

The Ohio Journal of Science

Author's Instructions for Preparation of Manuscripts

The Ohio Journal of Science considers for publication **solicited Book Reviews and Research Reviews**, and **unsolicited Brief Notes and Research Reports**. Solicited submissions will be requested by the editor or member of the editorial board. Book reviews will be requested of experts in the subject matter of the book to be reviewed. Research Reviews will be requested to serve as extensive surveys of the literature of an area of science in which Academy members have an interest.

Unsolicited submissions, in the form of presentations of quantitative or qualitative data pertinent to any of the sections of the Academy listed inside the front cover, will be considered for peer review. Brief notes are manuscripts that are less than 2 printed pages (approximately 6 typed pages) and contain no more than one table, figure or other type of illustration. The editor will identify papers which meet these criteria as Brief Notes if not already categorized as such by the author. Research Reports are those papers which are longer than 2 pages or contain more than one illustration.

All manuscripts will be organized as follows:

Page 1 – Title, Author(s), Running Head, Abstract

Page 2 and remainder – Introduction, Materials and Methods, Results, Discussion, Acknowledgments, Literature Cited, Tables, Figure Legends, Figures.

STYLE. The **CBE Manual for Authors, Editors, and Publishers, 6th ed.** is used for editorial decisions with regard to style. Manuscripts should be typewritten using 1 inch margins on 8.5 x 11 inch paper. Text should be left-justified using elite print (twelve characters per inch). Three copies should be submitted. Manuscript should be double-spaced throughout, including the title and abstract. Arabic numerals should be used in preference to words when the number designates anything that can be counted or measured (7 samples, 43 species). One exception to this use is that numerals are not used to begin a sentence (Twenty-one species were found in . . .). The 2nd exception is when 2 numeric expressions are adjacent in a sentence. The number easiest to express in words should be spelled out and the other left in numeric form (The sections were divided into eight 4-acre plots.).

TITLE, AUTHOR(S), AFFILIATION(S). The first page of the manuscript should contain the title, author(s) name(s), the affiliation of the author(s) at the time the research was carried out, a shortened title (running head), and the abstract. The title must be typed in upper and lower case letters as it will appear when typeset. Name(s) of the author(s) should be typed in capital letters below the title. The address (department, institution, city, state, postal code, country if not USA) should appear below the name of the author(s). If more than one institution is to be credited, they should appear in the order of the authors' affiliation. A running head of not more than 38 letters and spaces should be typed in capital letters between the address and the abstract.

ABSTRACT. The abstract should summarize the main conclusions and any new methods or procedures critical to the results of the study. It should be 250 words or less.

INTRODUCTION. The introduction should describe the knowledge that gave rise to the question examined by, or the hypothesis posed for the research.

MATERIALS AND METHODS. This section should describe the research design, the methods and materials used in the research (subjects, their selection, equipment, laboratory or field procedures), and how the findings were analyzed.

RESULTS. The text of the results should be a descriptive narrative of the main findings, of the reported study. This section should not list tabulated data in text form. Reference to tables and figures included in this section should be made parenthetically in the text.

DISCUSSION. This section should compare and contrast the data collected in the presented study with that previously reported in the literature. Unless there are specific reasons to combine the two, as

explained by the author in the letter of transmittal, Results and Discussion should be two separate sections.

ACKNOWLEDGMENTS. Colleagues and/or sources of financial support to whom thanks are due for assistance rendered in completion of the research or preparation of the manuscript should be recognized in this section rather than in the body of the text.

LITERATURE CITED. References to scientific literature should be arranged alphabetically by first author's last name using the Name/Year (N-Y) method as described in the CBE Manual.

Journals

Author(s). Year. Article title. Journal title volume number (issue number): inclusive pages.

Thomison JB. 1988. Uniform requirements for manuscripts. *South Med J* 81(8):947-52.

Form of citation: (Thomison 1988)

Books

Author(s). Year. Title. Place of publication: publisher name. Number of pages.

Voet D, Voet JG. 1990. *Biochemistry*. New York: J Wiley. 1223 p.

Form of citation: (Voet and Voet 1990)

Multiple author citation: (Steiner and others 1992)

TABLES. Tables must be typed double-spaced, one table to a page, numbered consecutively, and placed in the manuscript after Literature Cited. Since tables must be individually typeset, consolidation of data into the smallest number of tables is encouraged. A horizontal double underline should be made beneath the title of the table, and single underlines should be made the width of the table below the column headings and at the bottom of the table. Do not use vertical lines, and do not place horizontal lines in the interior of the table. Footnotes should be used to clarify possible questions within the table, and should be noted by asterisks, daggers, or other symbols to avoid confusion with numerical data.

FIGURES. All illustrations are referred to as "Figures" and must be numbered consecutively. Figures may be photographs, hand-drawn or computer generated drawings in black ink. Each figure should be identified along the top edge with the name of the author(s) and figure number, and on the back with name of author(s) and manuscript title. Illustrations other than those generated by the author(s) must bear permission for use and credit to the originator. **ORIGINAL ARTWORK WILL NOT BE RETURNED UNLESS SPECIFICALLY REQUESTED AT TIME OF SUBMISSION.** Each figure must have a complete legend. The legend should not be placed on the figure, but should be typed in order, double-spaced, on a separate sheet which precedes the figures in the manuscript. Figures should be referred to parenthetically in the text, for example (Fig. 1). The size and proportion of each illustration should be suitable for reduction. Excessive white space should be avoided. Illustrations will be reduced to one column width (3 and 3/8 inches) or two column width (7 inches) at the discretion of the editor. Lettering should be done of a size to ensure that it can be read after reduction. On maps and other illustrations where original size is a concern, a graphic scale should be incorporated into the figure.

FOOTNOTES. Text footnotes should not be used with the following exceptions. A footnote to the title will be added editorially to state the dates of manuscript submission and revision. A footnote to name(s) of author(s) may be used to indicate present address different from that at which the research was done, or to indicate the author to whom inquiries should be directed. All other material or comments must be incorporated into the text. Literature Cited should not be inserted as footnotes. Footnotes to tables are permissible, and are encouraged to promote clarity.

Attention to the above instructions will minimize the need for revision and editorial correction, and will shorten the time from submission to publication. Any questions which are not answered by these instructions, or by consulting the **CBE Manual for Authors, Editors, and Publishers, 6th Edition**, should be addressed to the editor.

Available: Stipends Tuition Waivers

Students interested in the
“Biology of Human Disease.”
Join a unique graduate program
at The Ohio State University which
targets the following areas:

- Biochemistry
- Bioinformatics
- Cell Biology
- Developmental
Biology
- Genetics
- Immunology
- Microbiology
- Molecular
Biology
- Neurobiology
- Pathobiology
- Pharmacology
- Physiology
- Virology

The Integrated Biomedical Science Graduate Program is designed to prepare students to become leading biomedical scientists. Students are financially supported by an annual stipend of \$19,000 plus tuition.



Visit www.ibgp.org for more information or application requirements.



HOW TO PREPARE A COLLEGE UNDERGRADUATE RESEARCH-IN-PROGRESS SUMMARY

IN ORDER TO ACCELERATE THE ENTRY OF COLLEGE UNDERGRADUATE students into the professional world of education, science, engineering, technology, or their applications, The Ohio Academy of Science has adopted the following policy and procedures to accept and publish summaries of college undergraduate research-in-progress in lieu of abstracts for the Annual Meeting. Papers, based on the student's research, may be presented in either podium or poster format. Undergraduates whose research is unfinished by the abstract submission deadline may submit an Undergraduate Research-in-Progress Summary in lieu of an abstract. This summary is a statement following the general typing and submission instructions for an abstract. **The summary shall contain the following elements:** (1) background or introduction including goals, objectives, purpose, and hypothesis, (2) methods and materials, and, (3) if available, initial observations. Phrases like "will discuss, will review, will talk about, or will present" are unacceptable in a summary. All important facts should be stated with brevity, but not such sparing use of words as to leave ambiguity. Summaries should be 250 words or fewer. Tables and graphs should not be included. New techniques or new apparatus and their functions should be mentioned. New constants, initial critical data, if available, or formulae should be included. Names of new species should not be listed in the summary; use full scientific names for all

organisms. The value of summary is real and considerable, not only for those in attendance, but also for others unable to attend. **Summaries shall be presented by the college undergraduate first author.** It is the responsibility of the first author of multi-authored summaries to obtain permission from all authors and research advisor(s) to submit the content of the summary. Undergraduate Research-in-Progress Summaries shall be reviewed for conformity to general format but **SHALL NOT BE CONSIDERED A PEER-REVIEWED SCIENTIFIC PUBLICATION.** Summaries shall not be accepted for publication without a signed statement from the advisor(s) **whose name(s) appear in the summary**, vouching for the accuracy of the summary and, barring some compelling reason, assuring that the undergraduate will present the work, including results, analysis of results, and any conclusions available, at the Academy's Annual Meeting. Acceptable final summaries—to be submitted by Email when requested by the Academy—will be published in the Program Abstracts issue of *The Ohio Journal of Science* and shall be identified as a summary by including the advisor's name in parentheses.

First authors must be members to submit and present at the Annual Meeting of The Ohio Academy of Science.

Please JOIN or RENEW TODAY!

INSTRUCTIONS FOR SUBMITTING A COLLEGE UNDERGRADUATE RESEARCH-IN-PROGRESS SUMMARY

TYPE TITLE IN CAPITAL LETTERS. Continue typing on the same line with name(s) of student(s) typed First, Middle Initial, and Last in UPPER/lower case (do not type the last name(s) in all capital letters); then type the **name(s) and email(s) of advisor(s) in parentheses**; then add the **complete and accurate** undergraduate's institution mailing address and ZIP code. Add Email address. **DO NOT CENTER THE LINES OF YOUR ADDRESS.** Type flush left, ragged right. Do not indent.

Skip one line and use complete, DOUBLE-spaced sentences to state purpose, objectives or goals of the research, hypothesis, methods and materials, and, if available, initial observations. **DO NOT EXCEED 250 WORDS. DO NOT EXCEED ONE PAGE.** Summary must be one paragraph. Leave a 1" top and left margin. Use 12 point Times New Roman type. **LASER PRINT IS PREFERRED. DO NOT FOLD YOUR ORIGINAL OR COPIES.** Mail FLAT with cardboard protection. **PLEASE COMPLETE AND INCLUDE THE SUBMISSION FORM.**

Mail **FIRST CLASS (postmarked) by Friday, November 1, 2002 to:**
The Ohio Academy of Science
PO Box 12519
Columbus OH 43212-0519

PLEASE INCLUDE THE FOLLOWING:

1. Completed submission form for the **first** author who will present. **EACH SUMMARY MUST HAVE A SEPARATE SUBMISSION FORM. Enclose one additional copy.**
2. Submission and membership fee (check payable to The Ohio Academy of Science). The submission fee includes the registration fee for the first author **ONLY** and is non-transferrable.
3. Original summary typed within 1" or wider margins on **8.5" x 11" WHITE PAPER** plus **one** identical xerographic copy.
4. **DO NOT SUBMIT** your summary on computer disk. Later, after review, and if accepted, you will be required to submit your summary by Email.
5. To acknowledge receipt of your summary please include a self-addressed, stamped postcard. Only one postcard per envelope is needed.



CHECKLIST:

- First authors must be a member to submit and present at the Academy's Annual Meeting
- Submission and Membership Form plus one copy
- Submission Fee
- Original submission plus one copy
- To acknowledge receipt of your abstract include a self-addressed, stamped postcard. Only one postcard per envelope is needed.

Content of Summary:

Please include one or two sentences on each of the following:

- background or introduction including goals, objectives, purposes, and hypothesis;
- methods & materials;
- initial observations, if available.

Please DO NOT submit your summary on a Computer Disk at this time. Later, if your summary is accepted, we will require you to submit a file by Email.



For more forms phone: 614/488-2228 or outside 614, toll free, if needed, 1-800-OHIOScience



PLEASE COMPLETE AND RETURN THE SUBMISSION FORM POSTMARKED BY FRIDAY, NOVEMBER 1, 2002.

SUBMISSION AND MEMBERSHIP FORM

DEADLINE:
Nov. 1, 2002

First authors must be members to submit and present at the Annual Meeting of The Ohio Academy of Science. PLEASE JOIN OR RENEW TODAY! The submission fee includes the meeting registration fee **ONLY** the **FIRST AUTHOR**. Registration information will be sent only to the first author. All meeting attendees, including authors, must register. The **FIRST AUTHOR**, WHO WILL BE THE PRESENTER OF EACH PAPER, MUST RETURN THIS FORM WITH THE SUBMISSION AND PAYMENT TO THE OHIO ACADEMY OF SCIENCE. Please use a separate form for each submission. *As a first author I understand that by submitting this abstract or summary I will present my research at the meeting. If I am unable to attend, then I understand that whoever presents it for me will be required to pay the full meeting registration fee.* First Author's Signature _____

First authors must be members to submit and present at the Annual Meeting of The Ohio Academy of Science.

Please JOIN or RENEW TODAY!

OFFICE USE ONLY Abstract No.

\$ _____

REQUIRED SUBMISSION FEE:

— \$45 Submission fee . **One fee per submission**; this fee includes the registration fee for the **first author ONLY**.

YOU MUST COMPLETE ALL PARTS OF THIS FORM

Type: ABSTRACT or *Undergraduate Research-in-Progress Summary

Check: Professional Collegestudent Pre-collegestudent

Check: Ms. Mrs. Mr. Dr. Prof.

First Author's Full Name _____

Job Title _____

Employer, organization, school, or institution _____

Preferred mailing address (students must use home, dorm, or apartment address) _____

City _____ State _____ Zip _____

Is this a home address? Yes No

Ohio County _____

Office Phone (____) _____

Home Phone (____) _____

FAX Number (____) _____

E-MAIL _____

Presentation method poster or podium.

All podium presentations are limited to 15 minutes. If no method is selected, podium will be assigned. **Audiovisual will be confirmed later.**

SUBMISSION TITLE (first 5-10 words) _____

FIELD OF SUBMISSION:

Did the research reported in this submission involve more than one major discipline or field of study? YES NO

Is this your **FIRST** time to present a scientific paper? YES NO

Are you interested in volunteering to chair a session? YES NO

College Undergraduate Research-in-Progress Summaries shall not be accepted for publication without the following signed statement from the advisor whose name appears in the summary: *I vouch for the accuracy of the College Undergraduate Research-in-Progress Summary being submitted with this form and barring some compelling reason, assure that the undergraduate will present the work, including results, analysis of results, and any conclusions available, at the Academy's Annual Meeting.

Advisor's Signature _____

Printed Name _____

Email _____

REQUIRED ACADEMY MEMBERSHIP:

- **NEW** or **RENEWAL**
- \$1,000 LIFE (installment plan available)
- \$1,000 Sponsor of the Academy
- \$750 Sustainer of the Academy
- \$500 Advocate of the Academy
- \$500 Corporate Member
- \$250 Supporter of the Academy
- \$100 Institution, Organization or Agency Member
- \$100 Friend of the Academy
- \$85 Family (maximum of 3 persons)
- \$75 Regular Member
- \$40 Retired (age 59 & over) Member with Journal
- \$40 College Student with Journal
- \$40 Pre-college Student (age 17 & under) w/ Journal
- \$25 Retired Member without Journal
- \$25 Pre-College Student without Journal

*METHOD OF PAYMENT:

Enclosed is a check made payable to The Ohio Academy of Science for \$_____.

*Please charge my credit card \$_____ Please **PRINT** your name below as it appears on your card.

First _____ Middle _____ Last _____

*VISA 

*MASTERCARD 

Card Number _____

Expiration Date _____

Signature _____

* Check here and go to the following site for ONLINE PAYMENT:
<http://www.merchantamerica.com/ohiosci/>

MAIL FIRST CLASS (POSTMARKED) BY Nov. 1, 2002

1. Submission and Membership Form plus one copy,
2. Submission (abstract or summary) plus one copy
3. Combined Abstract and Meeting Registration Fee
4. Membership Fee (renewal or joining) as needed
5. Self-Addressed, stamped acknowledgement postcard to:

The Ohio Academy of Science

PO Box 12519

Columbus OH 43212-0519

Phone 614/488-2228 or toll-free, outside (614), 1-800-OHIOSCI

You May Duplicate This Form. EACH SUBMISSION MUST HAVE A SEPARATE FORM.