GUIDELINES
for
CPUB RESEARCH AND TEACHING ABSTRACTS

Scientific paper presentations (research and teaching) by faculty and students are a most important component of CPUB ANNUAL MEETINGS. All faculty and students who are undertaking research and teaching projects are encouraged to share their work with others of the Commonwealth Universities of Pennsylvania. Those individuals who desire to present their investigations should submit abstracts regardless of whether they choose to give their papers in a Paper or Poster Session. Informational abstracts are preferred, but Indicative abstracts are also welcomed.

The informational abstract should follow these guidelines. The indicative abstract should follow these guidelines as much as possible.

1. State the principal objectives/hyposthesis and scope of the investigation.
2. Describe the primary methodologies and materials employed in the study.
3. Emphasize the results (data).
4. Summarize the interpretations and conclusions.
5. Abstract should not exceed 200 words.

The indicative abstract (those not having final results and conclusions) may be needed by those students who are not
in the final stages of their work, but who would benefit by having the opportunity to present at a formal scientific meeting. Hopefully these abstracts would be upgraded to informational abstracts prior to being published in the PROCEEDINGS.

IMPORTANT!! Each student paper should place a RESEARCH OR TEACHING ADVISOR on each abstract. If the advisor is one of the authors, he/she should be represented by an asterisk in the Abstract Heading. If the advisor is not an author, the name(s) and university address should be placed at the end of the abstract. This helps to facilitate abstract reviews by the Review Editorial committee.

All submitted abstracts will be considered for publication in the PROCEEDINGS OF THE COMMONWEALTH OF PENNSYLVANIA UNIVERSITY BIOLOGISTS. Each abstract will be reviewed by a Board of Editors (faculty members from the Commonwealth Universities) one year prior to the publication of the Proceedings. Abstracts will be recommended for publication or for revision.
SCIENTIFIC AND EDUCATIONAL

ABSTRACTS

OF

FACULTY AND STUDENTS

OF

CPUB

(1983-1987)

I. MANSFIELD UNIVERSITY OF PENNSYLVANIA (1983)
   (ABSTRACTS 83-1 TO 83-9)

II. EAST STROUDSBURG UNIVERSITY OF PENNSYLVANIA (1984)
    (ABSTRACTS 84-1 TO 84-24)

III. WEST CHESTER UNIVERSITY OF PENNSYLVANIA (1985)
    (ABSTRACTS 85-1 TO 85-16)

IV. LOCK HAVEN UNIVERSITY OF PENNSYLVANIA (1986)
    (ABSTRACTS 86-1 TO 86-26)

V. CLARION UNIVERSITY OF PENNSYLVANIA (1987)
    (ABSTRACTS 87-1 TO 87-20)
SCIENTIFIC PAPER PRESENTATIONS
1983-1987

ABSTRACTS

INTRODUCTION

In 1972, at the Annual Meeting of CPUB, the first scientific paper presentations of this organization were made by students and faculty. Eight researchers presented their data and interpretations of ongoing investigations at their institutions. Since that time over 150 research papers have been presented by CPUB students and faculty. The paper sessions at the CPUB meetings were well attended and many of the student presenters were making their initial scientific presentations. The subjects being investigated were many and varied. Projects of CPUB investigators were in the life science areas of: bacteriology; biochemistry; chemotaxonomy; dendrology; entomology; herpetology; limnology; mammology; microscopy, parasitology; plant physiology; ultrastructure; zoology and many other biological disciplines.

Biology, like other scientific areas, is research based. Therefore to enable our students to learn experimental biology, many faculty undertake a variety of research studies to prepare their students for graduate and professional schools and in many career endeavors. Research has been an integral part of the institutions of CPUB and the published research abstracts of this Proceedings is a testimony to what we have accomplished in the past and what we will pursue in the future. Many of our former research students are presently pursuing advanced degrees in the
biological or medical sciences and numerous ones are now practicing biologists and physicians. Many CPUB faculty have obtained grants and contracts to finance their research programs and they have also published in many prestigious life science journals.

The abstracts of this Proceedings are indexed by author and by subject. These index listings are provided to enable readers to determine the kinds of life science studies which have been undertaken by faculty and students during the past five years. The senior author of each abstract presented the biological paper, unless otherwise noted.