

# Peer Community In & Peer Community Journal



Denis Bourguet

Benoit Facon

Thomas Guillemaud

Marjolaine Hamelin

INRAE



From preprint recommendation to Diamond  
Open Access publication



PCI

# Scientific publishing

---



## **Too long**

Cascade of submissions/rejections

Sometimes between 1 or 2 years between submission and publication



## **Opaque**

Evaluation reports and editor's name not published

Data, scripts and codes often not published

Conflicts of interest not disclosed

70% of articles are behind paywalls



## **Pernicious**

The income of the publisher depends directly on the number of articles accepted



## **Too expensive**

9 billion € / 3 millions articles = 3000 € / article (France: ~ 150 M € /year)

Extraordinary profit margin (35-40% for the 5 big publishers)



## **Researchers do nearly everything...for free**

As authors, editors, reviewers,

they write, evaluate, edit, proofread

Re-appropriation of the  
publication system:

Peer Community In  
&  
Peer Community Journal

---

# Peer Community In & Peer Community Journal

---

A double publication system



Peer Community In  
"PCI"

Peer Reviewed and  
recommended preprints



Peer Community Journal  
"PCJ"

Diamond Open Access  
generalist journal

# The aim of PCI

---

**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 Microbiology*

etc..

# How does PCI work?

---

## Repository



## PREPRINT server



1

author deposits their manuscript,  
data and code

## Repository



## PREPRINT server



author deposits their manuscript,  
data and code

## PCI website



author submits  
the DOI/URL



## Repository



## PREPRINT server



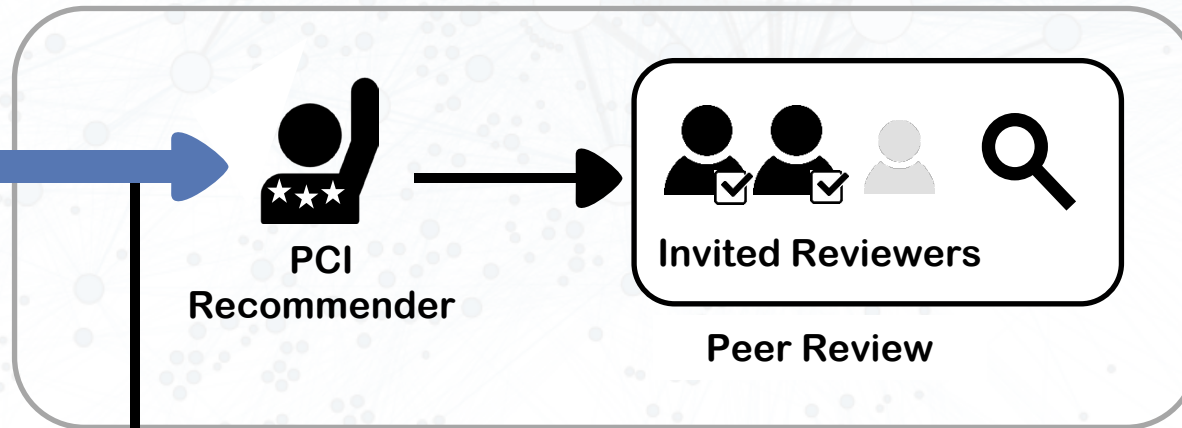
1

author deposits their manuscript,  
data and code

2

author submits  
the DOI/URL

## PCI website

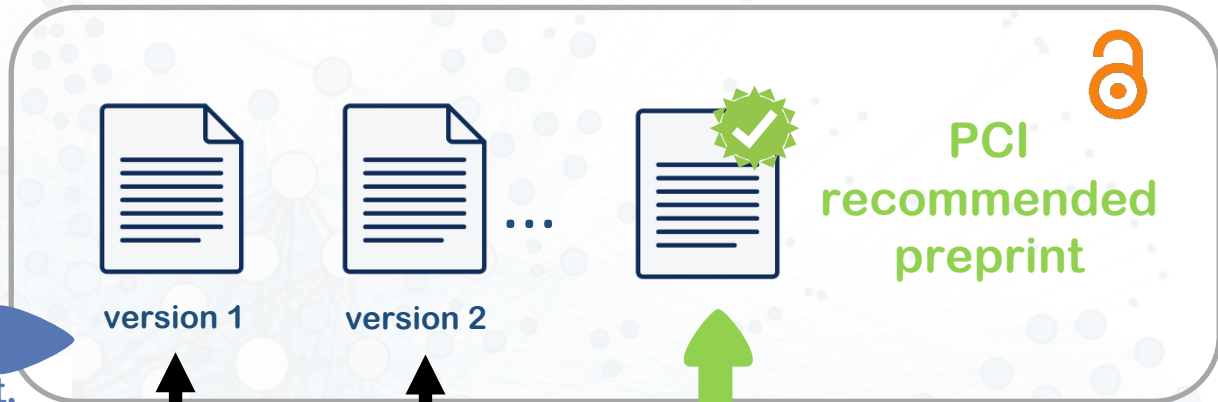


Not considered

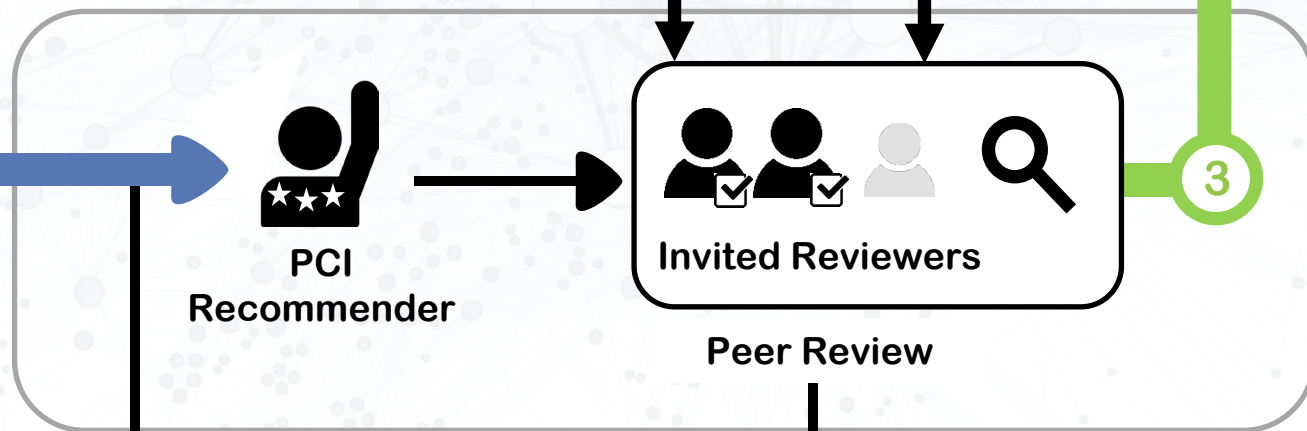
## Repository



## PREPRINT server



## PCI website



Not considered

Rejected



1

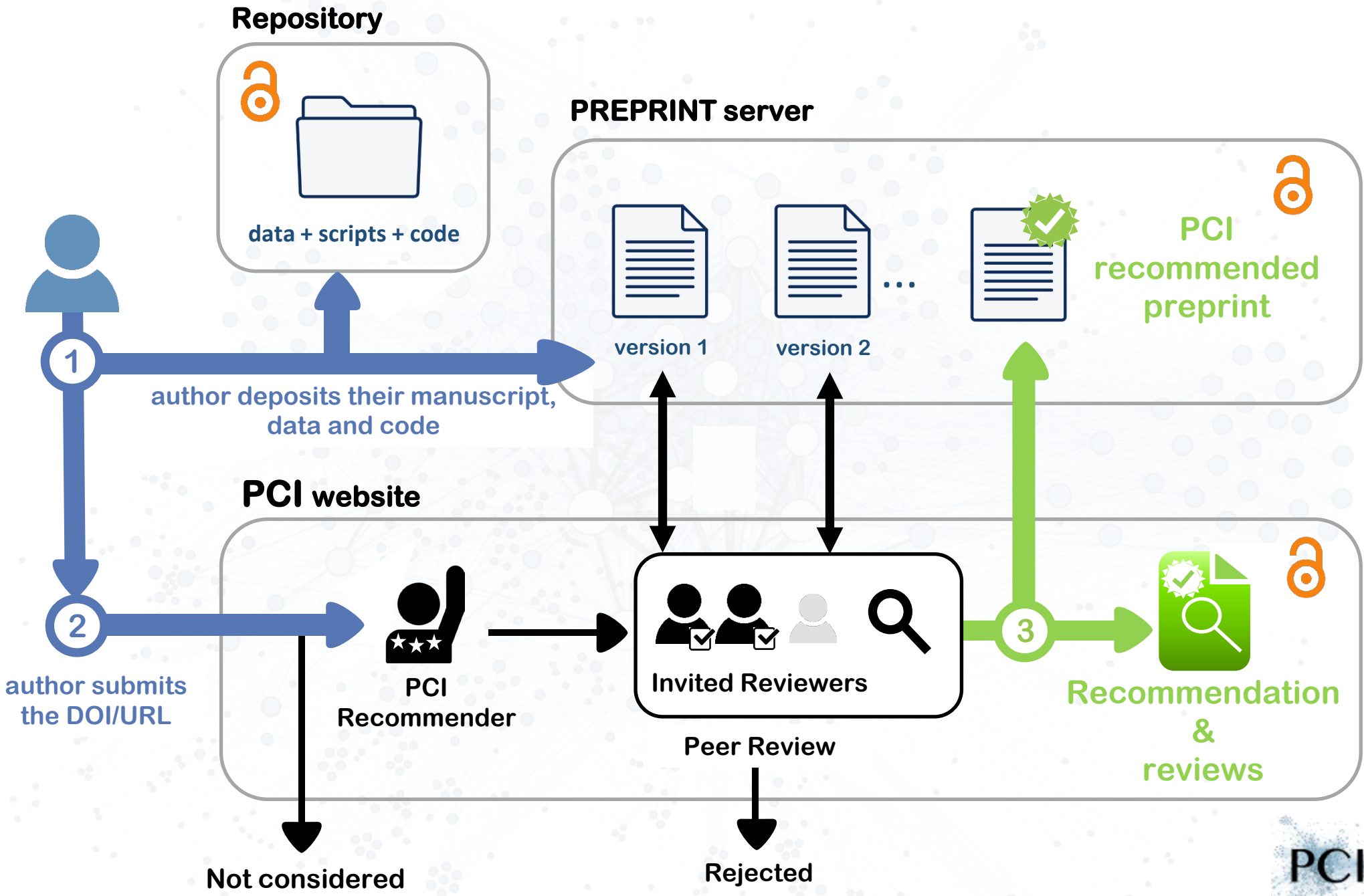
author deposits their manuscript,  
data and code

2

author submits  
the DOI/URL

3

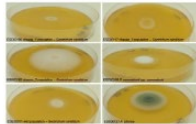
PCI  
recommended  
preprint



## Diverse outcomes in cheese fungi domestication

Christelle Fraïsse based on reviews by Delphine Sicard and 1 anonymous reviewer

A recommendation of:



### Domestication of different varieties in the cheese-making fungus *Geotrichum candidum*

Bastien Bennetot, Jean-Philippe Vernadet, Vincent Perkins, Sophie Hautefeuille, Ricardo C. Rodríguez de la Vega, Samuel O'Donnell, Alodie Snirc, Cécile Grondin, Marie-Hélène Lessard, Anne-Claire Peron, Steve Labrie, Sophie Landaud, Tatiana Giraud, Jeanne Ropars

(2023), bioRxiv, ver.4, peer-reviewed and recommended by PCI Evol Biol  
<https://doi.org/10.1101/2022.05.17.492043>

READ PREPRINT IN PREPRINT SERVER



- Data used for results ✓
- Codes used in this study ✓
- Scripts used to obtain or analyze results ✓
- Abstract ✓
- Suggested Reviewers ✓
- Opposed reviewers ✓

Link to PCI-recommended preprint

Final, valid, findable and citable article



Recommendation text

Published, citable and argued editorial decision

Submission: posted 12 August 2022

Recommendation: posted 23 March 2023, validated 24 March 2023

### Recommendation

Domestication is a complex process that imprints the demography and the genomes of domesticated populations, enforcing strong selective pressures on traits favourable to humans, e.g. for food production [1]. Domestication has been quite intensely studied in plants and animals, but less so in micro-organisms such as fungi, despite their assets (e.g. their small genomes and tractability in the lab). This elegant study by Bennetot and collaborators [2] on the cheese-making fungus *Geotrichum candidum* adds to the mounting body of studies in the genomics of fungi, proving they are excellent models in evolutionary biology for studying adaptation and drift in eukaryotes [3].

Bennetot et al. newly showed with whole genome sequences that all *G. candidum* strains isolated from cheese form a monophyletic clade subdivided into three genetically differentiated populations with several admixed strains, while the wild strains sampled from diverse geographic locations form a sister clade. This suggests the wild progenitor was not sampled in the present study and calls for future exciting work on the domestication history of the *G. candidum* fungus. The authors scanned the genomes for footprints of adaptation to the cheese environment and identified promising candidates, such as a gene involved in iron uptake (this element is limiting in cheese). Their functional genome analysis also provides evidence for higher contents of transposable elements in cheese-making strains, likely due to relaxed selection during the domestication process.

This paper is particularly impressive in that the authors complemented the population genomic approach with the phenotypic characterization of the strains and tested their ability to outcompete common fungal food spoilers. The authors convincingly showed that cheese-making strains display phenotypic differences relative to wild relatives for multiple traits such as slower growth, lower proteolysis activity and a greater amount of volatiles attractive to consumers, these phenotypes being beneficial for cheese making.

Finally, this work is particularly inspiring because it thoroughly discusses convergent evolution during domestication in different cheese-associated fungi. Indeed, studying populations experiencing similar environmental pressures is fundamental to understanding whether evolution is repeatable [4]. For instance, all three cheese populations of *G. candidum* exhibit a lower genetic diversity than wild populations. However, only one population displays a stronger domestication syndrome, resembling the *Penicillium camemberti* situation [5]. Furthermore, different cheese-making practices may have led to varying situations with clonal lineages in non-Roquefort *P. roqueforti* and *P. camemberti* [5, 6], while the cheese-making *G. candidum* populations still harbour some diversity. In a nutshell, Bennetot's study makes an important contribution to evolutionary biology and highlights the value of diversifying our model organisms toward under-represented clades.

### REFERENCES

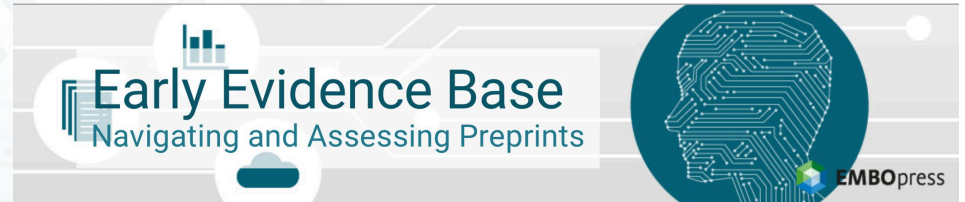
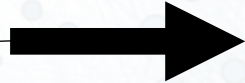
- [1] Diamond J (2002) Evolution, consequences and future of plant and animal domestication. *Nature* 418: 700–707. <https://doi.org/10.1038/nature01019>
- [2] Bennetot B, Vernadet J-P, Perkins V, Hautefeuille S, Rodríguez de la Vega RC, O'Donnell S, Snirc A, Grondin C, Lessard M-H, Peron A-C, Labrie S, Landaud S, Giraud T, Ropars J (2023) Domestication of different varieties in the cheese-making fungus *Geotrichum candidum*. *bioRxiv*, 2022.05.17.492043, ver. 4 peer-reviewed and recommended by Peer Community in Evolutionary Biology. <https://doi.org/10.1101/2022.05.17.492043>
- [3] Gladieux P, Ropars J, Badouin H, Branca A, Aguilera G, de Vienne DM, Rodríguez de la Vega RC, Branco S, Giraud T (2014) Fungal evolutionary genomics provides insight into the mechanisms of adaptive divergence in eukaryotes. *Mol. Ecol.* 23: 753–773. <https://doi.org/10.1111/mec.12631>
- [4] Bolnick DI, Barrett RD, Oke KB, Rensson DJ, Stuart YE (2018) (Non)Parallel evolution. *Ann. Rev. Ecol. Evol. Syst.* 49: 303–330. <https://doi.org/10.1146/annurev-ecolsys-110617-062240>
- [5] Ropars J, Didot E, Rodríguez de la Vega RC, Bennetot B, Coton M, Poirier E, Coton E, Snirc A, Le Prieur S, Giraud T (2020) Domestication of the Emblematic White Cheese-Making Fungus *Penicillium camemberti* and its Diversification into Two Varieties. *Current Biol.* 30: 4441–4453.e4. <https://doi.org/10.1016/j.cub.2020.08.082>
- [6] Dumas, E, Feurtey, A, Rodríguez de la Vega, RC, Le Prieur S, Snirc A, Coton M, Thierry A, Coton E, Le Piver M, Roueyre D, Ropars J, Branca A, Giraud T (2020) Independent domestication events in the blue-cheese fungus *Penicillium roqueforti*. *Mol Ecol.* 29: 2639–2660. <https://doi.org/10.1111/mec.15359>

# Automatic notifications to databases

---

PCI  
recommendation

CrossRef API



RSS feed



FTP



# Automatic notifications to preprint servers / open archives

---

PCI  
recommendation



# PCI recommendation



The screenshot shows a web browser displaying a bioRxiv preprint page. The browser's address bar shows the URL <https://doi.org/10.1101/2022.03.20.485041v5>. The page header includes the bioRxiv logo and the text 'THE PREPRINT SERVER FOR BIOLOGY'. The main title of the preprint is 'slendr: a framework for spatio-temporal population genomic simulations on geographic landscapes'. The authors listed are Martin Petr, Benjamin C. Haller, Peter L. Ralph, and Fernando Racimo. The DOI is <https://doi.org/10.1101/2022.03.20.485041>. A note states: 'This is a preprint. It has not been certified by a journal but peer reviews are available. [what does this mean?]'.

On the right side of the page, there is a section titled 'Evaluation/discussion of this paper'. It features a green checkmark and the text 'TRiP'. Below this, it says: 'bioRxiv partners with journals and review services to enable posting of peer reviews and editorial decisions related to preprints they are evaluating. Reviews are posted with the consent of the authors.' There is a button to 'Share this TRiP tab (click to copy link)'. Below that, it says 'PCI Peer Community In'. A red box highlights the text: 'recommended by PCIEvolBiol. See the peer reviews and the recommendation.'

At the bottom of the page, there is a section for 'Abstract' with the following text: 'One of the goals of population genetics is to understand how evolutionary forces shape patterns of genetic variation over time. However, because populations evolve across both time and space, most evolutionary processes also have an important spatial component, acting through phenomena such as isolation by distance, local mate choice, or uneven distribution of resources. This spatial dimension is often neglected, partly due to the lack of tools specifically designed for building and evaluating complex spatio-temporal population genetic models. To address this methodological gap, we present a new framework for simulating spatially-explicit genomic data, implemented in a new R package called *slendr* ([www.slendr.net](http://www.slendr.net)), which

# PCI recommendation



## Linked Data Notifications

The screenshot shows a web browser displaying a HAL document page. The URL is [hal.science/hal-03780127v2#](https://hal.science/hal-03780127v2#). The document title is "Most diverse, most neglected: weevils (Coleoptera: Curculionoidea) are ubiquitous specialized brood-site pollinators of tropical flora" by Julien Haran et al. A red box highlights the "PCI Recommendation" section, which states: "Recommended by: Juan Arroyo. Pollination-herbivory by weevils claiming for recognition: the Cinderella among pollinators. *Peer Community in Ecology*. 2023-4-28 <https://doi.org/10.24072/pci.ecology.100505>". Other sections include "Dates and versions", "Licence", "Identifiers", "Abstract", "Keywords", and "Domains".



## Repository

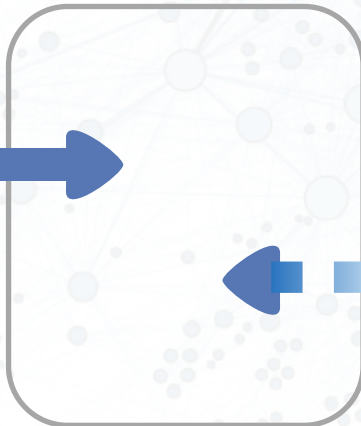


## PREPRINT server



author deposits their manuscript,  
data and code

## PCI website



**HAL**  
science ouverte

# Simplified Preprint Submission to PCI from HAL

Possible at the end of the HAL deposit form, if 2 conditions are fulfilled:

- the selected document type is **“Preprint/Prepublication”**
- a **full-text file** is deposited

## I submit my preprint to a publishing or a peer-review service

Select the service of your choice from the list below

Once your deposit is online on HAL, your preprint will be automatically transferred to this service.

### Peer Community In

Animal Science  
Archaeology  
Ecology  
Ecotoxicology and Environmental Chemistry  
Evolutionary Biology  
Forest and Wood Sciences  
Genomics  
Health and Movement Sciences  
Infections  
Mathematical and Computational Biology  
Microbiology  
Network Science  
Neuroscience  
Organization Studies  
Paleontology  
Zoology

The authors then receive a **link to complete their submission** on the corresponding PCI website.

PCI-recommended  
preprint



**Peer Community Journal**

Direct publication in diamond open access

OR



**PCI-friendly** journals

OR



**Other journals**

# PCI-friendly journals

## 3 categories

### 1. Accept without further reviews (14)

- Acarologia
- Advances in Cognitive Psychology
- Belgian Journal of Zoology
- Cadernos de Linguística
- Frontiers of Biogeography
- International Journal of Limnology
- Journal of Lithic Studies
- OCL - Oilseeds and fats, Crops and Lipids
- Peer Community Journal
- Peer J
- PeerJ Computer Science
- Rethinking Ecology
- Theoretical Roman Archaeology Journal
- Tropical and Subtropical Agroecosystems



### PCI RR-friendly journals

- Addiction Research & Theory
- Advances in Cognitive Psychology
- Advances in Methods and Practices in Psychological Science
- Brain and Neuroscience Advances
- Cambridge Educational Research e-Journal
- Communications in Kinesiology
- Cortex
- Experimental Psychology
- F1000Research
- Human Population Genetics and Genomics
- In&Vertebrates
- Infant and Child Development
- Journal for Reproducibility in Neuroscience
- Journal of Cognition
- Meta-Psychology
- NeuroImage: Reports
- Peer Community Journal
- PeerJ
- PeerJ Computer Science
- PeerJ Physical Chemistry
- PeerJ Organic Chemistry
- PeerJ Inorganic Chemistry
- PeerJ Analytical Chemistry
- PeerJ Materials Science
- Psychology of Consciousness: Theory, Research, and Practice
- Royal Society Open Science
- Swiss Psychology Open
- WiderScreen

# PCI-friendly journals

## 3 categories

1. Accept without further reviews

2. Fast response ( $\leq 7$  days) to presubmission enquiry (36)

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

- Animal Welfare
- Annals of Forest Science
- Bulletins et Mémoires de la Société d'Anthropologie de Paris (BMSAP)
- Bulletin of the History of Archaeology
- Collabra: Psychology
- Communications in Kinesiology
- Ecology and Evolution
- Ecology Letters
- European Rehabilitation Journal
- European Scientific Journal
- European zoological journal
- Evolution
- Evolution Letters
- Evolutionary Applications
- Evolutionary Ecology
- FEMS Yeast Research
- GigaByte
- GigaScience
- Heritage
- Journal of Applied Entomology
- Journal of Applied Microbiology
- Journal of Avian Biology
- Journal of Biogeography
- Journal of Computer Applications in Archaeology
- Journal of Evolutionary Biology
- Journal of Iran National
- Museum
- Journal of Neolithic Archaeology
- Journal of Open Archaeology Data
- Journal of the Israel Prehistoric Society
- Letters in Applied Microbiology
- Molecular Ecology
- Oikos
- PLoS Biology
- PLoS One
- Préhistoires méditerranéennes - Mediterranean Prehistories
- Quaternaire
- Veterinary Research


# PCI-friendly journals

---

## 3 categories

1. Accept without further reviews
2. Fast response ( $\leq 5$  days) to presubmission enquiry
3. May use the evaluations of PCI if adequate (31)

- Adansonia
- Agronomy for Sustainable Development
- Animal
- Animal microbiome
- Anthropozoologica
- Archäologische Informationen
- Botany
- Botany Letters
- Brazilian Journal of Motor Behavior
- Canadian Journal of Animal Science
- Canadian Journal of Fisheries and Aquatic Sciences
- Canadian Journal of Forest Research
- Canadian Journal of Zoology
- Comptes Rendus Palevol
- Cryptogamie, Algologie
- Cryptogamie, Bryologie
- Cryptogamie, Mycologie
- EXARC Journal
- FACETS
- G3: Genes, Genomes, Genetics
- Genetics
- Genome
- Geodiversitas
- Global Ecology and Biogeography
- Internet Archaeology
- Journal of Pollination Ecology
- M@n@gement
- Mathematical Modelling of Natural Phenomena
- Naturae
- Neuroanatomy and Behaviour
- Zoosystema

- Launched in November 2021
- Accepts “as is” any and only recommended articles
- **Free for readers and authors**
- Already 315 articles published
- **17 sections**
- **CC-BY Licence**
- **Indexed in**  **DOAJ**  **Plan S** 



- Applications for indexation in  **Scopus**<sup>®</sup>



## Peer Community Journal

Section: Health & Movement Sciences

### RESEARCH ARTICLE

Published  
2023-08-31

Cite as  
Katerina Newman, Cyril Forestier, Boris Cheval, Zachary Zenko, Margaux de Chanaille, Benjamin Gardner and Amanda L. Rebar (2023) Comparing habit-behaviour relationships for organised versus leisure time physical activity. Peer Community Journal, 3: e77.

Correspondence  
a.rebar@cqu.edu.au

Peer-review  
Peer reviewed and recommended by PCI Health & Movement Sciences.

<https://doi.org/10.24072/pci-healthmovsci.100002>



This article is licensed under the Creative Commons Attribution 4.0 License.

### Comparing habit-behaviour relationships for organised versus leisure time physical activity

Katerina Newman<sup>1</sup>, Cyril Forestier<sup>2</sup>, Boris Cheval<sup>3,4</sup>, Zachary Zenko<sup>5</sup>, Margaux de Chanaille<sup>6</sup>, Benjamin Gardner<sup>7</sup>, and Amanda L. Rebar<sup>8,1</sup>

Volume 3 (2023), article e77

<https://doi.org/10.24072/pcijournal.311>

### Abstract

Evidence shows that people with strong physical activity habits tend to engage in more physical activity than those with weaker habits, but little is known about how habit influences specific types of physical activity. This study aimed to test whether mean level of habit strength and magnitude of the habit strength – behaviour association differed as a function of physical activity modality. Participants (N = 120; M age = 25 years, 75% female) who reported engaging in organised sport separately reported their habit strength for organised sport and leisure time physical activity as well as the time they spent engaging in these physical activity behaviours. Means comparisons and multilevel modelling revealed that people had significantly stronger habit for organised sport than for leisure time physical activity. Crucially, no significant difference was found in the magnitude of the sport-habit and leisure-habit link. Post-hoc analyses revealed that habit was stronger for team sport compared to individual sport, but that there was no significant difference in sport-habit association between team and individual sports. Research should therefore focus on identifying the characteristics of team sports-based activity that are particularly conducive to habit formation as a precursor to developing interventions to promote performance of leisure time activity in a way that would attain such characteristics.

<sup>1</sup>Motivation of Health Behaviours Lab, Appleton Institute, Central Queensland University – Rockhampton, Australia. <sup>2</sup>Laboratoire Métabolisme, Interactions, Performances, MIP – EA4254 Le Mans Université – Le Mans, France. <sup>3</sup>Department of Sport Sciences and Physical Education, Ecole normale supérieure Rennes – Bruz, France. <sup>4</sup>Laboratory VIP52, University of Rennes – Rennes, France. <sup>5</sup>California State University – Bakersfield, United States of America. <sup>6</sup>Laboratoire SENS, Univ. Grenoble Alpes – Grenoble, France. <sup>7</sup>Habit Application and Theory group, Health Psychology Research Group, School of Psychology, University of Surrey – London, United Kingdom.



Peer Community Journal is a member of the Centre Mersenne for Open Scientific Publishing  
<http://www.centre-mersenne.org/>  
e-ISSN 2804-3871

Web-published in collaboration with UGA Éditions



# Sign and share the #PCIManifesto

<https://peercommunityin.org/pci-manifesto/>



“

commit to submitting, within 15 months following the signing of this manifesto, at least one of my best articles to a PCI for peer review and, if recommended, to publish it in the Peer Community Journal

”

**1109** researchers from **60 countries** have signed so far



# 1 recommended preprint, 4 options!



## 1 Stop there!

The recommended article on the open archive is **findable, accessible, citable**



## 2 Publish the article directly in Peer Community Journal

The recommended article becomes a **diamond open access journal** article



## 3 Submit the article to one of the PCI-friendly journals

These journals either

1. Accept the article without further reviews if in the scope (14)
2. Give a fast response ( $\leq 5$  days) to presubmission enquiry (36)
3. May use the evaluations of PCI if adequate (31)

## 4 Submit the article to other journals

PCI

# The 10 benefits of the PCI model

---

1. **Big savings for research agencies:** 300 €/paper vs 3000 € (on average)
2. **Promotion of reproducible research:** data, scripts, codes available
3. **Transparency:** published evaluations, decisions, sources of fundings
4. **Valuing reviewers' effort:** recommendation usable by any journal
5. **Shared workload:** community of recommenders
6. **Valorisation of researchers' editorial work:** citable recommendations
7. **Independence:** fully operated by researchers only
8. **No economic publication bias:** diamond open-access model/preprints
9. **Collective decisions:** community-based organisation
10. **Multidisciplinarity:** applicable to all research fields



# PCI in figures & Current PCIs

---

# PCI in figures



17

PEER  
COMMUNITIES



2200

RECOMMENDERS



1556

SUBMITTED  
ARTICLES



158

MANAGING BOARD  
MEMBERS



789

RECOMMENDED  
ARTICLES



3593

COMPLETED  
REVIEWS



55

MEDIAN TIME TO  
1ST DECISION (DAYS)



102

FRIENDLY  
JOURNALS



1109

PCI MANIFESTO  
SIGNATURES



>12000

VISITORS TO  
PCI WEBSITES



>6000

REGISTERED  
USERS



169

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 & Wood Science

PCI Network Science

PCI Genomics

PCI Archaeology

PCI Neuroscience

## 2021

***PCI Registered Reports***

PCI Ecotoxicology and  
Environmental Chemistry

PCI Infections

## 2022

PCI Microbiology

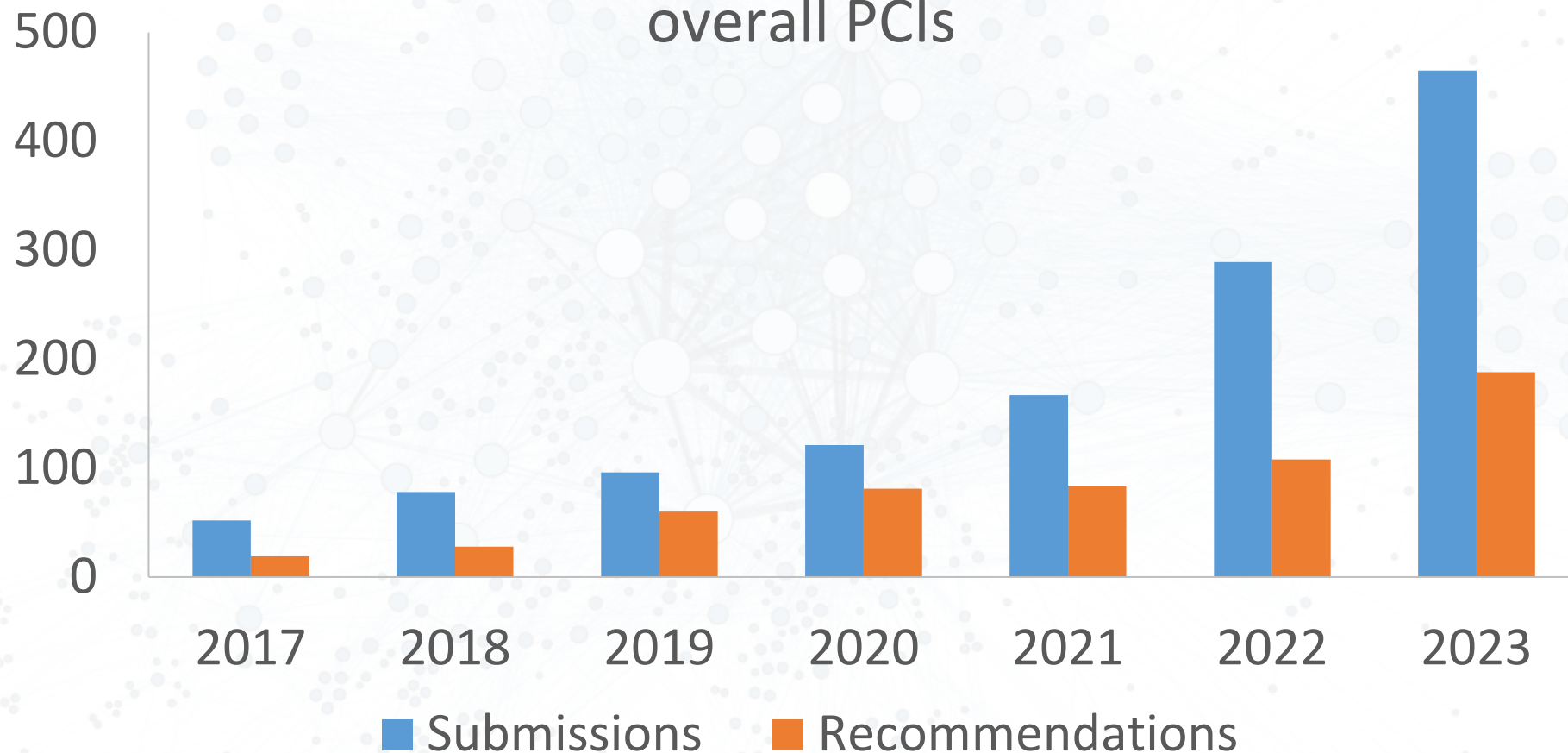
PCI Health & Movement  
Sciences

## 2023

PCI Organization Studies

# Increasing activity

## Submissions and recommendations overall PCIs



A complex network diagram with numerous nodes of varying sizes and colors (light blue, grey, white) connected by thin lines, creating a dense web of connections. The nodes are scattered across the slide, with a higher concentration in the center and bottom right.

# Supports, awards and recognition

---

# Recognition by funders



Peer Reviewed preprints are considered by most cOAlition S organisations to be of equivalent merit and status as peer-reviewed publications that are published in a recognised journal or on a platform





# Recognition by committees and doctoral schools

---



Sections 29, 30 and 52 of  
the National Committee for Scientific Research



Section 67 and 74 of  
the Conseil National des Universités



Commissions Scientifiques Spécialisées (CSS) of  
the French National Institute for Agricultural Research



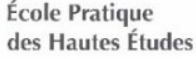
Commission Scientifique Sectorielle 3 (CSS3) of  
the French National Research Institute for Development

30 doctoral schools including :

- ED Gaïa
- ED Sciences Chimiques et Biologiques pour la Santé

# Supports

Ouvrir la science!



# Supports

## NORTH AMERICA

Harvard  
Library

Iowa State University



Bibliothèque  
Library

uOttawa

Faculté des sciences de la santé  
Faculty of Health Sciences

les bibliothèques

Université  
de Montréal

## UNITED KINGDOM



## EUROPE



## OTHER COUNTRIES



# How to get involved?

---

- **Submit your articles to a PCI**
- **Publish in Peer Community Journal**
- **Volunteer to format for Peer Community Journal**
- **Join us as reviewers and recommenders**
- **Create a new PCI:**  
<https://peercommunityin.org/2019/05/21/steps-in-the-creation-of-a-new-pci/>
- **Attend the PCI Webinars series events:**  
<https://peercommunityin.org/pci-webinar-series/>
- **More generally participate in real open science (Diamond OA, society/university journals, ...)**
- **Follow us on social media**

# Thanks!

---



<https://peercommunityin.org>

<https://peercommunityjournal.org>



@PeerCommunityIn@ecoevo.social

@PeerCommunityJournal@ecoevo.social



@peercommunityin.bsky.social

@peercomjournal.bsky.social



<https://www.linkedin.com/company/peer-community-in/>