

Welcoming Undergraduate Students Into The Scholarly Community Through The Peer Review Process

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Merinda Kaye Hensley

- Associate Professor and Research Support Liaison and Instruction Librarian
- Adjunct instructor for graduate courses at iSchool
- Supports undergraduate research including publishing and sharing work
- Researches intersection between information literacy and scholarly communication



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- Social Anthropologist and Information Scientist from Brazil
- Postdoctoral Research Associate at the iSchool at Illinois
- Researches public participation in peer review and peer review training
- Teaches scholarly communication and library services and programs



University Library + iSchool

Scholarship as a Conversation

Communities of scholars, researchers, or professionals engage in sustained discourse with new insights and discoveries occurring over time as a result of varied perspectives and interpretations.



Undergraduate Journals at UIUC

1. *Illinois Student Undergraduate Research Journal*
2. *Brain Matters*
3. *Lady Justice*
4. *Undergraduate History Journal at Illinois*
5. *Journal of Undergraduate Social Work Research*

Double Helix and *Undergraduate Psychology Journal*
are in production.



**PEER REVIEW IN SCHOLARLY JOURNALS:
HISTORY, PEOPLE, AND MODELS**

Undergraduate students, graduate students, staff, editors, and faculty are invited to join!

REGISTER HERE:

<https://uiuc.libcal.com/calendar/savvy>



Instructor:

Dr. Janayne do Amaral

Wed
Oct
11

Introduction to the Peer Review Process
2:00 pm – 3:30 pm

Wed
Oct
18

The Role of the Reviewer
2:00 pm – 3:30 pm

Wed
Oct
25

Reviewers and their Biases
2:00 pm – 3:00 pm

Wed
Nov
1

Reading Peer Review Policies
2:00 pm – 3:30 pm

Mon
Nov
6

Improving Peer Review Policies
2:00 pm – 3:30 pm

Wed
Nov
15

Understanding Open Peer Review
2:00 pm – 3:30 pm



UNIVERSITY OF
ILLINOIS
URBANA-CHAMPAIGN

Peer review workshops and undergraduate students

- Understanding the roles of the editors, authors, and peer reviewers
- How to write an evaluate a peer review report
- Reviewing journal policies and guidelines



OPINION |  Open Access |   

Librarians at the Center of Peer Review Training: Increasing Collaboration Among Scholarly Communication Stakeholders

Janaynne Carvalho do Amaral  Nicolene Sarich, Merinda Kaye Hensley, Maria J. C. Machado

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Preprint talk at the Main Library



October, 2024

Research on peer review training

Peer Review of a Peer Review Training Resource

A Case Study with Undergraduate Students

Samuele Longo (Philosophy) | longo4@illinois.edu — Dr. Janaynne Carvalho do Amaral (iSchool) |

Aim of our project:

To measure the **understandability** ¹ and **actionability** ² of a peer review training material for undergraduates.

- Materials are understandable when consumers of diverse backgrounds & varying levels of literacy can **process** and **explain** key messages.
- Materials are actionable when consumers of diverse backgrounds & varying levels of literacy can **identify** what they can do based on the information presented.
(adapted from Agency for Healthcare Research and Quality, 2020)

What our study entails:

Q: "What peer review material are you testing?"
A: The Open Reviewers: Reviewers Guide, a free, online resource for anyone looking to learn how to peer review.

It was created by *PREreview*, an organization that provides peer review services and guides.

Q: "How are you testing this resource?"
A: We created an evaluation form for study participants to evaluate the resource.

The resource is based on the Patient Education Materials Assessment Tool (PEMAT).

Q: "What's the difference between your form and the PEMAT?"

PEMAT	Our Form
<ul style="list-style-type: none">For: testing patient education materials (e.g., BMI charts, etc.)26 QuestionsQuestion type: agree/disagreeLanguage: referring to the material's quality in the eyes of a patient	<ul style="list-style-type: none">For: testing only the Open Reviewers: Reviewer Guide22 Questions: we deleted questions not applicable to the Review GuideQuestion type: agree/disagree & short answerLanguage: referring to a "user" of the Reviewer Guide

Wait, what's peer review?

Classical Peer Review Model:

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graph TD; A[Author submits manuscript to journal] --> B[Journal Editor reviews manuscript]; B --> C{ }; C --> D[Accepted]; C --> E[Rejected]; D --> F[Peer reviewers review manuscript; send report to Editor]; F --> G[Editor sends the peer review report to the Author]; G --> H[Author edits and revises manuscript]; H --> I[Editor makes final assessment]; I --> J{ }; J --> K[Accepted]; J --> L[Rejected]; K --> M[Manuscript is edited & published!];
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The bigger picture:

84% of peer reviewers (PRs) are white full professors (Inefuku, 2016).

Some journals, like *Frontiers for Young Minds* and *Research Involvement & Engagement*, are trying to:

- Address this lack of diversity by including children & patients in the PR pool, and...
- At the same time, promote scientific literacy for children & patients

Some publishers are providing ECRs (Early Career Researchers) with PR training materials. **Problem:** "ECR" is a broad term, describing undergrads. to early post-docs.

Thus, not all "ECR Peer Review Training" materials are appropriate for all ECRs.

With the above in mind...

"Why did you choose to study PREreview's guide?"

- PREreview's mission is also to **promote diversity** within peer review, and their guide is meant for first-timers and even experienced reviewers (PREreview, 2021).
- We want to test whether their guide is truly appropriate for undergrads, who are **(a)** usually students learning to peer review for the first time, and **(b)** underrepresented in peer review.

Next steps:

Gather data from approx. **30** students' evaluations of the Reviewer Guide using our form (with a printed form & Guide). It will take **1.5 hours**, in **one sitting**.

Reviewer Guide

Our Eval. Form

References

Undergraduate Research Symposium, April 2024





THE ILLINOIS STUDENT
UNDERGRADUATE RESEARCH JOURNAL

ILSURJ accepts submissions of both empirical and theoretical research manuscripts, along with abstracts, literature reviews, and other innovative projects (such as a creative short film, meaningful song, and much more). If you are not sure that your work is eligible for publication, please do not hesitate to reach out and ask. Our team of copy editors utilizes a standard rubric when reviewing manuscripts for publication. ILSURJ will review your manuscript in sections and as a whole, examining specific goals for your introduction, presentation of data, conclusion, and the overall cohesion and readability. The following list includes recommended questions we encourage you to review and apply to your manuscript before submission, as they are included in our selection criteria:

Introduction

- What is the paper's "hook?" Is it compelling and relevant?
- What is the motivation for the research? Why is it significant?
- Does the introduction recap the current state of the literature?
- If applicable, why is the reflection on this ethical question important?



Presentation of data/results/research

- Are the methods aligned with the proposed question?
- Do the experiments (or research) follow a reasonable and continuous train of thought?
- Are the figures easy to read and captioned well? Is the experimental data explained well and contextualized to the larger story of the project?

Discussion/conclusion

- Are the results tied back into the literature effectively?
- Are the conclusions justified within the context of the original purpose and question?
- Is there a comparison to other related studies or a connection made to other research?
- Are limitations of the research addressed?
- Are the implications and future directions of the research addressed?

Overall cohesion and readability

- Is the paper interesting and/or compelling?
- Is the manuscript straightforward and easy to understand to those working outside



Future work

- Stay in touch with students running the journals bc things can change quickly with turnover of students.
- Continue to offer peer review trainings at the Main Library, and surveying their needs, interests, and motivations first to support student success and promote democratic access to science.
- Design peer review workshops with undergraduate students running student academic journals.



Questions?

