



# Peer Review Manuscript Writing Strategies

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# Overview

- Writing process
- Journal selection
- Intentions and sections of a manuscript
- Tips for starting a manuscript
- Communicating with co-authors
- Submission to peer review
- Responding to peer review feedback

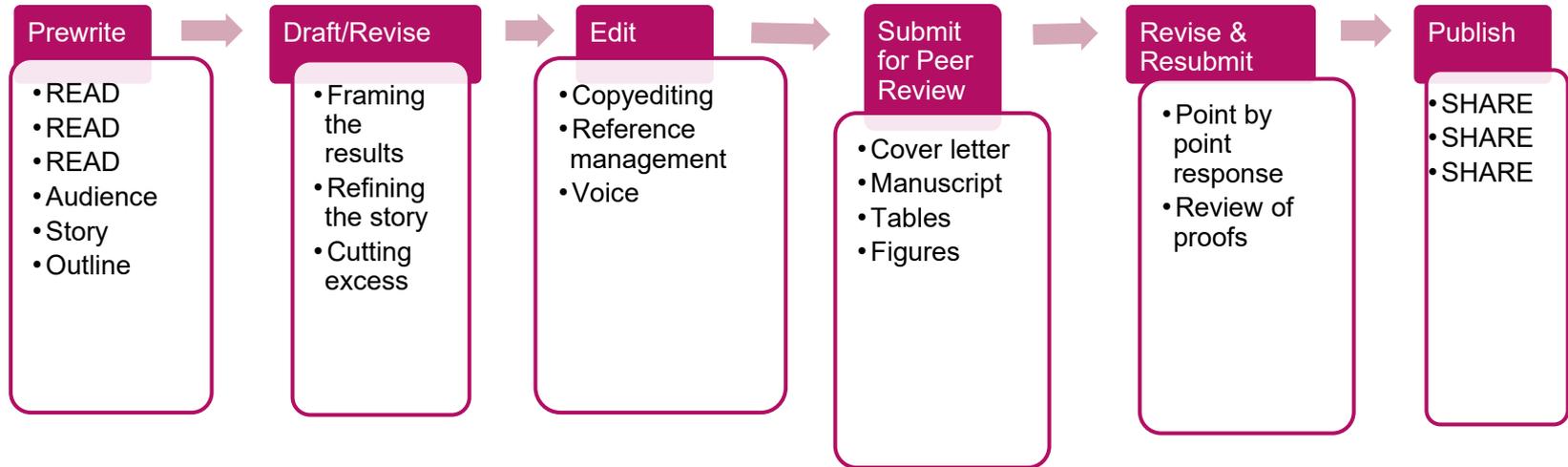


# Sharing your work

- **Why bother?**
  - Peer-review journal articles provide a permanent means of broadly sharing your work
- **Why peer-review?**
  - Verifying the work, validating approach and findings, being in conversation with the people in your field
- **Types and number of manuscripts**
  - There may be multiple manuscripts from your project



# Writing process



# READ READ READ

Ten simple rules for reading a scientific paper

Carey MA, Steiner KL, Petri WA Jr (2020) Ten simple rules for reading a scientific paper. PLoS Comput Biol 16(7): e1008032. <https://doi.org/10.1371/journal.pcbi.1008032>

Table 1. Reading intentions and how it might influence your approach.

Examples	Intention	Priorities
1	You are new to reading scientific papers. <sup>1</sup>	For each panel of each figure, focus particularly on the questions outlined in Rule 3.
2	You are entering a new field and want to learn what is important in that field.	Focus on the beginning (motivation presented in the introduction) and the end (next steps presented in the conclusion).
3	You receive automated alerts to notify you of the latest publication from a particular author whose work inspires you; you are hoping to work with them for the next phase of your research career and want to know what they are involved in.	Skim the entire work, thinking about how it fits into the author's broader publication history.
4	You receive automated alerts to notify you of the latest publication containing a set of keywords because you want to be aware of new ways a technique is being applied or the new developments in a particular topic or research area.	Focus on what was done in the methods and the motivation for the approach taken; this is often presented in the introduction.
5	You were asked to review an article prior to publication to evaluate the quality of work or to present in a journal club. <sup>2</sup>	Same as example 1. Also, do the data support the interpretations? What alternative explanations exist? Are the data presented in a logical way so that many researchers would be able to understand? If the research is about a controversial topic, do the author(s) appropriately present the conflict and avoid letting their own biases influence the interpretation?

<sup>1</sup> Yay! Welcome!

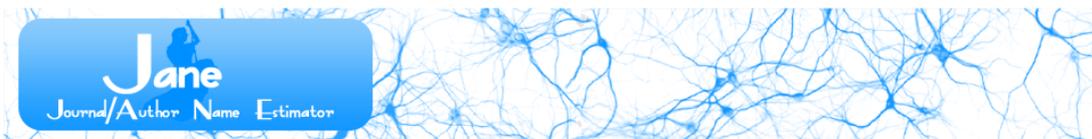
<sup>2</sup> A journal club is when a group of scientists get together to discuss a paper. Usually one person leads the discussion and presents all of the data. The group discusses their own interpretations and the authors' interpretation.



# Finding the right journal

During the Prewriting phase consider the following:

- Who is your primary audience?
- Where are the papers that you have been reading published?
- Where were similar methods and results published?
- What was included in those papers?
- How is your work innovative?



Insert your title and/or abstract here: (or, click [here](#) to search using keywords)

Scramble Clear Show extra options

Find journals Find authors Find articles

## Welcome to Jane

Have you recently written a paper, but you're not sure to which journal you should submit it? Or maybe you want to find relevant articles to cite in your paper? Or are you an editor, and do you need to find reviewers for a particular paper? Jane can help!

Just enter the title and/or abstract of the paper in the box, and click on 'Find journals', 'Find authors' or 'Find Articles'. Jane will then compare your document to millions of documents in PubMed to find the best matching journals, authors or articles.

### Keyword search

Instead of using a title or abstract, you can also search using a keyword search, similar to popular web search engines. Click [here](#) to search using keywords.

### Beware of predatory journals

JANE relies on the data in PubMed, which can contain papers from predatory journals, and therefore these journals can appear in JANE's results. To help identify high-quality journals, JANE now tags journals that are currently indexed in MEDLINE, and open access journals approved by the Directory of Open Access Journals (DOAJ).

[Additional information about Jane](#)





# Sections of a Manuscript

- Title
- Authors & Author Affiliations
- Abstract
- Introduction
- Methods
- Results
- Discussion
- References



# Title

The title is your paper's *first impression*.

The content of the title might include:

- Subject of research
- Population of interest
- Research approach



# Abstract

The abstract is the *summary* of your paper.

- Structure and content depends on journal requirements
- Stand alone - must make sense when read in isolation for those who read only the abstract
- States the purpose, findings and impact of the paper

General background

Specific background

Knowledge gap

Here we show...

Results

Implications



# Introduction

The content of an introduction depends on its ***purpose*** and the ***audience***.

- Provide the ***context*** of your work
  - Problem research is addressing
  - Define gap in knowledge
  - Set up the direction you'll take in your discussion section
- State your ***focus*** (hypothesis, question).
- Provide ***justification*** for your work (how your work can answer the question).

General background

Specific background

Knowledge gap

Here we show...



# Methods

The content of a methods section depends on what actually occurred with enough description to interpret and replicate the work.

- Information should be presented, using the past verb tense, in chronological order.
- Sub-headings should be used, where appropriate:
  - Subjects & Setting
  - Variables & Equipment
  - Procedures
  - Analysis
  - Human subjects approval



# Results



The goals of your Results section are:

- To describe and explain the data that you obtained with your methods, as objectively as possible and in a narrative form, and
- To communicate a take-home message based on those data.



# Tables and Figures

Before writing your Results, decide on the set of figures that will be included in your paper. Each Figure should support a specific conclusion, and provide the data that the reader needs to evaluate that conclusion.

- **Condense** large amounts of information
- **Convince** readers of your findings (by showing data quality).
- **Focus attention** on certain findings (e.g., relationship between values).
- **Simplify** complex findings.
- **Promote** thinking and discussion



# Discussion

- Answers to the question(s) posed in the introduction & links to explanations of:
  - How the findings concur with those of other authors/reports
  - Any discrepancies of the results with those in other papers
  - Unexpected findings
- The limitations of the study which may affect the study validity or generalizability of the study findings.
- Indication of the importance of the work (e.g. clinical significance & recommendations for further research

Summary of paper's main conclusion

Comparison with previous results  
or theories

Scientific or engineering  
implications of this work

Paper's limitations in scope

Forward-looking statement



# References

The number of references should be limited to the ***fewest number necessary*** by choosing the most important, the most valid and where appropriate, the most recent.

- References are almost exclusively used in the introduction and the discussion.
- Reference instruments used in methods
- Journals may limit the number of references
- Double check the reference formatting when using a reference management software



# Acknowledgements, Funding, Keywords

- **Acknowledgements:** All important contributors should be acknowledged by name or group with indication of the contribution.
- **Funding:** If the research was supported by a grant, then the name of the funding body and grant number must be included.
- **Key Words:** Most journals require the author to identify 3-5 key words which represent the major concept of the paper. These are used for indexing purposes.



# Starting the manuscript

- Determine what the required sections are for the target journal
- Determine the overall word count for paper type
- Determining the approximate word count per section
- Develop the outline- headings and subheadings
- Determine the layout of tables and figures



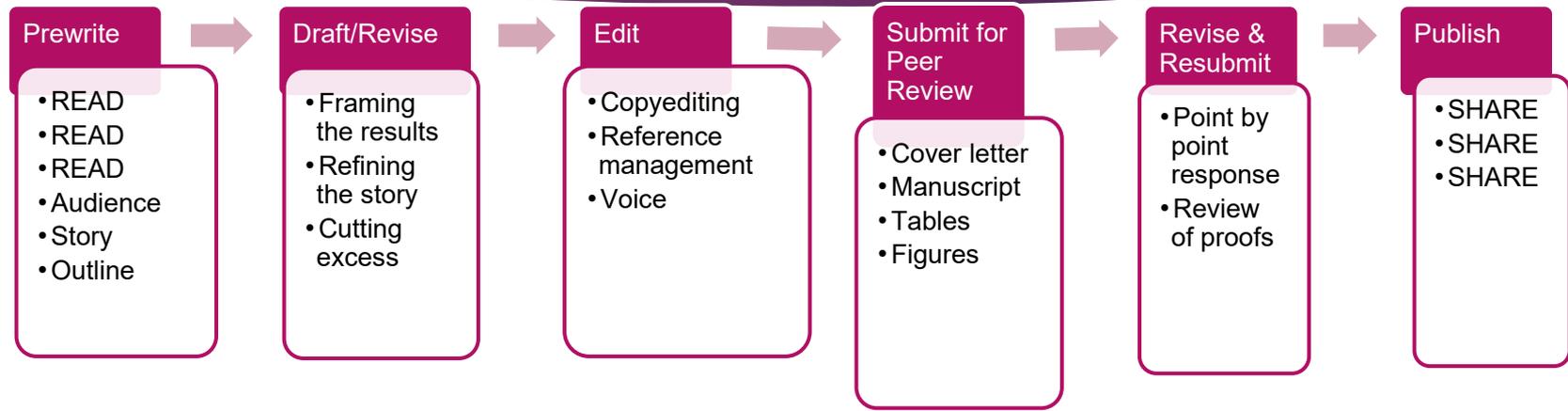
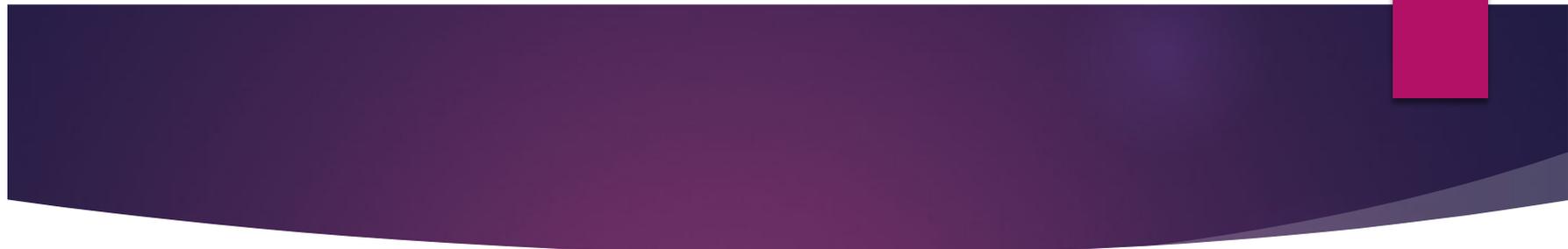
# Structure Tips

- Find several articles in each of your selected 3-5 journals that are similar to the work you want to publish
- Look at the structure of 2-3 of the articles in your chosen journal
- Use the word count and find the number of words per each section; find the average word count



# Communicating with co-authors

- Share your outline, paper purpose, target journals, and ***timeline***
- Meet face to face when possible, communicate over email, teleconference and videoconference
- Determine roles
- Discuss results with the co-author team as you are refining analyses
  - Take notes on the discussion- the issues that co-authors bring up may become key points in the Discussion section





# Writing considerations

It is uncomfortable but *share imperfect work* – the ugly first draft is a great conversation tool.

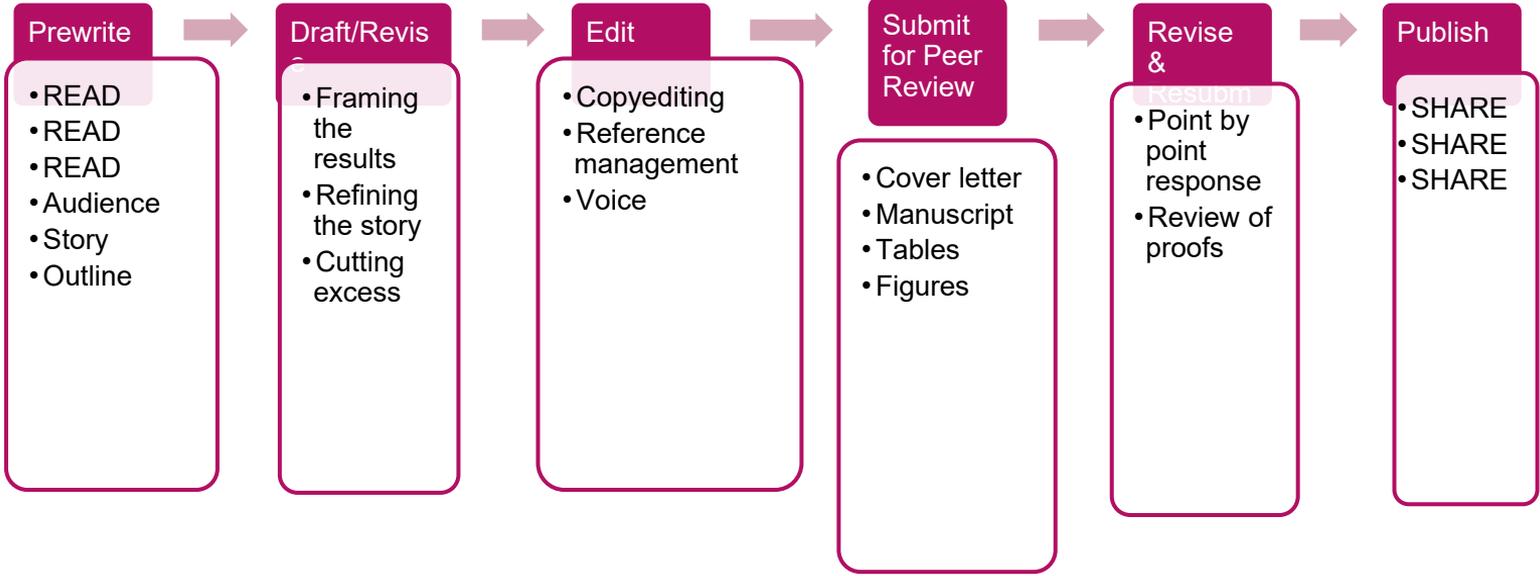
Other considerations:

- Reference management software
- Version control
- Flow, Voice, Abbreviations



# Refining the manuscript

- Proofreading
  - Remove empty phrases
  - Refine logic & flow
  - Edit for single voice
- Co-author review of drafts
- Writing accountability group
- Group feedback sessions





# Submitting to a journal

- Corresponding author
- Online submission requirements
- Cover letter
- Suggested reviewers
- Keywords
- Author information & author contributions
- Format and style
- Open access & publication fees
- Tracking after submission



# Types of peer review responses

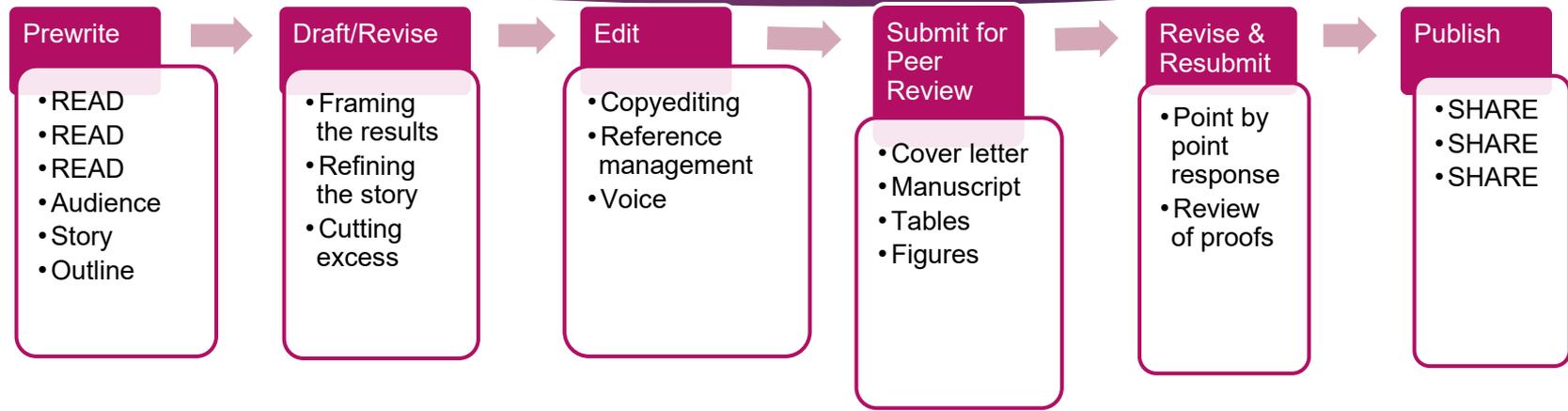
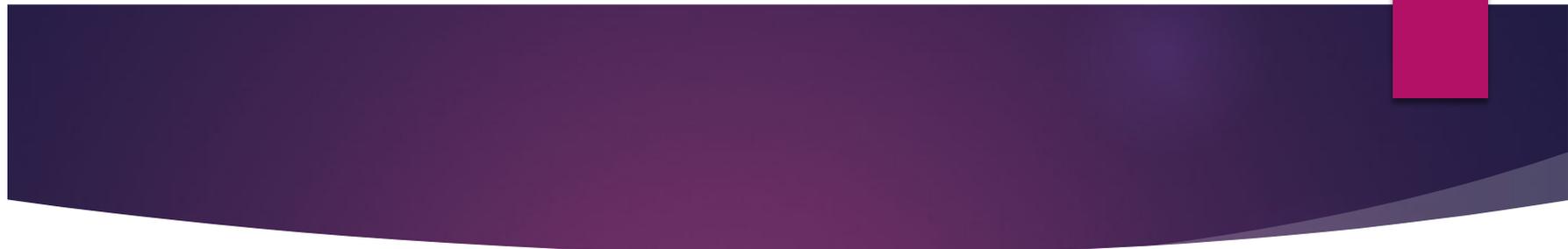
The following are the most common peer review decisions:

- accept without any changes (acceptance)
- accept with minor revisions (acceptance)
- accept after major revisions (conditional acceptance )
- revise and resubmit (conditional rejection)
- reject the paper (outright rejection)



# How to manage rejection

- Dust off your journal selection list and move down the list
- Writing group decision on any edits based on peer review feedback
- Corresponding author change if needed
- Keep the momentum going!!!





# Response to peer review feedback

- Share feedback with all authors and describe process for revisions
- Respond to all editor and reviewer feedback in a letter-point by point
- Track changes in text revisions of text, tables and figures
- Share revision with all authors for review
- Upload on journal website



**Prewrite**

- READ
- READ
- READ
- Audience
- Story
- Outline



**Draft/Revis**

- Framing the results
- Refining the story
- Cutting excess



**Edit**

- Copyediting
- Reference management
- Voice



**Submit for Peer Review**

- Cover letter
- Manuscript
- Tables
- Figures



**Revise &**

- Point by point response
- Review of proofs



**Publish**

- SHARE
- SHARE
- SHARE

# After publication

- Sharing your published work:
- Presentation of paper at conferences, videoconferences, department meetings, etc.
- Plan to disseminate the publication...
  - Within your partnerships
  - Within your department
  - Within your organization
  - Across your professional organizations
  - Social media- personal & professional