



PLOS

**HOW TO  
PEER  
REVIEW –  
A WORKSHOP  
FOR  
RESEARCHERS**

Presenter(s) / Event / Date / Etc.



**Hello**



# GOALS

## How to....

- ... get ready to review
- ... (not) get in over your head
- ... get the review done
- ... get asked again
- ... get credit

# WHY WE'RE HERE

- Gaps in training
- Support the scientific process
- Acknowledge volunteer efforts

## WHY ARE *YOU* HERE?

How confident do you feel about reviewing?

What do you want from this workshop?

What opportunities do you have to practice your reviewing skills?

What else can we do to help?





**What is peer review?**

# Peer review process at a glance



# Types of peer review



## Anonymous

*Single anonymized:* Reviewers know the authors' identities, but reviewer names are protected.  
*Double-anonymized:* Reviewer and author names are protected.



## Signed

Reviewers sign their comments. Authors receive reviewer names in the decision letter.



## Collaborative

Reviewers collaborate and submit joint comments, or in some cases confer with authors and editors during the review process.



## Portable

Reviewer comments can be shared with another journal. Usually but not always between journals of the same publisher.



## Published

Reviewer comments and/or names are published with the article or preprint.



## Post-publication

After a manuscript is posted the community reviews the research in an open forum. Reviewer names are usually published with their comments.



# Publication Process at PLOS



\* Preprint not offered for *PLOS Medicine*

# Who's who in peer review?



**Authors**



**Editors**



**Publishers**



**Readers**



**Funders**

How do reviewers benefit from participating in peer review?



**Reviewers**



How do reviewers benefit from participating in peer review?



**Reviewers**

**05:00**



# The role of the reviewer

# Serving as a peer reviewer

## **Out of your control**

Who for, when, and what you get asked to review

## **Within your control**

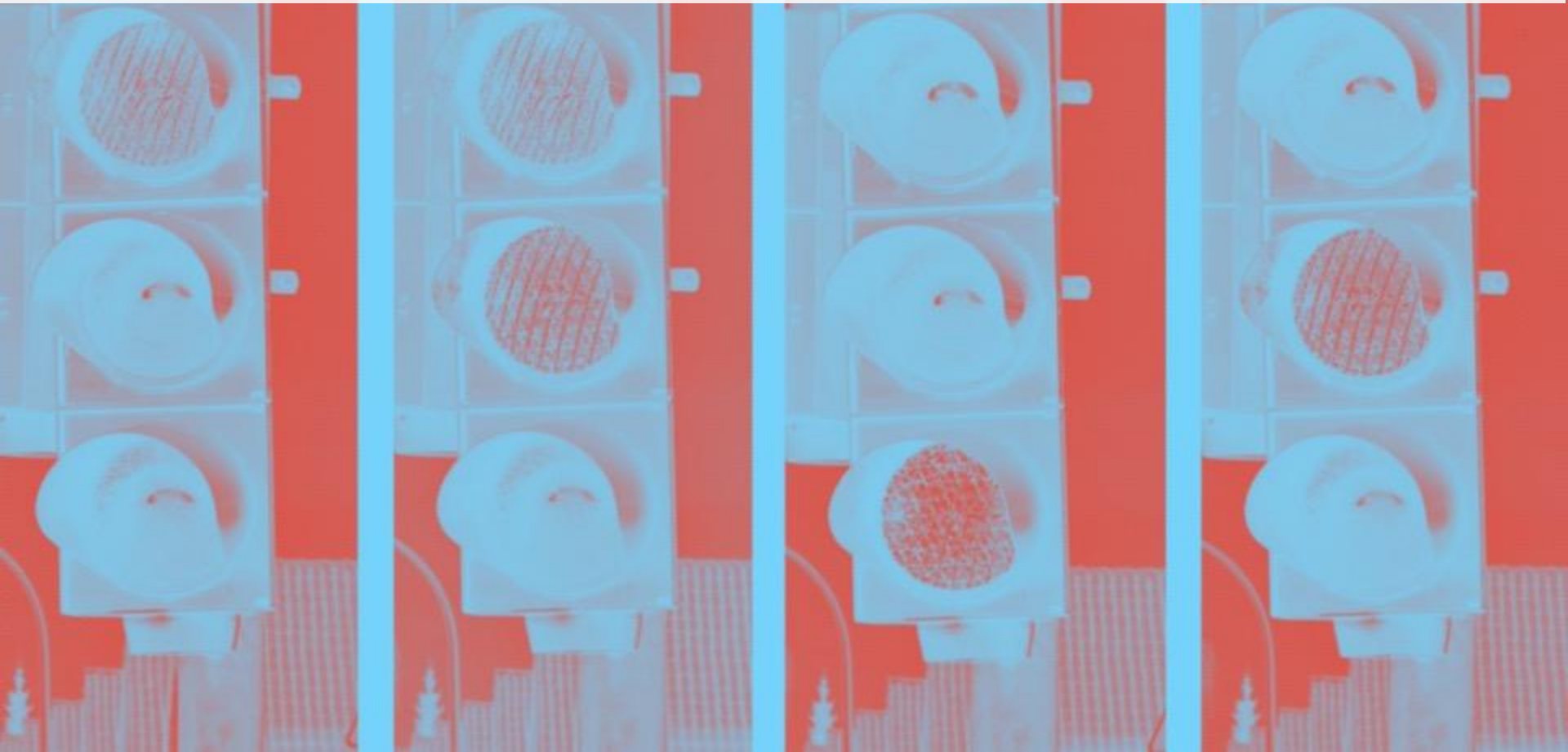
- Time management
- Behavior and tone
- Recognize bias
- Do your homework
- Networking



# 5 parts of peer review

1. **Responding** to the invitation
  2. **Reading** the manuscript
  3. **Writing** the reviewer report
  4. Getting **ready** to become a reviewer
  5. Getting **recognized** for your reviews
- } Review work
- } Career

# Responding to an invitation



# Should you say yes?

- Do you have the right expertise?
- Do you have the time?
- Can you be objective?



# Activity: What if...

... the topic is super fascinating—but you know nothing about it

... you're over-extended

... you're friends with the author

# Competing interests



# What is a competing interest?

A competing interest is anything that interferes with, **or could reasonably be perceived as interfering with**, the full and objective presentation, peer review, editorial decision-making, or publication of research or non-research articles submitted to PLOS.

Competing interests can be financial or non-financial, professional, or personal. Competing interests can arise in relationship to an organization or another person.





# How to check for competing interests

- Could you profit or be negatively impacted financially by the submitted research?
- Do you have a personal relationship with the authors?
- Are you and the authors rivals or competitors?
- Have you recently worked at the same institution or organization as the authors?
- Have you or are you currently collaborating with the authors?
- Have you recently published with the authors?
- Have you recently held grants with the authors?



# If you're not sure...

Ask the journal office

# If you decline the invitation...

Let the editor know ASAP

Suggest an alternative reviewer name





# Activity: Check the Journal Guidelines

What does the journal look for in articles it publishes?

What does the journal want from you?

**10:00**

# Reading the manuscript



# First reading

- What is the main research question?
- How does the study relate to the published literature on the topic?
- What are the key findings of the study?

# Second reading

Abstract and introduction

Figures and tables

Methods

Results, discussion,  
conclusions



# Writing the reviewer report



A purple spiral notebook and a purple pencil are positioned vertically on the left side of the slide. The notebook is on the left, and the pencil is to its right. The background is a gradient of blue and purple.

# Activity: What makes good feedback?

What they wrote...

How they wrote it...

**05:00**

# What to write...

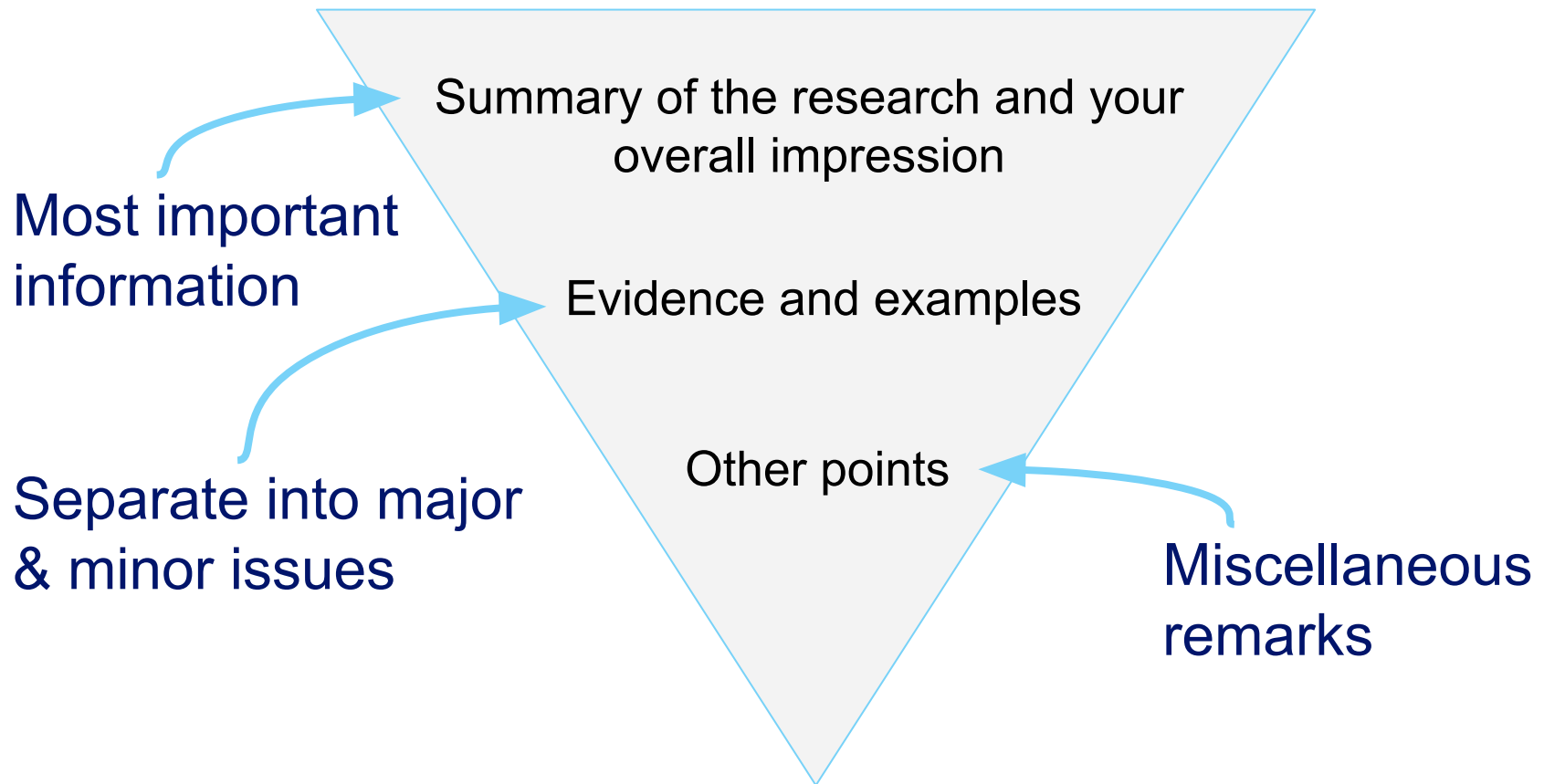
- Use examples and evidence to back up your statements
- Talk about what you liked too
- Don't talk about yourself and your research
- Don't focus on small things like typos
- Keep your recommendations bounded by the scope of the study in front of you

# How to write it...

- Be professional and respectful
- Be clear and concise
- Structure your points so that they are easy to follow
- Give page numbers, etc.
- Write about the manuscript, and not the authors
- Keep in mind the author's perspective



# Reviewer report outline



# Evidence and Examples

## Major

1. Must be addressed for the manuscript to proceed further
2. Does not include major additions or required experiments that would fall outside of or expand on the scope of the present study

## Minor

1. Important to address in order to improve the manuscript, but may not affect the overall conclusions

A photograph of a spiral-bound notebook and a pencil on a light blue surface. The notebook is on the left, and the pencil is on the right, both in sharp focus. The background is a soft, light blue gradient.

# Activity: Review the feedback

See published review from [insert journal and link]

# Activity: Review the feedback



**10:00**





## Activity: Rewrite the feedback

The authors appear to have no idea what they are talking about. I don't think they have read any of the literature on this topic.

The writing is so bad, it is practically unreadable. I could barely bring myself to finish it.

It's obvious that this type of experiment should have been included. I have no idea why the authors didn't use it. This is a big mistake.

# Activity: Rewrite the feedback



**10:00**

# The most important things...

Know your role

Remember your goals

Be confident



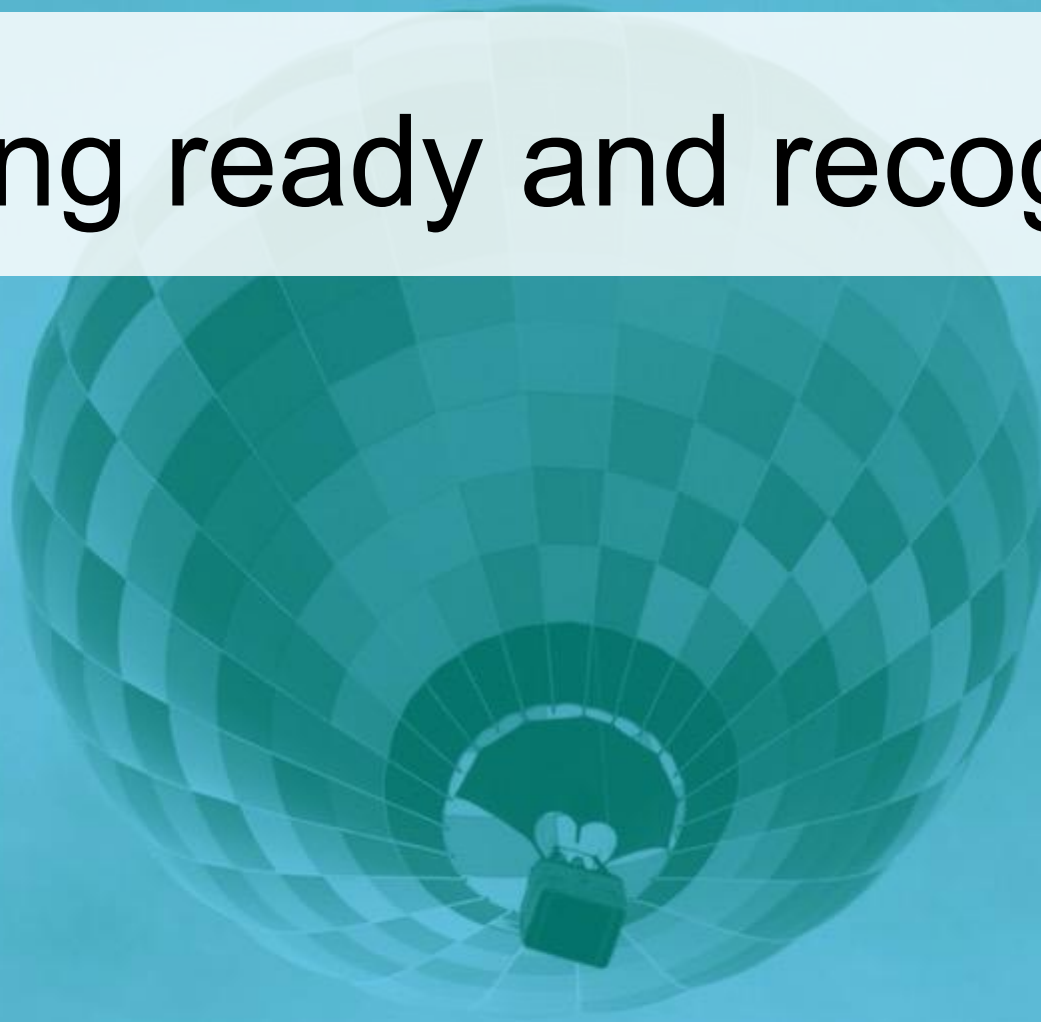




# Professional development



# Getting ready and recognized





# Getting ready to review

- Get your research out there
- Work with a mentor
- Keep up with the research in your field
- Start or join a journal club
- Make sure your profiles are up to date and your email address is easy to find
- Comment on published articles
- Participate in discussions in social media
- Do it well the first time so you'll be asked again



# Getting recognized for your work

[Publons](#)

[ORCID](#)

[PREreview](#)

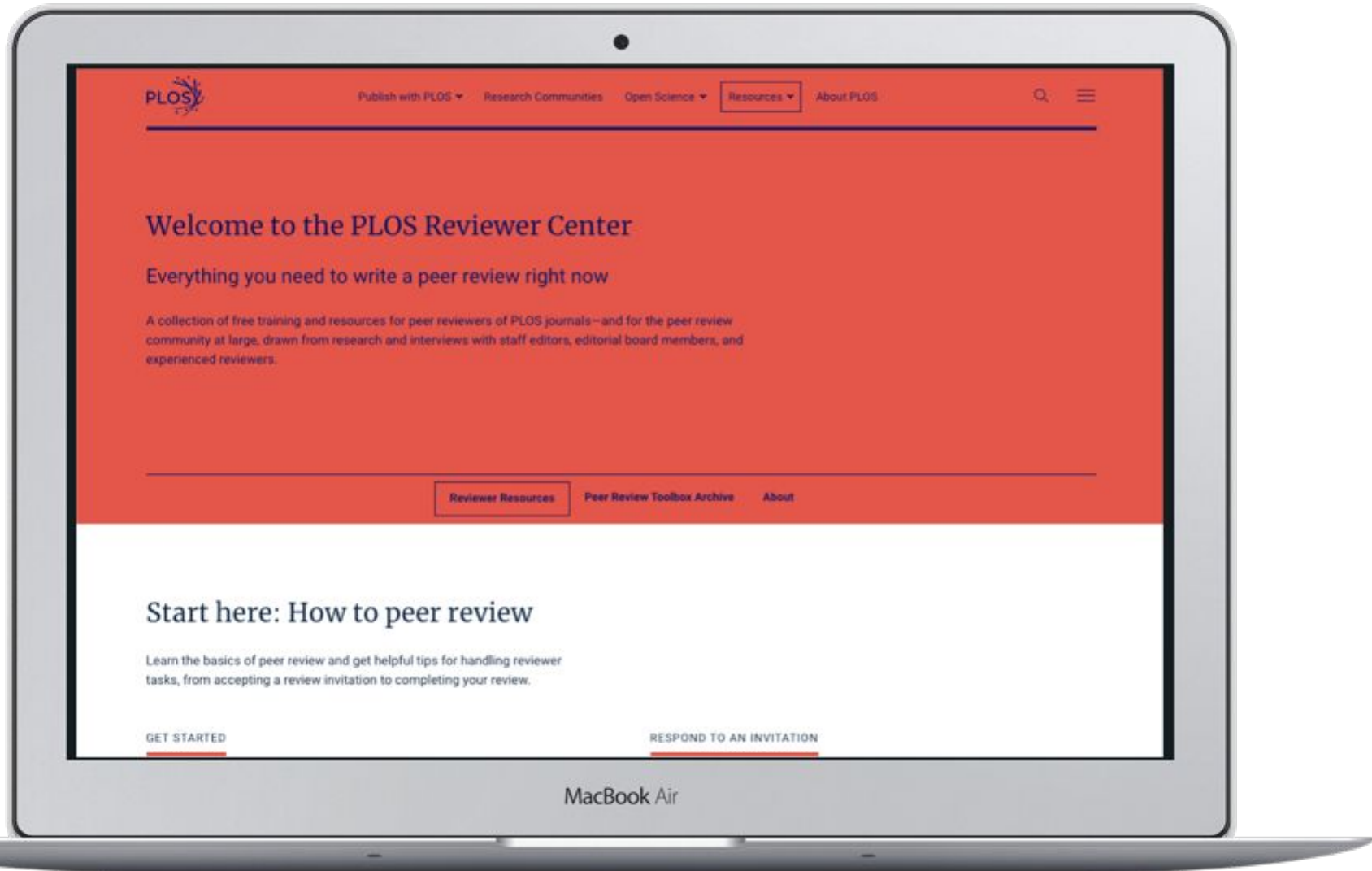
[Review Commons](#)

[Peerage of Science](#)

# Activity: Action plan

- Look at list of action steps in packet
- Check off what you've done already
- Circle what you want to do next and indicate a possible timeframe
- Write in anything that's important to you but not on the list
- Cross off anything that's not relevant
- Share plan with partner





<https://plos.org/resources/for-reviewers/>



# Peer Review Toolbox



The PLOS Peer Review Toolbox is your source for peer review best practice and practical tips to build your scientific skillset. Delivered to your inbox every two weeks, each issue is a new addition to your personal store of peer review know-how. [Sign up today.](#)

<https://plos.io/PeerReviewToolbox>

## Objective

How confident do you feel now about reviewing?

Did you get what you wanted from this workshop?

**Tell us what else can we do to help!**



PLOS

Thank  
you

[plos.org](https://plos.org)