

Peer Community In & Peer Community Journal

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From preprint recommendation to Diamond Open Access publication





We're facing several problems



Quality issues in published articles

- low power of statistical analysis
- Harking (hypotheses after results are known)
- p-hacking ...



- Raw data not available
- Methods: no details not complete
- Parameters not described
- Scripts and codes not available



4 20-60% studies are non reproducible depending on the field

Begley, C. G.; Ellis, L. M. (2012). "Drug Development: Raise Standards for Preclinical Cancer Research". Nature. Baker, M. 1,500 scientists lift the lid on reproducibility. Nature 533, 452–454 (2016). https://doi.org/10.1038/533452a Open Science Collaboration, Estimating the reproducibility of psychological science. Science 349, aa4716 (2015).

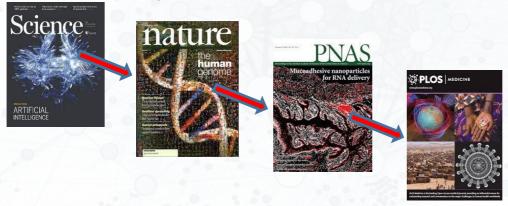


Inefficient Peer Review system

Peer Review = long process



Submissions/rejections in cascade

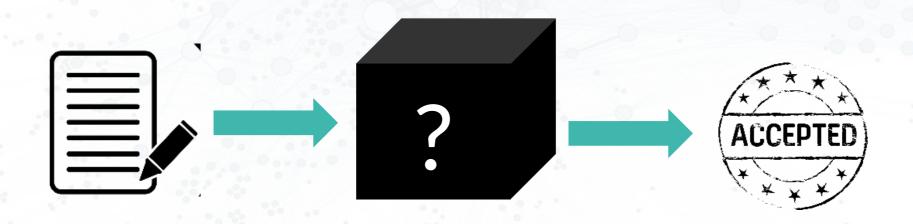


- 1-2 years to read a paper
- Waste of evaluation effort
- Reviewers availability issue



Non transparent Peer Review system

- Hidden Reviews
- Hidden Editorial Decisions
- Unknown Editor
- Hidden Conflicts of Interest



Publication = A closed system

% of publications behind paywalls

Worldwide: 70% (2019)

Piwowar et al 2019. https://doi.org/10.1101/795310



Europe: **64%** (2018)

https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/our-digital-future/open-science/open-science-monitor/trends-open-access-publications_en

France: 44% (2019)

https://www.enseignementsuprecherche.gouv.fr/fr/barometre-francais-dela-science-ouverte-47519



Publication = Costly system & fantastic margin profit



France: ~ €118 M/year

Europe: ~€3 B/year

World: ~ €10 B/ year

for 3 millions articles published /year

article description and the cost of ~ €3000 /article



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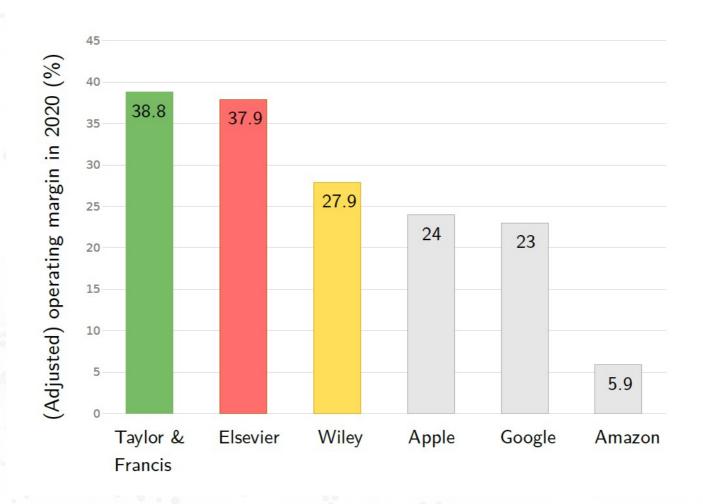
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for 3 millions articles published /year

♣ cost of ~ €3000 /article



and in 2020 ...



BRCP. Against Parasite Publishers: Making Journals Free. (2022). https://doi.org/10.5281/zenodo.7212922



Let's pay twice ...

Hybrid journals

Subscriptionbased journals



APC-based
Open Access
Journals



- 1- Libraries pay subscriptions
- 2- Laboratories pay APCs



Let's pay twice ... or even thrice!

Hybrid journals

Subscriptionbased journals



APC-based
Open Access
Journals



- 1- Libraries pay subscriptions
- 2- Laboratories pay APCs
- 3- Research institutions pay researchers to write, evaluate, edit,





Re-appropriate 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

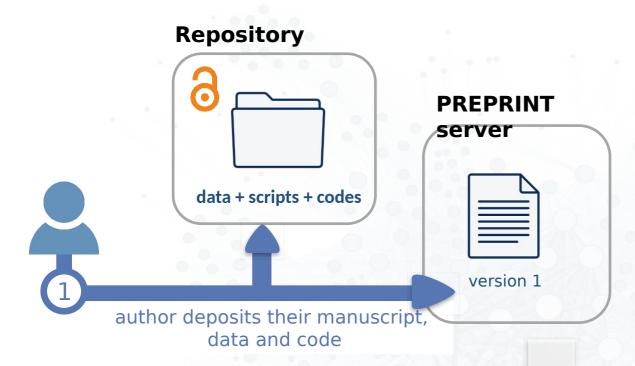
Communities of researchers handling the evaluation of (through peer review) and recommending preprints in their scientific field.

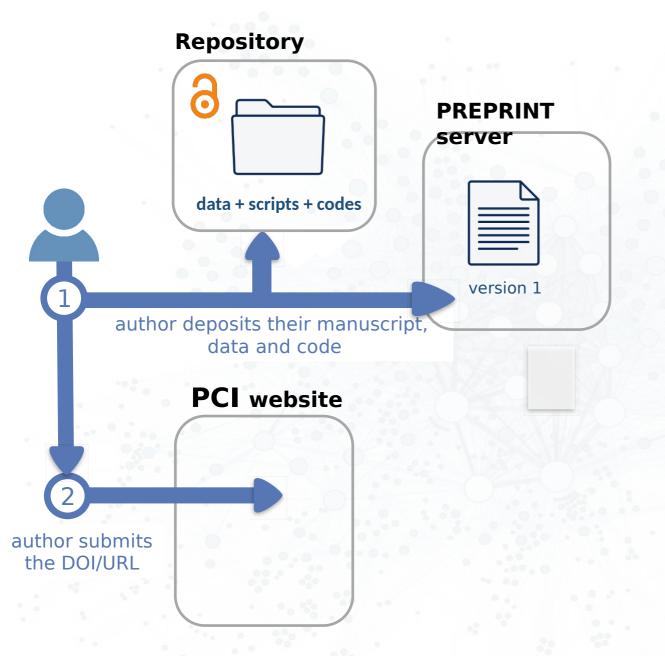


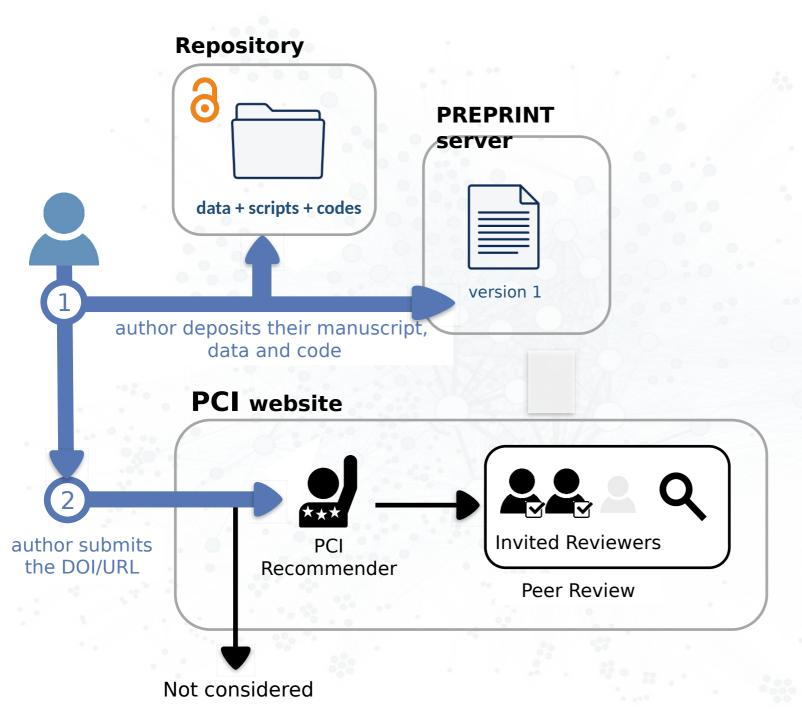
PCI Ecology
PCI Evolutionary Biology
PCI Genomics
PCI Microbiology
etc..



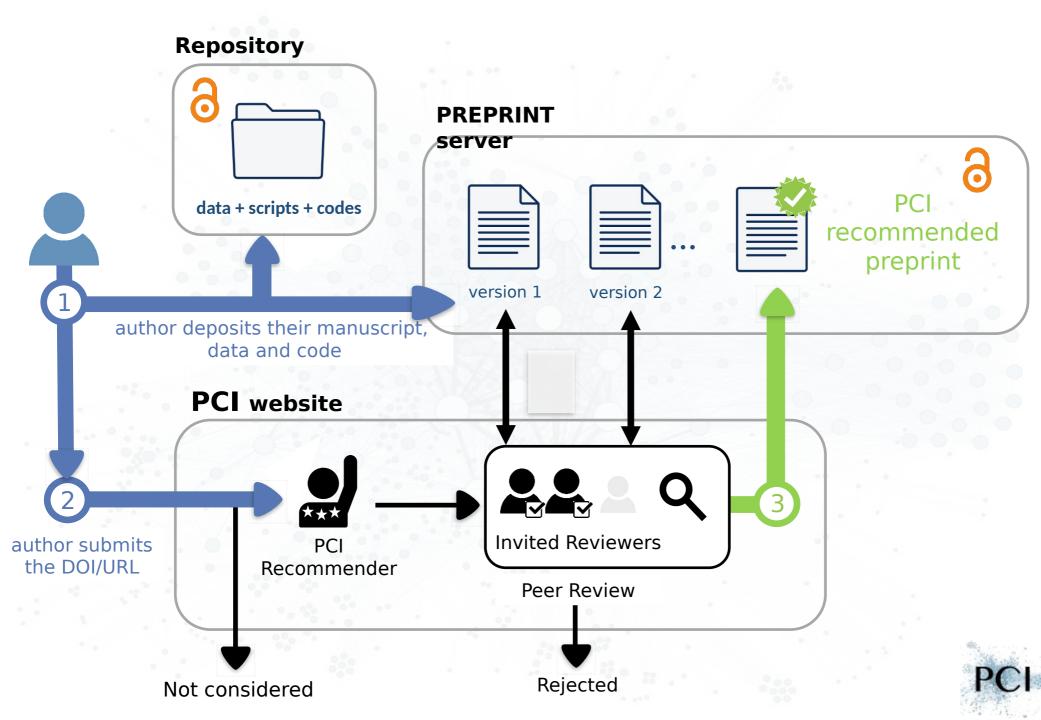
How does PCI work?

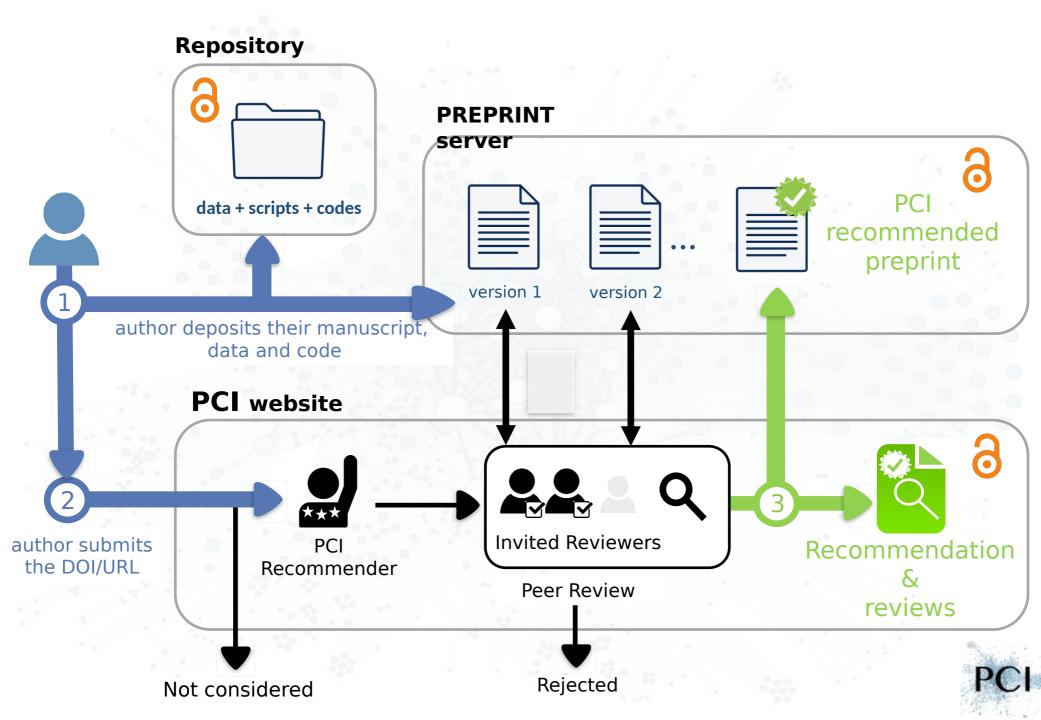












PCI-recommended preprint

Peer Community In Evolutionary Biology

RESEARCH ARTICLE

Open Access

Open Data

Open Code

Open Peer-Review

Cite as: Kozlowski DK, Hassnah-Goulamhoussen R, Da Rocha M, Koutsovoldo GD, Bailly-Bechet M, Danchin EG (2020) Transposable Elements are an evolutionary force shaping genomic plasticity in the parthengemetic root-knot nematode Meloidogyne incognita. bioRxiv, 2020.043.00.69948, vr. 4 peer-reviewed and recommended PCI Evolutionary Biology. https://doi.org/10.1101/2020.04.3 059948.

Posted: 03 Aug 2020

Recommender: Inés Alvar

Reviewers: Daniel Vitales and tw anonymous reviewers

Correspondence: etienne.danchin@inrae.fr diampa.kozlowski@outlook.co Transposable Elements are an evolutionary force shaping genomic plasticity in the parthenogenetic root-knot nematode *Meloidogyne incognita*

Djampa KL Kozlowski¹, Rahim Hassanaly-Goulamhoussen¹, Martine Da Rocha¹, Georgios D Koutsovoulos¹, Marc Bailly-Bechet¹*, Etienne GJ Danchin¹*.

¹ Université Côte d'Azur, INRAE, CNRS, ISA – Sophia Antipolis, France * equal contribution

> This article has been peer-reviewed and recommended by Peer Community in Evolutionary Biology https://doi.org/10.24072/pci.evolbiol.100106

ABSTRACT

Despite reproducing without sexual recombination, the root-knot nematod Meloidogyne incognite is adaptive and versatile. Indeed, this species displays a globs distribution, is able to parasitize a large range of plants and can overcome plant resistance in a few generations. The mechanisms underlying this adaptability without sex remain poorly known and only low variation at the single nucleotide polymorphism level hav been observed so far across different geographical isolates with distinct ranges o compatible hosts. Hence, other mechanisms than the accumulation of point mutation are probably involved in the genomic dynamics and plasticity necessary for adaptability Transposable elements (TES), by their repetitive nature and mobility, can passively an actively impact the genome dynamics. This is particularly expected in polyploid hybrigenomes such as the one of M. Incognita. Here, we have annotated the TE content of M incognita, analyzed the statistical properties of this TE content, and used populatio genomics approach to estimate the mobility of these TEs across 12 geographical isolates presenting phenotypic variations. The TE content is more abundant in DNA transposon and the distribution of TE copies identity to their consensuses sequence suggests the have been at least recently active. We have identified loci in the genome where the frequencies of presence of a TE showed variations across the different isolates. Compare to the M. Incognita reference genome, we detected the insertion of some TEs either within genic regions or in the upstream regulatory regions. These predicted TEs insertion might thus have a functional impact. We validated by PCR the insertion of some of thes TEs, confirming TE movements probably play a role in the genome plasticity with possible functional impacts.

Keywords: transposons, genomic plasticity, evolution, agricultural pest, parthenogenesis, hybridization

PEER COMMUNITY IN EVOLUTIONARY BIOLOGY

Recommendation text





PCI-recommended preprint

Recommendation text



RESEARCH ARTICLE

Open Access

Open Data

Open Code

Open Peer-Review

Cite as: Kozlowski DK, Hassanaly-Goulamhoussen, R. Da Rocha M, Koutsovoulos GD, Bailly-flechet M, Joachin EG (2020) Transposable Elements are an evolutionary force shaping genomic plasticity in the parthenogenetic root-knot nematode Mediodogyne incognita. bioRxiv, 2020.04.30.069948, ver. 4 peer-reviewed and recommended PCI Evolutionary Biology. https://doi.org/10.1101/2020.04.36.

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PEER COMMUNITY IN EVOLUTIONARY BIOLOGY





Final, valid, findable and citable article



Recognition by Doctoral Schools

- ED ABIES Univ. Paris-Saclay, France
- ED Agrosciences et Sciences Univ. Avignon, France
- ED Ecologie, Évolution, Microbiologie, Modélisation Univ. Lyon 1, 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 Espace, Temps, Cultures** Univ. Nanterre, France
- ED Gaïa Univ. Montpellier, France
- **ED MathSTIC** Univ. Bretagne Loire, France
- ED Sciences Chimiques et Biologiques pour la Santé 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. Paris-Saclay, France
- ED Sciences et Environnement Univ. Bordeaux, France
- ED Sciences Exactes et Applications Univ. de Pau et des Pays de l'Adour, France
- ED Sciences Humaines et Sociales Perspectives Européennes Univ. de Strasbourg, France
- ED Science, Ingénierie, Environnement Université Savoie Mont Blanc
- 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. Paris-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

A recommended article has the same value as a published article



Recognition by evaluation committees

Finland:



Julkaisufoorumi Recognition of PCI Evol Biol

France:



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

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



























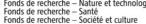


























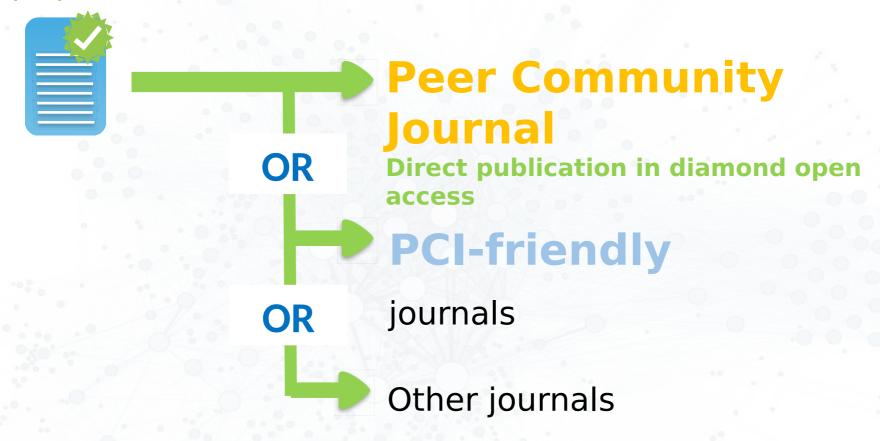






Publication of PCI-recommended preprints **Peer Community** Journal

PCI-recommended preprint





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

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

- Lipids
- Peer Community Journal
- Peer J
- PeerJ Computer Science
- Rethinking Ecology
- Theoretical Roman Archaeology Journal
- Tropical and Subtropical Agroecosystems
- Experimental Psychology
- F1000Research
- Human Population Genetics and Genomics
- In&Vertebrates
- Infant and Child Development
- Journal for Reproducibility in Neuroscience
- Journal of Cognition
- Meta-Psychology
- Neurolmage: Reports
- Peer Community Journal
- PeerJ

- PeerJ Computer Science
- PeerJ Physical Chemistry
- PeerJ Organic Chemistry
- PeerJ Inorganic Chemistry
- PeerJ Analytical Chemistry
 - Peerl Materials Science
- Psychology of Consciousness: Theory, Research, and Practice
- Royal Society Open Science
- Swiss Psychology Open
- WiderScreen



PCI-friendly journals

3 categories 2. Fast response (≤ 5 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
- Préhistoires méditerranéennes -Mediterranean Prehistories
- Quaternaire
- Veterinary Research



PCI-friendly journals

3 categories

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



Peer Community Journal

https://peercommunityjournal.org/

e-ISSN 2804-3871

Peer Community Journal

Section: Ecology



- Launched in November 2021
- Accepts "as is" any and only recommended articles
- Free for readers and authors
- Already 184 articles published
- 17 sections
- **CC-BY Licence**
- Indexed in **DOAJ**







RESEARCH ARTICLE

Claire Stragier, Sylvain Piry, Anne oiseau, Mamadou Kane, Aliou Sow Youssoupha Niang, Mamoudou Diallo, Arame Ndiaye, Philippe Sauthier, Marion Borderon, Laurent Granjon, Carine Brouat and Karine Berthier (2022) Interplay between historical and current features of the cityscape in shaping the genetic structure of the house mouse (Mus nusculus domesticus) in Dakar (Senegal, West Africa), Peer Community Journal, 2: e11

eer reviewed and

Interplay between historical and current features of the cityscape in shaping the genetic structure of the house mouse (Mus musculus domesticus) in Dakar (Senegal, West Africa)

Claire Stragier¹, Sylvain Piry^{0,2}, Anne Loiseau², Mamadou Kane¹, Aliou Sow¹, Youssoupha Niang¹, Mamoudou Diallo¹, Arame Ndiaye1, Philippe Gauthier2, Marion Borderon3, Laurent Granjon², Carine Brouat ^{0,#,2}, and Karine Berthier^{0,#,4}

Volume 2 (2022), article e11

https://doi.org/10.24072/pcjournal.85

Abstract

urbanized environment in order to improve management strategies for biodiversity conservation or pes ntrol. However, in such environment, population genetic structure may reflect both current features of the cityscape and urbanization history. This can be especially relevant when focusing on exotic commen sal rodents that have been introduced in numerous primary colonial European settlements. Accounting for spatial and temporal cityscape heterogeneity to determine how past and recent demographic event may interplay to shape current population genetic structure of synanthropic rodents may provide useful insights to manage their populations. In this study, we addressed these issues by focusing on the house mouse, Mus musculus domesticus, in Dakar, Senegal, where the species may have been introduced a soon as Europeans settled in the middle of the nineteenth century. We examined genetic variation a one mitochondrial locus and 15 nuclear microsatellite markers from individuals sampled in 14 sampling Dakar, We used various approaches, including model-based genetic clustering and model-free smooth arrent features of Dakar cityscape using random forest and Bayesian conditional autoregressive mod ds. Results are consistent with an introduction of the house mouse at colonial time and the curren genetic structure exhibits a gradient-like pattern reflecting the historical process of spatially continuou expansion of the city from the first European settlement. The genetic patterns further suggest that pop ulation dynamics of the house mouse is also driven by the spatial heterogeneity of the current cityscape including socio-economics features, that translate in habitat quality. Our results highlight the potential importance of accounting for past demographic events to understand spatial genetic patterns of nonna tive invasive commensal rodents in highly urbanized environment.

BIOPASS (IRD-CBGP, CIRAD, ISRA, UCAD), Campus de Bel-Air, BP 1386, CP 18524 Dakar, Senegal, 2CBGP, Univ Montp CIRAD, INRAE, Institut Apro, IRD, Montpellier, France, 3Dec



Peer Community Journal is a member of the Centre Mersenne for Open Scientific Publishin





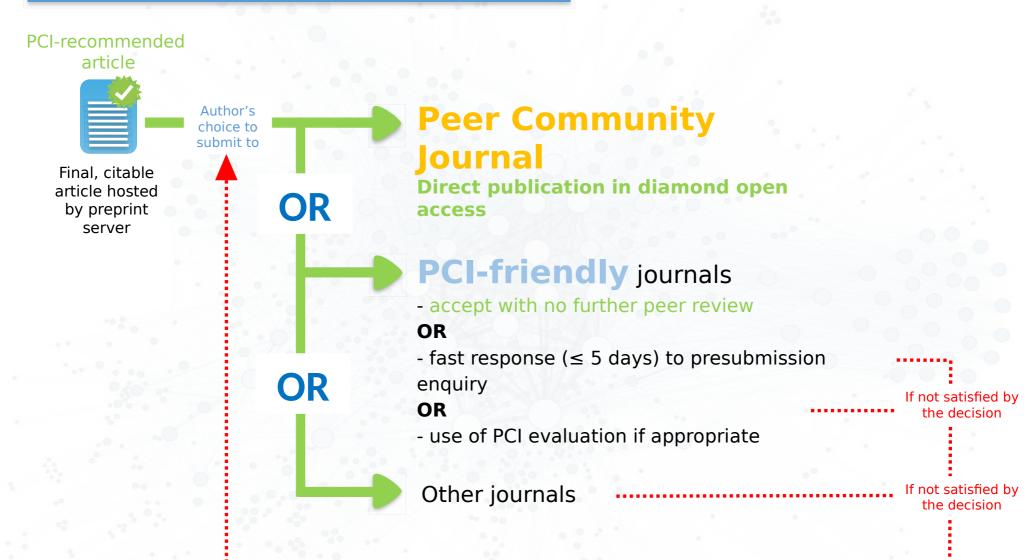


Applications for indexation in





In summary



Authors of PCI-recommended preprints

- ... can know within a few days if one or more PCIfriendly 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)

Consequences

• **Big savings for research** agencies (300 €/paper instead of 3000 € on average)

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- Transparency of data, methods, scripts, codes
- Transparency of evaluations

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- A mean to resist the big publishers' business (diamond OA)



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- The editorial policy of a journal is replaced by a clear and argued recommendation text
- A single evaluation for many journals
- A mean to resist the big publishers' business (diamond OA)
- recognition of reviewers' and recommenders' work



PCI in figures & Current PCIs

PCI in figures





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 Circuit Neuroscience

2021

PCI Registered Reports
PCI Ecotoxicology and
Environmental Chemistry
PCI Infections

2022

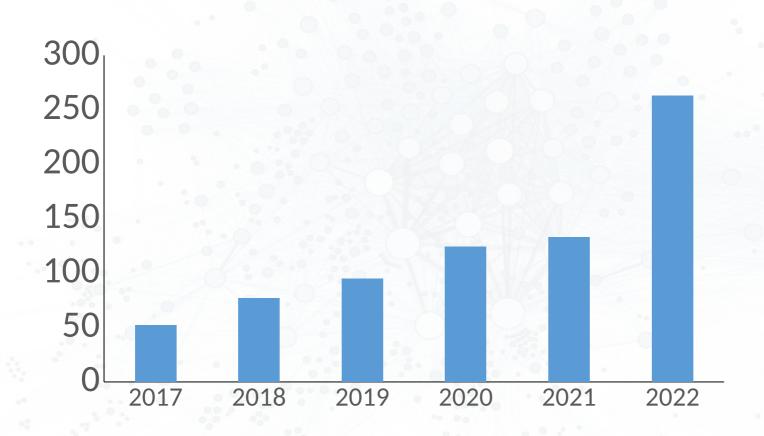
PCI Microbiology PCI Health & Movemen Sciences

2023

PCI Organization Studies



Submissions received (per year) overall PCIs





Supports, awards and recognition

Supports (univ. and research institutes)







































































Université Paris Nanterre













Supports (univ. and research institutes)

EUROPE: Belgium, Denmark, Germany, Italy, the Netherlands, Spain, Switzerland























BIRMINGHAM























OTHER COUNTRIES: Argentina, Australia, Israël, USA











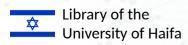
Supports (libraries, societies and others)

Libraries













Societies & networks



Other





















Awards and projects

2020 LIBER Award for Library Innovation



Pilote project « Notify » with









How to participate?

Sign and share the **#PCIManifesto**

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





- 1. I agree to submit at least one of my best articles to a PCI for peer review before the end of 2023 and, if recommended, to publish it in Peer Community Journal.
- 2. "I will be bound by this promise only if at least 500 other researchers make the same commitment."

 1021 colleagues have signed so far





- Submit your articles to a PCI
- Publish in Peer Community Journal
- Join us as reviewers and recommenders



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Create new PCIs



- Submit your articles to a PCI
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Twitter @PeerCommunityIn @PeerComJournal

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

- Create new PCIs
- More generally participate in real open science (Diamond OA, society/university journals, ...)





Thanks!



https://peercommunityin.org

https://

peercommunityjournal.org



The PCI team



Marjolaine Hamelin

Support officer



Denis Bourguet

Co-founder and member

of the PCI board



Thomas Guillemaud

Co-founder and member

of the PCI board



Benoit Facon

Co-founder and member

of the PCI board



Sylvain Piry
Web developer adviser



Garcia

Network engineer

adviser



Ajanaku Web developer

Michael



Olivier

Fambon

Web developer

coordinator



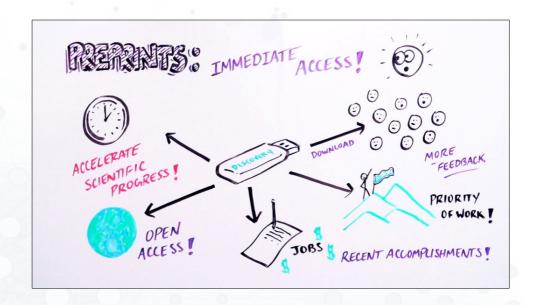
Web designer & web developer



Pavithran Narayanan Editorial assistant

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



We therefore need preprint evaluation

