1. Writing and Revising an Abstract and Introduction

In this workshop we will first discuss the principles of good science writing. Participants will then apply these principles to revising examples of text from research articles. Finally, we will discuss how Google Scholar can be used to identify stylistically appropriate expressions in academic writing. This workshop discusses how the three principles of good science/technical writing can be applied to writing and revising an introduction to a research article. The instructor will describe the components of an effective introduction and how to guide and enhance reader interest.

2. Grammar and Usage and Sentence Structure

Grammar errors impede comprehension and create a poor impression of your work. In addition, science writing has its own usage conventions, which can vary by discipline and journal. Science writers hoping to be published in high-impact journals need to be aware of basic usage conventions in their field. This workshop covers the elements of grammar and usage that are most important in science writing, particularly for biomedical researchers. This workshop aims to show how selection of appropriate sentence structure improves the quality of science/technical writing. The topics to be covered include how to construct effective sentences, emphasize important information, and improve clarity. The instructor will present several examples of key concepts and ask participants to apply these ideas in a short activity.

3. Punctuation

The importance of accurate punctuation is often underappreciated by readers and writers; however, clear writing demands consistent, judicious punctuation. First and foremost, science writing must be clear and accurate, and correct punctuation is an essential aspect of clear writing. Fundamentals of Science Writing: Punctuation reviews punctuation principles and common punctuation errors. The speaker will describe the various functions of the most frequently used punctuation marks and discuss common mistakes and misunderstandings.

4. Effective Paraphrasing

Researchers depend on the published record when designing their studies and presenting their findings. However, earlier work must be cited, and in most cases previously published text must be paraphrased, to comply with copyright restrictions. The instructor will present several examples of accurate and readable paraphrases of typical text from published research papers. Participants will then be asked to paraphrase selected passages.

5. Journal Selection and Writing Cover Letters and Responses to Reviewers

Selecting an appropriate journal for publication of your research involves several factors,
including journal impact and duration of manuscript review. In addition, authors must be careful to avoid submission to the growing number of "predatory" open access journals. The instructor will discuss the criteria used for journal selection, resources to aid you in selecting a journal, and methods of avoiding submission to predatory journals. The submission process is not complete without a cover letter. A good cover letter expedites the review process by accurately describing the goals and value of your research, your contact information, and your publication preferences. Another aspect of the submission process—responding to reviewer comments—requires attention to detail and, often, tact. We will discuss how to format your responses and respond to difficult, mistaken, and unfair reviewer comments.

6. **Predatory Publishers and Conferences**
This session would describe how to select a suitable journal for submission, the types and advantages and disadvantages of open access publications, the dangers of predatory publishers and conferences, and how to avoid them.

7. **Ethics in Research and Publication**
Editors of science/technical journals, funders, and regulatory agencies are growing more vigilant about research misconduct. This presentation will discuss the most serious forms of misconduct (fabrication, falsification, and plagiarism), as well as questionable research practices, including selective reporting, use of inappropriate study designs or statistical tests, and unreported conflicts of interest. Although most authorities agree that the overwhelming majority of articles published in science/technical journals adhere to high ethical standards, the perceived increase in ethical failures such as pre- and post-publication misconduct, improper authorship, and inappropriate peer assessment has prompted a re-assessment of publication practices and renewed interest in author education initiatives. The instructor will describe common oversights in publication ethics, after which students will discuss case studies from the Committee on Publication Ethics.

8. **Oral Presentation Skills Student practice presentation(s)**
Nothing creates more fear among researchers than the need to present their work orally at an international conference. The Oral presentation workshop provides useful advice on preparing and delivering oral presentations. The instructor will discuss organization of your talk, slide preparation, mental preparation, time management, body language, and how to avoid "Death by PowerPoint", among other topics.