

Practical Tools for Impact through Open Science



Daniela Saderi, Ph.D.
Executive Director
PREreview
(Chair)



Marie Soulière, Ph.D.
Head of Publication Ethics
and Quality Assurance
Frontiers

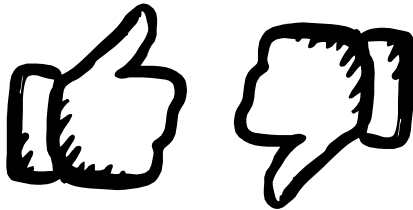


Erin Buchanan, Ph.D.
Professor of Cognitive Analytics
Harrisburg University of Science
and Technology

Break up of the next 75 minutes

- (15 minutes) Daniela Saderi - Introduction + PREREview
- (20 minutes) Marie Soulière - Frontiers tools and AIRA
- (20 minutes) Erin Buchanan - STAPLE
- (15-20 minutes) General discussion and moderated Q&A

Q&A Participation Guidelines



- To participate in the Q&A, please add your questions to the chat adding a **(Q)** at the beginning of the sentence or raise your hand and wait to be invited to speak during the Q&A
- If you tend to be someone who is comfortable talking a lot, try to make space and time for others who may be less comfortable than you
- Be open to, curious about and respectful of different opinions and experiences
- Zero tolerance for dismissing or disruptive behavior

Online Conference

Open Science & Societal Impact

24-25 April 2024

**For Research managers & administrators · Librarians · Funders ·
Researchers · Policy-makers · Publishers · Other professionals in Research,
Impact & Open Science**



Knockers and Locks on Wooden Door - Old Town - Ayvalik - Turkey - Adam Jones CC BY 2.0

OCSDNet and the 7 principles of Open Science



[Open & Collaborative Science Manifesto](#) OCSDNet

Knowledge commons

Cognitive justice

Situated openness

Right to research

Sustainable development

Equitable collaboration

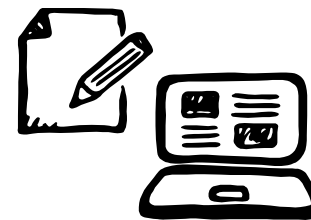
Inclusive infrastructures



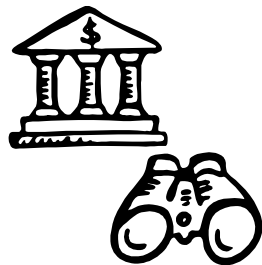
Tools for open, transparent, and equitable knowledge production, dissemination, and evaluation



Open Data Collection



Open Data/Results
Dissemination &
Evaluation



Open Discovery



Open Code/Data Analysis



Why peer review?

Peer review is the evaluation of work by one or more people with similar competencies as the producers of the work. It functions as a form of self-regulation by **qualified members of a profession** within the relevant field.

—Wikipedia



Peer review is inequitable and unsustainable

- The pool of people called to review/people willing to do so is small and often insufficient for the number of review requests
- The composition of the reviewer pool is homogenous across many dimensions
- Most reviewers are male, mid- or late-career researchers selected by journal editors as “experts” in their field
- Yet, most have never received any formal training in conducting peer review

PREreview imagines more equitable and broader participation in peer review

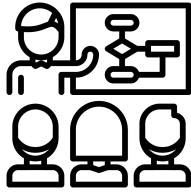
We envision a world in which feedback to scholarly outputs is done openly, rapidly, constructively, and by a diverse **global community of peers**.

We believe peer review **expertise** should be measured by constructive contributions and community engagement and not by seniority and prestige.

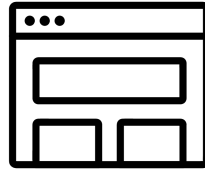
We value **openness** and **equity, collaboration** and **co-creation, iteration** and **plurality**.



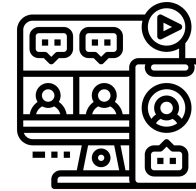
PREreview is a preprint peer review platform, a resource center and a convener



Peer review training programs to train researchers on constructive peer review practices



Open platforms where anyone with an ORCID account can give constructive feedback to preprints



Live collaborative reviews to engage researchers across the world in constructive and timely discussions around preprints



Training

- Manuscript or grant review workshops conducted in partnership with organizations and institutions
- Content tailored to specific audiences (e.g., undergraduate students, graduate students and postdocs, editors and established reviewers, grant reviewers)
- Focus on challenging the *status quo* of peer review, understanding and identifying personal bias rooted in systemic of oppression
- Practice how to recognize and mitigate personal bias in review
- Practice how to provide constructive, clear and actionable feedback
- Participants receive a certificate of participation and a badge

prereview.org/trainings



PREview Champions 2024



Cesar Acevedo-Triana



Femi Arogundade



Lonni Besançon



Juan Bizzotto



Janaynne Carvalho do Amaral



Kylie Yui Dan



Ebuka Ezeike



Samir Hachani



Narcisse Mbuzama



Sahar Mohamed



Anna Oliveras



Seun Olufemi



Chris Pavlakis



Pablo Ranea-Robles



Maria Sol Ruiz



María Eugenia Segretin



Allegra Spensieri



Muhammad Imtiaz Subhani



Azra Shaheen Syeda



Lamis Yahia Mohamed Elkheir





Live Reviews

- Reviews of preprints done collaboratively over a Zoom call
- Facilitated 90-minute conversation with researchers and professionals joining from all over the world
- The output of these calls are reviews written collaboratively and published on PREREVIEW.org and can be used in journal-organized peer review
- Often organized in collaboration with journals and other groups

prereview.org/live-reviews





Preprint Review Platform

- **Open:** open-source code on GitHub (MIT License); reviews have open licenses CC BY 4.0
- **Participatory:** designed with community input
- **Agile:** Small changes with measured feedback
- **Inclusive:** login *via* ORCID, public and pseudonym profiles
- **Adaptable:** multiple paths to help write a review, from structured to free-form
- **Citable:** Reviews get **DOIs** via DataCite/Zenodo
- **Interoperable:**
 - Preprint server-agnostic (currently can enable reviews from 22 preprint servers)
 - Links to reviews appear on bioRxiv, medRxiv, EuropePMC, and Society
 - Via COAR Notify, authors can request feedback to PRereview



Open preprint reviews. For all researchers.

Provide and receive constructive feedback on preprints from an international community of your peers.

[Review a preprint](#)

[Request a review](#)



For underserved researchers

We support and empower diverse and historically excluded communities of researchers (particularly those at early stages of their career) to find a voice, train, and engage in peer review.

A better way

Making science and scholarship more equitable, transparent, and collaborative.

[Our mission >](#)

Preprints allow for timely community feedback



Statistics

860
PREreviews

22
preprint servers

2,684
PREreviewers

Recent PREreviews

Stephanie Wankowicz reviewed “Prediction of Ca²⁺binding site in proteins with a fast and accurate method based on statistical mechanics and analysis of crystal structures”

April 23, 2024

bioRxiv

Lawngreen Parrot and 1 other author of the HHMI Transparent and Accountable Peer Review Training Pilot reviewed “Full-length direct RNA sequencing uncovers stress-granule dependent RNA decay upon cellular stress”

April 20, 2024

bioRxiv

Hickory Butterfly and 1 other author of the HHMI Transparent and Accountable Peer Review Training Pilot reviewed “Full-length direct RNA sequencing uncovers stress-granule dependent RNA decay upon cellular stress”










April 19, 2024

bioRxiv

[See all reviews >](#)

[< See other reviews](#)[Read the preprint >](#)

PREreview of “Virion morphology and on-virus spike protein structures of diverse SARS-CoV-2 variants”

by [James Fraser](#) , [Luisa Vasconcelos](#) , [Liyi Cheng](#) , [Samantha Lish](#) , [S. Chan Baek](#) , [Lang Ding](#) , [Alexandra Probst](#) , [Naiya Phillips](#) , [William Grubbe](#) , and 3 other authors of the [HHMI Transparent and Accountable Peer Review Training Pilot](#)

Published March 4, 2024 **DOI** [10.5281/zenodo.10779310](https://doi.org/10.5281/zenodo.10779310) **License** [CC BY 4.0](#)

The SARS-CoV-2 virus has experienced tremendous selective pressure over the course of the global pandemic with variants of concern emerging that differ in terms of transmissibility, immunogenicity, and other properties. The major goal of this paper is to determine how sequence changes in the major determinant of these properties, the Spike protein, affect structure, abundance, and distribution of the virion. In contrast to most previous studies, which use purified Spike that isn't anchored to the virus surface (or even a mimic of the virus surface or a biological environment), this study uses electron microscopy/tomography to visualize structures in a more native context. The major potential areas of improvement of the paper are the lack of quantitative comparisons to the “meta ensemble” of structures determined by other methods (single particle EM, X-ray, etc) and the limited discussion of the immune evasion properties of the variant structures with regard to antibody binding footprints. It ends with a potential mechanism for how the conformational equilibrium of certain confor-

PREreview Clubs



ASAPbio Neurobiology and neurodegeneration

The ASAPbio Neurobiology and neurodegeneration club is a community of researchers and students interested in the study of neurodegeneration and its underlying mechanisms.

Club leads

Bhargy Sharma, An

[Join the club](#)

PREreviews

Femi Arogundade, Albinsson, et al. Vesicle cluster is crucial for synaptic transmission

September 25, 2023

Kamaldeep Singh, Priti Singh, et al. Dynein and dynactin regulate the localization of the Golgi apparatus

September 20, 2023



Language Club

The Language Club is a community of researchers and students interested in the study of language and its underlying mechanisms.

Our purpose is to offer timely and constructive peer review in the field of linguistics. By doing so, we aim to improve the quality of research in the field, and to foster collaboration, and responsible research practices.

Club leads

Miguel Oliveira, Jr.

[Join the club](#)

PREreviews

Miguel Oliveira, Jr., Arthur Rodrigues, et al. The effects of the COVID-19 pandemic on the psycholinguistic and sociolinguistic aspects of Portuguese: a case study of the effects of the pandemic on the psycholinguistic and sociolinguistic aspects of Portuguese

December 20, 2023



Biophysics Lab

The Institute for Medical Physics and Biophysics is a leading research institute of the Medical Research Service. Our researchers are of diverse origin, hold diverse degrees, and share interdisciplinary research in fields such as spectroscopy, mass spectrometry, and much more.

This club should develop as a successful and unconfined OpenScience practice. At our institute, it should initially focus on providing training and educate them in giving adequate peer review.

Club leads

Jenny Leopold and Benedikt

[Contact the club](#)

PREreviews

Emelyne M. Pacull, Jeannette Laugwitz, and Matthias Voitel reviewed "Cryo-EM structure of cell-free synthesized human histamine H₂ receptor coupled to heterotrimeric G_{βγ} protein in lipid nanodisc environment"

December 19, 2023

bioRxiv



HHMI Transparent and Accountable Peer Review Training Pilot

HHMI is a biomedical research organization and philanthropy that supports a vibrant community of researchers, educators, students, and professionals. Together, we're unlocking the fundamentals of biology and building an open, inclusive future for science.

As part of a newly developed training pilot, participating graduate students and post-docs in HHMI labs will learn to conduct peer review in a manner that is constructive and transparent.

Club leads

Anna Hatch and Michele Avissar-Whiting

PREreviews

James Fraser, Luisa Vasconcelos, Liyi Cheng, Samantha Lish, S. Chan Baek, Lang Ding, Alexandra Probst, Naiya Phillips, William Grubbe, and 3 other authors reviewed "Virion morphology and on-virus spike protein structures of diverse SARS-CoV-2 variants"

March 4, 2024

bioRxiv



Published March 4, 2024 | Version v1

Peer review

PREreview of "Virion morphology and on-virus spike protein structures of diverse SARS-CoV-2 variants"

James Fraser ; Luisa Vasconcelos ; Liyi Cheng ; [Samantha Lish](#) ; S. Chan Baek ; Lang Ding ; Alexandra Probst ; Naiya Phillips ; William Grubbe ; 3 other authors

Research group: HHMI Transparent and Accountable Peer Review Training Pilot

This Zenodo record is a permanently preserved version of a PREreview. You can view the complete PREreview prereview.org/reviews/10779310.

Details

DOI

DOI [10.5281/zenodo.10779310](https://doi.org/10.5281/zenodo.10779310)

Resource type

Peer review

Publisher

Zenodo

Rights



Creative Commons Attribution 4.0 International

Citation

James Fraser, Luisa Vasconcelos, Liyi Cheng, Samantha Lish, S. Chan Baek, Lang Ding, Alexandra Probst, Naiya Phillips, William Grubbe, & 3 other authors. (2024). PREreview of "Virion morphology and on-virus spike protein structures of diverse SARS-CoV-2 variants". Zenodo. <https://doi.org/10.5281/zenodo.10779310>

Style



[< Back](#)


What name would you like to use?

You can choose between the name on your ORCID profile or your PREreview pseudonym.

▼ [What is a PREreview pseudonym?](#)

A PREreview pseudonym is an alternate name you can use instead of your real name. It is unique and combines a random color and animal. Your pseudonym is 'Pink Jaguar.'

Using your pseudonym, you can contribute to open preprint review without fearing retribution or judgment that may occur when using your real name. However, using a pseudonym retains an element of accountability.

- Daniela Saderi
We'll link your PREreview to your ORCID iD. 
- Pink Jaguar
We'll only link your PREreview to others that also use your pseudonym.

Save and continue

✓ Peer review (14 reviews for 1 publication/grant)

☰ Sort

✓ Review activity for **PREreview** (14)

👁 Everyone ▾

peer-review service, PREreview is a platform, resource center and convener. We provide ways for feedback to preprints to be done openly, rapidly, constructively, and by a global community of peers. Join us!

Review date: 2024-02-12 **Type:** review **Role:** reviewer

[Show less detail](#)

[View](#)

Review identifier(s)

DOI: [10.5281/zenodo.10650757](https://doi.org/10.5281/zenodo.10650757)

Convening organization

PREreview (Portland, US)

Review subject

(preprint)

DOI: [10.48550/arxiv.2310.07888](https://doi.org/10.48550/arxiv.2310.07888)

Source:  PREreview



W

Daniela Saderi

ORCID iD

 0000-0002-6109-0367

Slack Community name

 Daniela Saderi (she/her)

Career stage

Mid

Research interests

Neuroscience, Open Scholarship

Location

Portland, OR, United States

Languages

English, Italiano



PREreviews

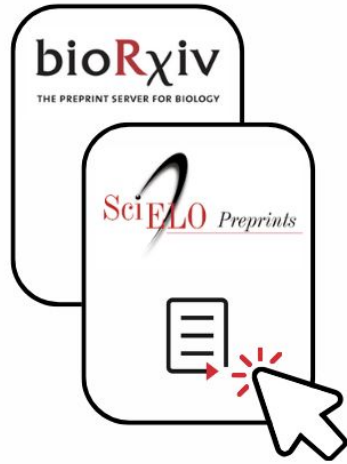
Daniela Saderi is happy to take requests for a PREreview. They can be contacted on our [Slack Community](#).

Daniela Saderi, Laetitia Bert, and Rakesh reviewed “Viability of Mobile Forms for Population Health Surveys in Low Resource Areas”

February 12, 2024

arXiv

Connecting Preprint Authors with Community Reviewers



#request-a-review on PREreview Slack Community



PREreview Bot APP 5:57 AM

SciELO Preprints is seeking reviewers for a paper on **CHATGPT, workplace safety, and risk prevention.** [Write a PREreview](#)

[Ideas para usar CHATGPT en Prevención de Riesgos Laborales](#)
by Jose Javier Miranda Mayo

Posted March 20, 2024 [Server](#)
SciELO Preprints

Vesa M Olkkonen seeks reviewers for this preprint on **lipid transport, autophagy, and endothelial cells.** [Write a PREreview](#)


[Functional omics of ORP7 in primary endothelial cells.](#)
by Juuso Hermann Taskinen, Minna Holopainen, Hanna Ruhanen, Reijo Kakela, and Vesa M Olkkonen

Posted March 19, 2024 [Server](#)
bioRxiv



bit.ly/PREreview-Slack






Using OpenAI to improve messaging on requests



 **PREreview Bot** APP 9:58 AM

This is an experimental threaded-version of [this review request](#).


 **Chris Wilkinson** is seeking your help to PREreview a preprint on **museum documentation, cultural heritage, and museology practices**. Click for more info below! 


 **3 replies** Last reply today at 9:58 AM

Thread  

 **Chris Wilkinson** is seeking your help to PREreview a preprint on **museum documentation, cultural heritage, and museology practices**. Click for more info below! 


3 replies


 **PREreview Bot** APP 1 hour ago

 Thanks for checking this out! The preprint is:

[Teaching of Museological Documentation: A Study at the Federal University of Pará](#)
by Jéssica Tarine Moitinho de Lima and Mariana Corrêa Velloso


Posted
March 6, 2024
Server
SciELO Preprints


 **PREreview Bot** APP 1 hour ago

Exciting, right? Here's a peek at the abstract: 

Teaching museum documentation plays a fundamental role in the sustainable management and preservation of cultural and scientific heritage in the Amazon region. This paper reflects on the importance and practices of teaching documentation of cultural...

[See more](#)

 **PREreview Bot** APP 1 hour ago

Still intrigued? Awesome! 

Please consider writing a PREreview for Chris or share this opportunity with others who might be interested.

[Write a PREreview](#) [Read the preprint](#)



What you can do next? If you are a **community member**...

- ★ Create an account on [PREreview.org](https://prereview.org) and fill in your profile
- ★ Start reviewing! Choose between copy/pasting in your review, filling out a basic template, or following our Structured Review prompts
- ★ Look into PREreview Open Reviewers training for your organization or join our next community workshop (<https://prereview.org/trainings>)
- ★ Start a PREreview Club or join an existing one (<https://prereview.org/clubs>)
- ★ Join the conversation on the PREreview Slack Community (bit.ly/PREreview-Slack)
- ★ Sign up for our bimonthly Newsletter (bit.ly/PREreview-newsletter)

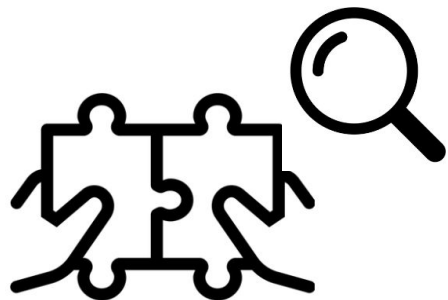
If you are a value-aligned **organization** or a **publisher**...

- ★ Get in touch with us at contact@prereview.org to explore how to leverage our alignment and collaborate towards shared goals
- ★ Inquire about our manuscript review training for your reviewers and editors
- ★ Inquire about hosting a live review for your journal

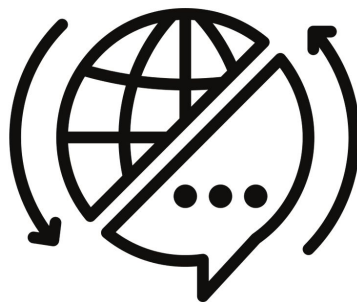
If you are a **funder**...

- ★ Get in touch with us at contact@prereview.org to explore ways you can support us and ways we can support you and your community
- ★ Inquire about our grant review training for your grant reviewer
- ★ Donate to us directly (bit.ly/PREreview-Donate)

Coming up next



Search and recommendation to improve discoverability of content and match-making



Localization and translation of our website and resources



Exploration of new reviewing audiences (e.g., patients, trainees)

Build it and they will come approach



AP Photo / Charlie Neibergall, File

Many thanks to an incredible team!



Daniela Saderi
Executive Director



Sam Hindle
Leadership Team



Monica Granados
Leadership Team



Chad Sansing
Product Manager



Vanessa Fairhurst
Community Manager



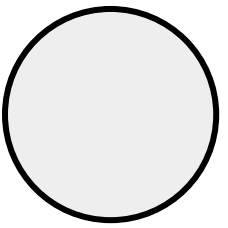
Chris Wilkinson
Tech Lead Manager



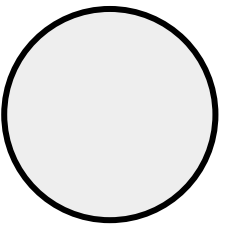
Kristen Ratan
Advisory Committee



Sarah Greaves
Advisory Committee



?
Advisory Committee



?
Advisory Committee



THANK YOU!

If you'd like to get involved with all the exciting opportunities to contribute to **PREreview** in 2024, please reach out to community@prereview.org.

In the meantime, **I'm happy to answer any questions you have during the Q&A!**
You can reach me at daniela@prereview.org.

