









# Open Peer Reviewers in Africa

MODULE II







**Open Peer Reviewers in Africa** is a 3-part workshop developed with a Train-of-Trainer framework in which trainees are invited and empowered to become trainers themselves.

This slide deck contains content from the workshop and is a **TEMPLATE** for any African-based researcher who wish to:

- 1. Read/learn about the content of the workshop
- Train others

Template slides for Module I can be found at <a href="https://doi.org/10.5281/zenodo.7145170">https://doi.org/10.5281/zenodo.7145170</a>



### About the content and how to cite it

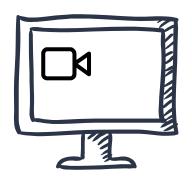
- o Content in this slide deck was adapted from the <u>PREreview Open Reviewers program</u> with contributions from all members of the organizing team of Open Peer Reviewers in Africa.
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   Owango, Joy, Ngugi, Wangari Joyce, Korzec, Kornelia, Outa, Nicholas. (2022). Open Reviewers
   Africa Workshop Module II Template Slides. Zenodo. <a href="https://doi.org/10.5281/zenodo.7145213">https://doi.org/10.5281/zenodo.7145213</a>
- The design template for this slide deck was done by Frasia Kemunto (TCC Africa) and adapted by Daniela Saderi (PREreview).
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### How to use this slide deck to train others



- 1. Download this slide deck from **Zenodo** and open them as Google slides.
- 2. Slide 8-10 contain information about the Open Peer Reviewers in Africa project.
- 3. For each slide, you will find speaker notes and tips on how to present the slide. Please use those as suggestions and feel free to adapt the content to your community.
- Information that is left as a placeholder is highlighted in YELLOW. Once the space is replaced with your info, remember to format the text with the white background.
- 5. This slide deck is meant to be interactive with the workshop participants, and the course assumes the use of Zoom as the virtual platform for workshop delivery.
- 6. If you have questions or concerns related to the content of this workshop or the program, please email us at <a href="mailto:openreviewers@prereview.org">openreviewers@prereview.org</a>.

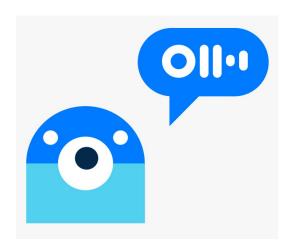
# To know before we start





We are going to RECORD THIS
CALL so that you all have access
to it as a future reference. The
recording will be made available
to all trainees in this cohort and
the facilitators. It will never be
shared with others without your
consent.

# Accessing Live Captions





We are using Otter.ai for live caption services. That means:

- 1) You can access the live caption transcript of this call by clicking on the otter icon at the top left of your Zoom window;
  - 2) You will have access to the transcript and audio recording after this call.

# Slide deck etiquette





You all have EDITING ACCESS to this Google slide deck which means you can change things. Please:

DON'T change the content of the slide deck

DON'T SHARE this link with anyone

DO edit only when prompted by the facilitator.

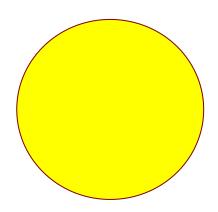
DO follow along as we present.



The Open Peer Reviewers community is committed to fostering learning in a space where everyone is and feels safe. This workshop has **participation guidelines** to which everyone is asked to abide. Expected behaviours from all participants include:

- Using welcoming and inclusive language;
- Providing feedback that is constructive, i.e., useful to the receiver;
- Being respectful of differing viewpoints and experiences;
- Gracefully accepting constructive criticism;
- Focusing on what is best for the community;
- Showing empathy towards other participants and community members.

# Today's Safety Officer



[ADD NAME and PICTURE OF SAFETY OFFICER]

### How to report a violation

- If you experience a violation of our participation guidelines during this workshop that needs immediate response, please send the Safety Officer a direct message on Zoom, and they will do their best to address the issue immediately.
- For non-immediate threats, please email [INSERT EMAIL ADDRESS TO REPORT VIOLATIONS].
- Any questions or concerns about this before we get started?



- Please feel free to eat, stretch, move, step away for any reason.
- Your kids, creatures, and podmates are welcome!
- We'd love to see you, but welcome you to turn off your camera if it is supportive for you.
- Please turn off your mic when you are not speaking.
- To ask a question please use the Zoom chat or raise your Zoom virtual hand.
- When invited to speak by the facilitator, please share your name as you start to speak.
- Feel free to use the Zoom chat to share resources and constructive comments on the materials shared throughout the workshop.

# Trigger Warning

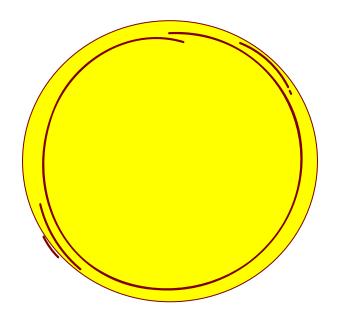
Some of the content we are going to cover today includes real life examples and it may trigger unwanted memories or uncomfortable feelings. Please know that we are here to support you, and PARTICIPATION IN THE GROUP DISCUSSIONS IS OPTIONAL.





I am Aurelia Munene I use she/her pronouns.

I am trained in health, gender and development. I am the founder of Eider Africa. I'm Kenyan and spend most of my time conducting research and co-developing research mentorship programs. I love making jewellery and having a good laugh with family and friends. I look forward to us learning and sharing together.



I am [INSERT NAME OF FACILITATOR]. I use [INSERT PREFERRED PRONOUNS] pronouns.

[INSERT SHORT FACILITATOR'S BIO]

# Workshop overview

#### Module I

- Methods of peer review: how it's done and what can be improved
- Systems of oppression in peer review: what are they and why it is important to recognize and combat them

#### Module II

- Constructive peer review step-by-step guide
- Assessing and addressing biases in peer review

#### Module III

- Collaborative preprint review
- Summarize the discussion in a preprint review
- Share the preprint review on <u>PREreview.org</u>



- Peer Review is a complex process that can take many shapes and shades.
- Some forms of peer review are more open than others, some aspects are more inclusive than others. We are here to **challenge the status quo** and move together towards a more open and equitable peer review process.
- Preprints are manuscripts that are posted online prior to journal-organized peer review and open up the possibility of anyone from the community to provide feedback.
- Systems of oppression affect us and our society, and manifest in the peer review process.
- Approaching solution-building with an equity lens means acknowledges that not everyone has the same resources and privilege and to ensure everyone has truly the same opportunities we need to provide extra resources and ad hoc solutions adapted to the needs of different groups.

# Open Reviewers Toolkit



• REVIEWER GUIDE

• BIAS REFLECTION GUIDE

• REVIEW ASSESSMENT RUBRIC

## Reviewer Guide

ep framework designed to help anyone

The <u>Reviewer Guide</u> is a comprehensive, step-by-step framework designed to help anyone who is going through the process of writing a manuscript review. It contains Editors' tips, content from the <u>PLOS Peer Review Center</u>, and offers space to keep notes and keep track of progress.

#### Why use it?

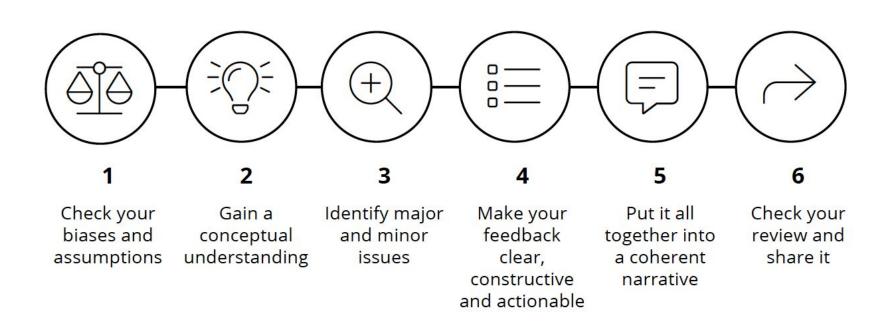
Writing a manuscript review for the first time can be challenging. Even more challenging is to do it objectively, constructively, and in a way that is truly going to help authors improve their work. This guide can be helpful to a student learning to peer review, or even to an experienced reviewer looking to gain an additional perspective on how to peer review.

#### How to use it?

- Section 1: General overview of what to consider before starting your review journey
- Section 2: Writing a Review Step-by-step
- Section 3: Writing a Review Print-out

## Reviewer Guide: Writing step-by-step

**Editor Tip**: "See the review as a multi-step process with the goal of objectively assessing the merit of the work and providing positive input, where necessary (instead of tearing it apart)." –Anonymous editor







The <u>Bias Reflection Guide</u> is a tool meant to help reviewers assess their own biases guiding them through a non-judgmental, self-reflective process.

#### Why use it?

 We all have biases - it is important to identify how our own biases and assumptions may interfere with an objective evaluation of the manuscript. Once these are identified, we can begin the work needed to alleviate their implications and eventually eliminate them altogether.

#### How to use it?

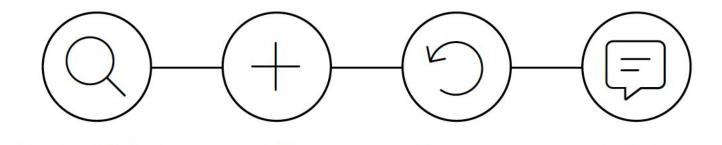
We recommend going through this guide before accepting to review a manuscript (if journal-organized peer review) or before selecting a preprint to review, and then again after the review is complete (STEP 6 of the Reviewer Guide).

# Common biases and assumptions

- Knowing the author's' gender leads me to feel more critical in my review of the manuscript.
- Knowing the authors' ethnicity and/or country of origin leads me to question the accuracy and reliability of the study.
- The country in which the authors' research institute is located makes me feel confident in the accuracy and reliability of the study.
- As a respected leader in the field, the senior author' reputation helps me feel confident in the accuracy and reliability of the study.

## Bias Reflection Guide: IDEA-R2 Method





Why would someone have this bias or make this assumption?

IDentify/Evaluate

What happens if you add an absolute word to the statement (e.g., never, always)?

Add

Can you think of situations in which that may not be the case?

Reverse

Can you rephrase the statement to include this reflection?

Rephrase

#### **Example IDEA-R2**

**Bias:** The senior author is at a late stage of their career and therefore is likely to be very experienced. Knowing this helps me feel more confident in the accuracy and reliability of the data and conclusions.

#### **ID**entify

Why do the author's years of experience lead me to believe that the data and conclusions are more accurate and reliable?

#### **Ev**aluate

Is this logical? Is there a rationale that supports the notion that experience = trust in the quality of the work?

#### Add

Is this \*always\* true? Let's place "always", "guarantee", or "never" into the statement.

#### Reverse

Are there situations I can think of in which the years of experience would not influence the quality of this manuscript?

I know this author is renowned in my field, so I think they probably do good science. They wouldn't let "bad science" come from their lab.

Therefore, I think this work is trustworthy.

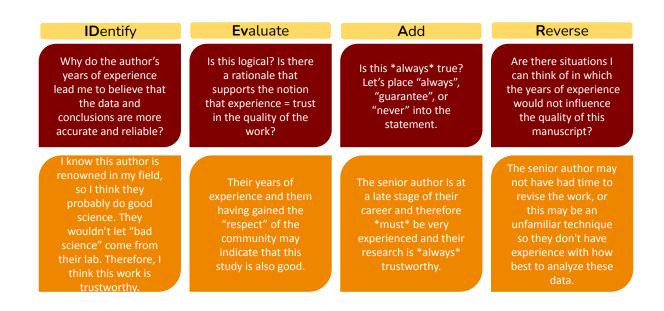
Their years of experience and them having gained the "respect" of the community may indicate that this study is also good.

The senior author is at a late stage of their career and therefore \*must\* be very experienced and their research is \*always\* trustworthy.

The senior author may not have had time to revise the work, or this may be an unfamiliar technique so they don't have experience with how best to analyze these data.

#### **Example IDEA-R2**

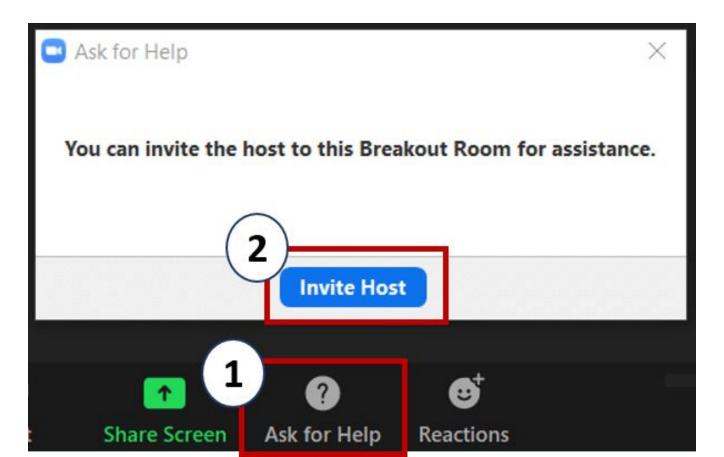
Rephrased: Although the author's experience and recognition in the field may correlate with sound and rigorous experiments, data analysis, and conclusions, it is not something I can take for granted. There are many factors that could influence a manuscript's need for revision. I should remember that experience does not necessarily mean that the work is not questionable or that I can be quicker at evaluating the rigor of the work.





- In the next few minutes we will use the IDEA-R2 Method to reflect on example
   biases that a reviewer may consciously or unconsciously experience when reviewing.
- After going through one example together, we will divide you in smaller breakout groups of 3-4 participants. Each group will have a different example to discuss.
- You will have 10 minutes to discuss among yourselves before we come back to have a group discussion with the facilitators.
- Each group please nominate one note taker who can write down the considerations discussed in the group and report back once we come back to the main group.

## How to Ask for Help from Breakout Rooms in Zoom



### **Group 1**



**Bias:** Knowing the author's' gender leads me to feel more critical in my review of the manuscript.

| <b>ID</b> entify                                                                                            | <b>Ev</b> aluate                                                                                               | Add                                                                                      | Reverse                                                                                                 |
|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Why do the author's gender lead me to believe that the data and conclusions are less accurate and reliable? | Is this logical? Is there a rationale that supports the notion that gender = trust in the quality of the work? | Is this *always* true? Let's place "always", "guarantee", or "never" into the statement. | Are there situations I can think of in which gender would not influence the quality of this manuscript? |
|                                                                                                             |                                                                                                                |                                                                                          |                                                                                                         |
|                                                                                                             |                                                                                                                |                                                                                          |                                                                                                         |
|                                                                                                             |                                                                                                                |                                                                                          |                                                                                                         |

#### Group 2

**Bias:** The country in which the authors' research institute is located makes me feel confident in the accuracy and reliability of the study.

#### **Ev**aluate **ID**entify Add Reverse Why does knowing the Are there situations I Is this logical? Is there a country of the institute Is this \*always\* true? can think of in which rationale that supports lead me to believe that Let's place "always", the country of origin the notion that origin of "guarantee", or "never" would not influence the the data and the institution = trust in conclusions are more into the statement. quality of this the quality of the work? accurate and reliable? manuscript?

### **Group 3**

**Bias:** As a respected leader in the field, the senior author' reputation helps me feel confident in the accuracy and reliability of the study.

#### **Ev**aluate **ID**entify Add Reverse Why do the author's Are there situations I Is this logical? Is there a years of experience Is this \*always\* true? can think of in which rationale that supports lead me to believe that Let's place "always", the years of experience the notion that "guarantee", or "never" would not influence the the data and experience = trust in conclusions are more into the statement. quality of this the quality of the work? accurate and reliable? manuscript?



# 5 MINUTE BREAK



# Step 2: Gain a conceptual understanding

During your **first read** through the manuscript, remember to avoid evaluating and instead focus on <u>understanding</u>. Evaluative thoughts will inevitably pop up, but understanding before evaluating can help us avoid bias.

**Editor Tip**: "During the review, first read the whole manuscript and note down the terms or methods that you are not familiar with, find the possible strength and limitations of the study. Then spend time to know about the terms or methods you are not familiar with. Then read the manuscript again in depth and try to help the authors by finding the scopes to improve the quality and readability of the manuscript." —PLOS ONE editor

# Step 3: Identify major and minor issues

In your **second read**, you can begin identifying issues you may have with the manuscript. We suggest highlighting and listing issues before categorizing them into major or minor concerns as you progress through the manuscript.

**Major or "core" issues** are issues that if not addressed may compromise the interpretation of the results and overall conclusions of the work. Here are some examples of what someone may refer to as "major" issue.

Minor or "peripheral" issues are those that even if left unresolved they would not compromise the interpretation of the results or overall conclusions of the work.

| MAJOR (CORE) ISSUES |                                                                                                           | MINOR (PERIPHERAL) ISSUES |                                                                                 |
|---------------------|-----------------------------------------------------------------------------------------------------------|---------------------------|---------------------------------------------------------------------------------|
| •                   | Conclusions that are not supported by the data                                                            | •                         | Missing/wrong references/citations (but                                         |
| •                   | <ul> <li>Contradictory conclusions</li> </ul>                                                             |                           | depending on what is missing, this could also be a major issue)*                |
| •                   | Not accounting for major confounding variables that can affect the conclusion                             | •                         | Technical clarifications (e.g., the authors should clarify how a reagent works) |
| 0                   | <ul> <li>Issues with experimental design including insufficient sample sizes or data, improper</li> </ul> |                           | <ul> <li>Data presentation (e.g., the authors should</li> </ul>                 |
|                     | controls, inappropriate methodology and/or                                                                |                           | present p-values differently)  Typos, spelling, grammar, and phrasing issues**  |

<sup>\*</sup>Tool to assess your bias when evaluating citations <u>Okune</u>, <u>Angela</u>. (2019). <u>Self-Review of Citational Practice</u>. <u>Zenodo</u> \*\*While it may be tempting to focus on these, try to be aware of your biases here. Journals have paid professionals, called copy editors, whose role it is to make these improvements. This is particularly important to keep in mind if you are reviewing a manuscript authored by researchers whose English is not the first language.

# Step 4: Clear, Constructive, Actionable Feedback





Clear feedback is more likely to be interpreted correctly



Constructive feedback is more likely to be well-received



Actionable feedback is more likely to be integrated

# Example: You believe the statistics are wrong

#### UNCLEAR, DESTRUCTIVE, NON ACTIONABLE CLEAR, CONSTRUCTIVE, ACTIONABLE Reviewer comment: Reviewer comment: "The authors have no idea of what they are doing and "Statistical [test X] is typically used for data that is distributed normally. The data presented in this should go back to statistics class." manuscript appear to be highly skewed to the left. This type of distribution requires a non-parametric version of Here the reviewer is <u>clearly attacking</u> the [test X], which makes no assumption on the parameters of the distribution of data. I suggest the use of [test Y]. If the author at a personal level and insulting their choice of [test X] is motivated by a particular strategy or education, which is not only offensive and other non-obvious analytical constraints, I recommend to <u>unprofessional</u>, but it is also <u>useless</u> to the authors as explicitly mention that in the Methods section justifying it does not provide a way to improve the study. the choice accordingly." Interpretation > Reason > Recommendation > Depersonalization

# Let's practice how to write constructive, clear, and actionable feedback



- In the next 10 minutes we break up in 3 smaller groups.
- Each breakout room will focus on on example of feedback and reword it to go from unclear, disruptive, and non-actionable, to clear, constructive, and actionable.
- You'll have 10 minutes before we come back and have a larger group discussion.
- Each group please nominate one or two note-takers who can write down the new comment and read it to the larger group.
- Participation is optional.

#### Instructions

Rewrite the following unclear, disruptive, and non-actionable comments using this structure as a guide:

Interpretation > Reason > Recommendation > Depersonalization

#### **GROUP 1 Comment**

The manuscript is really hard to read and is full of grammatical errors. I recommend that a native English speaker reviews the language and is included in the list of authors.

#### **GROUP 2 Comment**

The authors' conclusions do not reflect what the data shows and overreach.

#### **GROUP 3 Comment**

The way the authors plot the data in Figure 4 make it impossible for a reader to trust the interpretation of the results. The authors need to replot the data and show all data points.

## Group 1

| UNCLEAR, DESTRUCTIVE, NOT ACTIONABLE                                                                                                                                              | CLEAR, CONSTRUCTIVE, ACTIONABLE                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Reviewer comment:                                                                                                                                                                 | Reviewer comment:                                                                                              |
| "The manuscript is really hard to read and is full of grammatical errors. I recommend that a native English speaker reviews the language and is included in the list of authors." | <pre>[INSERT TEXT HERE]</pre> <pre>Interpretation &gt; Reason &gt; Recommendation &gt; Depersonalization</pre> |

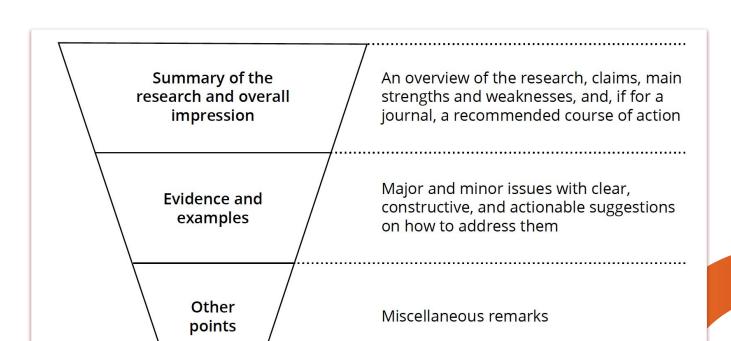
## Group 2

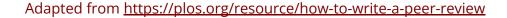
| Unclear, destructive, not actionable                                         | CLEAR, CONSTRUCTIVE, ACTIONABLE                                                                                |
|------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Reviewer comment:                                                            | Reviewer comment:                                                                                              |
| "The authors' conclusions do not reflect what the data shows and overreach." | <pre>[INSERT TEXT HERE]</pre> <pre>Interpretation &gt; Reason &gt; Recommendation &gt; Depersonalization</pre> |

## Group 3

| UNCLEAR, DESTRUCTIVE, NOT ACTIONABLE                                                                                                                                                      | CLEAR, CONSTRUCTIVE, ACTIONABLE                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Reviewer comment:                                                                                                                                                                         | Reviewer comment:                                                                                              |
| "The way the authors plot the data in Figure 4 make it impossible for a reader to trust the interpretation of the results. The authors need to replot the data and show all data points." | <pre>[INSERT TEXT HERE]</pre> <pre>Interpretation &gt; Reason &gt; Recommendation &gt; Depersonalization</pre> |

## Step 5: Review format









The <u>Review Assessment Rubric</u> comprises of 10 statements (below are just the first three) for which the assessor (e.g., peer review mentor, peer, or review author) is asked to provide a score and written comment to help the reviewer improve the review report.

1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree, N/A

| Statement                                                                                                                                                                                                 | Score | EXPLANATION, COMMENTS, EXAMPLES |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---------------------------------|
| 1. Review starts with a concise/informative summary, highlighting what the study did well, what can be improved, contextualizing the findings within the field.                                           |       |                                 |
| 2. The review is structured with the most important info/feedback at the beginning.                                                                                                                       |       |                                 |
| <b>3.</b> What is listed/described as a "major concern" is in fact an issue that the authors should prioritize addressing as if left unaddressed, it would compromise the interpretation of the findings. |       |                                 |

#### References and resources

- Bias Reflection Guide
- Reviewer Guide
- Review Assessment Rubric
- PLOS Peer Review Center
- Peer Review: The Nuts and Bolts (A guide for ECRs)
- PREreview Resource Center (Updates coming soon)
- <u>F1000Research Peer Review examples</u>
- eLife Guide for writing public reviews
- A New "Golden Rule" for Peer Review?
- COPE Ethical guidelines for peer reviewers
- o <u>'Editorial Peer Reviewers as Shepherds, Rather Than Gatekeepers'</u>
- o Okune, Angela. (2019). Self-Review of Citational Practice. Zenodo
- Add here...



#### What's next?

In Module III, we will collaboratively review this **preprint**: <mark>[ADD LINK and TITLE]</mark>

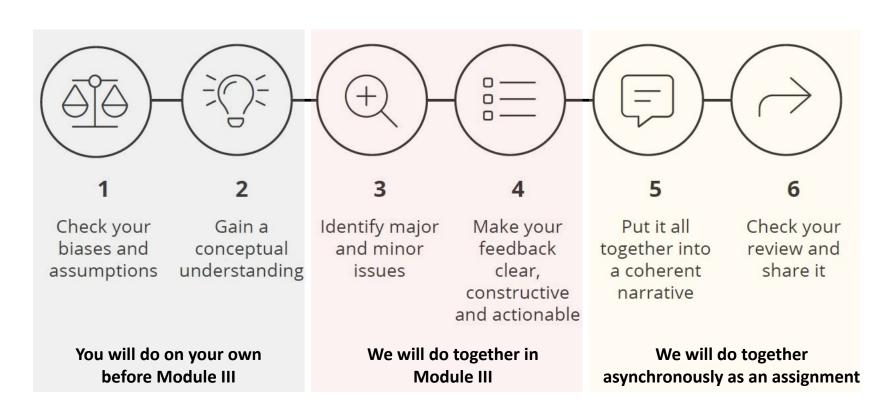
#### Assignment for next week

- Practice checking biases and assumptions you may hold (STEP 1)
- Read the preprint to gain a conceptual understanding (STEP 2)
- Re-read for evaluation and identify major and minor issues (STEP 3)
- Think about how you would suggest the authors addressed the issues (STEP 4)

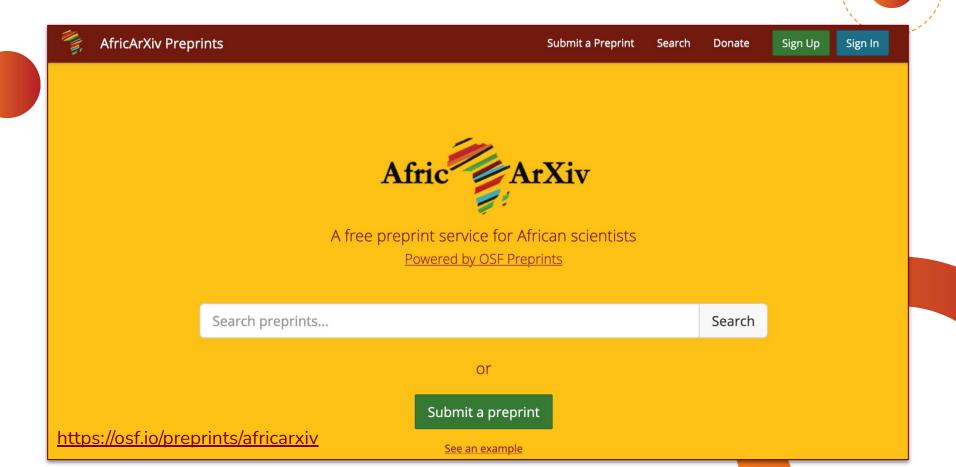
#### **Optional**:

- Sign up on <u>PREreview.org</u> (<u>video instructions</u>)
- Fill out a rapid PREreview (<u>video instructions</u>)

## Module III: Collaborative review of a preprint



#### AfricArXiv demo



#### PREreview demo

## Catalyzing change in peer review through equity, openness, and collaboration

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!

Start reviewing now

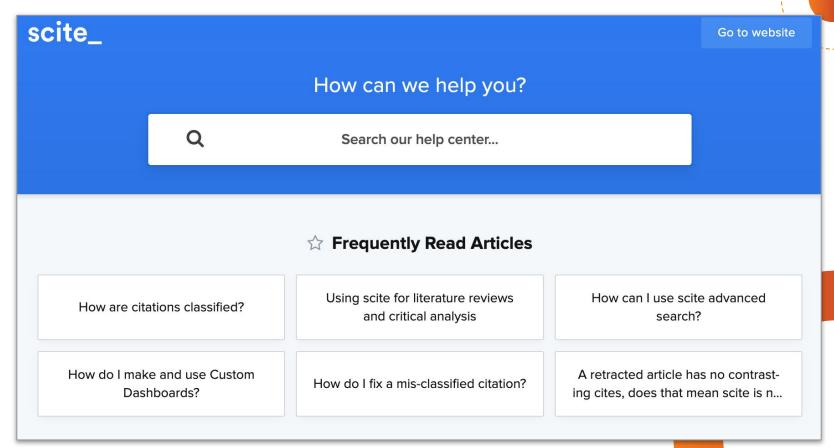
https://prereview.org

#### Search and browse preprint reviews

Search preprints by title, author, abstract, DOI, or arXiv ID



### Scite.ai demo



https://help.scite.ai/en-us/

# THANK YOU!

