



**HAL**  
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## Peer Community In... A free recommendation process of preprints based on peer reviews

Christian Mougin, Wilfried Sanchez, Pierre Labadie, Denis Bourguet, Benoit Facon, Thomas Guillemaud, Marjolaine Hamelin

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**HAL Id: hal-03679088**

**<https://hal.inrae.fr/hal-03679088>**

Submitted on 1 Apr 2023

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# Peer Community In...

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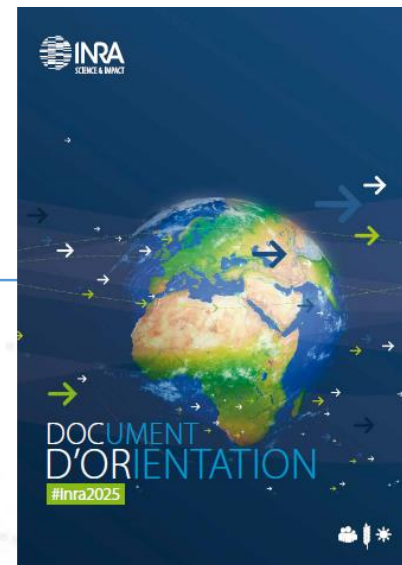


PCI

# Open Science

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- **2016 INRA : #OpenScience-4 - De nouveaux modes de diffusion de la connaissance**
  - Adapter le modèle éditorial et économique des revues académiques dont l'Inra est propriétaire aux principes d'une science ouverte
  - Explorer et encourager des modèles alternatifs de publication
  - Envisager la sortie du système des abonnements aux revues à l'horizon 2020
- **Aujourd'hui : soutien de la DiPSO**



# Scientific Publication

---

- **too long**
- **not transparent**
- **too expensive**
  - €10 Billion / 3 millions articles = €3000 / article
  - extraordinary profit margin (30-40% for the 5 big publishers)
- **vicious**
  - turnover positively linked to the number of accepted articles

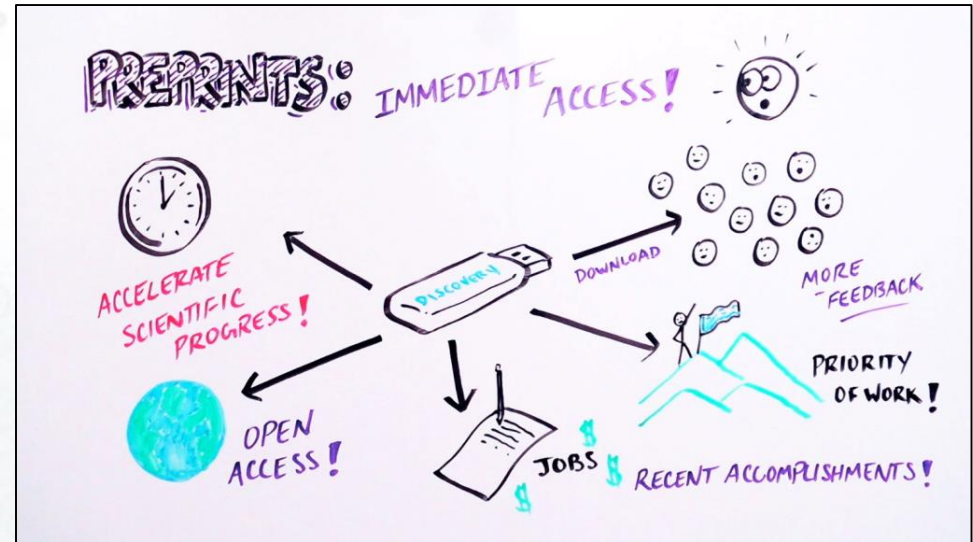
<https://peercommunityin.org>, @PeerCommunityIn

# Preprints: the solution?

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## Preprints are good...

- Low cost
- Free for authors and readers
- Available immediately
- Archive
- Proof of anteriority
- Searchable/Findable

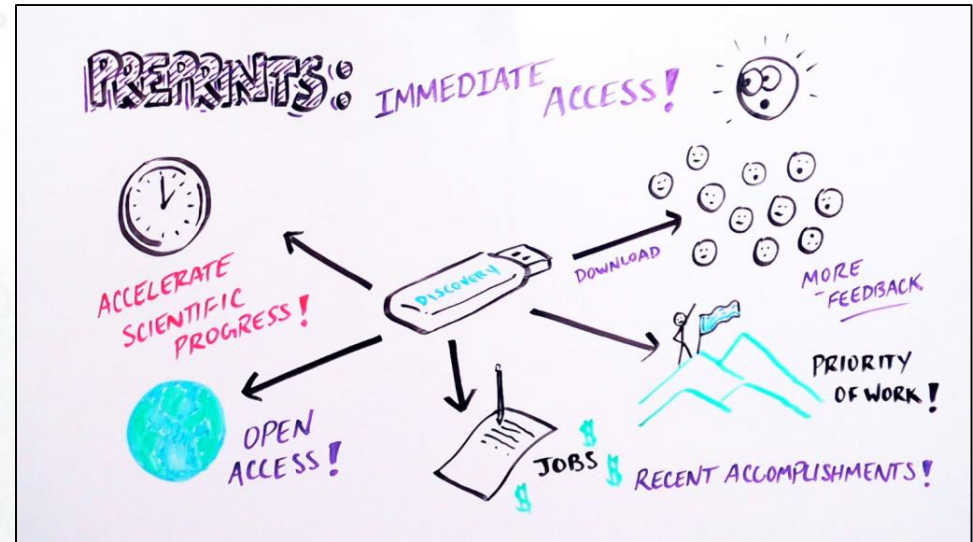


## But putative quality problem...

- No formal evaluation – no peer-review
- Everything can be found in open archives including preprints of very bad quality

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 **We therefore need preprint evaluation**



# The Peer Community In... initiative

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# The aim of PCI

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**Communities of researchers** handling the **evaluation** of (through peer review) and **recommending preprints** in their scientific field.

bioRxiv

arXiv.org

zenodo

HAL

archives-ouvertes.fr

OSF PREPRINTS

etc ...

*PCI Ecology*

*PCI Evolutionary Biology*

*PCI Genomics*

*PCI EcotoxEnvChem*

*etc..*

PCI

# How does it work?

---

## Repository



## PREPRINT server



1

author deposits their manuscript,  
data and code

## Repository



## PREPRINT server



## PCI website



1

author deposits their manuscript,  
data and code

2

author submits  
the DOI/URL

## Repository

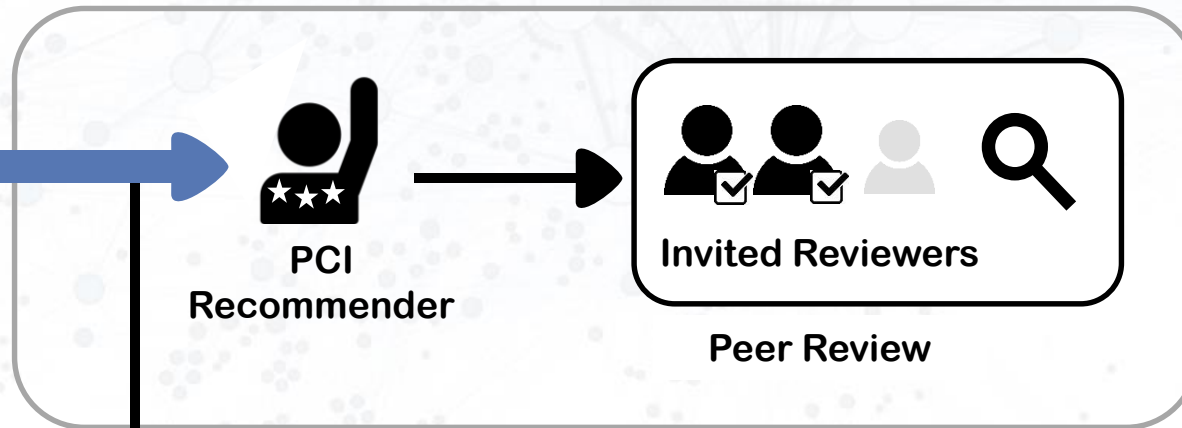


## PREPRINT server

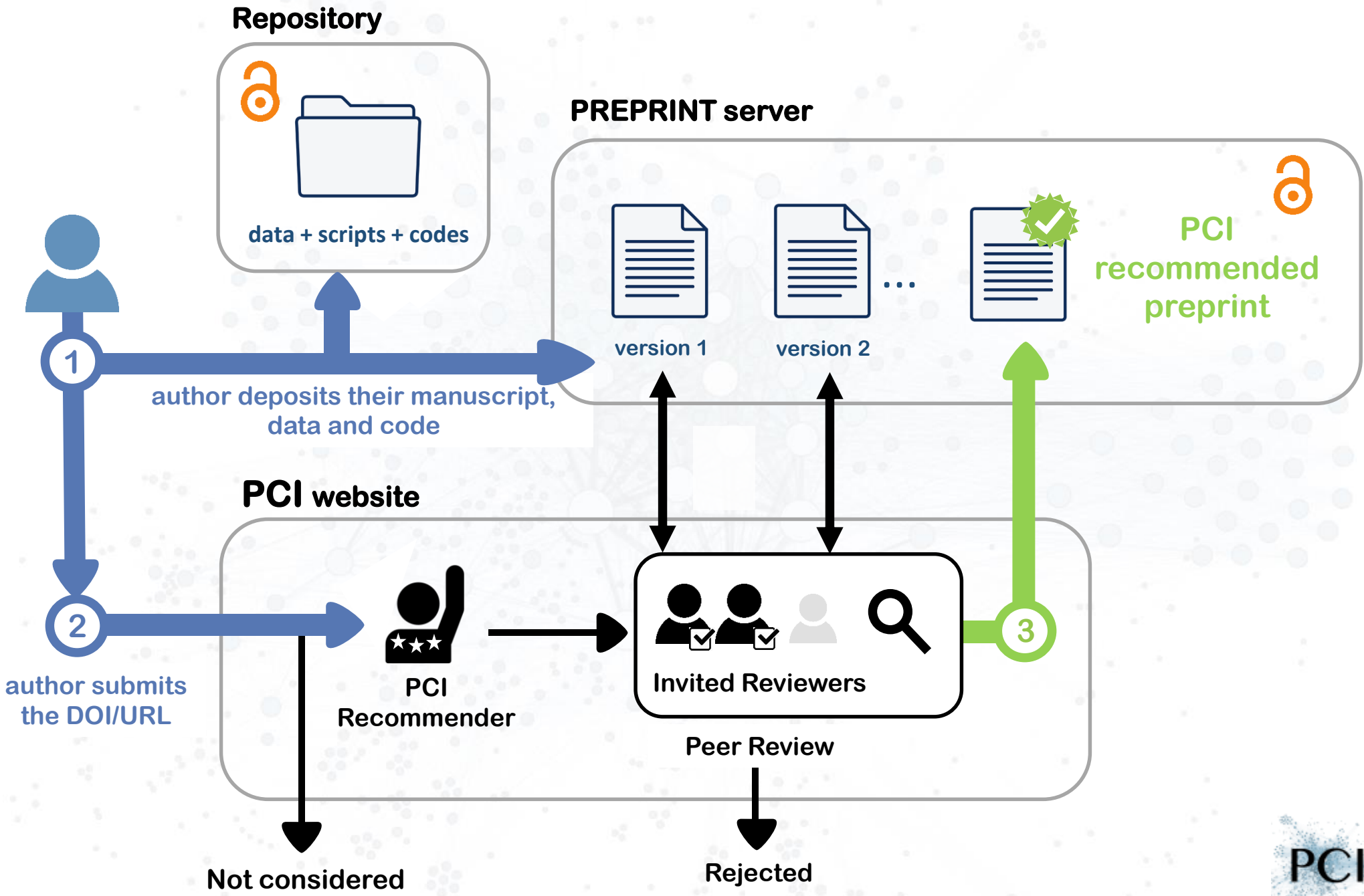


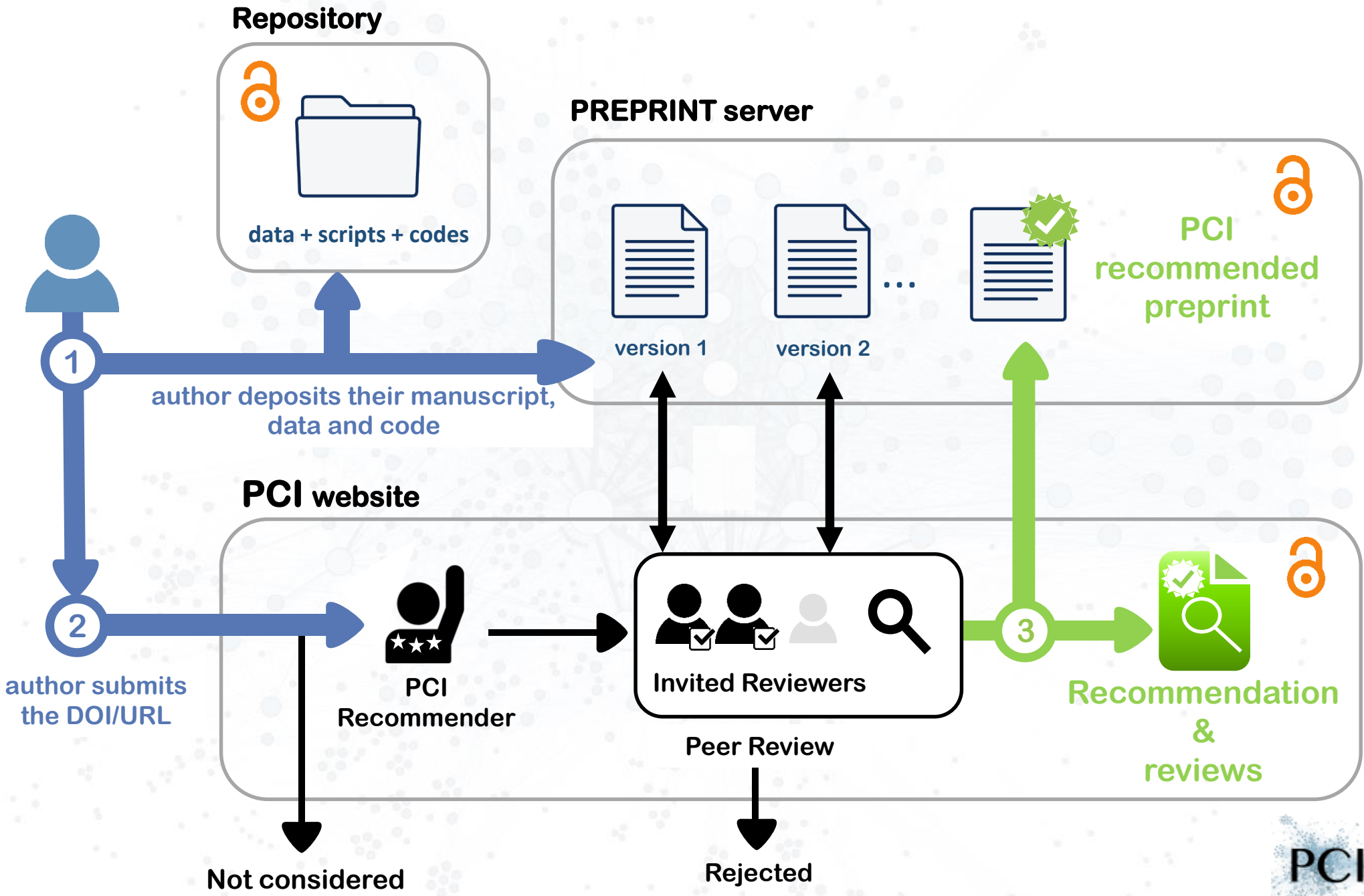
author deposits their manuscript,  
data and code

## PCI website



Not considered





# Preprint



bioRxiv

THE PREPRINT SERVER FOR BIOLOGY

bioRxiv posts many COVID19-related papers. A reminder: they have not been formally peer-reviewed and should not guide health-related behavior or be reported in the press as conclusive.

New Results

Follow this preprint

## Machine learning models based on molecular descriptors to predict human and environmental toxicological factors in continental freshwater

Rémi Servien, Eric Latrille, Dominique Patureau, Arnaud Hélias

doi: <https://doi.org/10.1101/2021.07.20.453034>

Now published in *Peer Community Journal* doi: [10.24072/pcjournal.90](https://doi.org/10.24072/pcjournal.90)



**Abstract** Full Text Info/History Metrics

Preview PDF

### ABSTRACT

It is a real challenge for life cycle assessment practitioners to identify all relevant substances contributing to the ecotoxicity. Once this identification has been made, the lack of corresponding ecotoxicity factors can make the results partial and difficult to interpret. So, it is a real and important challenge to provide ecotoxicity factors for a wide range of compounds. Nevertheless, obtaining such factors using experiments is

# Recommendation text



Articles

Env Chem

Share Tweet

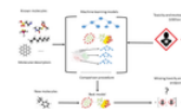
Printable page

## Predicting characterization factors of chemical substances from a set of molecular descriptors based on machine learning algorithms

*Sandrine CHARLES* based on reviews by Sylvain Bart, Patrice Couture, Dominique Lamonica and 2 anonymous reviewers



A recommendation of:



### Machine learning models based on molecular descriptors to predict human and environmental toxicological factors in continental freshwater

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(2022), *bioRxiv*, 2021.07.20.453034, ver. 6 peer-reviewed and recommended by Peer Community in Ecotoxicology and Environmental Chemistry

<https://doi.org/10.1101/2021.07.20.453034>

[READ PREPRINT IN PREPRINT SERVER](#)



**Abstract**

Submitted: 21 July 2021, Recommended: 17 January 2022

### Recommendation

Today, thousands of chemical substances are released into the environment because of human activities. It is thus

Open Access

Open Peer-Review

Open Data

Open Code

PCI



# Preprint



bioRxiv

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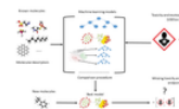
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Open Code



# Final, valid, findable and citable article

PCI

# Publication of PCI-recommended preprints

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PCI-recommended  
preprint



**Peer Community Journal**

Direct publication in diamond open access

OR



**PCI-friendly** journals

OR



**Other journals**

# PCI-friendly journals

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## 3 categories

### 1. Accept without further reviews



# PCI-friendly journals

## 3 categories

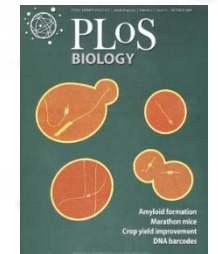
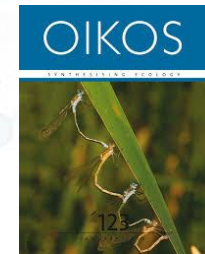
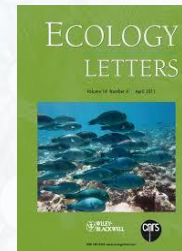
### 1. Accept without further reviews



...

### 2. Fast response ( $\leq 5$ days) to presubmission enquiry

- Accept without further reviews
- OR
- Need further reviews
- OR
- Not interested



...

# PCI-friendly journals

## 3 categories

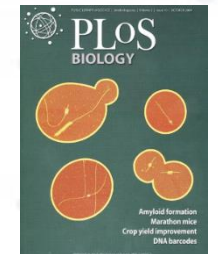
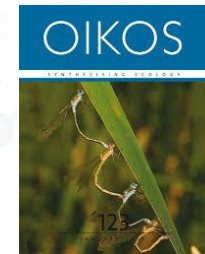
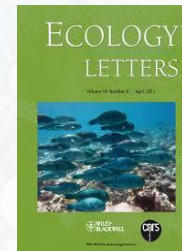
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...

### 3. May use the evaluations of PCI if adequate



...



# Peer Community Journal

Search articles, authors. [Q Search](#) [Browse by volumes](#) [Browse by section](#)

## Latest Articles



Evolutionary Biology

### Relaxation of purifying selection suggests low effective population size in eusocial Hymenoptera and solitary pollinating bees

Weyna, Arthur ; Romiguier, Jonathan

10.24072/pcjournal.3 - Peer Community Journal, Volume 1 (2021), article no. e2.

With one of the highest number of parasite, eusocial and pollinator species among all insect orders, Hymenoptera features a great diversity of specific lifestyles. At the population genetic level, such life-history strategies are expected to decrease effective population size and efficiency of purifying selection. In this study, we tested this hypothesis by estimating the relative rate of non-synonymous substitution in 169 species to investigate the variation in natural selection efficiency throughout the hymenopteran tree of life. We found no effect of parasitism or body size, but show that relaxed selection is associated with eusociality, suggesting that the division of reproductive labour decreases effective population size in ants, bees and wasps. Unexpectedly, the effect of eusociality is marginal compared to a striking and widespread relaxation of selection in both social and non social bees, which indicates that these keystone pollinator species generally feature low effective population sizes. This widespread pattern suggests specific constraints in pollinating bees potentially linked to limited resource and high parental investment. The particularly high load of deleterious mutations we report in the genome of these crucial ecosystem engineer species also raises

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## People

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[Archaeology](#)

[Circuit Neuroscience](#)

[Ecology](#)

[Ecotoxicology & Environmental Chemistry](#)

[Evolutionary Biology](#)

[Forest & Wood Sciences](#)

[Genomics](#)

- **Accepts as is** all articles recommended by a PCI
- **Free for readers** (Open Access)
- **Free for authors** (no APC)
- 80 PCI recommended articles will be published in the weeks following the launch of the journal

- Peer Community Journal <https://peercommunityjournal.org>
- 93 articles were already published on Peer Community Journal
- Peer Community Journal has an ISSN (2804-3871) and is now indexed in DOAJ (<https://www.doaj.org/toc/2804-387>) and in Google scholar. It is currently under evaluation for indexation in Web of Science, CABI; EBSCO, Norwegian register and Sherpa/Romeo. Between 1 and 2 years of anteriority are required by some databases such as Medline/PubMed and Scopus
- Peer Community Journal is indexed in the Journal Checker Tool of CoaS and is planS-compliant



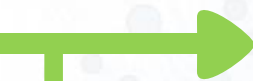
# In summary

PCI-recommended  
article



Final, citable  
article hosted  
by preprint  
server

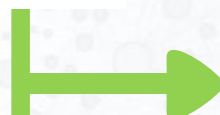
Author's  
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**Peer Community Journal**

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OR

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OR

- use of PCI evaluation if appropriate

OR



**Other journals**

If not satisfied by  
the decision

If not satisfied by  
the decision

PCI

# Authors of PCI-recommended preprints

---

- **... can know** within a few days **if one or more PCI-friendly journals**
  - are interested
  - will request or not further peer-review
- **... get 100% chance to publish rapidly** in an indexed and free open access journal (Peer Community Journal)

# PCI in figures & Current PCIs

---

# PCI in figures



14

PEER  
COMMUNITIES



441

SUBMITTED  
ARTICLES



256

RECOMMENDED  
ARTICLES



47

MEDIAN TIME TO  
1ST DECISION (DAYS)



>9200

TWITTER  
FOLLOWERS



>5600

REGISTERED  
USERS



>1700

RECOMMENDERS



120

MANAGING BOARD  
MEMBERS



797

REVIEWERS



88

FRIENDLY  
JOURNALS



>12000

VISITORS TO  
PCI WEBSITES



103

SUPPORTING  
ORGANISATIONS

# Current PCIs

---

## **2017**

PCI Evolutionary Biology

## **2018**

PCI Ecology

PCI Paleontology

## **2019**

PCI Animal Science

PCI Zoology

## **2020**

PCI Mathematical and  
Computational Biology

PCI Forest and Wood Science

PCI Network Science

PCI Genomics

PCI Archaeology

PCI Circuit Neuroscience

## **2021**

PCI Registered Reports

PCI Ecotoxicology and Environmental  
Chemistry

PCI Infections

## **2022**

PCI Microbiology ?

...

# Supports awards and recognition

---

# Institutions and universities



MAX-PLANCK INSTITUTE FOR EVOLUTIONARY BIOLOGY



UNIVERSITÉ DE MONTPELLIER



Swiss Institute of Bioinformatics



Université de Limoges



Inrap



Aix\*Marseille université

UNIVERSITÉ CÔTE D'AZUR



École Pratique des Hautes Études

PSL



CRÉATEURS DE FUTURS DEPUIS 1257

Université de Guyane



Institut de Recherche pour le Développement FRANCE



université de BORDEAUX



UNIVERSITÉ DE RENNES 1



Max Planck Institute for Evolutionary Anthropology

# Societies and doctoral schools

---



- ABIES, Structure et Dynamique des Systèmes Vivants...



# Grants, awards and projects

PCI is one of the winners of the first call for projects of the French National Open Science Fund (2020)



Pilote project in « Notify » with COAR, Harvard Library, Los Alamos Lab, HAL, etc...

2020 LIBER Award for Library Innovation



# Peer Community in Ecotoxicology and Environmental Chemistry

- **Launched in 2021 by:**

**Christian Mougin**

**Wilfried Sanchez**

**Pierre Labadie**



INRAE



Ifremer



- **Scope: interfaces of environmental chemistry, ecology and environmental toxicology**
- **Currently 22 recommenders and  $\approx$  150 reviewers**

- **Our supports**



- **Our website**

<https://ecotoxenvchem.peercommunityin.org/>

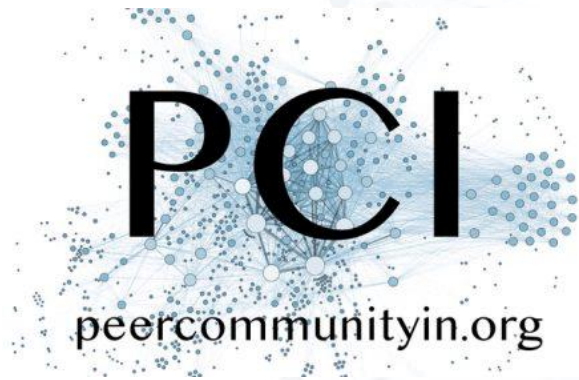
- **Our contact**

[contact@ecotoxenvchem.peercommunityin.org](mailto:contact@ecotoxenvchem.peercommunityin.org)

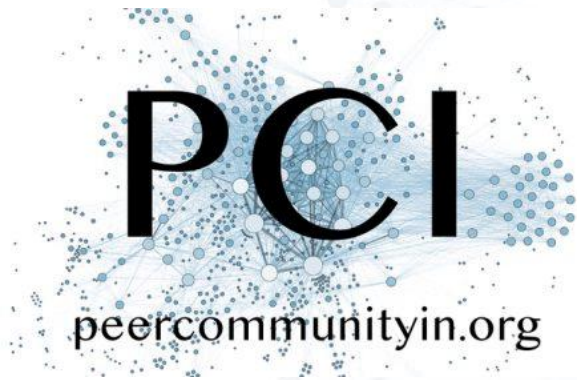
- **Current discussions for partnership with PCI-friendly journals: **SPRINGER NATURE****
- **Also seeking for:**
  - New submissions of preprints**
  - Additional recommenders**

# How to participate?

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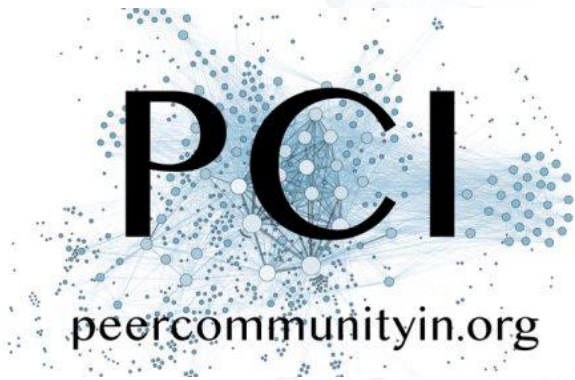


- **Submit your articles to a PCI**
- **Spread the word**

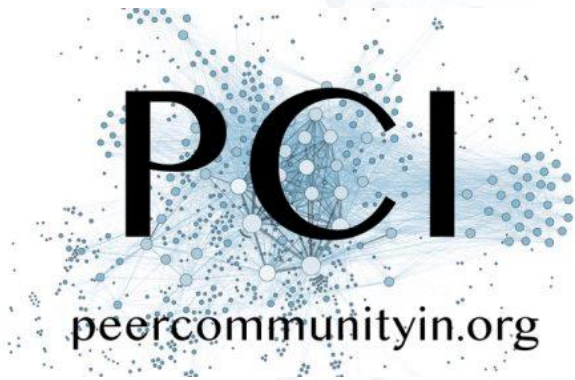


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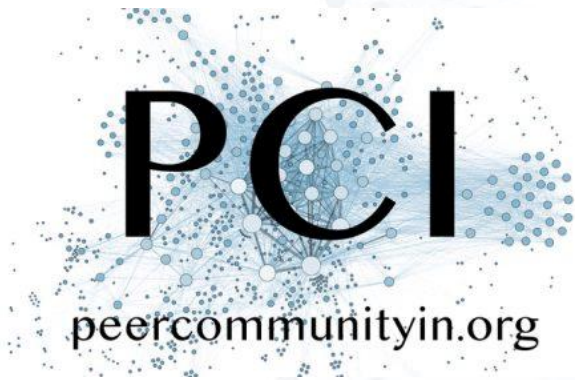




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- **Think about founding a new PCI**



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- **Register to the PCIs' websites (to be reviewer)**



- **Submit your articles to a PCI**
- **Spread the word**
- **Give us contacts to obtain supports or recognition**
- **Think about founding a new PCI**
- **Register to the PCIs' websites (to be reviewer)**
- **Consider becoming a recommender**

# Thanks!

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@PeerCommunityIn

<https://peercommunityin.org>