

# Peer Community In

A free and transparent initiative for preprint peer-reviewing

We did it in Archaeology, why not in Geochemistry?

Alain QUEFFELEC, Bruno MAUREILLE, Sébastien VILLOTTE

Goldschmidt 2021

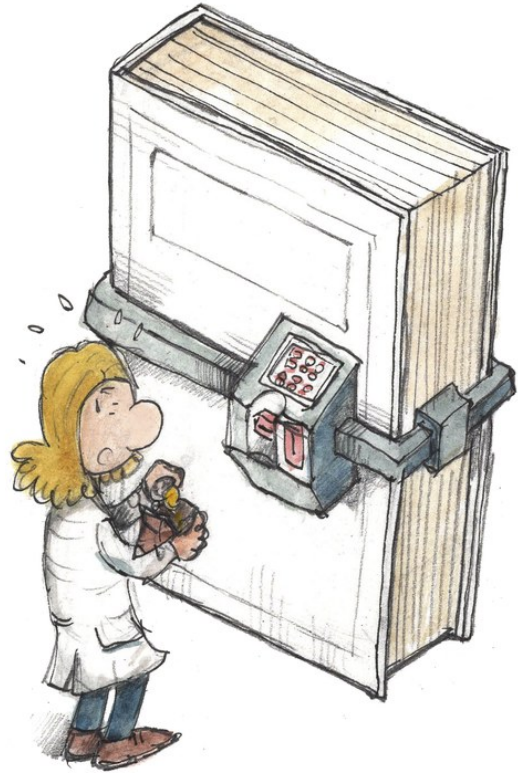
<https://archaeo.peercommunityin.org/>

 /pci.archaeology

 @PCI\_Archaeology

# Context: the present system

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Paywalls



Open Access



Hybrid...

# Context: very expensive system

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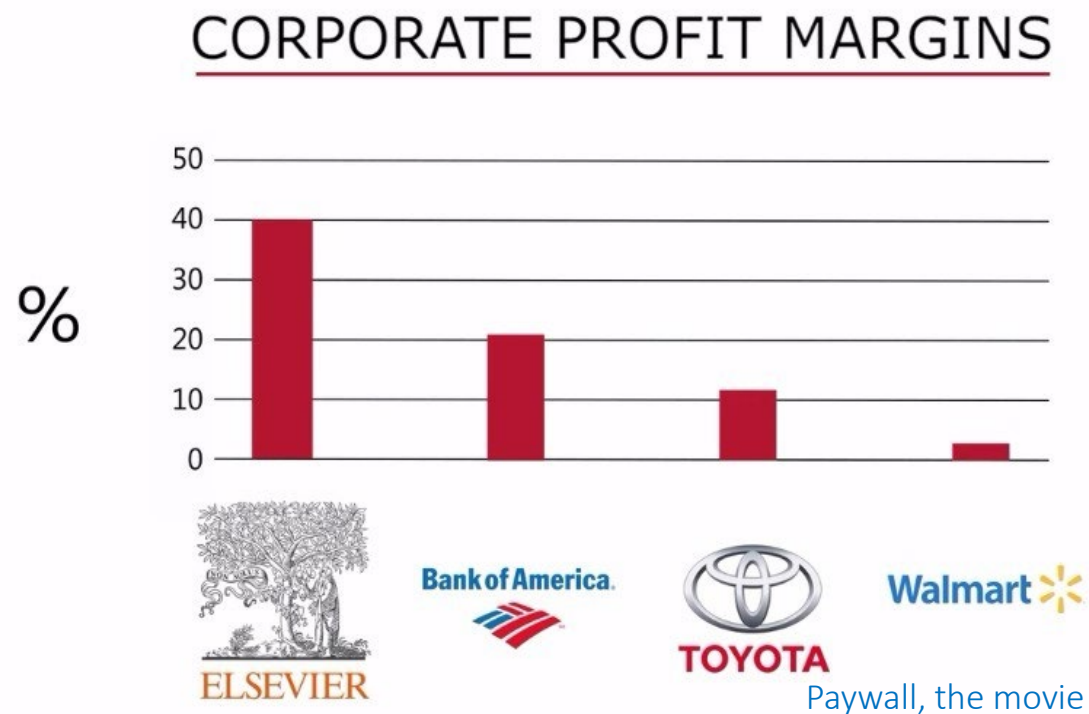
1 x



= 5 000 € !



# Context: costs are abusive & rising!



Benefits RELX group (Elsevier) 2018:  
2,6 **BILLIONS** € = CNRS annual budget

Costs are rising !  
+5-6% / year

Bosch et al. 2019

# Context: an oligopoly



 Elsevier  Taylor & Francis

 Wiley  Springer

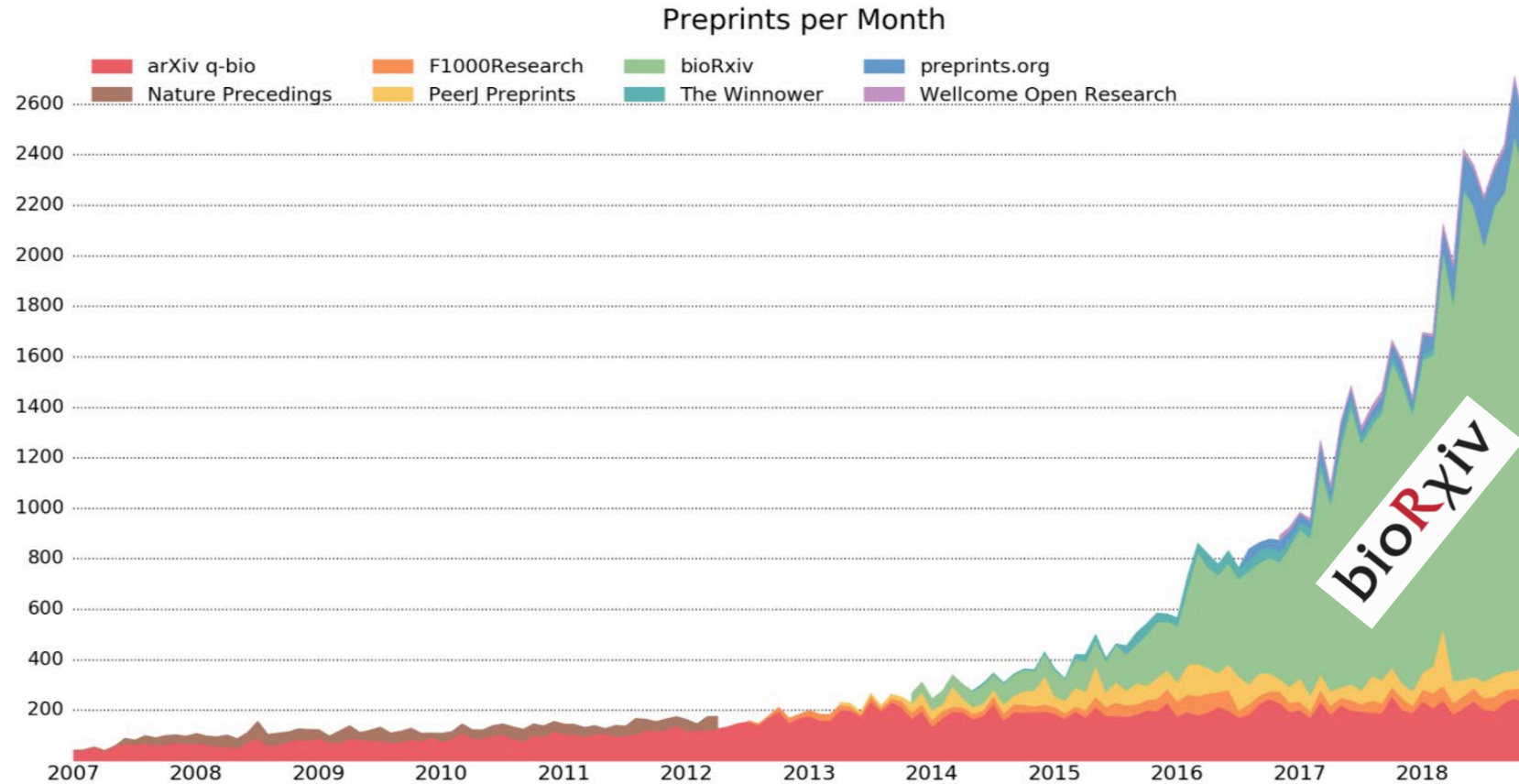
 Sage

> 50%

 Other publisher

Social Sciences & Humanities repartition of published papers in 2013

# A « new » way to publish, preprints



arXiv.org

zenodo

COS  
— CENTER FOR —  
OPEN SCIENCE

Earth ArXiv

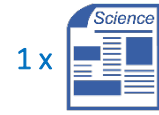
<http://www.prepubmed.org>

# A « new » way to publish, preprints

1 x



= 10 €



1 x

= 5 000 € !





**But preprints lack peer-review**



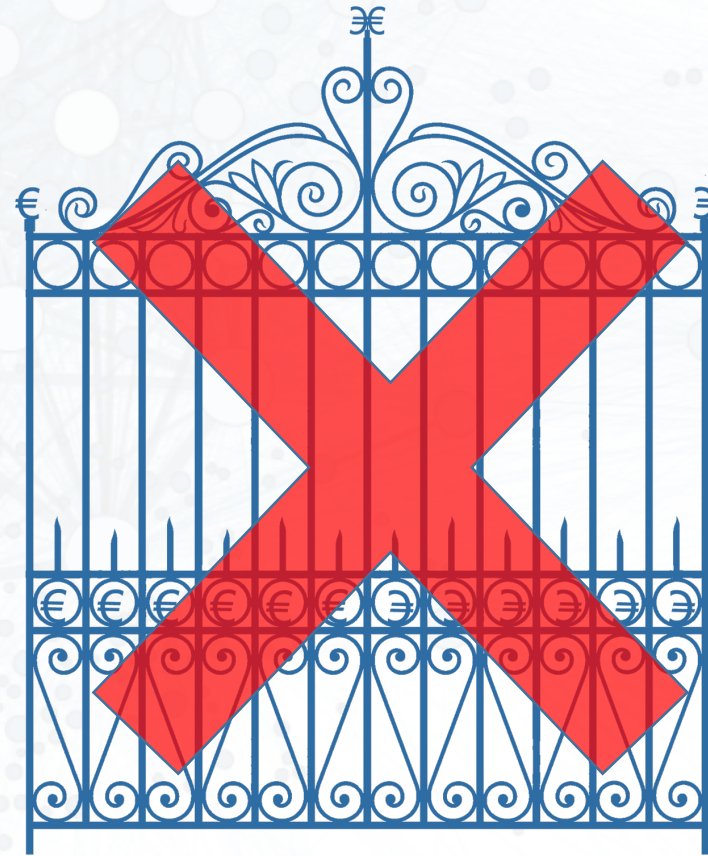
## Create communities of researchers to evaluate preprints

*e.g. PCI Ecology, PCI Evolutionary Biology, PCI Paleontology, etc..*



## Completely free for authors and readers

no APC, no paywall, no delay, no subscription



## PCI imposes Open Data and Open Code

**OPEN**  **CODE  
ACCESS  
DATA**

The background features a complex network diagram with numerous nodes of varying sizes and colors (light blue, grey, and white) connected by thin, light blue lines. The nodes are distributed across the frame, with a higher density in the center, creating a sense of interconnectedness and data flow.

**HOW DOES IT WORK ?**



You're proud of your manuscript. Instead of, or before, submitting it to a journal,

you first deposit it on a preprint server



**PREPRINT SERVER (OSF, BioRxiv, Zenodo ...)**

- anteriority proof
- open access
- free for readers and authors
- findable

Revised versions

PDF v1      PDF v2      PDF v3 ...

**Recommended, peer-reviewed preprint**

It becomes a valid & citable final article **AND** can still be submitted to a journal

PDF vn



you then submit it to a PCI.



**PCI process**

PCI website → **3** → Your preprint is Peer-reviewed

not considered for peer-review

rejected

**4** → Your preprint is Recommended

A citable Recommendation text + the Reviews are published by the PCI (doi)

- open access
- free for readers and authors
- searchable

PDF



**Your preprint is Recommended**

PDF

# ① Upload on preprint server

The research paper will always remain  
on the preprint server

We do not publish preprints

①

# Upload on preprint server

No delays

Visible and accessible

Protected (DOI)

Versioning

Free

2

# Submit to dedicated PCI

January 2017



Peer Community In  
Evolutionary  
Biology

January 2018



Peer Community In  
Paleontology



Peer Community In  
Ecology

June 2019



Peer Community In  
Animal  
Science

Sept/Oct 2019



Peer Community In  
Zoology

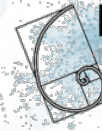


Peer Community In  
Circuit Neuroscience



Peer Community In  
Genomics

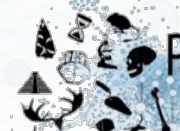
March 2020



Peer Community In  
Mathematical &  
Computational  
Biology

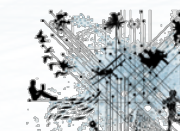


Peer Community In  
Forest & Wood  
Sciences



Peer Community In  
Archaeology

Sept 2020



Peer Community In  
Network  
Science

April 2021



Peer Community In  
Registered  
Reports

Free and transparent pre- and post-study  
recommendations across research fields

May 2021



Peer Community In  
Ecotoxicology & Environmental  
Chemistry

# 13 PCI



④

## Open recommendation

We publish the full editorial process:

- Reviews
- Answers to reviews
- Editorial decisions
- Final recommendation

4

# Open recommendation

January 2017



Peer Community In  
Evolutionary  
Biology

January 2018



Peer Community In  
Paleontology



Peer Community In  
Ecology

June 2019



Peer Community In  
Animal  
Science

Sept/Oct 2019



Peer Community In  
Zoology



Peer Community In  
Circuit Neuroscience



Peer Community In  
Genomics

March 2020



Peer Community In  
Mathematical &  
Computational  
Biology



Peer Community In  
Forest & Wood  
Sciences



Peer Community In  
Archaeology

Sept 2020



Peer Community In  
Network  
Science

April 2021



Peer Community In  
Registered  
Reports

Free and transparent pre- and post-study  
recommendations across research fields

May 2021



Peer Community In  
Ecotoxicology & Environmental  
Chemistry

250+

# Recommendations

5

# Submit to journal (if needed)

PCI-recommended article



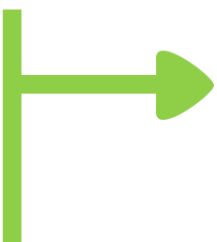
Final, citable article hosted by preprint server

Author's choice to submit to



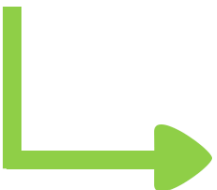
**Peer Community Journal**  
Direct publication in diamond open access  
Starting fall 2021

OR



**PCI-friendly journals**  
- accept with no further peer review  
OR  
- fast response ( $\leq 5$  days) to presubmission enquiry  
OR  
- use of PCI evaluation if appropriate

OR



**Other journals**

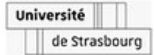
If not satisfied by the decision

If not satisfied by the decision



# Peer Community In

## INRAE



# Peer Community In

## Doctoral Schools

**ED ABIES** - Univ. Saclay, France

**ED E2M2** - Univ Lyon, France

**ED Écologie, Géosciences, Agronomie, ALimentation** - Univ. Rennes, France

**ED Energie et Environnement** - Univ. Perpignan, France

**ED Environnements-Santé** - Univ. Bourgogne Franche-Comté, France

**ED Gaïa** - Univ Montpellier, France

**ED Science de l'Environnement** - Univ Aix Marseille, France

**ED Sciences de la Mer et du Littoral** - Univ. Brest, Nantes, , France

**ED Sciences de la Nature et de l'Homme : écologie & évolution** - MNHN, France

**ED Sciences de la Vie et de la Santé** - Univ. Nice, France

**ED Sciences du végétal : du gène à l'écosystème** - Univ. Orsay, France

**ED Sciences Exactes et Applications** - Univ. de Pau et des Pays de l'Adour, France

**ED Sciences, Technologies et Santé** - Univ. La Réunion, France

**ED SEVAB** - Univ. Toulouse, France

**ED SMRE** - Univ. Lille, France

**ED SVSAE** - Univ. Clermont Auvergne, France

**ED Structure et Dynamique des Systèmes Vivants** - Univ. Saclay, France

**ED Theodore Monod** - Univ Poitiers, France

**Doctoral Programme in Biodiversity, Genetics and Evolution (BIODIV)** - Univ. Porto & Univ Lisbon, Portugal

**Programa de Doctorado en Biología Integrada** - Univ. de Sevilla, Spain

## Evaluation Committees



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



Section 67 of the **Conseil National des Universités**



CSS BPE of the **French National Institute for Agricultural Research**



CSS3 of the **French National Research Institute for Development**

+ Finland et Norway

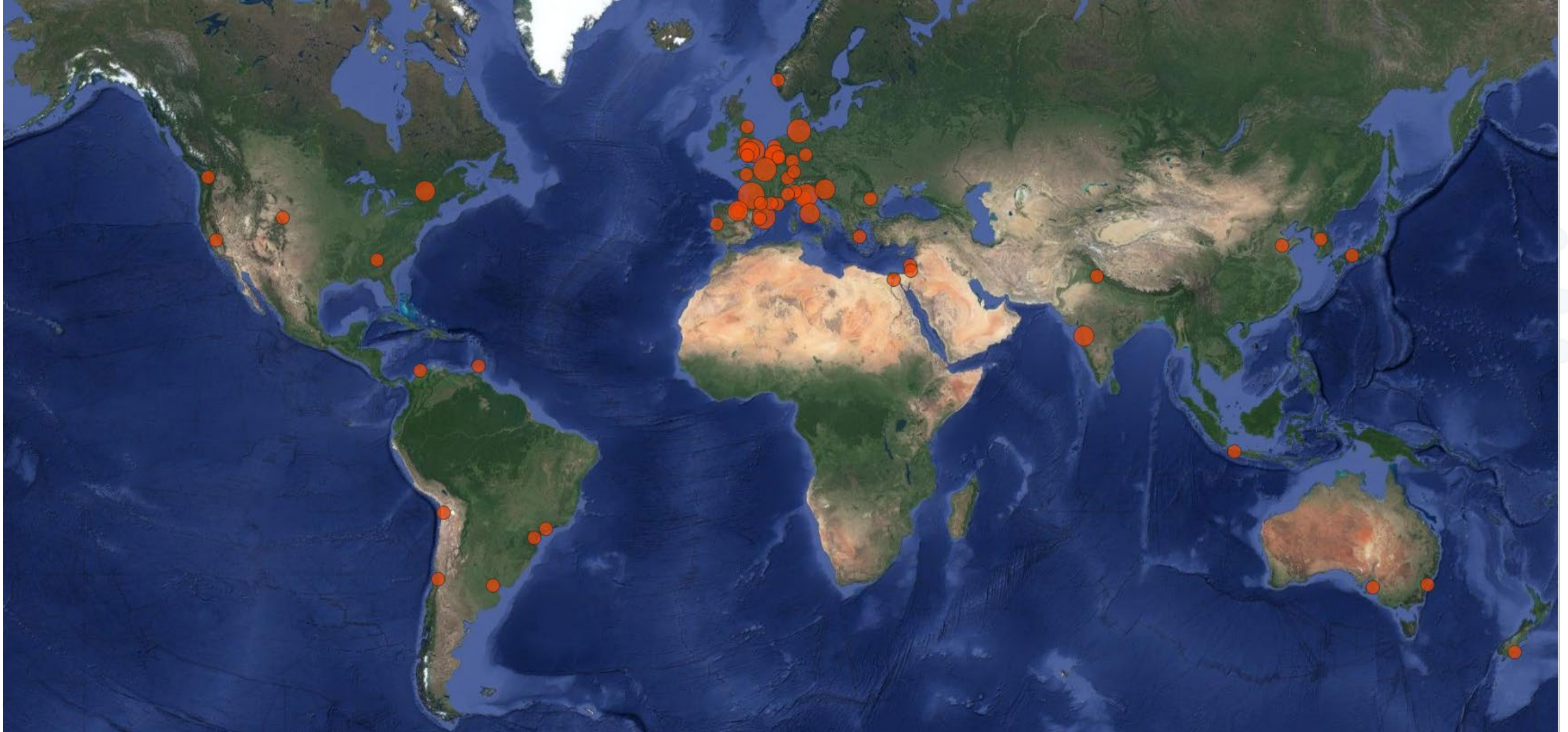


PCI  
Archaeology

# PCI Archaeology: recommenders

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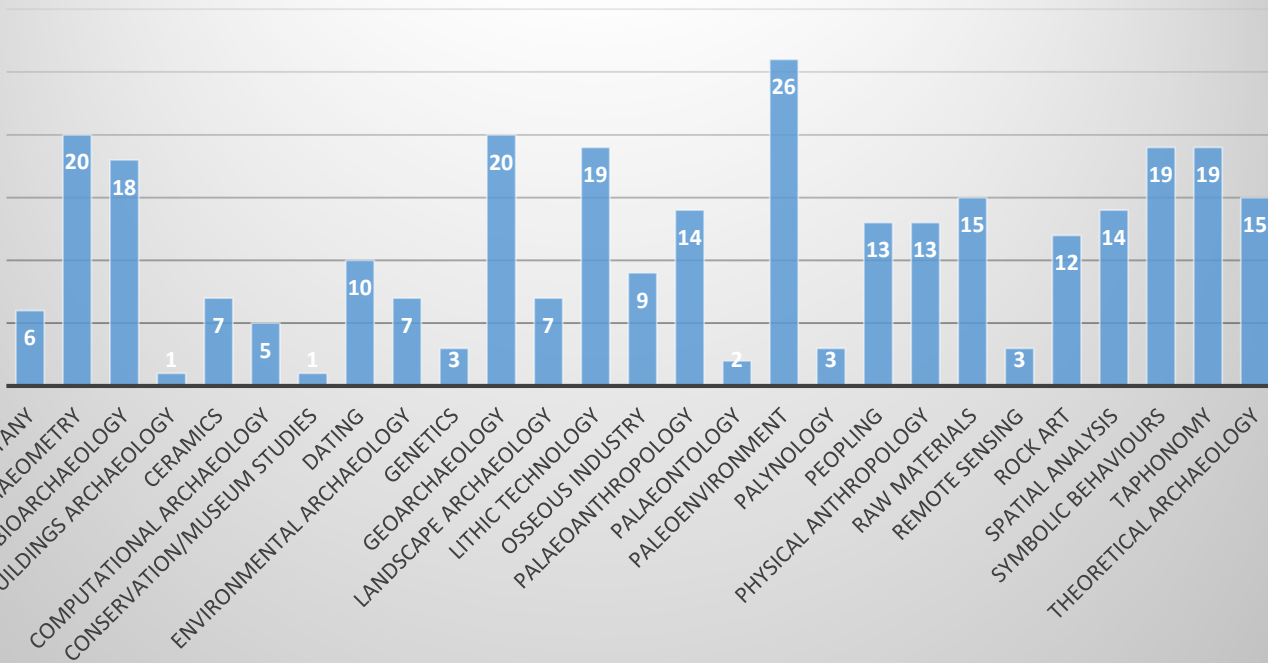
A pool of 94 *recommenders*



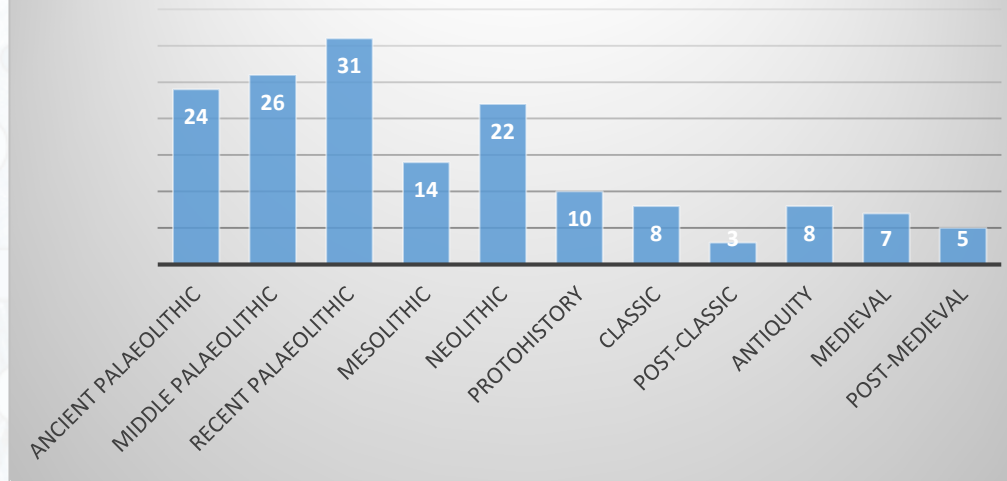
# PCI Archaeology: recommenders' specialties

A pool of 94 *recommenders*

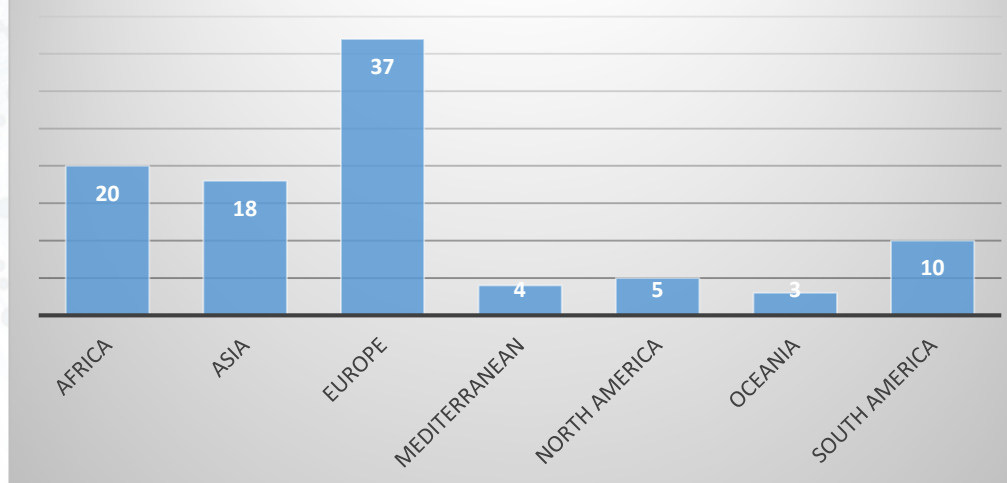
Nb\_recommenders



Nb\_recommenders



Nb\_recommenders

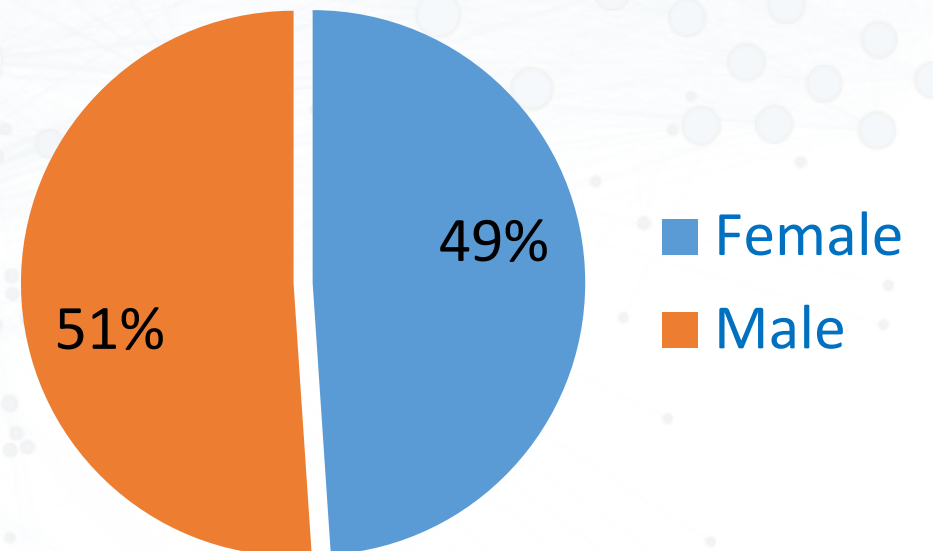
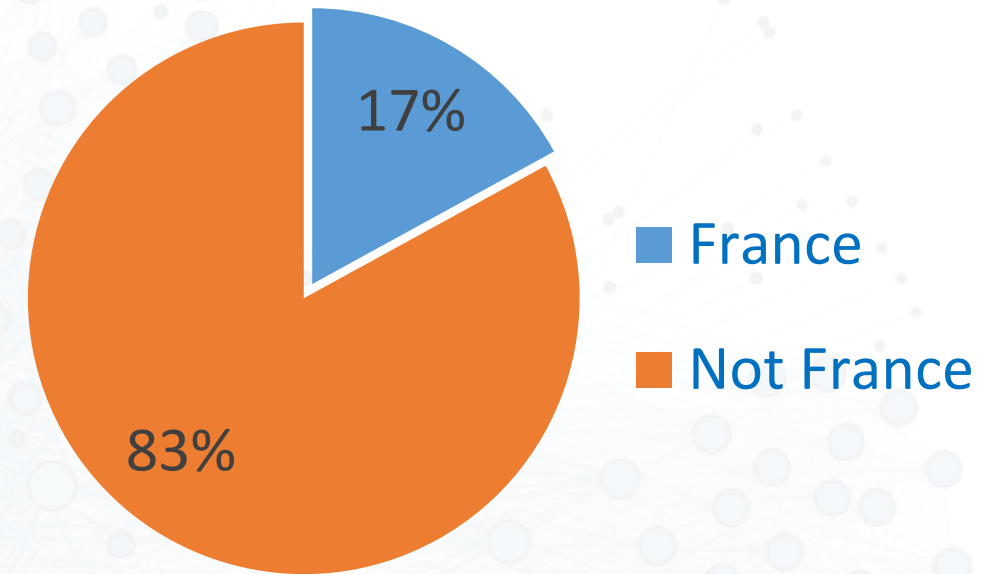
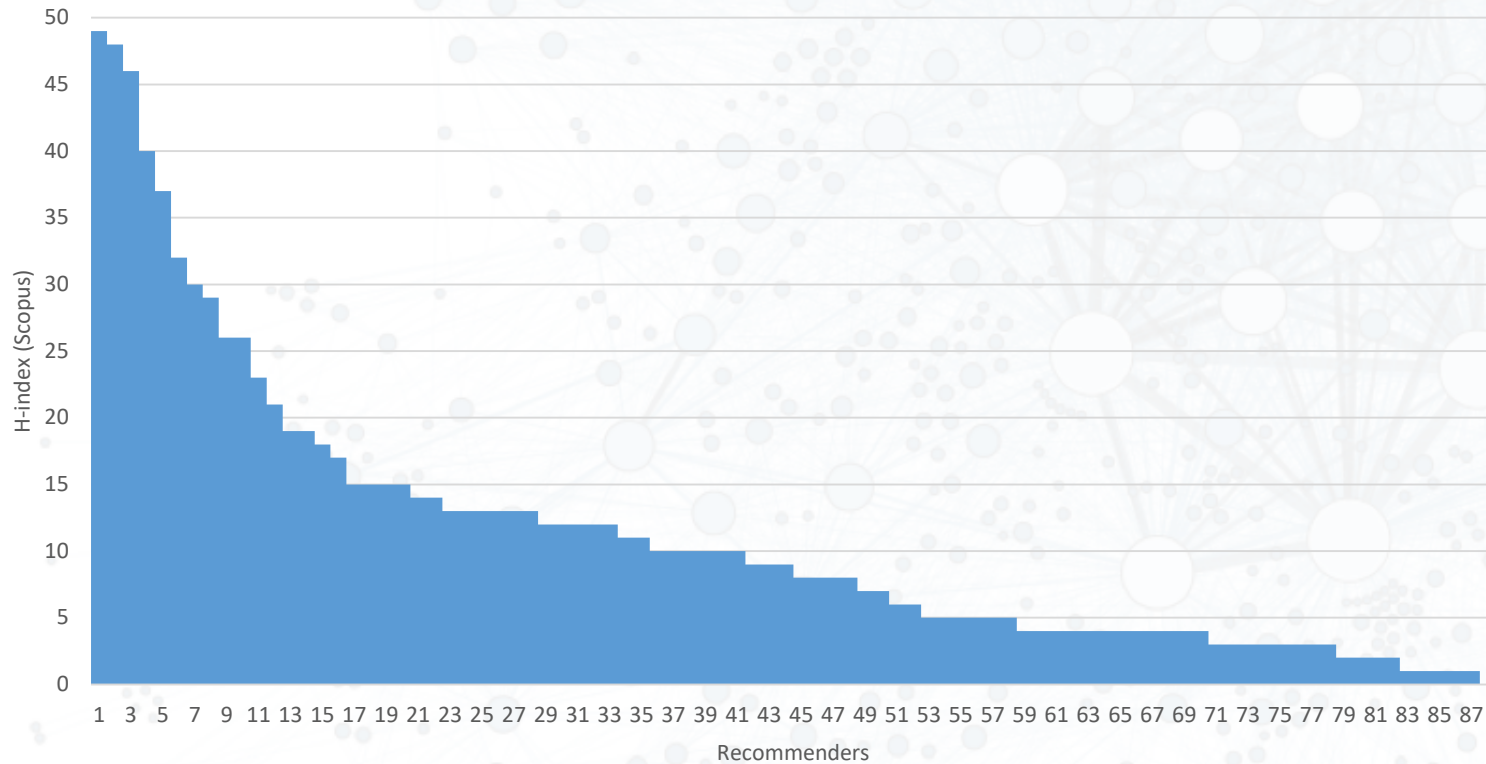




# PCI Archaeology: recommenders

## A pool of 94 *recommenders*

H-indices as a proxy of research experience of recommender

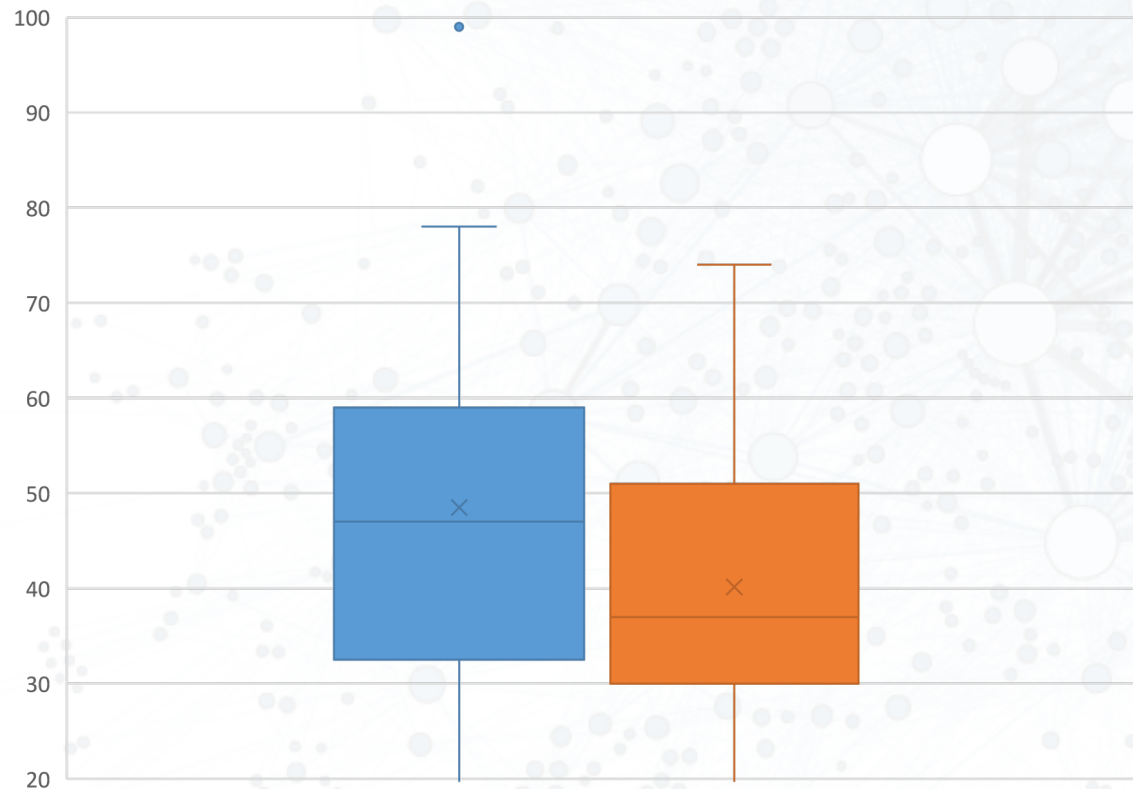


# PCI Archaeology 2020/2021 summary

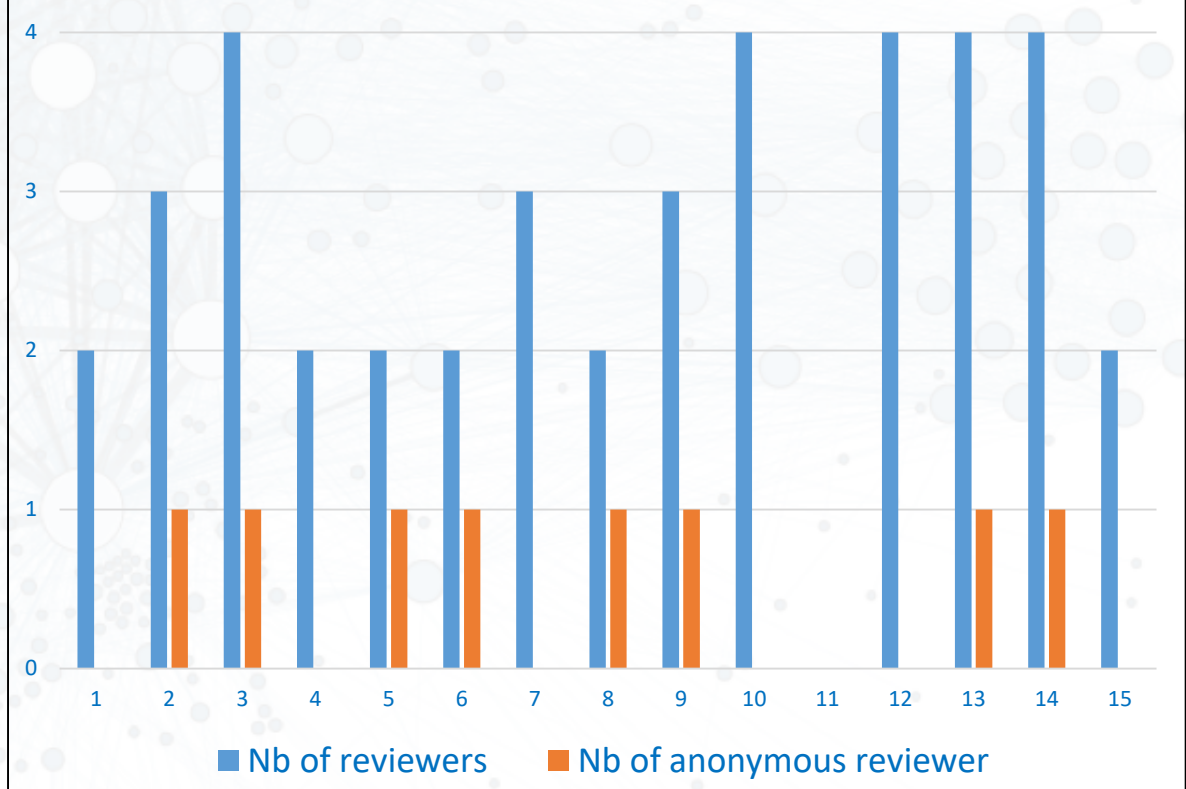
## 15 Submissions so far



Length to first decision and first review



Number of reviewers



# WHAT DO WE NEED FOR GOOD SCIENCE?



**FREE**



**PEER-REVIEWED**




**OPEN**



**REPRODUCIBLE**



# THE STEPS FOR CREATING PCI GEOCHEMISTRY

- 1) Choose 1 or 2 colleagues to set up and manage the PCI
- 2) Define the subject 
- 3) Establish a first group of recommenders (20 to 50)
- 4) Submit your proposal to the PCI association for approval
- 5) Recruit more recommenders
- 6) Set up a managing board
- 7) Open publicly the PCI



# OPEN SCIENCE IS JUST GOOD SCIENCE

J. Tennant †

These slides are available at <https://osf.io/t2mq7/>

<https://peercommunityin.org/>

 @PeerCommunityIn