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SLAS

AUTHOR

WORKSHOP

SLAS TECHNOLOGY & SLAS DISCOVERY
THE OFFICIAL JOURNALS OF SLAS

• **SLAS DISCOVERY**
  Advancing Life Sciences R&D
  
  Editor-in-Chief Robert M. Campbell, Eli Lilly & Company
  
  *SLAS Discovery* reports how scientists develop and utilize novel technologies and/or approaches to provide and characterize chemical and biological tools to understand and treat human disease.

• **SLAS TECHNOLOGY**
  Translating Life Sciences Innovation
  
  Editor-in-Chief Edward Kai-Hua Chow, National University of Singapore
  
  *SLAS Technology* explores ways in which scientists adapt advancements in technology for scientific exploration and experimentation.
HOW TO PREPARE A MANUSCRIPT TO IMPROVE YOUR CHANCES FOR PUBLICATION SUCCESS
PLAN AHEAD

• Writing begins before experiments are finished.

• When results start telling a story, make a working outline to help focus your continued experiments:
  ▪ Summarize the message of your paper in one sentence.
  ▪ Write down the findings leading to the main conclusion.
  ▪ Prepare draft figures (missing data is a blank figure).
PREPARE A FIRST DRAFT

• Build out from your working outline.
  • Keep the central message in focus.
  • Ensure the key takeaway points are clear and supported.
  • Look for a logical flow/progression in the data.

• Create and maintain a narrative that illustrates the originality of your research:
  • What novel insights or conclusions does your work offer?
  • How is your work different from work cited in your paper?
  • How is your work different from work NOT cited in your paper?
  • How does your work extend beyond what is known?
STANDARD MANUSCRIPT COMPONENTS

• Title
• Abstract
• Introduction
• Methods
• Results
• Discussion
• References/Citations
• Supplemental Materials
What is your most important message?

Be informative: the message is more than just the data.

Capture the reader’s imagination.
  - Example: Cellular-Level Surgery Using Nano Robots

Be clear and concise.
  - Bad example: Treatment of Pediatric Melanoma Patients with Lasers
  - Better Example: Laser Treatment of Pediatric Melanoma Patients

Choose keywords carefully.

Avoid abbreviations.
ABSTRACT

• Establish the narrative of your paper.
• Compel editors, reviewers, and readers to read your paper.
• Ensure it can stand alone (without the entire paper).
• State the hypothesis, question or objective of the study.
• Complete the story by answering the hypothesis, question or objective.
• Explain how this paper will impact your field of research and the larger scientific community.
• Follow manuscript structure protocol: Intro, Methods, Results, Discussion.
ABSTRACT

• Be consistent with the title and use of keywords.
• Do not include data that isn’t in the paper.
• Do not suggest conclusions that can’t be supported by the data in the paper.
• Avoid abbreviations.
• Do not include references or figure/table citations.
• Follow the prospective journal’s style, guidelines and word count.
INTRODUCTION

• Think: general to specific.
• Explain why your study was conducted.
• Sufficiently introduce the current state of research without becoming a review paper.
• Recognize key works that came before yours.
• Be clear about how your work differs from what’s already been published:
  • What did you do differently?
  • What is novel?
  • Concisely reiterate and summarize the key talking points/data/ideas that you will demonstrate in the paper and that are emphasized in the abstract.
• What is the main conclusion of your data?
METHODS

• Effectively describe how studies were performed.
• Explain techniques in sufficient detail to allow someone knowledgeable in the field to replicate the work.
• Be clear about sources for materials.
• Describe statistics and techniques employed.
• If studies involve living subjects, describe ethical and regulatory considerations.
RESULTS

• Order your results in a clear and sensible manner that fits your narrative.
• Subheads should reflect the conclusions of the sub-sections.
• In each sub-section, clearly state why the experiments are important.
• Make clear transitions from one point to another. Example: Because this result was due to either A or B, we did this…
• In each paragraph, start with more general considerations and proceed to more specific detail.
RESULTS

• State conclusions in the Results section.
• Provide enough data to convince readers of your conclusions.
• Reminder: Data and results are not the same.
• State results clearly without embellishment or overreaching conclusions.
DISCUSSION

• Explain why your work is important.
• What conclusions do you take from your results that advance what is known in your field?
• Do not just summarize results. Answer bigger questions.
• Do not be afraid to talk about the limitations of your work.
• How does your current work indicate where future research should go?
CHARTS, GRAPHS, TABLES & FIGURES

• Ensure the info *deserves* to be illustrated and highlighted.
• Ensure the info in the figure and the figure legend is clear, concise and appropriately labeled.
• Readers should be able to understand a figure without referring to the text.
• Make sure the graphic file will reproduce well in print (high resolution).
• Ensure the communication value will not be lost in black/white.
• Ideas are the currency of academia!
• Academics need to trace the genealogy of ideas.
• Failure to cite sources violates the rights of those who originated ideas.
• **Follow your prospective journal’s guidelines** (pay attention to details).
SUPPLEMENTAL MATERIAL

• Additional text, data, figures and/or movies that readers interested in your work will find helpful.

• Consider a supplemental file as a standalone report.
  • Include a cover sheet that includes your paper’s title, authors and contact info.
  • Pay attention to page layout and present information logically and attractively. Many journals publish supplemental materials online exactly as provided.
WRITING IS AN ITERATIVE PROCESS

PLANNING
DRAFTING
REVISING
REVISING
REVISING
REVISING
CHECKLIST: AUTHORSHIP

• Order of Authors
  • First author should be the person who did the most work; whose work led to the project and paper.
  • Co-first authors are fine.
  • Lead PI should be named last.
  • Gamesmanship: Do you have collaborators who helped with project? Could listing them as authors add legitimacy to your work?

• Corresponding Author
  • Generally, the lead PI is the corresponding author.
  • In cases of multi-disciplinary studies, co-corresponding authors are fine.
  • Sometimes there are situation-specific reasons for someone else to be the corresponding author.
CHECKLIST: AUTHORSHIP

- Permissions
  - Ensure that everyone on the author list knows they’re being listed.

- Authors or Contributors?
  - Use the Acknowledgements section to recognize other important contributions and assistance.
  - Refer to ICMJE and COPE guidelines (available at www.slas.org/publications).

- Exceptions to the Rules: Industry vs. Academia
CHECKLIST: CONFLICTS OF INTEREST

• Disclosure does not mean disqualification.
• For all authors – disclose any obvious or *potential* conflicts of interest that *may be perceived* to bias the work.
• Acknowledge sources of financial support.
• Mention any other personal connections that may raise eyebrows.
• Refer to ICMJE and COPE guidelines (available at www.slas.org/publications).
CHECKLIST: PERMISSIONS

• Previously published text, tables or figures can only be reprinted with written permission of the copyright license holder (typically the publisher not the author).

• Permission statements must be submitted with the manuscript and must apply to print and online publication.

• Acquiring permission is the sole responsibility of the authors.

• Secure permissions from publisher of the source material or via RightsLink.

• The publication from which the material is taken must be listed in the references.
• Choose a Journal
  • Consider editorial focus first and foremost. Choose a journal whose readers will care about your work.
  • Be realistic about the impact and significance of your paper.
  • Don’t be distracted by impact factors. *In today’s online universe, if your work is good, readers everywhere will find it – guaranteed!*
  • Consider publishing policies:
    ▪ Traditional publishing model: Pay to Read (with or without eventual free public access)
    ▪ Open Access publishing model: Pay to Publish.
    ▪ Important: Many journals with traditional publishing models offer an open access option for a fee, so funding mandates should not limit your choices.
SUBMISSION: PREPARATION

Dos and Don’ts

• **DO** submit your paper to one journal at a time (simultaneous submissions are taboo).

• **DON’T** submit a paper that has been published elsewhere (in whole or largely in part). Reviewers will search the literature for self-plagiarism.

• **DO follow directions. Read the Author Instructions.** Look at previously published papers as examples.

• **DO ask if you have ANY questions.** Publishers appreciate your interest and are happy to help. They want to receive manuscripts that meet their requirements.
SUBMISSION: COMMON MISTAKES

- Submitted files are unacceptable/unworkable (wrong formats, such as PDF vs. MSWord).
- Tables are not editable.
- Figures are not readable in black/white (printing in color may require you to pay fees).
- Style is incorrect (especially for references).
- Manuscript composition is incorrect (such as missing cover sheet; missing sections; section, line and page numbering; headers and footers; placement of tables, figures and corresponding legends).
- Supplemental materials are not nicely presented and don’t stand alone.
- Language errors (American or British English?). If necessary, engage a language service to polish grammar, spelling and punctuation.
SUBMISSION: COMMON MISTAKES

AVOID MISTAKES AND THE DELAYS THEY CAUSE BY READING AND FOLLOWING AUTHOR INSTRUCTIONS
THE REVIEW PROCESS

• Only candidates for publication are sent into review. Others are rejected outright.
• The process is confidential.
• Most journals ask authors for names of “preferred” and “non-preferred” reviewers.
• Revisions are typically requested (99%).
• Revised manuscripts should be returned with a detailed point-by-point response to the reviewer comments, questions, suggestions and concerns.
• Be patient and open-minded – constructive criticism is a gift!
THE REVIEW PROCESS: CONTENT

- Is the paper within the journal’s editorial scope?
- Will the subject be of interest to readers?
- Does the paper report a specific identifiable advance in knowledge?
- Has the work been published before?
- Do the title and abstract truly describe the content?
- Are the methods clear enough to allow someone knowledgeable in the field to replicate the work?
- Are the conclusions justified, sound and logically consistent?
- Are the references to prior work pertinent and complete?
THE REVIEW PROCESS: PRESENTATION

- Is the paper as concise as it could be?
- Is the language consistent and clear?
- Are all figures and tables relevant and nicely presented?
- Does basic grammar, spelling and punctuation need improvement?
• The process is confidential.
• Reviewers are asked to decline their invitations if they have any real or perceived conflict of interest with the author, the author’s company and/or the topic of the paper.
• Author requests for “non-preferred” reviewers are honored.
LEARN BY DOING

• Complete free ACS Reviewer Lab training.
• Register as a SAGEtrack user to volunteer to be a manuscript reviewer.
  ▪ Go to www.slas.org/journals.
  ▪ Click on this icon for whichever journal is most appropriate for you:
  ▪ Create an account.
  ▪ Choose personal attributes (keywords) carefully. These are what the system uses to match manuscripts with reviewers.
• Typically, authors retain copyrights for their work.
• Journals are licensed by authors to publish the work.
• Licensing terms typically align with Creative Commons licensing standards (www.creativecommons.org).
• Authors are required to sign copyright forms that detail licensing terms.
• Depending on the license, restrictions apply.
• Understand copyright terms before your paper is published.
• Publishers will pursue copyright violations.
SLAS Published Papers

- Become searchable and citeable immediately upon online publication (ahead-of-print).
- Full access is limited to SLAS members and journal subscribers and pay-per-view for one year after final (print) publication.
- Immediate open access is available for a fee and includes other licensing privileges.
POST PUBLICATION: SELF PROMOTION

- You CAN increase readership and citations of your paper.
- Don’t be shy! Post links, tag and share. Use KUDOS!
- Respect terms of copyright.
- Ask your employer to issue a news release (or issue one yourself).
- Present your paper at conferences.
- After initial postings/announcements, create and share companion videos, podcasts, figures or other complementary material.
- Monitor online discussion forums and comment (answer questions) that link to your published paper.
- More advice and examples at www.slas.org/publications/scientific-journals.
MORE TIPS FOR AUTHORS @ SLAS.ORG

• This PPT presentation.
• Links to helpful “How To” websites and advice columns.
• NIH Public Access Policy info.
• Copyright details.
• Author Instructions (Manuscript and Figure Guidelines).

• 20+ years of great examples in online archives.

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