermann[1,5]

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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

Michihito Sasaki[1], Manabu Igarashi[2], Hirofumi Sawa[1], Rie Hasebe[3], Hideto Fukushi[4], Takashi Kimura[1]

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VI-PO3-2

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

Takahiro Maeki[1], Akiko Kawabata[1], Mayuko Hayashi[1,2], Huamin Tang[2], Koichi Yamanichi[2], Yasuko Mori[1,2]

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VI-PO3-3

CHARACTERIZATION OF A RECEPTOR FOR POLIOVIRUS BBB-PERMEATION

Coh-Ichi Nihei, Manabu Yamasaki, Akio Nomoto

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VI-PO2 Host Factors for Virus Replication

Tuesday, 13 September

VI-PO2-1

CELLULAR CHAPERONE HEAT SHOCK PROTEIN-90 POSITIVELY REGULATES ROTAVIRUS INFECTION BY MODULATING THE VIRUS ENCODED NON STRUCTURAL PROTEIN -3

Mamta Chawla-Sarkar[1], Dipanjan Dutta[1], Nobumichi Kobayashi[2]

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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 Miyamoto[1], Masaru Yokoyama[2], Ken Kono[1], Tatsuo Shioda[1], Hironori Sato[2], Emi E Nakayama[1]

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VI-PO2-4

HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A2 PARTICIPATES IN THE REPLICATION OF JAPANESE ENCEPHALITIS VIRUS THROUGH THE INTERACTION WITH VIRAL PROTEINS AND RNA

Hiroshi Katoh[1], Yoshio Mori[2], Hiroto Kambara[1], Wataru Kamitani[1], Yoshiharu Matsuura[1]

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VI-PO2-5

IDENTIFICATION OF THE FUNCTIONAL REGION REQUIRED FOR ANTI-HIV-1 ACTIVITY OF APOBEC1

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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]

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VI-PO2-7

TO STUDY THE DEUBIQUITINATING ENZYMES INVOLVED IN THE ANTIVIRAL EFFECT OF TYPE I INTERFERONS

Hom-Ming Yeh[1], Ho-Chun Yang[2], Shih-Han Ke[3], Yi-Ling Lin[1,3,4]

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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 Hsieh[3], Li-Ting Lin[2], Chiayn Chiang[1,3], Yu-Chang Chang[2], Cheng-Kai Chang[3], Guang-Wu Chen[1,4], Shin-Ru Shih[1,2,3]

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VI-PO2-9

FUNCTIONAL ASSAY OF LEF GENES FOR THE ACTIVATION OF POLYHEDRIN PROMOTER OF THE BACULOVIRUS

Yueh-Lung Wu, Yu-Chan Chao

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VI-PO2-10

ROLE OF RAB11A IN VIRUS ASSEMBLY OF HIV-1

Tsutomu Murakami[1], Honggui Wu[1,2], Miyako Kawamata[1], Joe Chiba[2], Taichiro Takemura[1]

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VI-PO2-11

CYCLOPHILIN A MEDIATED UBIQUITINATION DEGRADATION OF INFLUENZA VIRUS M1 PROTEIN TO RESTRICT THE VIRAL REPLICATION

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VI-PO2-12

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

Zengfu Wang[1], Xiaoling Liu[1], Zhendong Zhao[1], Chongfeng Xu[1], Ke Zhang[1], Caiwei Chen[1], Lei Sun[1], George F Gao[2], Xin Ye[1], Wenjun Liu[1]

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VI-PO2-13

CELLULAR SIGNALING PATHWAYS INVOLVED IN CHIKUNGUNYA VIRUS AND SINDBIS VIRUS REPLICATION

Martijn J van Hemert[1], Florine Scholte[1], Ali Tas[1], Peter Ten Dijke[2], Paolo Cordioli[3], Eric J Snijder[1]

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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 Hirata[1], Kazutaka Ikeda[2], Masayuki Sudoh[3], Yuko Tokunaga[1], Yoshimi Tobita[1], Ryo Taguchi[2,4], Michinori Kohara[1]

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VI-PO2-16

INTERLEUKIN-26 ENHANCES INFECTION BY VESICULAR STOMATITIS VIRUS

Helmut Fickenscher, Michael Klages, Oliver Braum

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VI-PO2-17

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

Fumitaka Momose[1], Tetsuya Sekimoto[1], Takashi Ohkura[1], Shuichi Jo[2], Atsushi Kawaguchi[2], Kyosuke Nagata[2], Yuko Morikawa[1]

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VI-PO2-18

THE TUMOR SUPPRESSOR APC REGULATES HIV-1 ASSEMBLY AND RELEASE

Kei Miyakawa[1,2], Mayuko Nishi[1], Naoki Yamamoto[3], Akihide Ryo[1]

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VI-PO2-19

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

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VI-PO2-20

RNA INTERFERENCE SCREEN FOR HOST FACTORS REQUIRED FOR HCV REPLICATION

Ri Sho[1], Xuhong Zhang[2], Hisayashi Watanabe[3], Takafumi Saito[3], Rika Ishii[3], Sumio Kawata[3], Seiji Hongo[4], Akira Fukao[1]

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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 Nguyen[1], Nelianne J Verkaik[2], Lot de Witte[1], Albert D.M.E Osterhaus[1], Alex van Belkum[2], Rik L de Swart[1]

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VI-PO2-22

ANTI-TETHERIN ACTIVITIES OF ZAIRE AND RESTON EBOLAVIRUS GLYCOPROTEIN

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VI-PO2-23

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

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VI-PO2-24

CHROMATIN ENVIRONMENT-DEPENDENT TRANSCRIPTIONAL ACTIVITY OF BORNA DISEASE VIRUS RIBONUCLEOPROTEIN IN PERSISTENTLY INFECTED CELLS

Yusuke Matsumoto[1,2], Takuji Daito[1,2], Masayuki Horie[1,2], Kan Fujino[1,2], Keizo Tomonaga[2]

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VI-PO2-25

GLYCERALDEHYDE 3-PHOSPHATE DEHYDROGENASE (GAPDH) NEGATIVELY REGULATES THE REPLICATION OF BAMBOO MOSAIC VIRUS AND ITS ASSOCIATED SATELLITE RNA

Yau-Heiu Hsu[1], K. Reddisiva Prasanth[1], Ying-Wen Huang[1], Ming-Ru Liou[1], Yung-Liang Wang[2], Chung-Chi Hu[1], Ching-Hsiu Tsai[1], Menghsiao Meng[1], Na-Sheng Lin[3]

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VI-PO63 Structure and Assembly: Enveloped Viruses

Tuesday, 13 September

VI-PO63-1

THE M2 ION CHANNEL PROTEIN MEDIATES THE ESCRT-INDEPENDENT BUDDING OF INFLUENZA VIRUS

Jeremy S Rossman[1,2], Xianghong Jing[1,2], George P Leser[1,2], Robert A Lamb[1,2]

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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 VIRIONS

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VI-PO63-5

ENCAPSIDATION OF BAMBOO MOSAIC VIRUS SATELLITE RNA IN VITRO AND IN VIVO

Ya-Chien Lee[1], Chung-Chi Hu[1], Na-Sheng Lin[2], Yau-Heiu Hsu[1]

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VI-PO63-6

ELECTRON-MICROSCOPIC CHARACTERIZATION OF SIMIAN HEMORRHAGIC FEVER VIRUS (SHFV) PARTICLES AND SHFV-INFECTED CELLS

Jens H Kuhn[1,2], Yingyun Cai[1,2], Hannah B Sanford[1,2], John Bernbaum[1,2], Reed Johnson[1], Peter B Jahrling[1], Victoria Wahl-Jensen[1,2]

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VI-PO1 Virus and Host Responses

Tuesday, 13 September

VI-PO1-1

THE ER STRESS TRANSDUCER ATF6 IS CLEAVED BY ENTEROVIRUS 71 FOR VIRAL REPLICATION

Jim-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 Hasan[1], J Carlson[2], H Gatanaga[1,3], A Le[4], C Brumme[5], S Oka[1,3], Z Brumme[4,5], T Ueno[1]

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VI-PO1-5

POSSIBLE SUPPRESSION MECHANISMS OF HUMAN CYTOMEGALOVIRUS INFECTION WITH A NATURAL PRODUCT

Kunio Ohyama[1], Yuki Akiyama[1], Chieko Hirobe[2], Noboru Uchide[1], Hiroo Toyoda[1]

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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

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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-Parke[1], Paul Canning[1], Isobel Douglas[2], **Remi Villenave**[1], Liam Heaney[1], Peter Coyle[3], Keith Bailie[2], Michael Shields[1,2], Ultan Power[1]

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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-Poeggeler[1], Ulrich Commandeur[2], Kappei Kobayashi[3], Christina Maass[1], Ben E Lockhart[4]

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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 Iturbeormaetxe

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VI-PO1-10

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

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VI-PO1-11

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

Ambika Mosale Venkatesh Murthy[1], Poornima Priyadarshini C G[2], Savithri S Handanhal[2]

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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-Horimoto[2], Ryo Takano[2], Chairul A Nidom[3], Mai Thi Quynh Le[4], Tokiko Nagamura-Inoue[5], Taisuke Horimoto[2,8], Naohide Yamashita[6], Yoshihiro Kawaoka[1,2,7]

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VI-PO1-13

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

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VI-PO1-14

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

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VI-PO1-15

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

Takashi Ohkura[1], Yuji Kikuchi[1,2], Naoko Kono[3], Shigeyuki Itamura[3], Katsuhiro Komase[4,5], Fumitaka Momose[1], Yuko Morikawa[1]

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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

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VI-PO1-17

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

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VI-PO1-18

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

Yoshihiko Enomoto[1], Hiroko Sugiyama[1], Yuki Higashimoto[1], Yuri Katou[1], Masahiro Oohashi[2], Yoshiki Kawamura[2], Masaru Ihira[3], Tetushi Yoshikawa[2]

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VI-PO1-19

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

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VI-PO1-20

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

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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

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VI-PO1-23

IDENTIFICATION OF A NOVEL ANTIVIRAL RESPONSE TO HIV-1

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VI-PO1-24

SENSIBILITY FOR H5N1 INFLUENZA VIRUS INFECTION IN THE WILD BIRDS

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VI-PO1-25

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

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VI-PO1-26

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

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VI-PO1-27

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

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VI-PO1-28

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

Masao Hashimoto, Hayato Murakoshi, Masafumi Takiguchi
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VI-PO1-29

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

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VI-PO1-30

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

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VI-PO1-31

IMMUNE EVASION BY HIV-1PROTEASE-MEDIATED CLEAVAGE OF TANK-BINDING KINASE 1

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VI-PO1-32

INFLUENZA VIRUS M1 PROTEIN ACCUMULATES IN THE SUBNUCLEAR STRUCTURE, ND10, WITHOUT ANY HELP FROM OTHER VIRAL PROTEINS

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VI-PO1-33

INTERACTION OF HIV-1 VPR WITH HOST CELL FACTORS INVOLVED IN THE CELL CYCLE G2 ARREST INDUCTION

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VI-PO1-34

A QUANTIFICATION SYSTEM FOR INFLUENZA VIRUS IN PATIENT'S COUGH

Hidekazu Nishimura[1], Etuko Hatagishi[1], Suguru Ohmiya[1], Hisakazu Yano[1], Toru Hori[1], Yasushi Suzuki[2], Reiko Saito[2], Makoto Shoji[3], Yoshihisa Morisaki[4], Soichiro Sakata[5]
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VI-PO1-35

ANALYSIS OF MURINE INTERFERON REGULATORY FACTOR-3 (IRF-3) PROMOTER

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VI-PO1-36

DIFFERENT IMMUNE RESPONSES TO DENGUE VIRUS INFECTION IN DENGUE HEMORRHAGIC FEVER VERSUS DENGUE FEVER CASES IN KAOHSIUNG, TAIWAN

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VI-PO1-37

AUTOPHAGY IS INVOLVED IN VIRAL PROTEIN EXPRESSION OF INFLUENZA A VIRUS

Kaio Kitazato[1], Ge Liu[1], Chao-Wan Guo[1], Yang-Fei Xiang[2], Masaaki Komatsu[3], Tamotsu Yoshimori[4], Yi-Fei Wang[2]
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VI-PO1-38

CXCR3-CXCL10 AXIS ENHANCES NEUTROPHIL-MEDIATED PULMONARY INFLAMMATION WITH NON-VIRAL AND VIRAL ORIGINS

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VI-PO1-39

LIPIDOMICS ANALYSIS REVEALED THE DYNAMIC CHANGES IN PRO-RESOLVING LIPID MEDIATORS IN THE INFLUENZA VIRUS-INFECTED LUNGS

Masayuki Morita[1], Keiji Kuba[1], Masaki Saito[1], Mizuho Nakayama[1], Takashi Suzuki[1], Yoshihiro Kawaoka[2], Yumiko Imai[1]

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VI-PO1-40

PYROSEQUENCING AS A TOOL FOR GENOTYPING HEPATITIS C VIRUS

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VI-PO1-41

UPREGULATION OF GALNT3 AT THE EARLY STAGE OF INFLUENZA A VIRUS INFECTION THROUGH THE MIRNA PATHWAY

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VI-PO1-42

NEUROVIRULENCE OF BORNA DISEASE VIRUS IN INFECTED NUDE RATS

Yoshii Nishino[1,3], Hiroo Madarame[2], Kan Fujino[3], Saya Kojima[3], Yuji Fukuhara[2], Shoichiro Kameoka[2], Maki Inoue[3]

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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 Renoux[1], Inge Langers[1], Beatrice Clemenceau[2], Marc Thiry[3], Bettina Bisig[1], Christophe Deroanne[4], Jacques Boniver[1], Philippe Delvenne[1], Jacobs Nathalie[1]

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VI-PO18-2

COMMENSAL BACTERIA-MEDIATED SUPPRESSION OF HIV-1 REPLICATION IN MACROPHAGES THROUGH INNATE IMMUNE RESPONSE

Nursarat Ahmed[1], Takaya Hayashi[1], Atsuhiko Hasegawa[1], Noboru Okamura[2], Takao Masuda[1], **Mari Kannagi**[1]

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VI-PO18-3

ANTAGONISTIC ACTIVITY OF PARAMYXOVIRUS V PROTEINS AGAINST TOLL-LIKE RECEPTOR 7/9 DEPENDENT ALPHA INTERFERON INDUCTION

Yoshinori Kitagawa[1], Mayu Yamaguchi[1,2], Min Zhou[1], Takayuki Komatsu[3], Machiko Nishio[4], Tsuyoshi Sugiyama[5], Kenji Takeuchi[6], Masae Itoh[2], Bin Gotoh[1]

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VI-PO18-4

ANALYSIS OF SPECIFIC RIGI INTERACTIONS BY BIMOLECULAR FLUORESCENCE COMPLEMENTATION

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VI-PO18-5

IKKε-MEDIATED STAT1 PHOSPHORYLATION AT S708 RESIDUE GOVERNS THE EXPRESSION OF INTERFERON-STIMULATED GENES IMPORTANT FOR WEST NILE VIRUS CONTROL

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VI-PO18-6

INFLUENCE OF GENETIC VARIATION IN *IL-28B* PROMOTER ON THE GENE EXPRESSION LEVELS

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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 Liu[1], Shih-Chang Lin[1], Yen-Ling Yu[2], Ching-Liang Chu[1]

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VI-PO18-9

VIRUS-DERIVED SINGLE-STRANDED RNA WITH STABLE SECONDARY STRUCTURE EXTRACELLULARLY ACTIVATES TOLL-LIKE RECEPTOR 3

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VI-PO18-10

EXCESSIVE NEUTROPHILS AND NEUTROPHIL EXTRACELLULAR TRAPS CONTRIBUTE TO ACUTE LUNG INJURY OF INFLUENZA PNEUMONITIS

Meng Chee Phoon[1], Narasaraju Teluguakula[1], Edwin Yang[1], Perumalsamy Ramar[1], Huey Hian Ng[1], Wee Peng Poh[1], Audrey-Ann Liew[1], Nico van Rooijen[2], Vincent TK Chow[1]

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VI-PO18-11

RECOGNITION OF ENCEPHALOMYOCARDITIS VIRUS BY NLRP3 INFLAMMASOME

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VI-PO18-12

RIPLET UBIQUITIN LIGASE IS ESSENTIAL FOR RIG-I DEPENDENT TYPE I INTERFERON PRODUCTION DURING VIRAL INFECTION

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VI-PO18-13

ANTIVIRAL MECHANISMS AND APPLICATIONS OF VIPERIN IN THE INHIBITION OF INFLUENZA VIRUS INFECTION IN VIVO AND IN VITRO

Kai Sen Tan[1], Wai Chii Ng[1], Wee Peng Poh[1], Farzad Olfat[2], Keh Chuang Chin[3], Vincent Tak Kwong Chow[1]

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VI-PO18-14

DDX60, A NOVEL DEXD/H BOX HELICASE, PARTICIPATES IN EVOKING ANTIVIRAL IMMUNITY AND ENHANCING THE CYTOPLASMIC IFN-BETA-INDUCING PATHWAY

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VI-PO18-15

THE ROLE OF TLR4 ON INNATE IMMUNITY AGAINST H5N1 INFLUENZA VIRUS INFECTION

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VI-PO18-16

C-TERMINAL REGION OF IKKε IS REQUIRED FOR HOST ANTIVIRAL RESPONSE

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VI-PO18-17

DNA-PROTEIN KINASE IS A SENSOR OF VIRAL DNA FOR IRF-3-DEPENDENT INNATE IMMUNITY

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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 Suzutani[1], Yuka Sato[1], Kei Ishibashi[2], Koichi Hashimoto[3], Ken Ishioka[1], Shin-Ichi Yokota[4], Nobuhiro Fujii[4]

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VI-PO18-19

HEAT SHOCK PROTEIN 70 OVER-EXPRESSION REDUCES INTERFERON ANTAGONIST FUNCTION OF JAPANESE ENCEPHALITIS VIRUS NS5 PROTEIN

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VI-PO18-20

THE TLR3-TICAM-1 PATHWAY IS MANDATORY FOR INNATE IMMUNE RESPONSES TO POLIOVIRUS INFECTION

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VI-PO18-21

Withdrawn

VI-PO18-22

INTERACTION OF VIRAL RESTRICTION FACTORS WITH THE RIG-I SENSOR PATHWAY

Elisa de Castro[1], Atsushi Inoue[4], Stephen Soonthornvacharin[4], Paul Dejesus[4], Renate Konig[4], Anthony Orth[5], Loren Migalia[5], Sumit K Chanda[4], Adolfo Garcia-Sastre[1,2,3]
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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 APOPTOSIS

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VI-PO18-24

LACTOCOCCUS LACTIS SUBSP.*LACTIS* JCM5805 IS A POTENT STIMULATOR OF PLASMACYTOID DENDRITIC CELL VIA ACTIVATION OF TLR9/MYD88

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VI-PO18-25

IDENTIFICATION OF LACTIC ACID BACTERIA THAT DIRECTLY STIMULATE PLASMACYTOID DENDRITIC CELL TO PRODUCE IFN-α

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VI-PO18-26

APOBEC3/RFV3 AND RETROVIRUS NEUTRALIZATION

Diana S Smith[1], Kejun Guo[1], Brad S Barrett[1], Karl Heilman[1], Kim J Hasenkrug[2], Warner C Greene[3], Mario L Santiago[1]
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VI-PO18-27

THE IMPACT OF DICER-2 AND *WOLBACHIA* ON ANTIVIRAL PROTECTION IN *DROSOPHILA*

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VI-PO18-28

SIGNATURES OF POSITIVE SELECTION IN TOLL-LIKE RECEPTOR GENES IN MAMMALS

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VI-PO18-29

INTRACELLULAR DNA MEDIATED INNATE IMMUNE SIGNALING: HOST DEFENSE AGAINST DNA PATHOGENS

Glen N Barber[1], Ai Harashima[2], Hiroyasu Konno[2], Keiko Konno[2], Hiroki Ishikawa[3], Tianli Xia[2], Delia Gutman[2]
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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-Anazi[1], Nisreen Z Khalaf[1], Saud A Alarifi[4,8], Hamad I Al-Ashgar[5], Hind A Al-Humaidan[6], Riham S Al-Swayeh[6], Fahad N Al-Majhdi[7,8]

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VI-PO18-31

A COMPREHENSIVE ANALYSIS OF MAM PROTEOME OF HUH7 CELLS DURING HCV REPLICATION

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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-Shimizu[1], Rebeca Perez de Diego[1], Lazaro Lorenzo[1], Rabih Halwani[2], Abdullah Alangar[2], Sylvie Fabrega[3], Shen-Ying Zhang[4], Laurent Abel[1,4], Anne Puel[1], Saleh Al-Muhsen[2], Jean Laurent Casanova[1,4]

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VI-PO18-34

THE TLR3 AGONIST POLY(I:C) INHIBITED THE REPLICATION OF CHIKUNGUNYA VIRUS IN BEAS-2B CELLS

Yong Gang Li[1], Uamporn Siripanyaphinyo[1], Nitchakarn Noranate[1], Atchareeya A-Nuegoonpipat[2], Naokazu Takeda[1], Kazuyoshi Ikuta[3], Surapee Anantapreecha[2]

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VI-PO18-35

SPECIES-SPECIFIC INHIBITION OF TRIM25 DEPENDENT RIG-I UBIQUITINATION BY THE INFLUENZA A VIRUS NS1 PROTEIN

Ricardo Rajsbaum[1], Natalya P Maharaj[2], Randy A Albrecht[1], Adolfo Garcia-Sastre[1], Michaela U Gack[2]

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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 TRANSISTER AND NEXT-GENERATION SEQUENCE TECHNOLOGIES

Shih-Shun Lin[1,2], Kuan-I Chen[3], Yen-Hsin Chiu[1], Li-Ya Wang[1], Keng-Hui Lee[3], Yit-Tsong Chen[3]

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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 CELLS

Katsura Kakoki[1,2], Haruka Kamiyama[1], Tsukasa Igawa[2], Hideki Sakai[2], Naoki Yamamoto[1,3], Yoshinao Kubo[1]
[1]Department of AIDS Research, Institute of Tropical Medicine, Japan, [2]Department of Nephro-Urology Unit of Translational Medicine Course of Medical and Dental Sciences, Graduate school of Biochemical Sciences Nagasaki University, [3]Department 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 PKCα-MEDIATED CYTOPLASMIC P21 OVEREXPRESSION

Masahiko Yano[1], Shogo Ohkoshi[1], Hiromichi Takahashi[1], Yohei Aoki[1], Kazuhide Yamazaki[1], Sou Kurita[1], Kenta Suzuki[1], Shun Fujimaki[2], Ayumi Sanpei[2], Yasunobu Matsuda[1,2], Yutaka Aoyagi[1]
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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 AMPLICON

Fumi Goshima[1], Shinichi Esaki[1,2], Chen Hong Luo[1], Maki Kamakura[1], Daisuke Watanabe[3], Hiroshi Kimura[1], Yukihiro Nishiyama[1]
[1]Department of Virology, Graduate School of Medicine, Nagoya University, Japan, [2]Department of Otolaryngology, Head and Neck Surgery, Nagoya City University Graduate School of Medical Sciences and Medical School, [3]Department 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 AKT

Mami Matsuda[1], Futoshi Suizu[2], Noriyuki Hirata[2], Tadaaki Miyazaki[3], Chikashi Obuse[4], Masayuki Noguchi[2]
[1]Hokkaido University, Japan, [2]Division of Cancer Biology, Institute for Genetic Medicine, Hokkaido University, [3]Department of Bioresources, Hokkaido University Research Center for Zoonosis Control, [4]Division 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 INHIBITOR

Yuki Arai[1], Norihito Kawashita[1,2], Yu-Shi Tian[1], Mai Nagata[3], Kousuke Okamoto[1], Teruo Yasunaga[2], Tatsuya Takagi[1,2]
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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 Tyulenev[1], Victor A Naumenko[1], Ludmila V Shileyko[2], Regina R Klimova[1], Lubov F Kurilo[2], Alla A Kushch[1]
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VI-PO12-3

GEMCITABINE ENHANCES ANTITUMOR ACTIVITY OF ONCOLYTIC HERPES SIMPLEX VIRUS MUTANT HF10 RESULTING IN ENHANCED ANTITUMOR IMMUNITY

Shinichi Esaki[1,2], Fumi Goshima[1], Hiroshi Kimura[1], Shingo Murakami[2], Yukihiro Nishiyama[1]
[1]Department of Virology, Graduate School of Medicine, Nagoya University, Japan, [2]Department 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, Yukihiro 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 Wang[1], Masanori Tsuji[2], Shuichi Taniguchi[2], Hidekazu Nishimura[3], Mutsuyo (Takayama)-Ito[1], Hitomi (Kinoshita)-Yamaguchi[1], Masayuki Saijo[1]
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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 Chene[2], Susanne Nylen[2], Maria T Bejarano[2,3], Fred Kironde[4], Mats Wahlgren[2]
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VI-PO12-8

ABERRANT VZV GLYCOPROTEINS TRAFFIC MODULATED BY NEUTRALIZING ANTI-GH MAB

Masaya Takemoto[1], Tohru Daikoku[1], Kazuhiro Suzuki[2], Yasushi Akahori[2], Yoshikazu Kurosawa[2], Yoshizo Asano[3], Kimiyasu Shiraki[1]
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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 Noguchi[1], Ai Yasuda[1], Kazuhiro Katayama[1], Junko Mitsuhashi[1], Teru Kanda[2], Masafumi Minoshima[3], Toshikazu Bando[3], Hiroshi Sugiyama[3], Yoshikazu Sugimoto[1]
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VI-PO8-4

ANTICANCER ACTIVITIES OF VALPROIC ACID ON EPSTEIN-BARR VIRUS-ASSOCIATED T AND NATURAL KILLER LYMPHOMA CELLS

Seiko Iwata[1], Yoshinori Ito[2], Kensei Gotoh[2], Jun-Ichi Kawada[3], Maki Kamakura[1], Yukihiro Nishiyama[1], Hiroshi Kimura[1]
[1]Department of Virology, Nagoya University Graduate School of Medicine, Japan, [2]Department of Pediatrics, Nagoya University Graduate School of Medicine, [3]Department 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 Imadome[1], Misako Yajima[1,9], Ayako Arai[2], Atsuko Nakazawa[3], Norio Shimizu[4], Naoki Yamamoto[5,9], Tomohiro Morio[6], Shouichi Ohga[7], Mamoru Ito[8], Jun Komano[5], Shigeyoshi Fujiwara[1]
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VI-PO8-11

IMPAIRED GERMINAL CENTER REACTION BY EPSTEIN-BARR VIRUS LATENT MEMBRANE PROTEIN 2A

Takeharu Minamitani[1], Hitoshi Kikutani[1,2], Teruhito Yasui[1,2]
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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 Baryshev[1], Olga Bratslavska[1], **Svetlana Kozireva**[1], Russy Russev[2], Elena Pavlova[1], Modra Murovska[1]

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VI-PO9-4

F-ACTIN SUPPRESSES MEASLES VIRUS INFECTIOUS PARTICLE FORMATION BY INTERFERING WITH THE INTERACTION BETWEEN THE MATRIX (M) AND THE HEMAGGLUTININ (H) PROTEINS

Hiroshi Wakimoto[1], Masakatsu Shimodoh[1], Yoshinori Kitagawa[2], Kaoru Takeuchi[3], Bin Gotoh[2], Masae Itoh[1]

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VI-PO9-5

PROTEASOME IS INVOLVED IN TRANSLATIONAL CONTROL IN PARVOVIRUS B19 INFECTION

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VI-PO9-6

Withdrawn

VI-PO9-7

PARVOVIRUS B19 INFECTION IN OSTEOARTHRITIS AND RHEUMATOID ARTHRITIS PATIENTS

Modra Murovska[1], Olga Bratslavska[1], Anda Kadisa[1,2,3], Svetlana Kozireva[1], Peteris Studers[4], Aivars Lejnieks[2,3]

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VI-PO27 Hepatitis B

Tuesday, 13 September

VI-PO27-1

IN BANGLADESHI POPULATION,DETECTION OF HEPATITIS B VIRUS WHO ARE SERONEGATIVE

Md. Zakiur Rahman[1], Md Khairuzzaman[2], N M Abdal[2], Afzalunnesa B Lutfor[3]

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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 Oku[1], Takayuki Toyoyama[2], Masahiro Takayanagi[1], Rika Hara[1], Yoshitomo Kobayashi[1], Shin Furukawa[1], Hirohiko Kitakawa[1], Tetsuhiro Nishikawa[1], Yuuji Hori[1], Tetsurou Nagashima[1], Kazuyoshi Nihei[1]

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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-Anazi[1], Nisreen Khalaf[1], Saud Al-Arifi[4,9], Majid Al-Okail[5,9], Hamad Al-Ashgar[6], Hind Al-Humaidan[7], Fahad Al-Majhadi[8,9]

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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 Vaezjalali[1], T.M. Azad[2], S.M. Alavian[3], Ah Kashi[1]

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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
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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
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VI-PO21-2

HOST POLYCOMB FAMILY ACTS AS AN EPIGENETIC REPRESSOR FOR HIV-1 TRANSCRIPTION

Yuka Matsuda[1], Makoto Yamagishi[1], Mie Kobayashi[1], Takuma Hara[1], Takaomi Ishida[2], Toshiki Watanabe[1]
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VI-PO21-3

SIMIAN-TROPIC HIV-1 NL-4/5S6/7SVIFS SHOWS SLOWER CAPSID UNCOATING IN HUMAN CELLS.

Ken Kono[1], Ayumu Kuroishi[1], Emi E Nakayama[1], Amy E Hulme[2], Thomas J Hope[2], Tatsuo Shioda[1]
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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 Inchima[1], Claudia Patino[1], Ximena Zapata[1], Maria P Garcia[1], Jose Arteaga[2], Christophe Chamot[2], Ajit Kumar[3], Daniele Hernandez-Verdum[4]
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VI-PO21-5

THE IMPORTANCE AND NECESSITY OF THE COMMON HIV DRUG RESISTANCE DATABASE DEVELOPMENT IN THE FORMER USSR COUNTRIES

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VI-PO21-6

A NOVEL ANTISENSE RNA OF HIV-1, ALE, FUNCTIONS AS A SELF-LIMITING FACTOR FOR THE HIV-1 INFECTION

Mie Kobayashi-Ishihara[1], Makoto Yamagishi[1,4], Takuma Hara[1], Yuka Matsuda[1], Ariko Miyake[2], Kazumi Nakano[1], Takaomi Ishida[3], Toshiki Watanabe[1]
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VI-PO21-7

VIRAL RECOVERY FROM CYNOMOLGUS MACAQUES CONTROLLING A SIMIAN-TROPIC HIV-1 CHALLENGE

Naofumi Takahashi[1,2], Akatsuki Saito[2,3], Masako Nomaguchi[4], Akio Adachi[4], Hirofumi Akari[3], Tetsuro Matano[1,2]
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VI-PO21-8

NOVEL PI3K/AKT INHIBITORS SCREENED BY THE CYTOPROTECTIVE FUNCTION OF HUMAN IMMUNODEFICIENCY VIRUS TYPE 1 TAT

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VI-PO21-9

THE POL REGION OF HUMAN IMMUNODEFICIENCY VIRUS GAGPOL NEGATIVELY REGULATES ITS MEMBRANE BINDING AND PARTICLE ASSEMBLY

Hiyori Haraguchi[1], Takeshi Noda[2], Yoshihiro Kawaoka[2,3,4], Yuko Morikawa[1]
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VI-PO21-10

SL1 REVISITED: FUNCTIONAL ANALYSIS OF THE STRUCTURE AND CONFORMATION OF HIV-1 GENOME RNA

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VI-PO21-11

HIV-1 DNA INTEGRATION INTO HOST CHROMOSOMAL DOUBLE-STRAND BREAK SITES IS NOT ATTENUATED BY RALTEGRAVIR, AN INTEGRASE INHIBITOR

Takayoshi Koyama[1], Kenzo Tokunaga[2], Tetsutaro Sata[2], Yukihito Ishizaka[1]

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VI-PO21-12

HIV-1 VPR PROTEIN ACCELERATES VIRAL REPLICATION DURING ACUTE PHASE IN VIVO

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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

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VI-PO21-14

HIV-1 PROMOTER IS NEGATIVELY REGULATED BY HNRNPA1

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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

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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 Io**[1], Masaru Yokoyama[3], Masanobu Shinohara[1], Kotaro Shirakawa[1,2], Masashi Matsui[1], Takashi Uchiyama[1,4], Hironori Sato[3], Keisuke Shindo[1], Akifumi Takaori-Kondo[1]

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VI-PO21-17

INVOLVEMENT OF ACTIN BINDING PROTEIN CORONIN 1C IN HIV-1 REPLICATION AND RHESUS MACAQUE TRIM5α-MEDIATED RESTRICTION

Saori Shikama, Ryuta Sakuma, Sayaka Sukegawa, Shoji Yamaoka

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VI-PO21-18

REACTIVATION OF LATENT HIV-1 INFECTION BY BUTYRIC ACID-PRODUCING BACTERIA INVOLVES HISTONE MODIFICATION

Kenichi Imai[1], Muneaki Tamura[1], Kiyoshi Yamada[1], Takashi Okamoto[2], Kuniyasu Ochiai[1]

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VI-PO21-19

SELECTION AND SEQUENCING ANAYSIS OF THE MUTANT HIV-1 THAT CAN REPLICATE WITHOUT CYPA IN JURKAT CELL

Taichiro Takemura, Miyako Kawamata, Tsutomu Murakami

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VI-PO21-20

HIGH FREQUENCY OF HIV-1 DUAL INFECTIONS IN CENTRAL AFRICAN COUNTRIES

Eiji Ido[1,2], Nicaise Ndembi[3,4], Raphael Taty-Taty[5], Shizuka Iwamoto[6], Tetsuko Tada[6], Stomy Karhemere[7], Jean J Muyembe[7]

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VI-PO21-21

SUBTYPE AND SEQUENCE ANALYSIS OF HIV-1 STRAINS IN SOUTH OF IRAN

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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 Shigemi[1], Masumi Hosaka[1], Reiko Okazaki[1], Yasumasa Iwatani[1,3], Yoshiyuki Yokomaku[1], Wataru Sugiura[1,3]

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VI-PO21-23

CELLULAR MICRORNAS DIFFERENTIALLY REGULATE BRAIN-DERIVED HIV-1 VPR EXPRESSION

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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 Nakano[1], Tomomi Ando[1], Takaomi Ishida[2], Takeo Ohsugi[3], Yuetsu Tanaka[4], Toshiki Watanabe[1]
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VI-PO13-2

SPLICING-REGULATORY MECHANISMS OF MURINE LEUKEMIA VIRUS

Akihito Machinaga, Sayaka Takase-Yoden
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VI-PO13-3

INTERACTION OF THE MURINE LEUKEMIA VIRUS ENV PROTEIN AND HEPARAN SULFATE

Yohei Seki[1], Misaho Mizukura[1], Tomomi Ichimiya[1], Yasuo Suda[2], Shoko Nishihara[1], Michiaki Masuda[3], Sayaka Takase-Yoden[1]
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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
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VI-PO13-5

DETECTION OF HTLV-1 IN JAPANESE BREAST MILK

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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
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VI-PO13-7

HUMAN PHOSPHOLIPID SCRAMBLASE 1 SPECIFICALLY INTERACTS WITH HTLV-1 TAX AND AFFECTS ITS TRANSCRIPTIONAL ACTIVITIES

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VI-PO13-8

UBIQUITINATION-MEDIATED DEGRADATION AND DNA-BINDING IMPAIRMENT OF IRF-1 WERE INDUCED BY HTLV-1 HBZ

Risa Mukai, Takayuki Ohshima
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VI-PO13-9

ACTIVATION OF PKCDELTA IN ADULT T-CELL LEUKEMIA

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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

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VI-PO13-11

CARBOHYDRATE CHAIN PROFILING ON ATL CELL LINES

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VI-PO13-12

CLONAL EPIGENETIC CHANGES IN SPECIFIC GENES DURING PROGRESSION OF ADULT T-CELL LEUKEMIA/ LYMPHOMA (ATLL)

Takashi Oka[1], Lamia Abd Al-Kader[1], Hiaki Sato[2], Yoko Shinnou[1], Kana Washio[1], Ichiro Murakami[3], Atae Utsunomiya[4], Mamoru Ouchida[5], Tadashi Yoshino[1]

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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

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VI-PO13-14

ANTI-SENSE TRANSCRIPTS ENCODED BY HTLV-I IN ADULT T-CELL LEUKEMIA CELLS

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VI-PO13-15

EPIDEMIOLOGY AND VIRAL STRAINS CHARACTERIZATION OF EQUINE INFECTIOUS ANAEMIA CIRCULATING IN EUROPE

Aymeric Hans[1], Delphine Gaudaire[1], Elodie Morilland[1], Fanny Lecouturier[1], Caroline Leroux[2], Claire Laugier[1], Stephan Zientara[3]

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VI-PO13-16

HTLV-1 BZIP FACTOR ENHANCES TGF-BETA SIGNALING THROUGH P300 COACTIVATOR

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VI-PO13-17

IMPAIRED FUNCTION OF REGULATORY T CELLS BY HTLV-1 BZIP FACTOR (HBZ)

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VI-PO13-18

MOLECULAR CHARACTERIZATION OF NEW FOAMY VIRUSES IN A WIDE RANGE OF NEW WORLD MONKEY SPECIES

Claudia P Muniz[1], Andre F Santos[1], Lian Troncoso[1], Elisabete Farias[1], Esmeralda A Soares[2], Cibele R Bonvicino[2], Hector N Seuanez[1,2], William M Switzer[3], Marcelo A Soares[1,2]

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VI-PO13-19

SURVEILANCE OF RETROVIRUSES IN ZAMBIAN PRIMATES (MONKEYS AND BABOONS)

Akira Kawaguhi[1,2], Ichiro Nakamura[3], Yuka Thomas[4], Bernard Hang'ombe[5], Aaron Mweene[5], Takashi Kimura[2], David Wang[6], Hirofumi Sawa[2,7], Akihiro Ishii[4]

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VI-PO13-20

INTERACTION OF HUMAN T-CELL LYMPHOTROPIC VIRUS TYPE I REX WITH DICER SUPPRESSES RNAI SILENCING

Makoto Abe[1], Hitoshi Suzuki[1], Hironori Nishitsuji[1], Hisatoshi Shida[2], Hiroshi Takaku[1]

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VI-PO13-21

DIFFERENTIAL EFFECTS OF HTLV-1 TAX ON CELL FATE

Mariko Mizuguchi, Masataka Nakamura

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VI-PO13-22

Withdrawn

VI-PO13-23

ESTABLISHMENT OF A FELINE CELL LINE SUITABLE FOR VACCINE MANUFACTURING

Aiko Fukuma[1,2], Yuko Morikawa[2], Takayuki Miyazawa[3], Jiro Yasuda[1]

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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

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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

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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

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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 Kobayashi[1], Souvik Ghosh[1], Shyamal K Paul[2], Shigeo Nagashima[3]

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VI-PO31-4

FULL GENOMIC ANALYSES OF HUMAN G2P[4] ROTAVIRUS STRAINS FROM AFRICA

Souvik Ghosh[1], Noriaki Adachi[2], Zipporah Gatheru[3], James Nyangao[3], Masaho Ishino[1], Noriko Urushibara[1], Nobumichi Kobayashi[1]

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VI-PO31-5

FULL-GENOME ANALYSIS OF RARE G6P[9] HUMAN ROTAVIRUS DETECTED IN JAPAN

Dai Yamamoto[1], Mitsuyo Kawaguchiya[1], Souvik Ghosh[1], Maho Ichikawa[2], Kei Numazaki[2], Nobumichi Kobayashi[1]

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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 Miyazaki[1], Kazufumi Kuga[2], Tohru Suzuki[1], Hiroshi Tsunemitsu[1,2]

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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

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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

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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 Tran[1], Toyoko Nakagomi[1,2], Nigel A Cunliffe[2], Winifred Dove[2], Michiyo Yokoo[1], Basu D Pandey[3], Jeevan B Sherchand[4], Luis E Cuevas[5], Osamu Nakagomi[1,2]

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VI-PO31-12

FULL-GENOME ANALYSES SUGGEST THAT GROUP A ROTAVIRUSES UNDERGO FREQUENT REASSORTMENT OF SEVERAL GENE SEGMENTS IN ASYMPTOMATIC CATTLE

Masako Abe[1], Kota Okadera[2], Naoto Ito[1,2], Tatsunori Masatani[1], Keisuke Nakagawa[1], Satoko Yamaoka[1], Shigeo Sugita[3], Makoto Sugiyama[1,2]

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VI-PO31-13

SUCCESSIVE REPLACEMENT OF G12P[6] ROTAVIRUS STRAINS OVER 2 YEARS IN NEPAL

Punita Bhattachan[1], Toyoko Nakagomi[1,2], Nigel A Cunliffe[2], Michiyo Yokoo[1], Basu D Pandey[3], Jeevan B Sherchand[4], Osamu Nakagomi[1,2]

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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 OF G2 STRAINS

Yen H Doan[1], Toyoko Nakagomi[1,2], Nigel A Cunliffe[2], Basu D Pandey[3], Jeevan B Sherchand[4], Osamu Nakagomi[1,2]

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VI-PO31-15

COMPLETE GENOMIC CHARACTERISATION OF CELL CULTURE ADAPTED HUMAN G12P[6] ROTAVIRUSES CAU195 AND CAU214

Thai Van Than, Wonyong Kim

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VI-PO31-16

NOVEL GROUP A ROTAVIRUS G27P[3] DETECTED IN A SUGAR GLIDER (PETAURUS BREVICEPS)

Kota Okadera[1], Masako Abe[1], Naoto Ito[1,2], Keisuke Nakagawa[1], Satoko Yamaoka[1], Yumi Une[3], Makoto Sugiyama[1,2]

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VI-PO31-17

GENETIC DISSECTION FOR NONSTRUCTURAL PROTEIN 2 IN PORCINE GROUP B ROTAVIRUSES

Junichi Soma[1,2], Tohru Suzuki[1], Goro Suzuki[2], Kazufumi Kuga[1], Ayako Miyazaki[1], Takashi Sasaki[2], Hiroshi Tsunemitsu[1]

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VI-PO16 Filoviruses

Tuesday, 13 September

VI-PO16-1

ANALYSIS OF MARBURG VIRUS GENOMIC REGULATORY REGIONS

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VI-PO16-2

EVALUATION OF A BIVALENT EBOLA VIRUS VACCINE IN THE NOVEL SYRIAN HAMSTER MODEL

Yoshimi Tsuda[1], David Safronet[1], Marko Zivcec[1,2], Kyle Brown[2,3], Andrea Marzi[1], Heinz Feldmann[1,2], Hideki Ebihara[1]

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VI-PO16-3

A SEROLOGICAL SURVEY OF *RESTON EBOLAVIRUS* INFECTION IN SWINE DURING EPIZOOTIC IN 2008 IN THE PHILIPPINES

Yusuke Sayama[1,2], Shuetsu Fukushi[1], Mariko Saito[2], Satoshi Taniguchi[1], Itoe Iizuka[1], Tetsuya Mizutani[1], Ichiro Kurane[1], Masayuki Saijo[1], Hitoshi Oshitani[2], Shigeru Morikawa[1]

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VI-PO16-4

INFLUENCE OF EBOLA VIRUS VP24 RECOMBINANT PROTEIN ON INDUCTION OF INTERFERON

Alexander A Chepurnov[1], Areseniya A Shelemba[1], Andrey A Kolokoltsov[2], Robert Davey[2]

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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 Chulakasian[1], Min Liang Wong[1], Tien Jye Chang[1], Wei Li Hsu[2]

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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

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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 Sakai[1], Yohei Nishio[2], Noriyo Nagata[3], Yasushi Ami[4], Katsuhiro Komase[1], Masayuki Shimojima[2], Ken Maeda[2], Makoto Takeda[1], Masayuki Saijo[5], Shigeru Morikawa[5]

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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 Nishio[1], Junpei Ohtsuka[1], Masato Tsurudome[1], Tetsuya Nosaka[1], Daniel Kolakofsky[2]

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VI-PO22-9

A SINGLE AMINO ACID MUTATION AT POSITION 170 OF HUMAN PARAINFLUENZA VIRUS TYPE 1 FUSION GLYCOPROTEIN INDUCES OBVIOUS SYNCYTIUM FORMATION AND CASPASE-3-DEPENDENT CELL DEATH

Tadanobu Takahashi[1], Masahiro Takaguchi[1], Chika Hosokawa[1], Hiroo Ueyama[1], Keijo Fukushima[1], Takuya Hayakawa[1], Kazuhiko Itoh[1], Kiyoshi Ikeda[2], Takashi Suzuki[1]

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VI-PO22-10

SLAM-BLIND MEASLES VIRUS AS A NOVEL THERAPEUTIC AGENT FOR BREAST CANCER

Takaaki Sugiyama[1], Misako Yoneda[1], Takeshi Kuraishi[2], Shosaku Hattori[2], Yusuke Inoue[3], Hiroki Sato[1], Chieko Kai[1]

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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 Kato[1], Jiro Yasuda[2], Hiroshi Sagara[3], Mio Omi-Furutani[1], Misako Yoneda[1], Chieko Kai[1]

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VI-PO22-13

CHARACTERIZATION OF MUMPS VIRUS GENOTYPES IN THAILAND BETWEEN 2007 AND 2010

Patcha Incomserb, Athiwat Primsirikunawut, Atchariya Lukebua, Sanit Kumperasart, Prasopchai Aramrungroch, Jaruwan 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 Ayata[1], Shinji Ohgimoto[1], Mitsuru Kuwamura[2], Miyuu Tanaka[2], Kaoru Takeuchi[3], Makoto Takeda[4], Hisashi Ogura[1]

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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 Tahara[1], Katsuhiro Komase[1], XueMin Ma[1], JiLan He[1], Yusuke Yanagi[2], Katsumi Maenaka[3], Paul A Rota[4], Makoto Takeda[1]

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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 Yoshida[1], Motoi Suzuki[1], Hiroshi Yoshino[1], Hien-Anh Nguyen[2], Thiem-Dinh Vu[2], Tho-Huu Le[3], Mai-Quynh Le[2], Hiroyuki Moriuchi[4], Duc-Anh Dang[2], Koya Ariyoshi[1]

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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

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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 Nakatsu[1], Xuemin Ma[1], Fumio Seki[1], Tadaki Suzuki[2], Katsuhiro Komase[1], Makoto Takeda[1]

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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

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VI-PO22-24

CHARACTERIZATION OF THE RNA BINDING ACTIVITY OF MEASLES VIRUS C PROTEIN

Tomomi Nishie, Kaoru Takeuchi, Kyosuke Nagata

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VI-PO22-25

INFECTION OF CYNOMOLGUS MONKEYS WITH RECOMBINANT WILD-TYPE MEASLES VIRUS BEARING VACCINE H PROTEIN

Kaoru Takeuchi[1], Sei-Ich Kato[1], Noriyo Nagata[2], Tadaki Suzuki[2], Yasushi Ami[2], Kazuyasu Mori[2], Yasuko Tsunetsugu-Yokota[2], Kyosuke Nagata[1]

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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 Fukushima[1], Tadanobu Takashi[1], Yasuo Suzuki[2], Takashi Suzuki[1]

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VI-PO22-29

HUMAN PARAINFLUENZA VIRUS TYPE 4 INFECTIONS IN PEDIATRIC PATIENTS IN SENDAI AND YAMAGATA CITIES, JAPAN

Oshi Watanabe[1,6], Akira Oumi[1], Hisakazu Yano[1], Yukio Nagai[2], Fumio Katsushima[3], Yuriko Katsushima[3], Noriko Katsushima[3], Makoto Shoji[4], Setsuko Kitaoka[5], Yusaku Tazawa[5], Hidekazu Nishimura[1]

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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]

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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]

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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 Turan[1], Atsushi Kawaguchi[2], Yoshimi Harada[2], Kyosuke Nagata[2]

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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 Yamamoto[1], Yoshihiro Sakoda[1], Masatoshi Okamatsu[1], Hiroshi Kida[1,2]

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VI-PO7-7

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

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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 Suzuki[1], Akira Ainai[2], Noriyo Nagata[1], Tetsutaro Sata[1], Hideki Hasegawa[1,2]

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VI-PO7-11

ANTIGENIC STRUCTURE OF THE HEMAGGLUTININ OF PANDEMIC INFLUENZA A (H1N1) VIRUS

Yoko Matsuzaki[1], Kanetsu Sugawara[1], Yoshitaka Simotai[1], Seiji Hongo[1], Eri Nobusawa[2]

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VI-PO7-12

THE AMINO ACID REQUIREMENT AT POSITION 627 OF THE PB2 PROTEIN OF INFLUENZA A VIRUS FOR VIRUS REPLICATION

Masato Hatta[1], Yoshihiro Kawaoka[1,2]

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VI-PO7-13

PATHOGENIC ANALYSIS OF INFLUENZA VIRUS H6N1 SUBTYPE CIRCULATING AMONG POULTRY IN NORTHERN VIETNAM

Kozue Hotta[1], Tatsufumi Usui[2], Hiroki Takakuwa[3], Tsuyoshi Yamaguchi[2], Le Q Mai[4], Koichi Otsuki[3], Toshihiro Ito[2], Tetsu Yamashiro[1]

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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

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VI-PO7-15

DIFFERENT IMAGES OF INFLUENZA VIRUS M1 PROTEIN AT BUDDING SITES OBTAINED BY IMMUNOSTAINING AND TETRACYSTEINE-TAG STAINING

Toshikatsu Shibata[1,2], Satoshi Hayakawa[1], Kazufumi Shimizu[2], Tatsuo Yamamoto[2], **Kazumichi Kuroda**[1]

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VI-PO7-16

MORPHOLOGICAL CHARACTERIZATION OF A/H1N1PDM09 VIRUSES ISOLATED IN EGG FROM CLINICAL SPECIMENS

Kayoko Sato[1], Hideki Asanuma[1], Michiyo Kataoka[2], Noriyo Nagata[2], Masato Tashiro[1], Shigeyuki Itamura[1]

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VI-PO7-17

THE TEMPLATE RECOGNITION MECHANISM OF THE INFLUENZA A VIRUS RNA POLYMERASE COMPLEX

Moeko Minakuchi[1], Atsushi Kawaguchi[1,2,3], Kyosuke Nagata[1]

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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

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VI-PO7-19

CIRCULATION OF INFLUENZA A SUBTYPE H3N2 VIRUS IN MIGRATING AND WILD BIRDS FROM ATLANTICS RAIN FOREST IN BRAZIL

Adelia Hiroko Nagamori Kawamoto[1,2], Danielle Bruna Leal Oliveira[2], Luciano Matsumiya Thomazellii[2], Edison Luis Durigon[2]

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VI-PO7-20

BIOCHEMICAL CHARACTERIZATION OF PA ENDONUCLEASE ACTIVITY

Erin Noble, Baek Kim

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VI-PO10 Bunyaviruses

Tuesday, 13 September

VI-PO10-1

MAPPING OF THE OLIGOMERIZATION REGIONS WITHIN THE NUCLEOPROTEIN OF CRIMEAN CONGO HEMORRHAGIC FEVER VIRUS

Jesica M Levingston Mac Leod[1], Natalia Frias-Staheli[2], Gustavo Martinez-Delgado[1], Adolfo Garcia-Sastre[1]

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VI-PO10-2

EFFECT OF TRANSPORTATION ON THE EFFICACY OF A FORMALIN-INACTIVATED RIFT VALLEY FEVER VACCINE

Nina M T Lagerqvist[1,2], Belisario Moiane[1,3], Luis C Neves[3], Janusz T Paweska[4], Ake Lundkvist[1,2], Kerstin I Falk[1,2]

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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 Katz[1], Alexander N Freiberg[2], Vera Backstrom[1,3], Liisa Holm[3], Ralf F Pettersson[4], Antti Vaheri[1], Ramon Flick[2], Alexander Plyusnin[1]

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VI-PO10-5

WHOLE GENOME VARIABILITY AMONG BIOLOGICALLY DIFFERENT FIELD STRAINS OF TAHYNA ORTHOBUNYAVIRUS

Patrik Kilian[1,2], Tomas Chrudimsky[1], Vlasta Danielova[3], Libor Grubhoffer[1,2], Daniel Ruzek[2]

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VI-PO10-6

DEVELOPMENT OF PSEUDOTYPES AND VIRUS LIKE PARTICLES OF CRIMEAN CONGO HEMORRHAGIC FEVER VIRUS

Robert A Davey[1], Andrey A Kolokoltsov[1], Areseniya Shelemba[2], Alexander A Chepurnov[2]

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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 Kang[1], Blaise Kadjo[2], Sylvain Dubey[3], Francois Jacquet[4], **Richard Yanagihara**[1]

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VI-PO10-8

GENOME-WIDE RNA INTERFERENCE SCREEN FOR HOST FACTORS REQUIRED FOR RIFT VALLEY FEVER VIRUS INFECTION

Brooke Harmon[1], Benjamin Schudel[1], Chien-Te K Tseng[2], Oscar A Negrete[1]

[1]Sandia National Laboratories, USA, [2]University 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

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VI-PO17-2

ESTABLISHMENT OF SEROLOGICAL DIAGNOSIS OF ARGENTINE HEMORRHAGIC FEVER USING RECOMBINANT ANTIGENS

Koichiro Iha[1,2], Mina Nakauchi-Hori[3], Satoshi Taniguchi[1,2], Shuetsu Fukushi[1], Tetsuya Mizutani[1], Momoko Ogata[1], Shigeru Kyuwa[2], Masayuki Saijo[1], Victor Romanowski[4], Delia A Enria[5], Shigeru Morikawa[1,2]

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VI-PO17-3

DISSECTING THE MULTIFUNCTIONAL NUCLEOPROTEIN OF ARENAVIRUSES

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VI-PO24 Calici- and Astroviruses

Tuesday, 13 September

VI-PO24-1

STRUCTURAL FEATURES FOR THE SUBSTRATE RECOGNITION BY SAPOVIRUS 3C-LIKE PROTEASE

Masaru Yokoyama[1], Tomoichiro Oka[2], Kazuhiko Katayama[2], Hirotatsu Kojima[3], Tetsuo Nagano[3], Takayoshi Okabe[3], Tadahito Kanda[4], Hironori Sato[1]

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VI-PO24-2

VIRUS BINDING-PROTEIN WITH AN AFFINITY TO MULTIPLE GENOTYPES OF HUMAN NOROVIRUS

Daisuke Sano[1], Takahiro Imai[2], Satoshi Okabe[1], Takayuki Miura[1], Yoshifumi Masago[2], Tatsuo Omura[2]

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VI-PO24-3

IDENTIFICATION OF COMPOUNDS THAT MAY BLOCK NOROVIRUS-RECEPTOR INTERACTION

Ming Tan[1], Monica Chhabra[3], Xufu Zhang[1], Jarek Meller[4], Yizong Cheng[3], Xi Jiang[1,2]

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VI-PO24-4

EVOLUTION OF NOROVIRUSES - IMPROVED UNDERSTANDING ON THE PREDOMINANCE OF G2.4

Xi Jiang, Ming Tan

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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

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VI-PO24-6

BROADLY REACTIVE MONOCLONAL ANTIBODY WITH SEVERAL RECOMBINANT SAPOVIRUS-LIKE PARTICLES (SV-VLPS)

Noritoshi Kitamoto[1], Tomoichirou Oka[2], Grant S Hansman[2], Kazuhiko Katayama[2], Yoji Kato[1], Yomoyuki Tanaka[3]

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VI-PO24-7

DEVELOPMENT OF A PANTRAP METHOD TO DETECT NOROVIRUS FROM CONTAMINATED FOOD

Hiroyuki Saito[1], Miho Toho[2], Mamoru Noda[3], Tomoyuki Tanaka[4], Tomoichiro Oka[5], Kazuhiko Katayama[5]

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VI-PO24-8

A FOODBORNE OUTBREAK OF SAPOVIRUS LINKED TO CATERED BOX-LUNCH IN JAPAN

Shinichi Kobayashi[1], Noriko Fujiwara[1], Yoshihiro Yasui[1], Teruo Yamashita[1], Akira Fujiura[1], Mamoru Noda[2], Hiroko Minagawa[1]

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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 Yoda[1], Kenji Yamazaki[2], Ikuko Aoyama[2], Hiromi Miyagawa[2]

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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-Moriguchi[1], Haruko Shirato[2], Yuichi Someya[2], Yoshinobu Okuno[3], Yoshikazu Kurosawa[4], Koki Taniguchi[1]

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VI-PO24-12

MICROSCOPIC ANALYSIS OF HUMAN NOROVIRUS-LIKE PARTICLES BOUND TO CACO-2 CELLS

Kosuke Murakami[1], Tomoichiro Oka[1], Reiko Todaka[1], Takaji Wakita[1], Tsukasa Matsuda[2], Kazuhiko Katayama[1]

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VI-PO24-13

CHRONIC NOROVIRUS INFECTION IN RENAL TRANSPLANT RECIPIENTS

Mateja Poljsak-Prijatelj[1], Marko Kolenc[1], Spela Furar[1], Aljosa Kandus[2], Andrej Steyer[1]

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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 Sakon[1], Kenji Yamazaki[1], Tomoko Yoda[2], Keiko Nakata[1], Tetsuo Kase[1]

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VI-PO24-15

STRUCTURAL BASIS FOR CITRATE INHIBITION OF NOROVIRUS

Grant Hansman[1,3], Syed Hussan[2], Jason S Mclellan[3], Kazuhiko Katayama[1], Carole A Bewley[2], Peter D Kwong[3]

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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 Harada[1], Koichi Nishimura[1], Mineyuki Okada[2], Kazuhiko Katayama[3], Tomoichiro Oka[3]

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VI-PO24-17

Withdrawn

VI-PO24-18

HOSPITAL-BASED SURVEILLANCE OF NOROVIRUS IN WUHAN, CHINA, BETWEEN JAN.2007 TO MAY 2010

Yuanhong Wang[1], Nobumichi Kobayashi[2], Xuan Zhou[1], Souvik Ghosh[2], Jinsong Peng[1], Shigeo Nagashima[2], Ting Yang[3], Quan Hu[1], Dunjin Zhou[1]

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VI-PO24-19

GENETIC DIVERSITY OF NOROVIRUS STRAINS AMONG CHILDREN AND ADULTS IN KOLKATA, INDIA

Nataraju Seegekote Mariyappa[1], Madhu Sudhan Pativada[1], Rahul Kumar[1], Anannya Bhattacharya[1], Ganesh Balasubramanian[1], Kobayashi Nobumichi[2], Triveni Krishnan[1]

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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 Lee[1], Gyoo Seung Jung[1], Hyung Seok Kim[1], Jong Ik Kim[1], Ga Young Ji[1], Yu Young Kim[1], Wen Dan Wang[1], Keon Myung Lee[2], Young Min Lee[3]

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VI-PO24-22

VISUALIZATION OF MURINE NOROVIRUS REPLICATION COMPLEX IN RAW264.7 CELLS

Takashi Shimoike[1], Hirotaka Takagi[2], Tomoichiro Oka[1], Kosuke Murakami[1], Takaji Wakita[1], Kazuhiko Katayama[1]

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VI-PO24-23

GENETIC HETEROGENEITY OF NOROVIRUS IDENTIFIED FROM PORCINE IN TAIWAN

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VI-PO24-24

PREVALENCE OF SAPOVIRUS-RELATED COMMUNITY GASTROENTERITIS IN TOKYO FROM APRIL 2008 TO MARCH 2011

Kohji Mori[1], Tetsuya Akiba[1], Miyuki Nagano[1], Sanae Emura[1], Noriko Akamatsu[1], Katsushi Iwakoshi[1], Yukinao Hayashi[1], Akemi Kai[1], Mamoru Noda[2]

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VI-PO24-25

FELINE CALICIVIRUS AND MURINE NOROVIRUS SHOWED DIFFERENT SENSITIVITY WITH ETHANOL TREATMENT

Hirotaka Takagi[1], Tomoichiro Oka[1], Yukinobu Tohya[2], Kazuyoshi Sugiyama[1], Kazuhiko Katayama[1]

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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 Shibata[1], Akari Kodaira[1], Kohji Mori[2], Seiya Harada[3], Tomoichiro Oka[4], Kazuhiko Katayama[4]

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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 Someya[1], Haruko Shirato[1], Akiko Kumagai[1], Hiromi Ito[2], Sanae Furukawa[2], Takaji Wakita[1], Koji Ishii[1], Hisashi Narimatsu[2], Tomomi Kubota[2]

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VI-PO64 Nidoviruses

Tuesday, 13 September

VI-PO64-1

EQUINE ARTERITIS VIRUS: EPIDEMIOLOGY AND VIRAL CHARACTERIZATION OF EUROPEAN STRAINS

Delphine Gaudaire[1], Fanny Lecouturier[1], GaëL Amelot[1], Claire Laugier[1], Stephan Zientara[2], Aymeric Hans[1]

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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 Katow[1], Mitsuyo Tanemura[2], Masao Fukushima[3], Hiroko Minahara[1], Yumiko Saito[4], Yuji Hiramatsu[5]

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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

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VI-PO11-3

MUTATIONS OF SAGIYAMA VIRUS, A STRAIN OF *GETAH VIRUS*, WHICH ADAPT IT TO GROWTH IN *DROSOPHILA* S2 CELLS

Roghiyh Aliyari[1], Richard Digirolamo[2], Yukio Shirako[3]

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VI-PO11-4

ADAPTATIONS BY CHIKUNGUNYA VIRUS TO CIRCUMVENT THE ANTIVIRAL ACTIVITY OF 2'-5' OLIGOADENYLATE SYNTHETASES

Hans Henrik Gad[1], Marie-Mathilde Bonnet[1], Sylvie Paulous[1], Laure Diancourt[1], Valerie Caro[1], Beate Kümmerer[2], Anavaj Sakuntabhai[1], Philippe Despres[1]

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VI-PO11-5

PATHOGENESIS OF EPIDEMIC CHIKUNGUNYA VIRUS IN NONHUMAN PRIMATES

Chang-Kweng Lim[1], Yasuo Ami[2], Yoshiki Fujii[1,3], Meng Ling Moi[1], Kazutaka Kitaura[1,3], Akira Kotaki[1], Shigeru Morikawa[1], Masayuki Saijo[1], Ryuji Suzuki[3], Ichiro Kurane[1], Tomohiko Takasaki[1]

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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

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VI-PO25-2

ISOLATION AND CHARACTERIZATION OF JAPANESE ENCEPHALITIS VIRUS FROM MOSQUITOES IN ISHIKAWA, JAPAN IN 2010

Manabu Murakami[1], Kiyoshi Kamimura[2], Yosaburo Oikawa[3], Tsutomu Takegami[1]

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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 Ishida[1], Shima Yoshizumi[1], Tetsuya Ikeda[1], Masahiro Miyoshi[1], Akiko Goto[1], Keiji Matsubayashi[2], Hisami Ikeda[2], Shinichi Kudo[1]

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VI-PO32-2

SERO-SURVEILLANCE OF HANTAVIRUS IN RODENTS CAPTURED IN ZAMBIA, IN 2010

Ichiro Nakamura[1,2], Bernard M Hang'Ombe[2], Hirofumi Sawa[2,3], Ayato Takada[2,4], Kumiko Yoshimatsu[5], Jiro Arikawa[5], Chihiro Sugimoto[1,2]

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VI-PO32-3

TSG101 AND VACUOLAR PROTEIN SORTING PATHWAY ARE REQUIRED FOR VIRION RELEASE OF HEPATITIS E VIRUS

Shigeo Nagashima[1], Masaharu Takahashi[1], Jirintai Suljid[1], Toshinori Tanaka[1], Tsutomu Nishizawa[1], Jiro Yasuda[2], Hiroaki Okamoto[1]

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VI-PO32-4

MOLECULAR EPIDEMIOLOGY OF RABIES VIRUS IN THE CENTRAL, COPPERBELT AND LUSAKA PROVINCES OF ZAMBIA

Walter Muleya[1], Hirofumi Sawa[1], Paul Fandamu[2], Boniface Namangala[3], Aaron Mweene[3], Akihiro Ishii[1], Takashi Kimura[1], Luke Zulu[3]

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VI-PO32-5

SCREENING FOR HEV RNA IN BLOOD DONORS IN HOKKAIDO, JAPAN

Hidekatsu Sakata[1], Keiji Matsubayashi[1], Ikuma Abe[2], Shinichiro Sato[1], Toshiaki Kato[1], Satoru Hino[3], Hisami Ikeda[1]

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VI-PO32-6

ESTABLISHMENT OF AN IN VITRO CULTURE SYSTEM FOR HEV USING HEV-RNA-POSITIVE PLASMA OBTAINED FROM BLOOD DONORS IN JAPAN

Takashi Owada[1], Ko Suzuki[1], Chieko Matsumoto[1], Masashi Igarashi[1], Rieko Sobata[1], Keiji Matsubayashi[2], Hisami Ikeda[2], Shigeharu Uchida[1], Masahiro Satake[1], Kenji Tadokoro[1]

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VI-PO32-7

PHYLOGENETIC COMPARISON OF NNV ISOLATES AMONG WILD AND CULTURED FISH IN TAIWAN

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VI-PO32-8

SERO-PREVALENCE OF SWINE INFLUENZA VIRUSES IN THAI PIG POPULATION IN 2003-2010

Sujira Parchariyanon[1], Lamule Molee[1], Anchalee Srijangwad[1], Sureerat Hemngoen[1], Yuparat Inbumrung[1], Dearntem Tantiwattanapo[1], Nobuhiro Takemae[2,3], Yasuaki Hiromoto[2,3], Takehiko Saito[2,3]

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VI-PO32-9

HIGH SIMILARITY BETWEEN ISOLATES OF HEPATITIS E VIRUS RECOVERED FROM HUMAN AND SWINE IN FRANCE BETWEEN 2008 AND 2009

Jerome Bouquet[1], Sophie Tesse[2], Aurelie Lunazzi[1], Marc Eloit[1], Nicolas Rose[3], Elisabeth Nicand[2], Nicole Pavio[1]

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VI-PO32-10

EMERGENCE OF RABIES IN THE GAUTENG PROVINCE, SOUTH AFRICA

Claude Sabeta[1], Peter Geetsema[2], Debra Mohale[1], Mmantshuruge Miyen[1], Jacqueline Weyer[3], Lucille Blumberg[3], Pat Leman[3], Baby Phahladira[1], Wonderful Shumba[1], Johan Walters[2], Janusz Paweska[3]

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VI-PO32-11

SWINE INFLUENZA SURVEILLANCE IN THAILAND AND VIETNAM

Yasuaki Hiromoto[1,2], Nobuhiro Takemae[1,2], Sujira Parchariyanon[3], Ruttapong Ruttanapumm[3], Tung Nguyen[4], Do Thi Hoa[4], Long Thanh Ngo[5], Vu Phong Pham[5], Ha Thi Hong Le[5], Ha Truc Nguyen[5], Vu Tri Le[5], Binh Xuan Nguyen[5], Nguyen Van Long[6], Do Huu Dung[6], Tsuyoshi Hayashi[1,2], Yuko Uchida[1, 2], Takehiko Saito[1,2]

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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

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VI-PO23-5

CHARACTERIZATION OF CITRUS TRISTEZA VIRUS ISOLATES FROM PENINSULAR MALAYSIA USING MAJOR COAT PROTEIN

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VI-PO23-6

BROAD-SPECTRUM TRANSGENIC RESISTANCE AGAINST DIFFERENT TOSPOVIRUSES AT THE GENUS LEVEL CONFERRED BY THE CONSERVED REGION OF L GENES

Shyi-Dong Yeh[1], Tsung-Chi Chen[2], Jui-Chu Peng[1,3]

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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 Yoon[1], Seung Kook Choi[2], Ki Hyun Ryu[1], Peter Palukaitis[1]

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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, Sugihiro 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 SIRNAS IN *VITIS VINIFERA*

Vitantonio Pantaleo, Laura Miozzi, Giorgio Gambino, Jozsef Burgyan

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 Lin[1], Shu-Chuan Lee[1], Shih-Shun Lin[2], Ya-Chun Chang[1]

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VI-PO23-12

A CO-EVOLUTIONARY ARMS RACE BETWEEN *TOMATO MOSAIC VIRUS* AND ITS RESISTANCE GENE *TM-1*

Kazuhiro Ishibashi[1], Natsuki Mawatari[1], Shuhei Miyashita[1,2], Tetsuo Meshi[1], Masayuki Ishikawa[1,3]

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VI-PO23-13

POSSIBLE ROLE OF ENDOGENOUS ASCORBIC ACIDS IN *BRASSICA RAPA* IN DEFENCE AGAINST *TURNIP MOSAIC VIRUS*

Ayaka Fujiwara[1], Tsuyoshi Inukai[2], Chikara Masuta[2]

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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 Chisholm[1], Helene Sanfacon[1]

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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 Ghoshal[1], Jane Theilmann[2], Ron Reade[2], D'Ann Rochon[1,2]

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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 Delaye, Laura Silva-Rosales

Genetic Engineering, Cinvestav Irapuato, Mexico

VI-PO29-11

NUCLEOTIDE SEQUENCE AND INFECTIOUS CDNA CLONE OF *CHINESE YAM NECROTIC MOSAIC VIRUS*

Toru Kondo[1], Takashi Fujita[2]

[1]Agriculture Research Institute, Aomori Prefectural Industrial Technology Research Center, Japan, [2]Faculty of Agriculture and Life Science, Hirosaki 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 Kalinina[1], Jane Shaw[2], Daria Rakitina[1], Michael Taliansky[2]

[1]A.N.Belozersky Institute of Physico-Chemical Biology, Moscow State University, Russia, [2]Scottish 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 Takeshita[1], Emiko Koizumi[1], Makiko Noguchi[1], Kae Sueda[2], Hanako Shimura[2], Noriko Ishikawa[3], Hideyuki Matsuura[2], Tomohide Natsuaki[4], Kazusato Ohshima[5], Shigeru Kuwata[6], Naruto Furuya[1], Kenichi Tsuchiya[1], Chikara Masuta[2]

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VI-PO33-5

INVOLVEMENT OF SINGLE NUCLEOTIDE SUBSTITUTION IN REPLICASE GENES AND 5'- AND 3'- UNTRANSLATED REGIONS OF *PAPRIKA MILD MOTTLE VIRUS* JAPANEASE STRAIN IN VIRUS MOVEMENT IN TOMATO PLANTS

Hiroyuki 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 Hung[1], Chung-Chi Hu[1], Na-Sheng Lin[2], Yau-Heiu Hsu[1]

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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 Kim[1], Hyeok-Geun Lee[1], Wonkyong Cho[1], Seong-Han Sohn[2], Kook-Hyung Kim[1]

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VI-PO33-9

CHLOROPLASTIC GLYCERALDEHYDE 3-PHOPHATE DEHYDROGENASE OF NICOTIANA BENTHAMIANA PLAYS A POSITIVE ROLE IN CELL-TO-CELL MOVEMENT OF RED CLOVER NECROTIC MOSAIC VIRUS

Masanori Kaido[1], Kazutomo Abe[1], Takako Taniguchi[2], Hisaaki Taniguchi[2], Kazuyuki Mise[1], Tetsuro Okuno[1]

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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 Rotenberg[1], Punya Nachappa[1], Anna E Whitfield[1], David C Margolies[2], James R Nechols[2]

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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 Afsharnasab[2], Marzeih Heidareih[1], Vahid Yeganeh[2], Mohamad Hadi Razavi[1,3], Mahmood Tahami[1]

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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 Deng[1], Yeou-Liang Huang[1], Yeou-Liang Lin[1], Chin-Cheng Huang[1], Fun-In Wang[2]

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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 BACMAM BACULOVIRUS SYSTEM

Xianchun Tang[1,2], Hairong Lu[2], Ted M Ross[1,2]

[1]Department of Microbiology and Molecular Genetics, University of Pittsburgh, USA, [2]Center for Vaccine Research, University of Pittsburgh

VI-PO5-6

GENETIC STABILITY OF A LASSA VACCINE CANDIDATE (ML29) IN VACCINATED ANIMALS

Juan C Zapata[1], Gabriel Bedoya[1], Marco Goicochea[2], Joseph Bryant[2], David C Pauza[2], Lisa Sadzewicz[3], Luke Tallon[3], Garry Myers[3], Claire Fraser-Ligget[3], Igor Lukashevich[2], Maria S Salvato[2]

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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 PRODUCTION

Hiroko Toriniwa[1], Mario Lobigs[2], Nikolai Petrovsky[3], Tomoyoshi Komiya[1]
[1]The Kitasato Institute, Japan, [2]The Australian National University, [3]Flinders 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 IMMUNOLOGY

Claudine Porta[1,2], Abhay Kotecha[2], Alison Burman[1], Veronica Carr[1], Ian M Jones[3], Terry Jackson[1], Jinshan Ren[2], Elizabeth E Fry[2], David I Stuart[2], Bryan Charleston[1]
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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 PRODUCTION

Shigefumi Okamoto[1], Hiroshi Yamada[1], Sumiko Matsuoka[1], Ahmad M Haredy[1,2], Takeshi Tanimoto[3], Yasuyuki Gomi[3], Toyokazu Ishikawa[3], Mitsuru Akashi[4], Yoshinobu Okuno[3], Yasuko Mori[1,5], Koichi Yamanishi[6]
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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 Okamatsu[1], Yoshihiro Sakoda[1], Takahiro Hiono[1], Naoki Yamamoto[1], Hiroshi Kida[1,2]
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VI-PO5-15

A STUDY FOR DEVELOPMENT OF A RECOMBINANT VARICELLA VACCINE EXPRESSING MUMPS VIRUS HEMMAGLUTININ-NEURAMINIDASE AND FUSION PROTEINS

Masaaki Matsuura[1], Pranee Somboonthum[1], Megumi Ota[1], Yasuyuki Gomi[2], Michiaki Takahashi[3], Koichi Yamanishi[4], Yasuko Mori[1,5]
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VI-PO5-16

EVALUATION OF EXTRACELLULAR SUBVIRAL PARTICLES OF DENGUE TYPE 2 VIRUS PRODUCED BY INSECT CELLS FOR USE AS VACCINE AND DIAGNOSTIC ANTIGENS

Miwa Kuwahara[1], Hideki Yamaji[2], Eiji Konishi[1,3]
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VI-PO5-17

EVALUATION OF LIVE ATTENUATED COLD ADAPTED (CA) PANDEMIC INFLUENZA VIRUS VACCINES IN AFRICAN GREEN MONKEYS (AGMS)

Yumiko Matsuoka[1], Myeisha Paskel[1], Hong Jin[2], George Kamble[2], Kanta Subbarao[1]
[1]NIH, USA, [2]MedImmune

VI-PO5-18

NOVEL REPLIVAX® VACCINES AGAINST TICK-BORNE ENCEPHALITIS AND NON-FLAVIVIRUS PATHOGENS

Konstantin 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 Otsuki[1], Masafumi Sakata[1], Kiyoko Okamoto[1], Kaoru Fujii[1], Hitoshi Abo[1], Kazuhiko Kanou[2], Katsuhiro Komase[1], Makoto Takeda[1], Yoshio Mori[1]

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VI-PO5-20

A CUCUMBER MOSAIC VIRUS BASED EXPRESSION SYSTEM FOR THE PRODUCTION OF PORCINE CIRCOVIRUS SPECIFIC VACCINES

Ervin Balazs[1], Katalin Salanki[2], Tamas Tuboly[3], Akos Gellert[1]

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VI-PO5-21

A REPLICATION-INCOMPETENT VIRUS POSSESSING AN UNCLEAVABLE HA AS AN INFLUENZA VACCINE

Hiroaki Katsura[1], Kiyoko Iwatsuki-Horimoto[1], Satoshi Fukuyama[2], Shinji Watanabe[2], Saori Sakabe[1], Taisuke Horimoto[1], Yoshihiro Kawaoka[1,2,3,4]

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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 Zeng[1], Atsuhiko Hasegawa[1], Yukiko Shimizu[2], Yotaro Tamai[1], Ayako Takamori[1], Amane Sasada[1], Mari Kannagi[1]

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VI-PO5-23

EFFICIENT PRODUCTION OF EXTRACELLULAR SUBVIRAL PARTICLES OF JAPANESE ENCEPHALITIS VIRUS BY RECOMBINANT INSECT CELLS

Hideki Yamaji[1], Takashi Nagasuga[1], Yusuke Takahashi[1], Masataka Nakamura[1], Tomohisa Katsuda[1], Miwa Kuwahara[2], Eiji Konishi[2,3]

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VI-PO5-24

ADAPTATION MUTATION GLU345-LYS OF INFECTIOUS CDNA CLONE-DERIVED DENGUE TYPE 4 VACCINE VIRUS IN MRC-5 CELLS

Hsiang-Chi Lee[1], Hung-Ju Hsiao[1], Hsiao-Han Lin[1], Suh-Chin Wu[1,2]

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VI-PO5-25

MULTISEROTYPE PROTECTION ELICITED BY A COMBINATORIAL PRIME-BOOST VACCINATION STRATEGY AGAINST BTV

Javier Ortego[1], Eva Calvo-Pinilla[1], Nicolas Navasa[2], Juan Anguita[2]

[1]CISA-INIA, Spain, [2]University of Massachusetts

VI-PO5-26

AIK-C MEASLES VACCINE EXPRESSING FUSION PROTEIN OF RESPIRATORY SYNCYTIAL VIRUS INDUCES PROTECTIVE ANTIBODIES IN COTTON RATS

Akihito Sawada[1], Katsuhiro Komase[2], Tetsuo Nakayama[1]

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VI-PO5-27

IRES-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 Nakagomi[1], Osamu Nakagomi[1,2], Winifred Dove[2], Yen H Doan[1], Desiree Witte[2,3], Bagrey Ngwira[4], Stacy Todd[2], A D Steele[4], Kathleen M Neuzil[4], Htay H Han[5], Nigel A Cunliffe[2]

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VI-PO5-31

IMMUNOGENICITY OF LC16M8D VACCINIA PRIME/ SENDAI VIRUS VECTOR BOOST TARGETING THE ENVELOPE GLYCOPROTEIN OF HIV-1 AND CONTRIBUTION OF CD40LM

Tomoyoshi Sobue[1], Shun-Ichi Makino[1], Xianfeng Zhang[1], Takashi Ohashi[1], Kazunori Kato[2], Tatsuo Shioda[3], Makoto Inoue[4], Mamoru Hasegawa[4], Hisatoshi Shida[1]

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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 Chen[1], Ying-Chyi Song[1], Sheng-Kuo Chiang[1], Hsin-Yu Liu[1], Pele Chong[1,2]

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VI-PO5-33

INTRANASAL ADMINISTRATION OF 2009/10 ANNUAL INFLUENZA VACCINE INDUCE THE CROSS-PROTECTION AGAINST 2009 PANDEMIC INFLUENZA VIRUS INFECTION

Akira Ainai[1,2], Ryo Ito[2,3], Hideki Asanuma[1], Tadaki Suzuki[2], Takeshi Tanimoto[4], Takato Odagiri[1], Shin-Ichi Tamura[2], Tetsutaro Sata[2], Masato Tashiro[1], Hideki Hasegawa[1,2]

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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 Riet[1], Akira Ainai[1,2], Ryo Ito[1], Tadaki Suzuki[2], Shin-Ichi Tamura[2], Masato Tashiro[1], Hideki Hasegawa[1,2]

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VI-PO5-35

ANALYSIS OF THE IMMUNE RESPONSES AFTER INTRANASAL BOOSTER INFLUENZA VACCINE WITH HETEROLOGOUS VIRUS PRIMING

Ryo Ito[1], Akira Ainai[1,2], Hideki Asanuma[2], Tadaki Suzuki[1], Joe Chiba[3], Shin-Ichi Tamura[1], Masato Tashiro[2], Tetsutaro Sata[1], Hideki Hasegawa[1,2]

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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 Shichinohe[1], Yoshihiro Sakoda[1], Naoki Yamamoto[1], Masatoshi Okamatsu[1], Yu Noda[2], Yuka Nomoto[3], Takashi Honda[2], Yoshiyasu Takigawa[3], Hiroshi Kida[1,4]

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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 Kishida[1], Hong Xu[1], Hiromi Sugawara[1], Reiko Ito[1], Teruko Doi[1], Emi Takashita[1], Seiichiro Fujisaki[1], Miho Ejima[1], Namhee Kim[1], Reiko Saito[2], Hideyuki Ikematsu[3], Masato Tashiro[1], Takato Odagiri[1]

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VI-PO5-38

APPLICATION OF VARICELLA-ZOSTER VIRUS AS A POLYVALENT LIVE VACCINE VECTOR

Pranee Somboonthum[1], Masaaki Matsuura[1,4], Megumi Ota[1,2], Shigefumi Okamoto[1], Yasuyuki Gomi[4], Michiaki Takahashi[5], Koichi Yamanishi[3], Yasuko Mori[1,2]

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VI-PO5-39

PROTECTION OF MICE FROM LETHAL H5N1 HPAIV INFECTION VIA THE NEUTRALIZING ANTIBODY-INDEPENDENT MECHANISM

Keisuke Munekata[1], Fumihiko Yasui[1], Yoshihiro Sakoda[2], Hiroshi Kida[2], Michinori Kohara[1]

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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 Wu[1], Yi-Chun Yeh[1], Yu-Chih Yang[1], Ming-Tsan Liu[2], Ho-Sheng Wu[2], Jia-Tsrong Chan[3], Pei-Wen Hsiao[1]
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VI-PO5-42

SAFE AND HIGHLY EFFECTIVE VACCINE FOR PIG NIPAH VIRUS INFECTION USING RECOMBINANT PSEUDORABIES VIRUS

Misako Yoneda[1], Rie Mogi[1], Daichi Soda[1], Fusako Ikeda[1], Miho Ishii[1], Yasushi Kawaguchi[2], Hiroki Sato[1], Chieko Kai[1,2]
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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 Kawano[1], Tatsuya Suda[2], Toshitaka Akatsuka[2], Hiroshi Handa[3], Masanori Matsui[2]
[1]Molecular and Cellular Biology, Saitama Medical University, Japan, [2]Microbiology, Saitama Medical Univerisity, [3]Solutions Research Laboratory, Tokyo Institute of Technology

VI-PO5-45

KINETICS OF ANTIBODY RESPONSES DURING INFLUENZA VACCINATION AMONG ELDERLY PERSONS LIVING IN THE COMMUNITY

Uraiwan Kositanont[1], Prasert Assantachai[2], Chantapong Wasi[1], Pilaipan Puthavatana[1], Rungnirand Praditsuwan[3]
[1]Microbiology, Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand, [2]Preventive and Social Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University, [3]Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University

VI-PO5-46

DEVELOPMENT OF ORAL VACCINE AGAINST AVIAN INFLUENZA USING TRANSGENIC POTATO

Yukihiro Miyoshi[1], Naomi Himeno[1], Kentaro Susa[1], Toru Gotanda[1], Yoshihiro Sakoda[2], Masatoshi Okamatsu[2], Saya Kuribayashi[2], Masayuki Motoshima[2], Hiroshi Kida[2], Atsuko Itakura[3], Yuji Kikuchi[3], Noriko Itchoda[4], Yasushi Tasaka[5], Shin-Ichiro Joh[5], Akira Ito[5], Takeshi Matsumura[5]
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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 Gomi[1], Satoshi Naganawa[1], Fumihiko Yasui[1], Keisuke Munekata[1], Koji Ishii[2], Yoshihiro Sakoda[3], Hiroshi Kida[3], Michinori Kohara[1]
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VI-PO5-48

SEROPREVALENCE AND ANTIBODY RESPONSES AGAINST 2009 PANDEMIC INFLUENZA H1N1 BEFORE AND AFTER THE VACCINATION AMONG SCHOOLCHILDREN IN TAIWAN

Zheng-Rong Tiger Li[1], Pui-I Ho[1], Hsiu-Pin Lin[1], Chuan-Liang Kao[2], Chwan-Chuen King[1]
[1]Institute of Epidemiology and Preventive Medicine, National Taiwan University, Taiwan, [2]Department 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 Suthamsmai[1], Uraiwan Kositanont[2], Benjamas Chuaychoo[3], Prasert Auewarakul[4], Arth Nana[5], Khunnanta Maranetra[6], Prasert Thongcharoen[7]

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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 Hasegawa[1], Akira Ainai[1,2], Elly van Riet[2], Tadaki Suzuki[1], Ryo Ito[1,3], Takeshi Tanimoto[4], Takato Odagiri[2], Masato Tashiro[2], Tetsutaro Sata[1], Takeshi Kurata[1], Shin-Ichi Tamura[1]

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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 Castrucci[1], Bruno Garulli[1,2], Giuseppina Di Mario[1], Ester Sciaraffia[1]

[1]Dept. of Infectious, Parasitic and Immune-Mediated Diseases, Istituto Superiore di Sanità, Italy, [2]Dept. of Biology and Biotechnology Charles Darwin, [3]University 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 Asanuma[1], Mina Nakauchi[1], Kayoko Sato[1], Eri Nobusawa[1], Akira Ainai[1], Norio Yamamoto[1], Nami Konomi[2], Hideki Hasegawa[3], Masato Tashiro[1]

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VI-PO5-57

EFFICACY OF A PAN-FILOVIRUS VLP-BASED VACCINE IN NONHUMAN PRIMATES

M. Javad Aman[1], John Dye[2], Dana L Swenson[1], Sergey Shulenin[1], Jay Wells[2], Sina Bavari[2], Kelly L Warfield[1]

[1]Integrated Biotherapeutics, Inc., USA, [2]US 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 Yamazaki[1], Yasutomo Teshima[1], Daisuke Ninomiya[1], Maria Nagashima[1], Yuka Arai[1], Akira Fujimoto[1], Akira Ainai[2], Hideki Hasegawa[2], Joe Chiba[1]

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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 Tomonaga[2]

[1]Department of Virology, Research Institute for Microbial Diseases (BIKEN), Osaka University, Japan, [2]Department 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 Sharzei[1], Zia Banihashemi[2], Keramatollah Izadpanah[2], Alireza Afsharifar[2], Zahra Mohandesy[2]

[1]Department of Plant Protection, Marvdasht Branch, Islamic Azad University, Iran, [2]Department 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 Okada[1], Eri Kiyota[1], Sead Sabanadzovic[2], Rodrigo A Valverde[3], Marilyn J Roossinck[4], Toshiyuki Fukuhara[1], Hiromitsu Moriyama[1]

[1]Faculty of Agriculture, Tokyo University of Agriculture and Technology, Japan, [2]Department of Biochemistry, Molecular Biology, Entomology and Plant Pathology, Mississippi State University, [3]Department of Plant Pathology & Crop Physiology, Louisiana State University Agricultural Center, [4]Plant 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 Salaipeth[1], Sotaro Chiba[1], Yu-Hsin Lin[1], Atsuko Sasaki[2], Satoko Kanamatsu[2], Nobuhiro Suzuki[1]

[1]Group of Plant Microbe Interactions, Institute of Plant and Resources, Japan, [2]National Institute of Fruit Tree Science, National Agricultural Research Organization

VI-PO62-6

MYCOVIRUSES THAT INFECT PLANT PATHOGEN SCLEROTINIA SCLEROTIORUM

Daohong Jiang[1], Xiao Yu[1], Huiquan Liu[1], Bo Li[1], Jiatao Xie[1], Xueqiong Xiao[1], Yanping Fu[1], Guoqing Li[1], Said A Ghabrial[2]

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VI-PO62-7

A NOVEL QUADRIPARTITE DSRNA VIRUS ISOLATED FROM A PHYTOPATHOGENIC FILAMENTOUS FUNGUS, ROSELLINIA NECATIRX

Yu-Hsin Lin[1], Sotaro Chiba[1], Akio Tani[1], Hideki Kondo[1], Atsuko Sasaki[2], Satoko Kanematsu[2], Nobuhiro Suzuki[1]

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VI-PO43 Viroid and Satellite Viruses

Thursday, 15 September

VI-PO43-1

SPREAD OF GRAPEVINE VIROIDS AND GRAPVINE FANLEAF VIRUS IN IRAN

Mohammad Hajizadeh[1], **Nemat Sokhandan Bashir**[1], Beatriz Navarro[2], Seyed Abolghasem Mohammadi[3], Hamed Doulati Baneh[4], Francesco Di Serio[2], Giovanni Paolo Martelli[5]

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VI-PO43-2

BIOLOGICAL AND PHYSICAL PROPERTIES OF TOMATO CHLOROTIC DWARF VIROID ISOLATED IN JAPAN

Yosuke Matsushita[1], Shohei Matsuura[2], Tomio Usugi[3], Reiko Kozuka[4], Shinya Tsuda[3]

[1]National Institute of Floricultural Science, Japan, [2]Hiroshima Prefectural Technology Research Institute, [3]National Agricultural Research Center, [4]Chiba Prefectural Agriculture and Forestry Research Center

VI-PO43-3

POPULATION DIVERSITY OF GRAPEVINE VIROIDS IN CHINA

Dongmei Jiang[1,2], Shifang Li[1], Hongqing Wang[3], Shan Peng[1], Rui Guo[1], Zujian Wu[2], Lianhui Xie[2]

[1]State Key Laboratory of Biology of Plant Diseases and Insect Pests, Institute of Plant Protection (IPP), Chinese Academy of Agricultural Sciences (CAAS), China, [2]Institute of Plant Virology, Fujian Agriculture and Forestry University, [3]Department of Fruit Science, College of Agronomy and Biotechnology, China Agricultural University

VI-PO43-4

VIROIDS OF COLEVIROID IN CHINA AND INDIA

Shifang Li[1], Fanghong Fu[2], Dongmei Jiang[1,3], Hongqing Wang[2], Wanying Hou[1], Feng Li[1]

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VI-PO43-5

DETECTION OF COLEUS BLUMEI VIROID 6 (CBVD 6) FROM COLEUS IN JAPAN AND SEED TRANSMISSION OF CBVD 1 AND 6

Taro Tsushima[1], Teruo Sano[2]

[1]The United Graduate School of Agricultural Sciences, Iwate University, Japan, [2]Faculty 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 Flores[1], Sofia Minoia[1], Beatriz Navarro[2], Francesco Di Serio[2]

[1]Instituto de Biologia Molecular Y Celular de Plantas (UPV-CSIC), Spain, [2]Istituto 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 Shimura[1], Vitantonio Pantaleo[2], Takeaki Ishihara[1], Nobutoshi Myojo[1], Jun-Ichi Inaba[1], Kae Sueda[1], Jozsef Burgyan[2], Chikara Masuta[1]

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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 Sharma[1], Keiko Natsuaki[2], Masato Ikegami[1]

[1]NODAI Research Institute, Pakistan, [2]Department of Biosciences, COMSATS Institute of Information Technology, [3]Department 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 Sharma[3], R K Gaur[4], **M Ikegami**[1]

[1]NODAI Research Institute, Tokyo University of Agriculture, Japan, [2]Department of Biosciences, COMSATS Institute of Information Technology, [3]Division of Crop Improvement, Directorate of Wheat Research, [4]Mody 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 Chiaki[1], Nasril Nasir[2], Henny Herwina[2], Akira Uemura[1], Tomohiro Fukumoto[1], Masayuki Nakamura[1], Hisashi Iwai[1]

[1]Faculty of Agriculture, Kagoshima University, Japan, [2]Faculty 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 Ueda[1], Masatoshi Onuki[2], Hirotaka Yamaguchi[3], Youichi Yamato[1]

[1]Kurume Research Station, National Agricultural Institute for Kyushu Okinawa Region, Japan, [2]Koshi, National Agricultural Institute for Kyushu Okinawa Region, [3]National 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 Pinili[1], Keiko T Natsuaki[1], Teodora O Dizon[2], Olivia P Damasco[2]

[1]Graduate School of Agriculture, Department of Agriculture Laboratory of Tropical Plant Protection, Tokyo University of Agriculture, Japan, [2]Institute 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 Grigoras[1], Tatiana Timchenko[1], Bruno Gronenborn[1], **Heinrich-Josef Vetten**[2]
[1]Institut des Sciences du Vegetal, Centre National de la Recherche Scientifique, France, [2]Julius Kuehn 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 Yamagishi[1], Shintarou Sasaki[1], Kousuke Yamagata[1], Sadao Komori[2], Momoyo Nagase[2], Masato Wada[3], Toshiya Yamamoto[4], Nobuyuki Yoshikawa[1]
[1]Plant Pathology Laboratory, Facluty of Agriculture, Iwate University, Japan, [2]Horticulture Laboratory, Faculty of Agriculture, Iwate University, [3]Department of Apple Research, National Institute of Fruit Tree Science, [4]National 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 Chen[1], Yi-Shan Chang[1], Chin-Chu Wang[1], Huey-Jun Bau[2]
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VI-PO46-2

MOLECULAR CHARACTERIZATION OF SECOVIRIDAE AND POTEXVIRUS INFECTING YAMS (DIOSCOREA SPP)

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VI-PO46-3

USE OF APPLE LATENT SPHERICAL VIRUS VECTORS AS PLANT VIRUS VACCINES FOR THE CONTROL OF PLANT VIRUS DISEASES

Nobuyuki Yoshikawa[1], Akihiro Tamura[1], Takao Kato[1], Ayano Taki[1], Noriko Yamagishi[1], Masamichi Iosgai[1], Bo-Song Ryo[2], Masashi Fijunaga[3], Yoshitaka Kosaka[4], Tomohide Natsuaki[5], Kaoru Hanada[6]
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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 Tsai[1], Chung-Hao Haung[1], Ju-Ting Li[2,3], Jung-Shu Weng[2], Shyi-Dong Yeh[1], Tsung-Chi Chen[2]
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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

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VI-PO60-2

DESCRIPTION OF A NEW TOMATO DISEASE CAUSED BY A NOVEL TYMOVIRUS IN BRAZIL

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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

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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

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VI-PO53-2

EVIDENCES THAT RICE DWARF VIRUS ORIGINATES IN VECTOR INSECTS

Toshihiro Omura[1], Yingying Pu[1,2], Fusamichi Akita[1], Takumi Shimizu[1], Osamu Netsu[1], Nobuhiro Suzuki[3], Tamaki Uehara-Ichiki[1], Taiyun Wei[1], Yi Li[2], Takahide Sasaya[1]

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VI-PO53-3

TAIWANESE INFECTIOUS BRONCHITIS VIRUSES HAD UNDERGONE BOTH RECOMBINATION AND POSITIVE SELECTION IN NUCLEOCAPSID

Shu-Ming Kuo[1,2], Hsiao-Wei Kao[2], Ming-Hon Hou[3], Ching-Ho Wang[4], Hong-Lin Su[2]

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VI-PO53-4

BIO-GEOGRAPHICAL DIVERSITY OF WILD YAM PLANTS AND THEIR INFECTING VIRUSES IN JAPAN AND SOUTH KOREA

Shin-Ichi Fuji[1], Naoto Okayama[1], Yasunori Yoshida[1], Mizuki Inoue[1], Young-Jin Koh[2], Takeshi Toda[1], Hiromitsu Furuya[1]

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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

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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

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VI-PO53-7

COMPARISONS OF THE GENETIC STRUCTURE OF POPULATIONS OF TURNIP MOSAIC VIRUS IN CHINA AND VIETNAM

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VI-PO53-8

THE GENETIC STRUCTURES OF POPULATIONS OF CAULIFLOWER MOSAIC VIRUS IN GREECE, IRAN, JAPAN AND TURKEY

Shirin Farzadfar[1], Ali Reza Golnaraghi[2], Ryosuke Yasaka[3], Reza Pourrahim[4], Savas Korkmaz[5], Nikos Katis[6], Hideki Takahashi[7], Kazusato Ohshima[8]

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VI-PO53-9

MOLECULAR DATING IN THE EVOLUTION OF VERTEBRATE POXVIRUSES

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VI-PO53-10

SYLVILAGUS, LEPUS AND ORYCTOLAGUS TRIM5ALPHA PRYSPRY-DOMAIN DIVERGENT PATTERN SUSTAINS ENDOGENOUS RETROVIRUSES AS EVOLUTIONARY FORCES ACTING ON LEPORID TRIM5ALPHA

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VI-PO53-11

THE PRESENCE OF GENOTYPE MIXTURES IN CITRUS TRISTEZA VIRUS ISOLATES FROM CHINA REVEALED BY MULTIPLE MOLECULAR MARKERS

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VI-PO53-12

GENETIC AND PATHOGENIC CHARACTERIZATION OF H9N2 INFLUENZA A VIRUSES

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VI-PO53-13

VIRAL FACTORS LIMITING SYSTEMIC INFECTION BY *SOIL-BORNE WHEAT MOSAIC VIRUS* TO AMBIENT TEMPERATURES BELOW 20°C

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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

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VI-PO53-15

OUTBREAKS OF H5N1 SUBTYPE HIGHLY PATHOGENIC AVIAN INFLUENZA VIRUS (HPAIV) IN POULTRY DURING 2010-2011 IN JAPAN

Yuko Uchida[1], Masaji Mase[1], Nobuhiro Takemae[1], Hirokazu Hikono[2], Katsushi Kanehira[1], Yuichi Tagawa[3], Takehiko Saito[1]

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VI-PO53-16

ACQUISITION OF HUMAN-TYPE RECEPTOR BINDING SPECIFICITY BY NEW H5N1 INFLUENZA VIRUS SUBLINEAGES DURING THEIR EMERGENCE IN BIRDS IN EGYPT

Yohei Watanabe[1], Madiha S Ibrahim[2], Hanny F Ellakany[3], Norihito Kawashita[4], Hiroaki Hiramatsu[5], Nogluk Sriwilaijaroen[6], Yasuo Suzuki[7], Kazuyoshi Ikuta[8]

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VI-PO53-17

DYNAMICS OF SEQUENCE VARIATION IN ANTIGENIC DOMAINS AND GLYCOSYLATION SITES OF HEMAGGLUTININ OF HUMAN H3N2 INFLUENZA VIRUSES

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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 Tsai[2], Kuan-Ying Chu[2], Shu-Fang Chuang[2], Ta-Chien Chan[1], Chang-Jiunn Lee[1], Luan-Yin Chang[4], Yea-Huei Shen[5], Li-Min Huang[4], Ping-Ing Lee[4], Chwan-Chuen King[1]

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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

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VI-PO53-20

DEEP-SEQUENCING ANALYSIS - A NEW TOOL FOR STUDYING PLANT VIRAL EVOLUTION

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VI-PO53-21

MOLECULAR EVOLUTION OF INFLUENZA A VIRUS NUCLEOPROTEIN GENES IN TAIWAN

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VI-PO53-22

STUDY ON THE EVOLUTION OF HIV-1 ENVELOPE GENE IN THAI PATIENTS

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VI-PO53-23

IDENTIFICATION OF A NOVEL KOALA ENDOGENOUS RETROVIRUS

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VI-PO53-24

CODON USAGE AND EVOLUTIONARY RELATEDNESS OF PLANT AND FUNGAL PARTITIVIRUSES

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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

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VI-PO53-26

HLA-ASSOCIATED VIRAL POLYMORPHISM IN CHRONICALLY HIV-1-INFECTED JAPANESE COHORT

Takayuki Chikata[1], Masao Hashimoto[1], Yoshiko Tamura[1], Takuya Naruto[1], Mohamed Ali Borghan[1,3], Hiroyuki Gatanaga[1,2], Shinichi Oka[1,2], Masafumi Takiguchi[1]

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VI-PO53-27

HETEROGENEITY OF APPLE CHLOROTIC LEAF SPOT VIRUS ISOLATES ORIGINATED IN LATVIA AND UKRAINE

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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 Haugland[1], **Paal Nilsen**[2], Aase B Mikalsen[1], Karine Lindmo[2], Beate J Thu[1], Trygve M Eliassen[2], Norbert Roos[3], Marit Rode[2], Oystein Evensen[1]

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VI-PO52-2

THE PSAP LATE DOMAIN OF THE NUCLEOPROTEIN NP CONTRIBUTES TO TSG101 RECRUITMENT AND TO THE RELEASE OF INFECTIOUS MARBURG VIRUS

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VI-PO52-3

Withdrawn

VI-PO52-4

CANINE PARVOVIRUS-2C: AN EMERGING VIRUS OF DOGS IN THE UNITED STATES OF AMERICA

Sanjay Kapil

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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

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VI-PO52-6

DETECTABILITY OF POTYVIRUSES BY TWO PAIRS OF DEGENERATE PRIMERS

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VI-PO52-7

PENETRATION OF HPAI H5N1 2.3.2 GENOTYPE INTO THE SOUTH EASTERN PART OF NORTHERN EURASIA (2008 - 2010)

Dmitri K Lvov[1], **Michail Yu Shchelkanov**[1], Nikolai A Vlasov[2], Irina T Fedyakina[1], Alexei G Prilipov[1], Dmitri N Lvov[1], Eugeni I Samokhvalov[1], Sergei V Alkhovsky[1], Irina V Galkina[1], Elena S Proshina[2], Valeria A Aristova[1], Tatyana N Morozova[1], Petr G Deryabin[1], Alexei D Zaberezhny[1], Tatyana V Grebennikova[1], Taras I Aliper[1], David L Suarez[3]

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VI-PO52-8

INFECTIVITY OF XMRV TO HUMAN BLOOD CELLS

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VI-PO52-9

VACCINATION AND HOMOTYPIC IMMUNITY RESTRAINS EMERGENCE POTENTIAL OF SYLVATIC DENGUE VIRUS TYPE 4 IN THE URBAN TRANSMISSION CYCLE

Nikos Vasilakis[1], Anna P Durbin[2], Sandra V Mayer[1], Shannan L Rossi[1], Josephina Duran-Bedolla[3], Jose Ramos-Castaneda[3], Eng Eong Ooi[4], Jane Cardosa[5], Jorge L Munoz-Jordan[6], Robert B Tesh[1], Scott C Weaver[1]

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VI-PO52-10

SEQUENCE COMPARISON OF DIFFERENT ISOLATES OF TOMATO YELLOW FRUIT RING VIRUS FROM SOYBEANS, A NEW EMERGING TOSPOVIRUS IN IRAN

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VI-PO52-11

PREVALENCE OF ARCTIC-LIKE RABIES IN BANGLADESH

Takashi Matsumoto[1], Kamruddin Ahmed[2], Moazzem Hossain[3], Khondoker Mahabuba Jamil[4], Mohammad Azmat Ali[5], Sohrab Hossain[6], Shakawet Hossain[5], Aminul Islam[5], Nasir Uddin[5], Akira Nishizono[1,2]

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VI-PO52-12

EMERGENCE OF DENGUE IN KATHMANDU, NEPAL

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VI-PO52-13

VIROLOGICAL SURVEY OF MORBILLIVIRUS INFECTION IN CASPIAN SEALS

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VI-PO52-14

DETECTION OF PORCINE PICOBIRNAVIRUSES IN JAPAN

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VI-PO52-15

CHARACTERIZATION OF HUMAN DENGUE VIRUS ISOLATES FROM PATIENTS EXPERIENCING VARIOUS DEGREES OF DENGUE ILLNESS

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VI-PO52-16

HUMAN PARECHOVIRUS INFECTION IN CENTRAL NERVOUS SYSTEM RELATED DISEASES AND SEPSIS IN CHILDREN IN SHANGHAI, CHINA

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VI-PO52-17

THE AETIOLOGY OF HAND, FOOT AND MOUTH DISEASE IN WESTERN AUSTRALIA AND THE NORTHERN TERRITORY, 2007-2010

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VI-PO52-18

GLOBAL EMERGENCE OF THREATENING BEGOMOVIRUSES

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VI-PO52-19

FIRST REPORT OF HEPATITIS E VIRUS INFECTION (GENOTYPE 3) IN COLOMBIA, SOUTH AMERICA

Maria-Cristina Navas[1], Julio C Rendon[1], Maria C Hoyos[1], Maria M Velasquez[1], Fabian Cortes-Mancer[1], Gonzalo Correa[1,2], Maria E Sepulveda[1,2], Nora L Yepes[1,2], Francisco J Diaz[3], Maria P Arbelaez[4], Sergio Jaramillo[2]

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VI-PO52-20

GENETIC DIVERSITY OF THOTTAPALAYAM VIRUS, A HANTAVIRUS HARBORED BY THE ASIAN HOUSE SHREW (SUNCUS MURINUS) IN NEPAL

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VI-PO52-21

PROGRESSION OF PATHOGENIC EVENTS IN CYNOMOLGUS MACAQUES INFECTED WITH VARIOLA VIRUS

Victoria Wahl-Jensen[1], Jennifer A Cann[1], Kathleen H Rubins[2], John W Huggins[3], Robert W Fisher[3], Anthony J Johnson[1], Fabian de-Kok Mercado[1], Thomas Larsen[3], JoLynne Raymond[3], Lisa E Hensley[3], Peter B Jahrling[1]

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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 Saijo[1], Yasushi Ami[2], Yuriko Suzaki[2], Noriyo Nagata[3], Naoko Yoshikawa (Iwata)[3], Hideki Hasegawa[3], Shuetsu Fukushi[1], Tetsuya Mizutani[1], Tetsutaro Sata[3], Ichiro Kurane[1], Shigeru Morikawa[1]

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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 Kew[1], Jing Shaw[1], Jaume Jorba[1], Jane Iber[1], David Bukbuk[2], Festus Adu[3], Oyewale Tomori[4], A. J Williams[1], Mark Pallansch[1], Cara C Burns[1]

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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 Iwai[1], Hiromu Yoshida[2], Mayumi Obara[1], Eiji Horimoto[1], Masatsugu Obuchi[1], Takeshi Kurata[1], Takenori Takizawa[1]

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VI-PO50-4

ANTI-*INFLUENZA* VIRUS ACTIVITY OF SILVER ZEOLITE (AGZ)

Yoko Yanagawa[1], Koji Tsukada[2], Keiko Shimizu[3], Kohsuke Furuse[4], Kazuo Tanaka[1]

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VI-PO50-5

TARGETING TISSUE RESERVOIRS - ANTIRETROVIRAL THERAPY IN CHINESE RHESUS MACAQUES IN CHRONIC SIV INFECTION

Binhua Ling[1], Linda B Rogers[1], Mahesh Mohan[1], Andrew A Lackner[1], Michael Piatak[2], Jeffrey Lifson[2], Ronald S Veazey[1]

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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

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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 Inetrnational 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 Kiasari[1], Pamela J Vallely[2], Paul E Klapper[2,3]

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VI-PO38-4

RT-MULTIPLEX PCR FOR DETECTION OF DIARRHEAL VIRUSES

Hiroshi Ushijima[1,3], Pattara Khamrin[2], Ngan Thi Kim Pham[3], Aksara Thongprachum[3], Shoko Okitsu[1,3], Satoshi Hayakawa[1], Niwat Maneekarn[2]

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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 Balint[1], Renata Toth[2], Zsuzsa Veres[2], Ingo Jordan[3], Zoltan Zadori[2]

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VI-PO38-7

DEVELOPMENT OF EASY AND SPEEDY DETECTION SYSTEM FOR NIPAH AND HENDRA VIRUS BY REVERSE TRANSCRIPTION SMART AMPLIFICATION PROCESS (RT-SMARTAMP)

Mutsumi Awano[1], Alexander Lezhava[2], Misako Yoneda[1], Yasumasa Kimura[2], Hiroki Satoh[1], Tomohisa Ishikawa[2], Yoshihide Hayashizaki[2], Chieko Kai[1]

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VI-PO38-8

THE MODERN METHODS OF INFLUENZA VIRUS DETECTION

Svetlana V Trushakova[1], A A Isakova[2], V T Ivanova[1], D D Abramov[3], O A Raitman[2], V F Ivanov[2], V V Lavrischeva[1], N V Beliakova[1], E I Burtseva[1]

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VI-PO38-9

ETIOLOGY SPECTRUM OF INFANTILE ACUTE DIARRHEA IN BULGARIA

Zornitsa V Mladenova[1], Andrej Steyer[2], Adela Fratnik Steyer[2], Petar Petrov[3], Tanja Tchervenjakova[4], Neli Korsun[1]

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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 Lin[1], Meng-Shiou Lee[1], Meng-Ja Yang[1], You-Cheng Hseu[2], Guan-Hua Lai[1], Wen-Te Chang[1], Yau-Heiu Hsu[3]

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VI-PO38-11

SENSITIVE DETECTION OF MULTIPLE HEPATITIS A VIRUS GENOTYPES WITH A SINGLE POLONY-BASED ASSAY

Haifeng Chen[1], Gary P Richards[2], Huijun Yan[3], Xianghe Yan[4], Chris A Elkins[1]

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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 Ahmed[1], Omala Wimalaratne[2], Narapati Dahal[3], Pakamatz Khawplod[4], Susilakanthi Nanayakkara[2], Karma Rinzin[3], Devika Perera[2], Dushantha Karunanayake[2], Takashi Matsumoto[5], **Akira Nishizono**[5]

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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 Andrade[3], Carlos A Mendez[3], Guillermo Bolanos[3], Liliana Salazar[3]

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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 Shirafuji[1], Tohru Yanase[1], Tomoko Kato[1], Ken-Ichiro Kameyama[2], Hiroshi Iseki[2], Makoto Yamakawa[1]

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VI-PO38-17

ESTABLISHMENT OF A CELL LINE STABLY EXPRESSING JAPANESE ENCEPHALITIS VIRUS PRM-E PROTEIN AND APPLICATION FOR IGM CAPTURE ELISA

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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 Sitprija

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

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VI-PO38-20

QUANTIFICATING 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, Quantificating 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 Kameyama[1], Misako Konishi[1], Hiroshi Iseki[1], Hiroaki Shirafuji[2], Makoto Yamakawa[2], Kenji Murakami[1]

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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 Yoshida[1], Hanako Shimura[1], Kazuo Yamashita[2], Shuichi Tabuchi[3], Yoshihiko Shiga[4], Masahiko Suzuki[1], Chikara Masuta[1]

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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 Takayama[1], Shinichi Shimada[2], Mina Nakauchi[1], Toshitaka Minegishi[2], Masato Tashiro[1], Tsutomu Kageyama[1]

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VI-PO38-25

COMPARISON OF MICRO-FOCI REDUCTION ASSAY WITH PLAQUE REDUCTION NEUTRALIZATION FOR DENGUE VIRUS NEUTRALIZATION ANTIBODY DETECTION

Shu-Fang Chuang[1], Chuan-Liang Kao[1,2,3], Day-Yu Chao[4], Gwong-Jen J Chang[5], Chwan-Chuen King[1]

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VI-PO38-26

APPLICATION OF PHAGE DISPLAY TECHNOLOGY FOR GENERATION OF SPECIFIC MONOCLONAL RECOMBINANT ANTIBODIES AGAINST WITCHES' BROOM DISEASE OF LIME (WBDL)

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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 Utsumi[3], Deshinta Putri Mulya[4], Yanri Wijayanti Subronto[4], Yoshitake Hayashi[1,3]

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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 Rasool[1], Rosfizah B Zuki[1], Mohd N Aziz[2], Lily X Pang[3]

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VI-PO38-29

DETECTION AND QUANTIFICATION OF CUCURBIT CHLOROTIC YELLOWS VIRUS BY SEROLOGICAL AND RT-PCR METHODS

Jun Ohnishi[1], Kenji Kubota[2], Tomio Usugi[2], Yasuhiro Tomitaka[2], Shinya Tsuda[2]

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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 Okamoto[1], Xu Zhang[2], Takayuki Hamazaki[1], Yousuke Nishi[1], Yasuo Suda[2], Masanori Baba[1]

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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

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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

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VI-PO38-33

QUALITY ASSURANCE AND STANDARDIZATION OF VIRUS DIAGNOSTICS FOR TRANSFUSION TRANSMITTED INFECTIONS AND EMERGING VIRUS DISEASES

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VI-PO38-34

DETECTION AND MOLECULAR CHRACTERIZATION OF PORCINE TYPE 3 ORTHOREOVIRUSES CIRCULATING IN SOUTH KOREA

Hyung-Jun Kwon[1], Ha-Hyun Kim[1], Hyun-Jeong Kim[2], Jun-Gyu Park[2], Kyu-Yeol Son[2], Woo Song Lee[1], Kyoung-Oh Cho[2], Mun-Il Kang[2], Su-Jin Park[1]

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VI-PO35 Antiviral Drugs

Thursday, 15 September

VI-PO35-1

AN ANTIVIRAL COUNTER-STRATEGY - TURNING A FLAVIVIRUS' ARSENAL AGAINST ITSELF

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VI-PO35-2

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 Chen[1], Liang-Tzung Lin[2], Chueh-Yao Chung[3], Ryan S Noyce[2], T. Bruce Grindley[4], McCormick Craig[2], Ta-Chen Lin[5], Guey-Horng Wang[6], Chun-Ching Lin[1,3], Christopher D Richardson[2]

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VI-PO35-3

IMIQUIMOD SUPPRESSES PROPAGATION OF HERPES SIMPLEX VIRUS TYPE 1 INDEPENDENT TO TYPE I INTERFERON INDUCTION

Tamaki Okabayashi[1], Yuji Kan[2], Shin-Ichi Yokota[1], Toshiharu Yamashita[2], Nobuhiro Fujii[1]

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VI-PO35-4

DEVELOPMENT OF THE COMPOUNDS INHIBITING RNASE H ENZYMATIC ACTIVITY OF HIV-1 REVERSE TRANSCRIPTASE

Hiroshi Yanagita[1], Tyuji Hoshino[1], Masakazu Ogata[1], Emiko Urano[2], Reiko Ichikawa[2], Tsutomu Murakami[2], Jun Komano[2]

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VI-PO35-5

ANTIVIRAL ACTIVITIES OF POLYPHENOL TYPE-A POLYMERS FROM CINNAMON: SPECIAL REFERENCES WITH FELINE CALICIVIRUSES (FCV) REPLICATION

Yoshiyuki Yoshinaka[1], Katsuhiro Nakayama[2], Takanari Tominaga[2], Atsusi Shimizu[2], Tadahito Shionoda[3], Shoji Yamaoka[1]

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VI-PO35-6

INHIBITORY EFFECT OF MARINE NATURAL PRODUCTS ON THE REPLICATION OF HEPATITIS C VIRUS

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VI-PO35-7

A STUDY OF OSELTAMIVIR RESISTANT INFLUENZA VIRUSES IN THAILAND, 2008-2010

Malinee Chittaganpitch[1], Sunthareeya Waicharoen[1], Jiranana Warachitdesilva[1], Krongkaew Supawat[1], Sirima Pattamadilok[1], Busarawan Sriwantana[1], Sonja J Olsen[2], Passakorn Akrasewi[3], Pathom Sawanpanyalert[1]

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VI-PO35-8

CHEBULAGIC ACID AND PUNICALAGIN AS BROAD-SPECTRUM ENTRY INHIBITORS AGAINST MULTIPLE VIRAL INFECTIONS

Chueh-Yao Chung[1], **Liang-Tzung Lin**[2,3], Ting-Ying Chen[4], Ayham Al-Afif[3], Ta-Chen Lin[5], Guey-Horng Wang[6], Robert Anderson[3], Chun-Ching Lin[1,4], Christopher D Richardson[2,3]

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VI-PO35-9

A COMBINATION OF POLYMORPHIC MUTATIONS IN V3 LOOP OF HIV-1 GP120 CAN CONFER NONCOMPETITIVE RESISTANCE TO MARAVIROC

Keisuke Yusa[1], Yuhze Yuan[2], Yosuke Maeda[3], Hiromi Terasawa[3], Shinji Harada[3]

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VI-PO35-10

A COMBINATION THERAPY OF POLYETHYLENIMINE WITH LIPOSOMES AND CHITOSAN FOR HERPES SIMPLEX VIRUS INFECTION

Kenji Ishigaki[1], Yuta Nakazawa[1], Daisuke Aragane[1], Kyoko Hayashi[2], Takashi Kai[3], Yoshie Maitani[1]

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VI-PO35-11

CHARACTERIZATION OF A HIGHLY CATIONIC POLYETHYLENIMINE IN HERPES SIMPLEX VIRUS TYPE 2 INFECTION

Kyoko Hayashi[1], Hiroki Onoue[1], Kohei Sasaki[1], Yosie Maitani[2], Takashi Kai[3], Toshimitsu Hayashi[1]

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VI-PO35-12

EFFICACY OF BRAZILIAN PROPOLIS AGAINST HERPES SIMPLEX VIRUS TYPE 1 INFECTION IN MICE AND THEIR MODES OF ANTI-HERPETIC EFFICACIES

Hiroki Yoshida[1], Hisahiro Kai[2], Shigetoshi Tsutsumi[3], Ken Yasukawa[4], Koji Matsuno[2], Wataru Watanabe[5], Kimiyasu Shiraki[6], Masahiko Kurokawa[1]

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VI-PO35-13

ANTIVIRAL ACTIVITIES OF CAMPTOTHECIN AND TUBERCIDIN AGAINST ENTEROVIRUS 71 IN HUMAN RHABDOMYOSARCOMA CELLS

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VI-PO35-14

NEURAMINIDASE INHIBITOR-RESISTANT INFLUENZA A VIRUSES DETECTED IN THE 2010/11 SEASON IN YOKOHAMA, JAPAN

Chiharu Kawakami[1], Emi Takashita[2], Miho Ejima[2], Seiichiro Fujisaki[2], Namhee Kim[2], Shuzo Usuku[1], Eishi Kurata[1], Mami Iwata[3], Takahiro Toyozawa[4], Takato Odagiri[2], Masato Tashiro[2]

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VI-PO35-15

DRUG SUSCEPTIBILITY OF INFLUENZA VIRUSES CIRCULATING IN RUSSIA

Elena S Shevchenko[1], Natalia V Beliakova[1], Valentina V Lavrischeva[1], Elena I Burtseva[1], Tiffany G Sheu[2], Larisa V Gubareva[2], Alexander I Klimov[2]

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VI-PO35-16

PREVALENCE OF ANTIVIRAL DRUG-RESISTANT INFLUENZA A VIRUSES IN MYANMAR FROM 2007 TO 2010

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VI-PO35-17

MARINE NATURAL PRODUCTS AS A SOURCE OF THE NOVEL ANTIVIRAL AGENT TARGETING TO HCV NS3 HELICASE

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VI-PO35-18

CIRCULATION OF HUMAN INFLUENZA VIRUSES IN THE PANDEMIC (2009-2010) AND POST-PANDEMIC (2010-2011) SEASONS IN JAPAN

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VI-PO35-19

ANTI-VIRUS EFFECT OF TRICIN, 4', 5, 7-TRIHYDROXY-3', 5'-DIMETHOXYFLAVONE, ON HUMAN CYTOMEGALOVIRUS

Tsugiya Murayama[1], **Ying Li**[1], Hidetaka Sadanari[1], Rie Yamada[1], Xin Zheng[1], Yuuzo Tuchida[2]

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VI-PO35-20

STRUCTURE-ACTVITY RELATIONSHIP OF ANTI-HIV-1 COMPOUND, LAMELLARIN SULFATES

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VI-PO35-21

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

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VI-PO35-22

VIRUS INACTIVATION BY NON-CYTOTOXIC ARGININE-DERIVATIVES WITH DETERGENT ACTIVITY

Kazuko Tsujimoto[1], Keiko Ikeda[1,2], Hisashi Yamasaki[1], Mitsunori Nishide[1,3], Hiroshi Irie[4], A. Hajime Koyama[1]

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VI-PO35-23

ANTIVIRAL USE OF ACIDIC ARGININE AGAINST THE INFECTION ON BODY SURFACE

Keiko Ikeda[1,2], Kazuko Tsujimoto[1], Hisashi Yamasaki[1], Yukikko Suzuki[2], Tsuyoshi Naito[3], Hiroshi Irie[4], A. Hajime Koyama[1]

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VI-PO35-24

INHIBITION OF A MULTIPLICATION OF HERPES SIMPLEX VIRUS BY CAFFEIC ACID

Hisashi Yamasaki[1], Keiko Ikeda[1,2], Kazuko Tsujimoto[1], Misao Uozaki[1], Hiroshi Irie[3], A. Hajime Koyama[1]

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VI-PO35-25

ANTIVIRAL AND VIRUCIDAL ACTIVITIES OF COMMON VEGETABLES AND FRUITS IN WAKAYAMA

Mitsunori Nishide[1,2], Kazuko Tsujimoto[1], Keiko Ikeda[1], Hisashi Yamasaki[1], A. Hajime Koyama[1]

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VI-PO35-26

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

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VI-PO35-27

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

VI-PO35-28

INHIBITION OF HIV-1 TAT-MEDIATED TRANSCRIPTION BY A COUMARIN DERIVATIVE BPRHIV001 THROUGH AKT PATHWAY

Sui-Yuan Chang[1,3], Pi-Han Lin[1], Yi-Yu Ke[2], Hsing-Pang Hsieh[2], Chun-Nan Lee[1,3], Chuan-Liang Kao[1,3]

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VI-PO35-29

LOW MOLECULAR WEIGHT COMPOUNDS AS ANTI-HIV CANDIDATES VIA CYPA INHIBITION OBTAINED FROM IN SILICO SCREENING

Yushi Tian[1], Norihito Kawashita[1,2], Chris Verathamjamras[2], Kousuke Okamoto[1], Teruo Yasunaga[2], Masanori Kameoka[2], Tatsuya Takagi[1,2]

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VI-PO35-30

ANTI-VIRAL ACTIVITY OF GALANGIN COMPOUND ISOLATED FROM *ALPINIA OFFICINARUM* HANCE

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VI-PO35-31

INHIBITORY EFFECTS OF *CLINACANTHUS NUTANS* AND *ANDROGRAPHIS PANICULATA* COMPOUNDS ON PROSTAGLANDIN E2 PRODUCTION IN DENGUE VIRUS INFECTED CELLS

Sujittraporn Sittiso[1], Tipaya Ekalaksananan[1], Chamsai Pientong[1], Chantana Aromdee[2], Santi Sakdarat[3], Supawadee Seubsasana[2], Nicha Charoensri[4], Bunkerd Kongyingyoes[5]

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VI-PO35-32

HIV-1 CDNA INTEGRATION AND PERSISTENT INFECTION BY DNA REPAIR SYSTEM

Hirotaka Ebina, Yuka Kanemura, Yasutsugu Suzuki, Kozue Urata, Yoshio Koyanagi
Institute for Virus Research, Kyoto University, Japan

VI-PO35-33

NEURAMINIDASE SEQUENCE ANALYSIS AND SUSCEPTIBILITIES TO NEURAMINIDASE (NA) INHIBITORS OF INFLUENZA VIRUS ISOLATED FROM PERAMIVIR CLINICAL STUDIES

Ryu Yoshida[1], Shigeru Kohno[2], Hiroshi Kida[3], Norio Sugaya[4]
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VI-PO35-34

BACTERIAL NEURAMINIDASE REDUCES THE ANTIVIRAL EFFECTS OF INFLUENZA VIRUS NEURAMINIDASE INHIBITOR

Tomoko Nishikawa[1,4], Keiko Toyosawa[1], Kazumichi Kuroda[2], Tatsuo Yamamoto[1], Nobuhiro Hanada[3], Yoshiki Hamada[4], Kazufumi Shimizu[1]
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VI-PO35-35

MOLECULAR CHAPERON INHIBITOR-BASED TREATMENT AGAINST ATL: ITS IN VITRO AND IN VIVO EVALUATION

Hidekatsu Iha[1], Emi Ikebe[1], Akira Kawaguchi[2,3], Shinya Taguchi[1], Akira Nishizono[1], Yuetsu Tanaka[4], Hirofumi Sawa[3], Masao Ogata[5], Mitsuo Hori[6], Jun-Ichi Fujisawa[7], Hideki Hasegawa[2]
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VI-PO35-36

EVALUATION OF THE RESPONSES OF RETICULAR ENDOTHELIAL SYSTEMS OF HIV POSITIVE PERSONS ON ANTIRETROVIRAL THERAPY

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VI-PO35-37

CYTOTOXIC T LYMPHOCYTE RESPONSES DURING HIGHLY ACTIVE ANTIRETROVIRAL THERAPY IN SIMIAN IMMUNODEFICIENCY VIRUS-INFECTED MACAQUES

Yusuke Takahara[1], Midori Nakamura[1,2], Ryo Higashi[1,2], Mariko Horiike[3], Tomoyuki Miura[3], Tatsuhiko Igarashi[3], Taeko Naruse[4], Akinori Kimura[4], Tetsuro Matano[1,2], Saori Matsuoka[1,2]
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VI-PO35-38

MECHANISM OF ANTI-HERPES SIMPLEX VIRUS ACTIVITY OF SPIRULINA PLATENSIS EXTRACT APOGEN

Pei-Yun Hung[1], Chuan-Liang Kao[1,2], Su-Yuan Chang[1,2], I-Chen Hu[3], Chun-Nan Lee[1,2]
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VI-PO35-39

REVERSION OF CXCR4-USING CRF01_A/E TO CCR5-USING HIV-1 BY A CXCR4 ANTAGONIST IN VITRO

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VI-PO35-40

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

VI-PO35-41

INHIBITION OF HERPES SIMPLEX VIRUSES 1 AND 2 BY SHORT SYNTHETIC PEPTIDES

Blanca L Barron[1], Rogelio Lopez-Martine[1], Abraham Cetina[1], Uriel Lopez-Sanchez[1], Miguel Torres[1], Alfonso Mendez-Tenorio[2], Elizabeth Ortega[1]
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VI-PO35-42

ISOLATION AND CHARACTERIZATION OF ANTI-INFLUENZA A SUBTYPE H5N1 NEUTRALIZING HUMAN MONOCLONAL FAB BY PHAGE DISPLAY SYSTEM

Genichiro Uechi[1], Mai Q Le[2], Kinuyo Ozaki[3], Hiroki Takakuwa[4,5], Etsuro Ono[3], Tetsu Yamashiro[1]

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VI-PO35-43

DEVELOPMENT OF THE ANTI-VIRAL AGENTS BLOCKING THE FUNCTION OF HEMAGGLUTININ OF INFLUENZA VIRUS

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VI-PO35-44

STRUCTURAL AND FUNCTIONAL ANALYSIS OF THE INFLUENZA NEURAMINIDASE: EVALUATION OF NOVEL INHIBITORS AND INVESTIGATIONS INTO THE ENZYMATIC 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]

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VI-PO35-45

ANTIVIRAL CANDIDATES AGAINST INFLUENZA VIRUS

Sangmoo Lee, Hyeeun Hyun, Sam Shin, Yongkwan Won, Jinil Kim, Il-Seob Lee, Sehee Park, Min-Woong Hwang, Joon-Yong Bae, Man-Seong Park

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VI-PO35-46

DISCOVERY OF ANTI-INFLUENZA VIRUS COMPOUNDS FROM MEDICINES ON THE MARKET

Mayuko Fukuoka[1,2], Moeko Minakuchi[3], Atsushi Kawaguchi[3], Kyosuke Nagata[3], Yuji O Kamatari[4], Kazuo Kuwata[1,2]

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VI-PO35-47

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

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VI-PO35-48

IDENTIFICATION OF AN ANTIVIRAL COMPOUND THAT TARGETS THE VARICELLA-ZOSTER VIRUS MAJOR CAPSID PROTEIN (ORF40)

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VI-PO35-49

AN IN VITRO CLEAVAGE ASSAY SYSTEM FOR XMRV PROTEASE BY WHEAT-GERM CELL FREE PROTEIN PRODUCTION

Satoko Matsunaga[1], Ayako Furukawa[2], Yoshitsugu Kojima[1], Ryo Morishita[1], Tatsuya Sawasaki[3], Akifumi Takaori-Kondo[4], Wataru Sugiura[5], Masato Katahira[2], Akihide Ryo[1]

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VI-PO35-50

A KINASE INHIBITOR DISLOCATES DENGUE VIRUS ENVELOPE PROTEIN FROM THE REPLICATION COMPLEX AND BLOCKS VIRUS ASSEMBLY

Azlinda Anwar[1], Takamitsu Hosoya[2], Kok Mun Leong[1], Hiroshi Onogi[3,4], Yukiko Okuna[3], Toshiyuki Hiramatsu[2], Hiroko Koyoma[5], Masaaki Suzuki[6], Masatoshi Hagiwara[3,7], Mariano A Garcia-Blanco[1,8]

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VI-PO35-51

INHIBITION OF REPLICATION OF AVIAN INFLUENZA VIRUSES BY A SYNTHETIC SIALYLGLYCOCONJUGATE

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VI-PO35-52

PHARMACOKINETIC ASSESSMENT OF ANTIVIRAL EFFECT OF THE BIOCHEMICALS AGAINST PLANT VIRUS

Minho Lee[1,2], Nam Gyu Kim[3], Jong Gwan Kim[3], Cheol Jang[3], In Cheon Hwang[3], Beom Seok Kim[2], Ki Hyun Ryu[4], Mun Il Ryoo[2]

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VI-PO35-53

IN VITRO INHIBITORY ACTIVITY OF *ALPINIA KATSUMADAI* EXTRACTS AGAINST INFLUENZA VIRUS INFECTION AND HEMAGGLUTINATION

Young Bae Ryu[1], Su-Jin Park[1], Hyung-Jun Kwon[1], Ha-Hyun Kim[1], So Young Yoon[1], Young Min Kim[1], Kyoung-Oh Cho[2], Woo Song Lee[2], Mun-Chual Rho[2]

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VI-PO35-54

HOMOISOFLAVONOIDS FROM *CAESALPINIA SAPPAN*: 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 Daikoku[1], Kazuhiro Horiba[1], Masaya Takemoto[1], Takehiro Himaki[1], Takashi Kawana[2], Masaru Hirano[3], Kimiyasu Shiraki[1]

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VI-PO36-2

PROTEIN PREPARATION AND PRELIMINARY X-RAY CRYSTALLOGRAPHIC STUDY OF HEMAGGLUTININ FROM CANINE DISTEMPER VIRSUS

Toyoyuki Ose[1], Miyuki Sako[2], Mizuho Kajikawa[2], Takao Hashiguchi[3], Yuri Ito[1], Hideo Fukuhara[1], Makoto Takeda[4], Yusuke Yanagi[3], Katsumi Maenaka[1]

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VI-PO36-3

LOCALIZATION OF BORNA DISEASE VIRUS GLYCOPROTEIN AT THE NUCLEAR MEMBRANE

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VI-PO58 Virus Entry, Trafficking and Membrane Fusion

Thursday, 15 September

VI-PO58-1

IMMUNOLOCALIZATION OF INTRACELLULAR VIRUS LIFE CYCLES

Christopher K. E Bleck[1], Henning Stahlberg[1], Ari Helenius[2], Jason Mercer[2]

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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 Agarkova[1], Brigitte Hertel[2], Laslie C Lane[1], Gerhard Thiel[2], James L Van Etten[1,3]

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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 Kodama[1], Takeshi Noshi[1], Masanori Kobayashi[1], Ryu Yoshida[1], Akihiko Sato[1], Naoki Nomura[2], Kosuke Soda[2], Masatoshi Okamatsu[2], Yoshihiro Sakoda[2], Hiroshi Kida[2]

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VI-PO58-4

ANTI-BETANODAVIRUS MECHANISM OF SHEWANELLA STRAIN 0409 ISOLATED FROM GROUPER INTESTINE

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VI-PO58-5

UNPROCESSED CATHEPSIN L IS ACTIVE IN XC CELLS IN WHICH XMRV INFECTION IS PH-INDEPENDENT

Yoshinao Kubo[1], Haruka Kamiyama[1], Katsura Kakoki[1,2], Tsukasa Igawa[2], Hideki Sakai[2], Naoki Yamamoto[1,3]

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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 Park[1], Tim L Sit[2], Steven A Lommel[2], Kook-Hyung Kim[1]

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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 Akita[1], Naoyuki Miyazaki[2], Hiroyuki Hibino[1], Takumi Shimizu[1], Akifumi Higashiura[2], Tamaki Uehara-Ichiki[1], Takahide Sasaya[1], Tomitake Tsukihara[2,3], Atsushi Nakagawa[2], Kenji Iwasaki[2], Toshihiro Omura[1]

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VI-PO39-4

JC POLYOMAVIRUS CAPSID ASSEMBLY AT THE PROMYELOCYTIC LEUKEMIA NEUCLEAR 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 Ikebuchi[1], Satoru Konnai[1], Yuji Sunden[2], Shiro Murata[1], Misao Onuma[1], Kazuhiko Ohashi[1]

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VI-PO51-2

INVESTIGATION OF THE HLA-ASSOCIATED CHANGES IN GAG-MEDIATED VIRAL REPLICATION CAPACITY IN TREATMENT-NAIVE JAPANESE PATIENTS

Keiko Sakai[1], Mari Hasegawa[1], Takayuki Chikata[1], Hiroyuki Gatanaga[2,3], Shinichi Oka[2,3], Masafumi Takiguchi[1]

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VI-PO51-3

ANALYSIS OF ANTIGENIC SITES ON THE HA PROTEIN OF PANDEMIC INFLUENZA H1N1PDM09 VIRUS, RECOGNIZED BY HUMAN ANTIBODY

Mina Nakauchi[1], Emi Takashita[1], Masato Tashiro[1], Hidekazu Nishimura[2], Eri Nobusawa[1]

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VI-PO51-4

MOLECULAR BASIS FOR IMMUNORECEPTOR RECOGNITION BY MIR2 UBIQUITIN LIGASE OF KSHV

Mizuho Kajikawa[1], Eiji Goto[1], Pai-Chi Li[1,2], Naoyuki Miyashita[2], Masami Aoki-Kawasumi[1], Mari Mito-Yoshida[1], Yuji Sugita[2], Satoshi Ishido[1]

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VI-PO51-5

NUCLEOCYTOPLASMIC TRAFFICKING OF VIRAL INTERFERON ANTAGONIST PROTEINS: A KEY VIRULENCE FACTOR AND POTENTIAL THERAPEUTIC TARGET

Gregory W Moseley[1], Naoto Ito[2], Linda Wlitzer[1], Sibil Oksayan[1], Michelle Audsley[1], Caitlin L Rowe[1], Aaron Brice[1], Glenn Marsh[3], Lin Fa Wang[3], Danielle Blondel[4], David A Jans[1]

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VI-PO51-6

HUMORAL IMMUNE RESPONSE TO INFLUENZA A/CALIFORNIA/07/2009(H1N1) IN PATIENTS WITH NATURAL INFECTION AND IN VACCINE RECIPIENTS

Takuji Kumagai[1], Tetsuo Nakayama[2], Yoshinobu Okuno[3], Tetsuo Kase[4], Naoko Nishimura[5], Takao Ozaki[5], Hiroyuki Tsutsumi[6], Masatoshi Okamatsu[7], Yoshihiro Sakoda[7], Hiroshi Kida[7], Hitoshi Kamiya[8]

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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 Sato[1], Nicholas E Martinez[1], Seiichi Omura[1], Jonathan S Alexander[2], Ikuo Tsunoda[1]

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VI-PO51-11

SEROPREVALENCE AND SEVERITY OF 2009 PANDEMIC INFLUENZA A H1N1 IN TAIWAN

Chih-Jung Chen[1], Shih-Cheng Chang[2], Yhu-Chering Huang[1], Cheng-Hsun Chiu[1], Tzou-Yien Lin[1]

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VI-PO51-12

VIROLOGIC AND IMMUNOLOGIC INDICATORS OF CHRONIC TICK-BORNE ENCEPHALITIS

Rafail Z Kuzyaev[1], Liliya P Bykova[1], Anatoliy P Godovalov[2]

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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

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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 Itoh[1], Masahiko Arikata[1], Toshinaga Maeda[2], Takashi Shiina[3], Hirohito Ishigaki[1], Ayato Takada[4], Masatoshi Okamatsu[4], Yoshihiro Sakoda[4], Misako Nakayama[1], Hiroshi Kida[4], Kazumasa Ogasawara[1]

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VI-PO51-15

THE IMMUNE RESPONSE OF LUNG MACROPHAGES TO INFLUENZA VIRUS INFECTION

Satoshi Fukuyama[1], Ryo Takano[2], Jason Shoemaker[1], Izumi Ishikawa[1], Naomi Fujimoto[1], Yukiko Matsuoka[1], Hiroaki Kitano[1], Yoshihiro Kawaoka[1,2,3,4]

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VI-PO51-16

POST-INFECTION PASSIVE IMMUNIZATION OF SIVMAC239-SPECIFIC, NON-NEUTRALIZING ANTIBODIES DOES NOT CONTROL VIRUS REPLICATION IN VIVO

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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 Hsu[1], Yan Wu[1], Meng Chee Phoon[1], Mark Chen[2], Gerald Koh[3], Yee Sin Leo[2], Vincent TK Chow[1]

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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 Takeshita[1], Yukiharu Kikuchi[1], Bumbein Dashnyam[3], Satoshi Kawahara[4], Hiroki Yoshida[5], Wataru Watanabe[5], Michio Muguruma[2,4], Masahiko Kurokawa[5]

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VI-PO51-19

CLEARANCE OF SARS-COV BY COOPERATION OF ANTIBODIES AND PHAGOCYTES

Fumihiko Yasui[1], Chieko Kai[2], Kouichi Morita[3], Michinori Kohara[1]

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VI-PO51-20

REGULATORY T CELLS PLAY A DETRIMENTAL ROLE IN A VIRAL MODEL FOR MULTIPLE SCLEROSIS

Nicholas E Martinez[1], Fridrik Karlsson[2], **Fumitaka Sato**[1], Seiichi Omura[1], Mathew B Grisham[2], Ikuo Tsunoda[1]

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VI-PO51-21

INDUCTION OF INNATE ANTI-VIRAL RESPONSE BY XMRV INFECTION

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VI-PO51-22

GRANULAR-LIKE ACCUMULATION OF RIG-I-LIKE RECEPTORS IN VIRUS-INFECTED CELLS

Michihiko Jogi[1,2], Koji Onomoto[1], Takashi Fujita[2,3], Mitsutoshi Yoneyama[1]

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VI-PO51-23

A COMMUNITY-BASED SURVEY OF VARICELLA-ZOSTER VIRUS-SPECIFIC IMMUNE RESPONSES IN THE HEALTHY ELDERLY

Huamin Tang[1], Eiko Moriishi[2], Shigefumi Okamoto[2], Yoshinobu Okuno[4], Hiroyasu Iso[5], Hideo Asada[6], Koichi Yamanishi[3], Yasuko Mori[1,2]

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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 Takamori[1], Atsuhiko Hasegawa[1], Atae Utsunomiya[2], Yasuhiro Maeda[3], Yoshihisa Yamano[4], Yukiko Shimizu[4], Ilseung Choi[5], Naokuni Uike[5], Jun Okamura[6], Toshiki Watanabe[7], Mari Kannagi[1]

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VI-PO51-25

STUDY ON ANTI-HIV-1 HUMORAL IMMUNE RESPONSES IN HIV-1-INFECTED THAI PATIENTS

Sompong Sapsutthipas[1], Naho Tsuchiya[2], Panita Pathipavanich[3], Koya Ariyoshi[2], Pathom Sawanpanyalert[4], Panasda Isarangkura-Na-Ayuthaya[4], Masanori Kameoka[1,5]

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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 Tecnologico Agrario (ITA), Spain

VI-PO56-2

NOVEL ADENOVIRUSES DETECTED IN BATS IN HUNGARY

Marton Z Vidovszky, Balazs Harrach
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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 Kajan[1], Balazs Harrach[1], Sandor Kecskemeti[2], Maria Benko[1]
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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]
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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 Moriuchi[1], Shin Koyano[2], Naoki Inoue[3], **Hiroyuki Moriuchi**[1,4]
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VI-PO42-2

DETECTION OF HUMAN CYTOMEGALOVIRUS DNA IN THE URINE FROM INFANTS BY REAL-TIME PCR

Chikara Kohda[1], Katsumi Mizuno[2], Chiaki Maekawa[3], Takaharu Negoro[3], Yasuko Nakano[3], Kazuo Tanaka[1]
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VI-PO42-3

INHIBITORY EFFECT OF STATINS ON EXPRESSION OF THE MAJOR IMMEDIATE-EARLY GENE OF HUMAN CYTOMEGALOVIRUS (HCMV) IN HCMV-INFECTED CELLS

Hidetaka Sadanari[1], Zheng Xin[2,3], Rie Yamada[2], Keiko Matsubara[2], Takashi Takahashi[4], Tsugiya Murayama[2]
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VI-PO42-4

MODULATION OF CELL CYCLE PROGRESSION BY HUMAN CYTOMEGALOVIRUS

Shang-Kwei Wang, Shin-Rung Lin, Voon-Kwan Siew
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VI-PO42-5

ANALYSIS FOR CELL-TO-CELL SPREAD OF HCMV IN EPITHELIAL CELLS BY USING THE PML ASSAY

Jun Sasaki[1], Tomonori Ueno[1], Harutaka Katano[2], Tetsutaro Sata[2], Kiyoko Ogawa-Goto[1,2]
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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 Beauchemin[4], Tetsuko Tada[3], Tatsuhiko Igarashi[3], Tomoyuki Miura[3]
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VI-PO41-4

NEF ACTIVITY IN ENHANCEMENT OF VIRION INFECTIVITY IS IMPAIRED IN HIV ELITE CONTROLLERS

Philip Mwimanzi[1], Tristan Markle[2], Michiyo Tokunaga[1], Toshiyuki Miura[3], Eric Martin[2], Florencia Pereyra[4], Bruce Walker[4], Zabrina Brumme[2], Mark Brockman[2], Takamasa Ueno[1]
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VI-PO41-5

ADJUVANT MOLECULE AG85B CDNA INSERTION INTO LIVE ATTENUATED SIMIAN-HUMAN IMMUNODEFICIENCY VIRUS ENHANCES THE SHIV-SPECIFIC IMMUNE RESPONSES IN CYNOMOLGUS MONKEYS

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VI-PO41-6

IDENTIFICATION OF NOVEL DRUG-RESISTANCE MUTATIONS SELECTED DURING ABACAVIR+LAMIVUDINE+LOPINAVIR/R THERAPY IN HIV-2 CRF01_AB INFECTION

Shiro Ibe[1], Takashi Masaoka[1], Yoshiyuki Yokomaku[1], Yasumasa Iwatani[1,2], Wataru Sugiura[1,2]
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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
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VI-PO41-8

HIV-1 TAT INTERACTS WITH AND REGULATES THE LOCALIZATION AND PROCESSING OF AMYLOID PRECURSOR PROTEIN

Jiyoung Kim[1], Jee-Hyun Yoon[2], Yeon-Soo Kim[1,2]
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VI-PO47 Picornaviruses

Thursday, 15 September

VI-PO47-1

SAFFOLD CARDIOVIRUSES IN PEDIATRIC PATIENTS WITH DIARRHEA, THAILAND

Pattara Khamrin[1], Natthawan Chaimongkol[1], Nattika Nantachit[2], Shoko Okitsu[3], Hiroshi Ushijima[3], Niwat Maneekarn[1]
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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 Trasti[3], Eng Lee Tan[4,5], Sylvie Alonso[1]
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VI-PO47-3

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 Himeda[1], Takushi Hosomi[2], Naeem Asif[3], Hiroyuki Shimizu[3], Takako Okuwa[1], Yasushi Muraki[1], Yoshiro Ohara[1]
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VI-PO47-4

EPIDEMIOLGY AND DISEASE ASSOCIATION OF HUMAN PARECHOVIRUS IN NIIGATA, JAPAN

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VI-PO47-5

MOLECULAR CHARACTERIZATION OF VP1 REGION OF PORCINE KOBUVIRUS

Shoko Okitsu[1], Pattara Khamrin[2], Aksara Thongprachum[3], Satoshi Hayakawa[1], Niwat Maneekarn[2], Hiroshi Ushijima[1,3,4]
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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
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VI-PO47-8

SELECTION OF RNA APTAMERS THAT SPECIFICALLY BIND DOMAIN V OF ENTEROVIRUS 71 INTERNAL RIBOSOMAL ENTRY SITE (IRES) AND INHIBITS THE VIRAL TRANSLATION

Szu-Hao Kung[1], Kun-Pi Li[1], Bin-Hsin Kao[1], Chia-Hung Cheng[1], Cheng-Wen Lin[2], Wu-Tse Liu[1]
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VI-PO47-9

PREVALENCE OF NEUTRALIZING ANTIBODY AGAINST SAFFOLD VIRUS GENOTYPES 2 AND 3 IN KOCHI, JAPAN

Takushi Hosomi[1], Tami Nabeshima[1], Tae Taniwaki[1], Kazushige Matsumoto[1], Aki Fujito[1], Isao Geshi[1], Michiaki Matsumoto[1], Toyokazu Morihata[2], Atsushi Imai[1]
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VI-PO47-10

RHINOVIRUS REPLICATION KINETICS: AN IN VITRO MODEL SYSTEM FOR THE STUDY OF HOST-PATHOGEN INTERACTIONS

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VI-PO47-11

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

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VI-PO47-12

MUTATIONS IN VP2 AND VP1 CAPSID PROTEINS INCREASE CYTOTOXICITY AND MOUSE LETHALITY OF ENTEROVIRUS 71 BY VIRUS BINDING AND RNA ACCUMULATION ENHANCEMENT

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VI-PO47-13

ANTIVIRAL EFFECT OF NITRIC OXIDE ON ENTEROVIRUS 71 REPLICATION

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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
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VI-PO47-15

CROSS-REACTIVE NEUTRALIZING ANTIBODY RESPONSES TO ENTEROVIRUS 71 INFECTION IN TAIWANESE YOUNG CHILDREN

Mei-Liang Huang[1,2], Pai-Shan Chiang[1], Shu-Ting Luo[1], Kuo-Chien Tsao[3], Tzou-Yien Lin[3], Luan-Yin Chang[2], Min-Shi Lee[1]
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VI-PO47-16

ROLE OF IMPORTED SEAFOOD AS A VEHICLE OF HEPATITIS A VIRUS

Mamoru Noda[1], **Masashi Uema**[1], Noriko Aoki[2], Satomi Aoki[2], Yumiko Furuya[3], Osamu Nishio[4], Shinichiro Shibata[5], Akari Kodaira[5], Koji Ishii[6], Yasutaka Yamasita[2]

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VI-PO47-17

FOOD HYGIENIC INVESTIGATION OF HEPATITIS A CASES IN THE SPRING OF 2010 IN JAPAN

Mamoru Noda[1], Yuki Tada[2], Masashi Uema[1], Kazutoshi Nakashima[2], Tomoe Shimada[2], Naomi Nakamura[3], Tomoko Kiyohara[4], Koji Ishii[4]

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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

VI-PO47-19

ECTROPIS OBLIQUE PICORNA-LIKE VIRUS CDNA VECTOR

Yuanyang Hu, Meijuan Lin, Congyi Zheng, Jiamin Zhang

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VI-PO47-20

VIRAL LOAD OF ENTEROVIRUS IN CEREBROSPINAL FLUID MEASURED BY QUANTITATIVE ASSAY AND CLINICAL SYMPTOMS

Masahiro Amaha, Hisashi Kawashima, Takami Takeshi, Kouji Takekuma, Akinori Hoshika

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VI-PO47-21

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

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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 Beier[2], Klara Azzami[2], Juergen Tautz[2], Takeo Kubo[1]

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VI-PO45 Flaviviruses

Thursday, 15 September

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 Whitehead[1], Anna Durbin[2], Beth Kirkpatrick[3], Daniel Elwood[2], Kristen Pierce[3], Cecilia Tibery[2], Kimberli Wanionek[2], Bhavin Thumar[2], Marya Carmolli[3], Catherine Luke[1], Kanta Subbarao[1]

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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

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Virology 1, National Institute of Infectious Diseases, Japan

VI-PO45-4

MULTIPLE MECHANISMS OF SEVERE DISEASE FOLLOWING JAPANESE ENCEPHALITIS VIRUS INFECTION

Daisuke Hayasaka[1], Yoshiki Fujii[2], Noriyo Nagata[3], Dihn Tuan Duc[1], Yuki Takamatsu[1], Kazutaka Kitaura[2], Kanae Tanaka[1], Tetsutaro Sata[3], Ryuji Suzuki[2], Kouichi Morita[1]

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VI-PO45-5

Withdrawn

VI-PO45-6

CONSTRUCTION AND CHARACTERIZATION OF CHIMERIC VIRUS BETWEEN TICK-BORNE ENCEPHALITIS VIRUS AND OMSK HEMORRHAGIC FEVER VIRUS

Kentaro Yoshii[1], Yuji Sunden[2], Kana Yokozawa[1], Hiroaki Kariwa[1], Michael R Holbrook[3,4], Ikuo Takashima[1]

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VI-PO45-7

FIRST SEROLOGICAL EVIDENCE OF *BORDER DISEASE VIRUS* AMONG SHEEP FROM NORTHERN JAPAN

Massimo Giangaspero[1], Giorgina Ibata[2], Giovanni Savini[3], Takeshi Osawa[4], Shingo Tatami[5], Eishu Takagi[6], Hiroaki Moriya[7], Norimoto Okura[8], Kazuo Kato[9], Atsushi Kimura[10], **Ryô Harasawa**[1]

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VI-PO45-8

INVOLVEMENT OF CYCLOPHILIN B IN THE REPLICATION OF JAPANESE ENCEPHALITIS VIRUS

Hiroto Kambara[1], Hideki Tani[1], Yoshio Mori[2], Takayuki Abe[1], Hiroshi Katoh[1], Takasuke Fukuhara[1], Shuhei Taguwa[1], Kohji Moriishi[3], Yoshiharu Matsuura[1]

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VI-PO45-9

Withdrawn

VI-PO45-10

Withdrawn

VI-PO45-11

DISPLACEMENT OF THE PREDOMINANT DENGUE VIRUS IN SURABAYA, INDONESIA: STATUS IN 2008-2010

Atsushi Yamanaka[1,2], Kris C Mulyatno[2], Helen Susilowati[2], Eryk Hendrianto[2], Amor P Ginting[2], Dian D Sary[2], Fedik A Rantam[2], Soegeng Soegijanto[2], Eiji Konishi[1,2,3]

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VI-PO45-12

GEOGRAPHIC DISTRIBUTION OF SUBCLUSTERS OF JAPANESE ENCEPHALITIS VIRUS GENOTYPE 1

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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

VI-PO45-14

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 IGG

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VI-PO45-16

SMALL CARBOHYDRATE INHIBITOR TARGETING DENGUE VIRUS E PROTEIN

Shota Era[1], Kazuya I.P.J Hidari[1], Ippei Watanabe[1], Kiyoshi Ikeda[2], Kouichi Morita[3], Takashi Suzuki[1]

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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

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VI-PO45-18

NATURAL INFECTION WITH JAPANESE ENCEPHALITIS VIRUS IN INHABITANTS OF KUMAMOTO PREFECTURE, JAPAN, FROM 2004 THROUGH 2010

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VI-PO45-19

BIOCHEMICAL PROPERTIES OF N-LINKED GLYCOSYLATION OF DENGUE VIRUS NS1 PROTEIN

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VI-PO45-20

ROLE OF THE N-LINKED GLYCAN OF ENVELOPE PROTEIN OF TICK-BORNE ENCEPHALITIS VIRUS IN THE VIRUS REPLICATION AND PATHOGENICITY

Natsumi Yanagihara[1], Kentaro Yoshii[1], Akiko Goto[1,2], Ayae Ikawa[1], Mariko Ishizuka[1], Hiroaki Kariwa[1], Ikuo Takashima[1]

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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

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VI-PO45-22

MOLECULAR GENETIC CHARACTERISTICS OF TICK-BORNE ENCEPHALITIS VIRUS SIBERIAN SUBTYPE

Nina V Kulakova[1], Elena V Romanova[1], Elena A Sidorova[2], Tatyana I Borisova[2], Evgenii I Andaev[2], Anna G Trukhina[2], Eugene V Chausov[3], Vladimir A Ternovoi[3], Galina N Leonova[4], Sergei I Belikov[1], Sergei V Balakhonov[2]

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VI-PO45-23

THE INFLUENCE OF TICK-BORNE ENCEPHALITIS VIRUS GENOME MUTATIONS ON THE PATHOGENICITY

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VI-PO45-24

BOVINE VIRAL DIARRHEA VIRUS QUASISPECIES DETECTED IN AN RK13 CELL LINE ORIGINATING IN A RABBIT KIDNEY

Mahmod Muhsen, Hiroshi Aoki, Akio Fukusho

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VI-PO45-25

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

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VI-PO45-26

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 Pitsksajjakul[2,5], Chonlatip Pipattanaboon[2,5], Motoki Kuhara[4,5], Takeshi Kurosu[1,5], Pongrama Ramasoota[2,5], Kazuyoshi Ikuta[1,3,5]

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VI-PO45-27

A NOVEL APPROACH TO DETECT VIRAL ANTIGENS IN PATIENTS WITH ACUTE DENGUE VIRUS INFECTION

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VI-PO45-28

INFECTION OF MOUSE CELLS WITH DENGUE VIRUS AND JAPANESE ENCEPHALITIS VIRUS

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VI-PO45-29

EFFICIENT SCREENING OF PROTEASE INHIBITOR AGAINST DENGUE VIRUS NS3 BY STRUCTURE-BASED STUDY

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VI-PO45-30

DOGS ARE GOOD SENTINELS FOR JAPANESE ENCEPHALITIS VIRUS INFECTION IN RURAL/RESIDENTIAL AREAS

Hiroshi Shimoda, Seiji Tamaru, Masayuki Shimojima, Ken Maeda

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VI-PO45-31

AN INVOLVEMENT OF PHOSPHATIDYLSERINE-DEPENDENT APOPTOTIC PLATELET CLEARANCE IN THE MECHANISMS OF TRANSIENT THROMBOCYTOPENIA IN SECONDARY DENGUE VIRUS INFECTION

Maria Terrese G Alonzo[1], Talitha Lea Lacuesta[2], Lady-Anne Suarez[3], Cynthia Mapua[3], Takeshi Kurosu[4], Yukihiro Akeda[1], Efren Dimaano[2], Filipinas Natividad[3], Shigekazu Nagata[5], Kazunori Oishi[1]

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VI-PO45-32

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

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VI-PO45-33

LOSS OF T-CELL CONTROL DURING INFECTION WITH RUSSIAN SPRING-SUMMER ENCEPHALITIS AND OMSK HEMORRHAGIC FEVER VIRUSES

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VI-PO45-34

CHANGES IN THE BLOOD-BRAIN BARRIER DURING TICK-BORNE ENCEPHALITIS

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VI-PO45-35

MOLECULAR EPIDEMIOLOGICAL STUDY OF INFECTIOUS DISEASES DERIVED FROM WILD BIRDS IN HOKKAIDO

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VI-PO45-36

INHIBITION OF IFN-BETA PROMOTER ACTIVATION BY TICK-BORNE ENCEPHALITIS VIRUS PRM AND NS1 PROTEINS

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VI-PO45-37

CONSECUTIVE DENGUE INFECTIONS DURING A DENV-1 AND DENV-4 CO-EPIDEMIC

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VI-PO45-38

INFLUENCE OF DENGUE VIRUS SEROTYPES AND PREVIOUS DENGUE INFECTIONS ON SEVERITY OF ILLNESSES IN ADULT DENGUE PATIENTS

Laurent Thomas[1], **Fatiha Najioullah**[2], Victor Moravie[1], Francois Besnier[1], Stephane Kaidomar[1], Francois Lengelle[1], Raymond Cesaire[2], Andre Cabie[3]

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VI-PO45-39

IMPORTANCE OF THE VIRAL GENOTYPES FROM WHICH ELISA ANTIGENS ARE DERIVED FOR SEROSURVEILLANCE OF JAPANESE ENCEPHALITIS VIRUS

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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 Kotaki[1], Kyoko Sawabe[3], Haruo Watanabe[2,4], Ichiro Kurane[1], Tomohiko Takasaki[1], Shigeru Tajima[1]

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VI-PO45-41

A NOVEL STRATEGY FOR THE EXPRESSION OF THE YELLOW FEVER NS1 PROTEIN IN EUCARIOTIC CELLS

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VI-PO45-42

DENGUE PRIMARY INFECTIONS OBSERVED AMONG DENGUE HAEMORRHAGIC FEVER/DENGUE SHOCK SYNDROME CASES IN UPPER MYANMAR

Mya Myat Ngwe Tun[1], Kyaw Zin Thant[2,3], Shingo Inoue[1], Yae Kurosawa[4], Yee Yee Lwin[3], Sanda Lin[3], Kay Thi Aye[5], Pe Thet Khin[6], Tin Myint[7], Khin Htwe[8], Kouichi Morita[1]

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VI-PO45-43

(2) PHYSIOLOGICAL FUNCTION OF JAPANESE ENCEPHALITIS VIRUS PROTEIN NS4A

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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 Leaungwutiwong[4,5], Takeshi Kurosu[2,3,5], Pongrama Ramasoota[4,5], Kazuyoshi Ikuta[2,3,5]

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VI-PO45-45

CHARACTERIZATION OF DENGUE 1 EPIDEMIC STRAINS PROLIFERATED IN HANOI, VIETNAM IN 2009

Futoshi Hasebe[1,2], Takeshi Nabeshima[1], Kenta Okamoto[1], Toru Kubo[1], Takashi Tsunoda[3], Guillermo Posadas Herrera[1], Thuy Thi Thu Nguyen[4], Yen Thi Nguyen[5], Mai Thi Quynh Le[4], Kouichi Morita[1]

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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

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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

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VI-PO61-2

DEVELOPMENT OF THE LETHAL ANIMAL MODEL OF HUMAN HANTAVIRUS INFECTION

Takahiro Seto[1], Noriyo Nagata[2], Keisuke Yoshikawa[1], Osamu Ichii[3], Takahiro Sanada[1], Ngonda Saasa[1], Yasunori Kon[3], Kentaro Yoshii[1], Hiroaki Kariwa[1]

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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

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VI-PO61-4

EPIZOOTIOLOGICAL INVESTIGATION OF HANTAVIRUS INFECTION IN JAPAN AND GENETIC VARIATION OF HOKKAIDO VIRUS IN MYODES RUFOCANUS

Yuka Ozaki[1], Takahiro Sanada[1], Takahiro Seto[1], Kyle Taylor[1], Leonid I Ivanov[2], Kentaro Yoshii[1], Toshio Tsubota[1], Yoshinori Ikenaka[1], Mayumi Ishizuka[1], Jiro Arikawa[3], Hiroaki Kariwa[1]

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VI-PO61-5

THE IDENTIFICATION OF THE RODENT RESERVOIR OF MONTANO VIRUS, A NOVEL HANTAVIRUS IN MEXICO

Ngonda Saasa[1], Cornelio Sanchez-Hernandez[2], Maria de Lourdes Romero-Almaraz[2], Haruka Yoshida[1], Takahiro Sanada[1], Takahiro Seto[1], Kentaro Yoshii[1], Kumiko Yoshimatsu[3], Jiro Arikawa[3], Ikuo Takashima[1], Hiroaki Kariwa[1]

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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

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VI-PO61-7

INTERFERON-BETA RESPONSE IN A549 CELLS FOLLOWING PUUMALA VIRUS INFECTION

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VI-PO61-8

SMALL INTERFERING RNA INHIBITION OF ANDES VIRUS REPLICATION IN VITRO

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VI-PO61-9

PUUMALA HANTAVIRUS IN LATVIA: PHYLOGENETIC EVIDENCE FOR A NOVEL LINEAGE CO-CIRCULATING WITH THE COMMON RUSSIAN LINEAGE

Maria Razzauti[1], Angelina Plyusnina[1], Jukka Nienimaa[2], Heikki Henttonen[2], Alexander Plyusnin[1]

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VI-PO61-10

HEMORRHAGIC FEVER WITH RENAL SYNDROME IN US SOLDIERS AND SURVEILLANCE FOR HANTAVIRUS INFECTION OF RODENT, SOUTH KOREA

Jin-Won Song[1], Se Hun Gu[1], Sung-Sil Moon[2], Ki-Joon Song[1], Luck Ju Baek[1], Richard Yanagihara[3], Heung-Chul Kim[4], Terry A Klein[4]

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VI-PO61-11

DISTINCT LINEAGES OF SEEWIS VIRUS IN THE EURASIAN COMMON SHREW (SOREX ARANEUS) IN CENTRAL AND SOUTHEASTERN POLAND

Pawel P Liberski[1], Hae Ji Kang[2], Janusz Markowski[3], Beata Sikorska[1], Richard Yanagihara[2]

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VI-PO61-12

T CELLS ARE NOT REQUIRED FOR HANTAVIRUS PULMONARY SYNDROME PATHOGENESIS

Jay W Hooper, Christopher D Hammerbeck

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VI-PO61-13

ISOLATION AND CHARACTERIZATION OF HANTAVIRUSES FROM WILD RODENTS AND EPIDEMIOLOGY OF HEMORRHAGIC FEVER WITH RENAL SYNDROME IN RUSSIA

Hiroaki Kariwa[1], Takahiro Seto[1], Keisuke Yoshikawa[1], Evgeniy A Tkachenko[2], Vyacheslav G Morozov[3], Leonid I Ivanov[4], Raisa Slonova[5], Tatyana A Zakharycheva[6], Kentaro Yoshii[1], Ikuo Takashima[1]

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VI-PO61-14

PHOSPHATIDYLINOSITOL 3-KINASE SIGNALING CONTRIBUTES TO HANTAVIRUS PATHOGENESIS

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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 Shimojima[1], Yuto Shiozaki[1], Nozomi Shiba[1], Hiroshi Shimoda[1], Takuya Mizuno[2], Tsutomu Hohdatsu[3], Ken Maeda[1]
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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 Maeda[1], Nobutaka Matsui[1], Yuto Shiozaki[1], Masami Mochizuki[2], Masayuki Shimojima[1]
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VI-PO65-3

INTERFERON GAMMA PROTECTS ADULT BALB/C MICE FROM LETHAL RESPIRATORY ILLNESS AFTER MOUSE-ADAPTED SARS-COV INFECTION

Noriyo Nagata[1], Naoko Iwata[1], Hideki Hasegawa[1], Yuko Sato[1], Shigeru Morikawa[2], Tetsutaro Sata[1]
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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

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VI-PO65-5

EPIDEMIOLOGICAL STUDY ON BAT CORONAVIRUS IN PHILIPPINES

Shumpei Tsuda[1], Shumpei Watanabe[2], Joseph S Masangkay[3], Phillip Alviola[4], Naoya Ueda[5], Koichiro Iha[5], Satoshi Taniguchi[5], Hikaru Fujii[6], Kentaro Kato[1], Taisuke Horimoto[1], Tetsuya Mizutani[7], Yumi Une[8], Shigeru Kyuwa[5], Yasuhiro Yoshikawa[9], Hiroommi Akashi[1]
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VI-PO65-6

INHIBITION OF SARS CORONAVIRUS REPLICATION BY ANTISENSE PEPTIDE NUCLEIC ACIDS TARGETING THE VIRAL RIBOSOMAL FRAMESHIFTING SIGNAL

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VI-PO65-7

NEUROPATHOGENESIS OF MOUSE-ADAPTED PORCINE EPIDEMIC VIRUS INFECTION IN SUCKLING MOUSE

Osamu Kotani[1], Kazuya Shirato[2], Noriyo Nagata[2], Ayako Miyazaki[3], Hidetoshi Ikeda[1], Fumihiro Taguchi[1], Kimimasa Takahashi[1]
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VI-PO65-8

RECEPTOR-INDEPENDENT INFECTION DETECTED BY SPINOCULATION WITH ULTRAVIOLET RADIATION IN MUTANT VIRUSES IMMERGED FROM THE NEUROPATHOGENIC MOUSE HEPATITIS VIRUS SRR7

Rihito Watanabe, **Masatoshi Kakizaki**, Risa Nomura, Hiromi Kashiwazaki
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VI-PO66 Arteriviruses and Toroviruses

Thursday, 15 September

VI-PO66-1

PATHOGENICITY OF EMERGING PORCINE REPRODUCTIVE AND RESPIRATORY SYNDROME VIRUS IN VIETNAM

Michihiro Takagi[1], Hiroshi Iseki[1], Kenji Kawashima[1], Tomoyuki Shibahara[1], Tung Nguyen[2], Ken Inui[2], Hoan Van Nam[3], Yoshiko Kuroda[1], Hiroshi Tsunemitsu[1]
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VI-PO54 Hepatitis C

Thursday, 15 September

VI-PO54-1

INCREASED RISK OF STROKE AMONG PEOPLE WITH HEPATITIS C

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VI-PO54-2

APPLICATION OF DHCR24 FOR THE DIAGNOSIS OF HEPATOCELLULAR CARCINOMA (HCC)

Nagla Elwy Salem[1,3,4], Tomhiro Nishimura[1], Makoto Saito[1], Michinori Kohara[2], Shinji Harada[3], Ahmed El-Gohary[4,5], Kyoko Kohara[1]

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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

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VI-PO54-4

LONG-TERM PERSISTENT GBV-B INFECTION AND DEVELOPMENT OF A PROGRESSIVE CHRONIC HEPATITIS C-LIKE DISEASE IN MARMOSETS

Hirofumi Akari[1], Yuki Iwasaki[2,3], Ken-Ichi Mori[4], Koji Ishii[5], Noboru Maki[4], Sayuki Iijima[2], Tomoyuki Yoshida[1], Sachi Okabayashi[6], Yuko Katakai[6], Young-Jung Lee[2], Akatsuki Saito[1]

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VI-PO54-5

OVEREXPRESSION OF 3BETA-HYDROXYSTEROL DELTA24-REDUCTASE IS INDUCED BY HEPATITIS C VIRUS INFECTION THROUGH OXIDATIVE STRESS-MEDIATED SP1 ACTIVATION

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VI-PO54-6

MOLECULAR MECHANISMS INVOLVED IN HCV INFECTION-INDUCED HEPATIC GLUCONEOGENESIS

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VI-PO54-7

POLYMORPHISMS OF SERINE PROTEASE-DOMAIN OF NS3 AND CORE PROTEIN OF HEPATITIS C VIRUS GENOTYPE 1B ASSOCIATE WITH HEPATOCELLULAR CARCINOMA DEVELOPMENT

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VI-PO54-8

HEPATITIS C VIRUS PROTEINS IN PERIPHERAL BLOOD MONONUCLEAR CELLS: CORRELATION WITH ACTIVITY AND STAGE OF CHRONIC HEPATITIS

Olga V Masalova[1], Tatyana V Vishnevskaya[1], Aleksey V Pichugin[2], Sergey V Alkhovsky[1], Tatyana V Shkurko[1], Ravshan I Ataullakhanov[2], Alla A Kushch[1]

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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 Tirumuru[1], Chen Li[2], Anuradha Balasubramanian[3], Groopman E Jerome[3], Leask Andrew[4], David R Brigstock[2], Anand R Appakkudal[1], Ramesh K Ganju[1]

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VI-PO54-10

DEVELOPMENT OF HCV JFH-1 REPORTER ASSAY SYSTEMS USING DIFFERENT HUMAN HEPATOMA CELL LINES

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VI-PO54-11

NOVEL PHENANTHRIDINONE DERIVATIVES AS SELECTIVE INHIBITORS OF HCV REPLICATION

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VI-PO54-12

INHIBITION OF HEPATITIS C VIRUS REPLICATION THROUGH AMP-ACTIVATED PROTEIN KINASE-DEPENDENT AND -INDEPENDENT PATHWAYS

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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
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VI-PO54-14

INVESTIGATION OF NEUTRALIZING ANTIBODIES AGAINST HEPATITIS C VIRUS IN HEALTHY BLOOD DONORS

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VI-PO54-15

DEVELOPMENT OF HEPATOCELLULAR CARCINOMA IN TRANSGENIC MICE EXPRESSING THE NS3 PROTEIN OF HEPATITIS C VIRUS

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VI-PO54-16

ISOLATION AND CHARACTERIZATION OF A HIGHLY INFECTIOUS HEPATITIS C VIRUS WITH ADAPTIVE MUTATIONS

Yoshitaka Shirasago[1,2], Kyoko Saito[2], Yuko Murakami[5], Hidesuke Fukazawa[5], Tetsuro Suzuki[3], Takaji Wakita[4], Kentaro Hanada[2], Joe Chiba[1], Masayosi Fukasawa[2]
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VI-PO54-17

HEPATITIS C VIRUS REGULATES P62 METABOLISM

Yoshiyasu Shinohara[1,2], Koji Fujita[1], Kento Imajo[1], Hironori Mawatari[1], Masato Yoneda[1], Kengo Funakoshi[2], Masanori Ikeda[3], Nobuyuki Kato[3], Shin Maeda[1], Atushi Nakajima[1], Saito Satoru[1]
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VI-PO54-18

EVALUATION OF HCV-INACTIVATION IN BLOOD PRODUCTS

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VI-PO54-19

PRODUCTION OF INFECTIOUS HCV PARTICLES BY TRANSCOMPLEMENTATION USING NON-STRUCTURAL PROTEIN 5A

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VI-PO54-20

DEGRADATION OF AIMP1/P43 INDUCED BY HEPATITIS C VIRUS E2 LEADS TO UPREGULATION OF TGF-B SIGNALING AND INCREASE IN SURFACE EXPRESSION OF GP96

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VI-PO54-21

ANALYSIS OF INFECTION EFFICIENCY OF NEWLY CLONED HCV GENOTYPE 1A STRAIN HCV-RMT IN VITRO AND IN VIVO USING ADAPTIVE MUTATIONS

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VI-PO54-22

FREQUENCY OF HEPATITIS C VIRUS GENOTYPE IN REFEREES TO THE BLOOD TRANSFUSION ORGANIZATIONS IN WESTERN OF IRAN

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VI-PO54-23

STABLE GROWTH OF HEPATITIS C VIRUS IN CELL CULTURE: REVELATION OF EMERGENCE OF SUPERINFECTION EXCLUSION IN HCV HIGHLY REPLICATING CELLS

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VI-PO54-24

HUH-7 SUBCLONE THAT SUPPORTS HIGH HCV PRODUCTION DUE TO HIGH VIRUS ASSEMBLY

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VI-PO54-25

INHIBITION OF HEPATITIS C VIRUS REPLICATION BY SIRNAS TARGETING PROTEIN KINASE C-RELATED KINASE 2

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VI-PO54-26

STRAIN SPECIFIC SUSCEPTIBILITY TO THE HEPATITIS C VIRUS NS5A INHIBITOR

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VI-PO54-27

MODULATION OF MIR-122 EXPRESSION BY HEPATITIS C VIRUS CORE PROTEIN AFFECTS VIRAL GENOME REPLICATION

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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, Wooseong Lee, Jong-Won Oh

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VI-PO54-29

CHARACTERIZATION OF HCV VIRAL POPULATION BY USING MULTIPLE SEQUENCING TECHNOLOGIES

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VI-PO54-30

DEVELOPMENT OF A NOVEL INFECTIOUS HCV SURROGATE VIRUS BASED ON A RECOMBINANT VIRUS EXPRESSING HCV ENVELOPE GLYCOPROTEINS

Kazu Okuma[1], Linda Buonocore[2], Koji Fukagawa[1,3], Takuya Kohma[1,3], Hideki Kusunoki[1], John K Rose[2], Toshiaki Mizuochi[1], Isao Hamaguchi[1]

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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 GLYCYRRHIZIN AGAINST HEPATITIS C VIRUS IN VITRO

Yoshihiro Matsumoto[1,2], Koichi Watashi[1], Ryosuke Suzuki[1], Tomokazu Matsuura[3], Tetsuro Suzuki[4], Tatsuo Miyamura[1], Kenjiro Wake[5], Takaji Wakita[1], Hideki Aizaki[1]

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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.Tarassevitch 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 Yamaoka[1], Naoto Ito[1,2], Tatsunori Masatani[1], Masako Abe[1], Keisuke Nakagawa[1], Kota Okadera[1], Makoto Sugiyama[1,2]
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VI-PO44-3

IDENTIFICATION OF AMINO ACID SEQUENCE MOTIFS REQUIRED FOR THE UNCONVENTIONAL MRNA CAPPING ACTIVITY OF THE VESICULAR STOMATITIS VIRUS L PROTEIN

Tomoaki Ogino[1], Satya P Yadav[2], Amiya K Banerjee[1]
[1]Department of Molecular Genetics, Lerner Research Institute, Cleveland Clinic, USA, [2]Molecular 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 Punyadarsaniya[1], Isabel Hennig-Pauka[2], Christine Winter[1,3], Christel Schwegmann-Wessels[1], Georg Herrler[1]
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VI-PO55-3

EPITOPE MAPPING OF HUMAN MONOCLONAL ANTIBODY NEUTRALIZING 2009 PANDEMIC INFLUENZA A VIRUS

Mayo Yasugi[1], Anariwa Du[1,2], Norihito Kawashita[3], 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]
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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 Lvov[1], Nikolai V Bovin[2], Alexei G Prilipov[1], Valentina S Bogdanova[1], Ludmila V Kolobukhina[1], Michail Yu Shchelkanov[1], Elena I Burtseva[1], Eugeni I Samokhvalov[1], Sergei V Alkhovsky[1], Valentina V Lavrishcheva[1], Nikolai A Malyshev[3], Vladimir E Malikov[3], Marina V Bazarova[3], Irina T Fedyakina[1], Petr G Deryabin[1], Taras I Aliper[1], Alexei D Zaberezhny[1], Marina M Zhuravleva[1]
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VI-PO55-5

WIDE-RANGED CELL TROPISM OF ASIAN-H5N1 VIRUSES IN HUMAN AIRWAY EPITHELIAL CELLS

Tomo Daidoji[1], Madiha Salah Ibrahim[2], Yohei Watanabe[2], Mayo Yasugi[2], Cheng-Son Yang[1,2], Kazuyoshi Ikuta[2], Takaaki Nakaya[1]
[1]Laboratory of Viral Pathogenesis, International Research Center for Infectious Diseases, Research Institute for Microbial Diseases, Osaka University, Japan, [2]Department 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 Khalenkov, 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 Kuribayashi[1], Yoshihiro Sakoda[1], Masatoshi Okamatsu[1], Takashi Umemura[2], Hiroshi Kida[1,3]

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VI-PO55-8

SEQUENCE ANALYSIS OF THE HEAMGLUTININ GENE OF THE H9N2 AVIAN INFLUENZA VIRUSES ISOLATED IN SHIRAZ-IRAN

Mohammad J Mehrabanpour[1], Vajihe Fatalizadeh[2], Abdololah Rahimian[1], Hamidreza Farzin[1], Shahla Shahsavandi[1]

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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 Nakaya[1], Mayo Yasugi[1], Shota Nakamura[1], Tomo Daidoji[1], Ririn Ramadhany[1], Cheng-Song Yang[1], Teruo Yasunaga[1], Tetsuya Iida[1], Toshihiro Horii[1], Kazuyoshi Ikuta[1], Kazuo Takahashi[2]

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VI-PO55-11

A POTENTIAL MECHANISM OF ARISING VIRAL HEMAGGLUTININ MUTATIONS IN PANDEMIC (H1N1) 2009 VIRUSES

Kyoko Shinya[1], Akiko Makino[1], Teridah E Ginting[1], Motoko Tanaka[1], Takaaki Nakaya[2], Shota Nakamura[2], Yasuhisa Abe[3], Hiroyuki Yoshida[3], Ichiro Morioka[3], Soichi Arakawa[3], Yasuhiro Takeshima[4], Kentaro Iwata[5], Yoshihiro Kawaoka[1,6,7]

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VI-PO55-12

INFLUENZA A VIRUS SUPPRESSION OF AUTOPHAGOSOME MATURATION AND ITS REVERSAL BY MAOTO, A TRADITIONAL HERBAL MEDICINE

Shigeki Nabeshima[1,2], Kei Yamauchi[2], Shinta Masui[2], Kazunari Ishii[2], Toshinori Soejima[2], Kenji Hiromatsu[2]

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VI-PO55-13

TYPE II MEMBRANE-BOUND PROTEASES, MSPL AND TMPRSS13, CLEAVE HEMAGGLUTININ OF HIGHLY PATHOGENIC AVIAN INFLUENZA VIRUSES AND INDUCE THEIR MULTICYCLE REPLICATION

Etsuhisa Takahashi[1], Yuushi Okumura[1,2], Irene Lorinda Indalao[1], Mihiro Yano[1], Hiroshi Kido[1]

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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 Kojimahara[2], Satoko Ohfuji[3], Yoshio Hirota[3], Tetsuo Kase[1]

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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 Uno[2], Hiroshi Ito[1,3], Toshihiro Ito[1,3], Tsuyoshi Yamaguchi[1,2]

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VI-PO55-18

CHARACTERIZATION OF LOW PATHOGENIC AVIAN INFLUENZA VIRUSES ISOLATED FROM DOMESTIC DUCKS IN VIETNAM IN 2009 AND 2010

Naoki Nomura[1], Yoshihiro Sakoda[1], Mayumi Endo[1], Hiromi Yoshida[1], Naoki Yamamoto[1], Masatoshi Okamatsu[1], Kenji Sakurai[2], Hiroshi Kida[1,3]

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VI-PO55-19

SERO-PREVALENCE OF PANDEMIC (H1N1) 2009 INFLUENZA A VIRUS AMONG SCHOOLCHILDREN AND THEIR PARENTS IN TOKYO, JAPAN

Kiyoko Iwatsuki-Horimoto[1], Taisuke Horimoto[2], Daisuke Tamura[1], Maki Kiso[1], Eiryo Kawakami[1], Shuji Hatakeyama[1], Yasuhiro Ebihara[3], Tomohiko Koibuchi[4], Takeshi Fujii[4], Kazuo Takahashi[5], Masayuki Shimojima[6], Yuko Sakai-Tagawa[1], Mutsumi Ito[1], Saori Sakabe[1], Ayaka Iwasa[1], Kei Takahashi[1], Takashi Ishii[1], Takeo Gorai[1], Koichiro Tsuji[3], Aikichi Iwamoto[4], Yoshihiro Kawaoka[1,7,8,9]

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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 Sasaki[2], Torahiko Tanaka[1,4], Kazumichi Kuroda[1,3], Reiko Todaka[5], Masamichi Oshima[5], Tatsuo Yamamoto[1,2]

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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 Cutts[2], Anders Leung[2], Sarah Bow[1,2], Steven Theriault[2,3], Darwyn Kobasa[1,2,5]

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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 *Terra Incognita*, 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

IUMS 2011 Sapporo

FINAL PROGRAM

XV International Congress of Virology