

Instructions to Authors for Abstract Submission

Abstracts should be submitted using 12-point font, with a maximum of 300 words, excluding title, authors and affiliations. Abstracts should be broken down in clearly identifiable components of Background/Introduction, Methodology, Results, and Conclusion/Discussion.

Trainees including Undergraduate Students, Graduate Students, Post-Doctoral Fellows, Residents & Fellows (subspecialty residents) and Research Associates/Technicians submitting abstracts must review their abstracts prior to submission with their supervisor. Abstracts being considered for poster prizes and for oral/platform presentation will be graded according to the quality of the abstract presentation and clarity of scientific argument. Please see the [abstract grading] schema at the end of this document for specific criteria for evaluating trainee abstracts.

NOTE: Abstracts exceeding 300 words will **not** be considered for poster prizes or oral presentations, and may be rejected. It is the responsibility of the **first author** to ensure that the abstract conforms to formatting and word limit requirements.

For your information, general guidelines for how to write a research abstract are included for the benefit of trainees. Trainees are required to complete a checklist to optimize the quality of the abstract submission.

- The abstract is written so that a scientist who knows nothing about your field will be able to easily follow the scientific argument and findings.
- Your primary research advisor has reviewed the abstract.

- Introduction is brief (<25% of the total abstract)
- Introduction includes an explicit statement of the research hypothesis and/or objective
- Methods describe all the techniques and analysis plan reported in the results
- Methods are restricted to those needed to test hypothesis
- Results reports data – including descriptive statistics, observations (present/absent) and numerical data (e.g. mean +/- SD) or a relative difference (e.g. 1.7 fold difference) between group comparisons.
- Results is the largest section of the abstract
- Conclusion summarizes the principal finding(s)
- Conclusion is fully supported by the results presented
- Conclusion specifically addresses the hypothesis being tested (i.e. results support or do not support the hypothesis)

Writing a Research Abstract

The written abstract is used in making selections for presentations at scientific meetings. Writing a good abstract is a formidable undertaking and many novice researchers wonder how it is possible to condense months of work into 300 words. Nevertheless, creating a well-written abstract is a skill that can be learned and mastering the skill will increase the probability that your research will be selected for presentation.

The first rule of writing abstracts is to know the rules. Organizers of scientific meetings set explicit limits on the length abstracts.

Authors must pay close attention to the published details of the meeting including deadlines and suggested format. Since reviewers have many abstracts to read and rank; those that don't conform to the stated rules are simply discarded. Make sure to think about your audience. For Child Health Research Day, your abstract may be reviewed by basic scientists, clinical researchers, or social scientists.

The scientific abstract is usually divided into five unique sections: Title and Author Information, Introduction, Methods, Results, and Conclusions. The following paragraphs summarize what is expected in each of these sections.

Title and Author Information: The title should summarize the abstract and convince the reviewers that the topic is important, relevant, and innovative. To create a winning title, write out 6 to 10 key words found in the abstract and string them into various sentences. Once you have a sentence that adequately conveys the meaning of the work, try to condense the title yet still convey the essential message.

Following the title, the names of all authors and their institutional affiliations are listed. It is assumed the first author listed will make the oral or poster presentation.

Introduction: This should be brief (i.e. <25% of the abstract). It usually consists of 2-3 sentences outlining the question addressed by the research. Make the first sentence of the introduction as interesting and dramatic as possible. For example, "100,000 people each year die of..." is more interesting than "An important cause of mortality is..." If space permits, provide a concise review of what is known about the problem addressed by the research, what remains unknown, and how your research project fills the knowledge gaps.

The final sentence of the introduction explicitly describes the *objective* of the study and/or the study's *a priori hypothesis*.

Methods: Methods should describe all the techniques and the analysis plan reported in the results; and they should be restricted to only those needed to test the hypothesis.

This is the most difficult section of the abstract to write. It must be scaled down sufficiently to allow the entire abstract to fit into the box, but at the same time it must be detailed enough to judge the validity of the work. For most research abstracts, the

following areas are specifically mentioned: research design; research setting; number of patients enrolled in the study and how they were selected or types of samples and how they were obtained; a description of the intervention (if appropriate) or techniques used; and a listing of the outcome variables and how they were measured. Finally, the statistical methods used to analyze the data are described.

The outcome variables being measured should be clearly related to the purpose or *a priori* hypothesis described in the introduction.

Results: This should be the largest section of the abstract. It reports the data from each experiment described in the methods and include descriptive statistics, observations (present/absent), numerical data (e.g. mean +/- SD) or a relative difference (e.g. 1.7 fold difference) between group comparisons. It should be clear which findings are statistically significant.

This section begins with a description of the subjects/samples that were included and excluded from the study. For those excluded, provide the reason for their exclusion. Next, list the frequencies of the most important outcome variables. If possible, present comparisons of the outcome variables between various subgroups within the study (treated vs. untreated, young vs. old, male vs. female, and so forth). This type of data can be efficiently presented in a table, which is an excellent use of space (and doesn't count toward your word total). Numerical results should include standard deviations or 95% confidence limits and the level of statistical significance. If the results are not statistically significant, present the power of your study (beta-error rate) to detect a difference.

It is better to present the data than to summarize findings. The data presented should follow from the methods described, and should always include the primary outcome.

Conclusion: State concisely what can be concluded and its implications. This should specifically address whether the objective of the study was met or whether the data support the *a priori* hypothesis. The conclusions must be supported by the data presented in the abstract; never present unsubstantiated personal opinion. If there is room, address the generalizability of the results to populations other than that studied and the weaknesses of the study.

Research literature has a special language that concisely and precisely communicates meaning to other researchers. Abstracts should contain this special language and be used appropriately. See [The Glossary] of commonly used research terms.

Avoid the use of medical jargon and excessive reliance on abbreviations. Limit abbreviations to no more than three and favor commonly used abbreviations. Always spell out the abbreviations the first time they are mentioned unless they are commonly recognized by the people who will be at the conference.

Although short in length, a good abstract typically takes several days to write. Take this into account when budgeting your time. Seek the help of an experienced mentor. Share

the abstract with your mentor and make revisions based upon the feedback. Allow others to read your draft for clarity and to check for spelling and grammatical mistakes. Reading the abstract orally is an excellent way to catch grammatical errors and word omissions.

Abstract Grading Schema:

Abstract # _____

Score each criterion on a scale of 0-1-2-3

0 = poor, not done

1 = fair

2 = good (average)

3 = excellent (high)

	Score
Intro: Clear rationale, hypothesis and/or objectives(0-3)	
Methods: complete, concise, linked to results (0-3)	
Results: report data, statistics (0-3)	
Conclusion: supported by data presented (0-3)	
Quality and completeness of research findings (0-12)	
Total (0-24)	

For the last criterion, score from 0-12 in bins as follows:

At least 25 % of abstracts to be scored as 0-4

At least 25 % of abstracts to be scored as 5-8

At least 25 % of abstracts to be scored as 9-12