DIRECTIONS

The Medical College of Ohio is located between Arlington and Glendale Avenues east of Byrne Road.

From I-75 to I-475 Northbound or U.S. 25/475 Southbound:
Take Airport Hwy. exit (Route 2). Airport Highway east to Byrne Road, turn right to Arlington Avenue, left to MCO entrance.

From I-75 Southbound:
Use exit marked "Maumee/U.S. 25" to Anthony Wayne Trail; take Glendale Avenue west to MCO entrance.

From Ohio Turnpike, East or Westbound:
Use exit 4; go north on Reynolds Road to Glendale Avenue; turn right on Glendale (approx 1/2 mile). Turn left at MCO entrance.

To reach the Cardiac Catheterization Facilities:

Address:
Medical College of Ohio
3000 Arlington Avenue
Toledo, Ohio 43614

Telephone:
419-381-3697 or, 800-321-8383, ext. 3697

Medical College of Ohio Campus

MCO Hospital Cafeteria
Health Education Building
Eleanor N. Dana Conference Center
Official Announcement
For Members Only

Saturday, April 23, 1994
5:15 P.M.
Medical College of Ohio at Toledo
Dana Conference Center
Lucas

ANNUAL BUSINESS MEETING FOR THE MEMBERSHIP:

There shall be an Annual Business Meeting for the membership of the Academy during the Annual Meeting. The business session shall be conducted in accordance with the most recently published edition of "Robert's Rules of Order". The order of procedure shall be as follows:

A. A Call to Order by the President.
B. A summary of the Minutes of the previous meeting shall be read by the Secretary.
C. Presentation of the report of the tellers of the election of officers and other positions.
D. Voting on any proposed amendments to the Constitution or By-Laws.
E. Business from the floor.
F. Adjournment.

PROPOSED AMENDMENTS TO THE CONSTITUTION OF THE OHIO ACADEMY OF SCIENCE (1) TO DEFINE THE TERMS OF SERVICE OF THE ACADEMY SECRETARY AND TREASURER, (2) TO CREATE THE OHIO ACADEMY OF SCIENCE DEVELOPMENT COUNCIL, AND (3) TO ENABLE THE ACADEMY GOVERNING COUNCIL, EXECUTIVE COMMITTEE AND OTHER COMMITTEES TO CONDUCT BUSINESS BY MAIL OR OTHER ELECTRONIC MEANS.

Text approved by the Governing Council on March 4, 1994 for consideration by the membership of The Ohio Academy of Science.

NOTE:

New wording is indicated by **BOLD ALL CAPITALS**; deleted wording is indicated by *bold delete*.

ARTICLE IV - OFFICERS

3. SECRETARY:

C. Term of Office: The term of office shall commence immediately upon election AND SHALL BE FOR THREE YEARS. In order to provide continuity in the affairs of the Academy, the Secretary SHALL automatically continue to serve as a member of the Executive Committee and Governing Council for a term of one year. The terms of the Secretary and Treasurer **SHOULD** not terminate in the same calendar year.

4. TREASURER:

E. Term of Office: The term of office shall commence on the first of July following the date of election AND SHALL BE FOR THREE YEARS. Upon completion of the term, the Treasurer **SHOULD** automatically continue to serve as a member of the Executive Committee and Governing Council for a term of one year. The terms of the Treasurer and the Secretary **SHOULD** not terminate in the same calendar year.

ARTICLE V - COUNCILS

1. THE GOVERNING COUNCIL:

A. Membership: The Governing Council shall be composed of the President, President-elect, immediate Past President, Secretary, Treasurer, (when applicable, the outgoing Secretary or the outgoing Treasurer), Editor of The Ohio Journal of Science, Senior Academy Director, Junior Academy Director, Director of the Industrial and Business Council, CHAIRPERSON OF THE DEVELOPMENT COUNCIL, Secretary of The Ohio Academy of Science Foundation, Chief Executive Officer, Representatives to the American Association for the Advancement of Science, Representatives to the National Association of Academies of Science, Representative to the Executive Committee of the Ohio Biological Survey, Historian-Archivist, the at-large members of the Executive Committee, and the Chairpersons of all standing and temporary committees.

6. THE DEVELOPMENT COUNCIL

A. PURPOSE AND GOALS: The purpose of the Development Council is to develop financial support for the Ohio Academy of Science and thereby forward and enhance its mission by: developing and implementing policies and procedures to be adopted by the Academy's Governing Council in order to 1. Identify, 2. Qualify, 3. Cultivate, 4. Solicit, and 5. Recognize Donors.

B. MEMBERSHIP: The Development Council shall consist of 1. Chairperson, 2. Vice Chairperson, 3. Secretary, 4. Members of the Academy who have expertise and/or interest in seeking financial support for the Academy, and 5. The President, Treasurer, Professional Development Officer (Consultant or Academy Staff Person) and Chief Executive Officer of the Academy all of whom shall serve as ex-officio, non-voting members of the Development Council. After the initial organizational appointments the Development Council shall select its own members, subject only to ratification by the Governing Council.

(1) OFFICERS: The Development Council Chairperson shall be an Academy member and shall be recommended by the members of the Development Council and be appointed by the Governing Council. The Chairperson of the Development Council shall be a member of the Executive Committee and the Governing Council. The Vice Chairperson shall act in the absence of the Chairperson and fulfill other duties as assigned by the Development Council. The Secretary shall prepare minutes of the Development Council and fulfill other duties as assigned by the Development Council. Terms of Office for the Chairperson, Vice Chairperson, Secretary shall be for one year renewable for a total of three years. The Treasurer and Chief Executive Officer shall provide the Development Council with reports on income and expenditures and fulfill other duties as assigned by the Development Council.

(2) THE PROFESSIONAL DEVELOPMENT OFFICER WILL ATTEND ALL MEETINGS OF THE DEVELOPMENT COUNCIL, EXECUTIVE COMMITTEE, AND GOVERNING COUNCIL AS AN EX-OFFICIO, NON-VOTING MEMBER.

(3) TREASURER, CHIEF EXECUTIVE OFFICER: The Academy's Treasurer, and Chief Executive Officer will provide the Development Council with reports on income and expenditures consistent with the need to report to donors.

C. MEETING: A minimum of two regular meetings will be held annually. Sub-committee and other Development Council meetings will be held as needed.

D. DUTIES:

(1) GOVERNING DOCUMENT: The Development Council shall prepare a Governing Document to be approved by the Executive Committee and Governing Council of the Academy. The document shall include, but not be limited to, the following items:

A. Gift Management Policy: A Gift Management Policy with clear guidelines for the receipt, deposit, recording, and expenditure of funds consistent with the wishes of the donor will be developed. This document will also cover the management of funds donated in excess of the required budget and the use of income generated from such overages. It will further establish guidelines for the refusal of gifts that are not appropriate for the organization; or proposed gifts when the Academy cannot fulfill the wishes of the donor. Non-cash gifts such as stocks, real estate, art and other items will also be dealt with in the policy. All fund raising and gift management of the Development Council and the Academy will be consistent with the standards of the Better Business Bureau, The Code of Ethics of the National Society of Fund Raising Executives and all Ohio and Federal Statutes.

B. STAFFING PLAN: The Staffing Plan will define the skills and qualifications required of the paid or contract agent(s) serving as the professional development officer and any support staff. It will contain job descriptions with clear expectations.

continued on next page...
C. Budget: The budget will identify the source and process to raise or allocate start-up funds to cover staffing costs, equipment, fund raising supplies, and materials.

D. Fund Management: Each contribution collected shall be solely in the name of the Ohio Academy of Science, not later than two business days after receipt of each contribution the entire amount of the contribution shall be deposited initially in an account at a bank or other federally insured financial institution; the account shall be in the name of the Ohio Academy of Science. The Ohio Academy of Science shall have sole control of all withdrawals from the account. Only authorized individuals, whose names are on file with the financial institution, will be given the authority to withdraw any deposited funds from the account. All expenditures must clearly be in compliance with the donor's intent. When compliance is not clear the Chair of the Development Council reserves the right to confer with the officers of the Ohio Academy of Science for approval.

E. Recruitment Plan: The recruitment plan for Development Council members will be developed in order to find the right people with the interest and willingness to serve on the Development Council and to solicit funds on behalf of the Academy. It will contain a job description with clear expectations and a succession plan to insure long term stability of the development efforts.

F. Table of Organization: The table of organization will establish standing sub-committees of the Development Council. At the discretion of the Development Council additional sub-committees may be established.

G. Donor Profile System: The donor profile system database will consist of a giving history to the Academy, donor interests, donor giving policies or preference, donor linkage to the Academy and other pertinent information for appropriate cultivation, solicitation and recognition of individuals, corporations, foundations, organizations and government entities.

(2) Three Year Plan: A three year plan, updated annually, shall be developed by the Development Council and submitted to the Governing Council for approval. The plan will be specific to the fund raising activities required to meet the budgets for each approved activity of the Academy.

(3) Feasibility Review: A funding feasibility review will be conducted by the Development Council prior to the final approval of the Governing Council of a final plan, program, project, or the program or project itself. The Development Council will be presented with an outline of the proposed activity and the anticipated costs and will recommend to the Governing Council the viability of funding of the project through the Development Council activities.

ARTICLE VI — COMMITTEES

1. Executive Committee:

A. Membership: All members of the Executive Committee shall be Members of the Academy. The membership of the Executive Committee shall consist of the President, President-elect, immediate Past President, Secretary, Treasurer, (when appropriate, either the outgoing Secretary or Treasurer), Director of the Senior Academy, Director of the Junior Academy, Editor of The Ohio Journal of Science, Director of the Industrial and Business Council, Chairperson of the Development Council, and six at-large positions, two each from industry, government, and academia who are elected to two year staggered terms each by the membership.

ARTICLE X — RULES OF ORDER

1. All Councils, Committees and other deliberative bodies of The Ohio Academy of Science shall conduct their business according to the most recently published edition of "Robert's Rules of Order."

2. Unless discussion is requested, which may be facilitated by a conference call, any action which can be taken or authorized at a meeting of the Governing Council, Executive Committee or other deliberative bodies and committees may be taken or authorized without a meeting by approval of two-thirds of the members in office by telephone, fax, other electronic means, or by mail vote.

-End of Proposed Amendments-
103rd Annual Meeting - Registration Form

The Ohio Academy of Science
April 22-24, 1994 – Hosted by Medical College of Ohio, Toledo

Advance registration must be received by April 13, 1994.

ALL presenters and other participants must register. Access to sessions by name tag only. Name

tags and information packet will be available at Meeting Registration Desk. Please return the completed registration form along with
the appropriate fees to the address printed below. A confirmation and receipt for pre-registration received by April 13 will be mailed to
the address listed below. Those registered after April 13 will be able to pick up their receipt at the Meeting Registration Desk.

PLEASE PRINT OR TYPE. Please use a separate form for each registration. COPY this form as needed.

Circle; Ms. Mrs. Mr. Dr. NAME

Please PRINT or TYPE First, Middle, and Last

SCHOOL or EMPLOYER

TITLE

Social Security Number

ADDRESS

Is this a home address? Yes No

CITY

STATE

ZIP

HOME PHONE ( )

WORK PHONE ( )

FAX ( )

REGISTRATION FEES: Please fill in the amount. One fee covers ALL THREE DAYS. To avoid higher rates, advance
registration and payment must be received by April 13, 1994. On-site registration will be accepted at the higher rate.

Member of The Ohio Academy of Science

Professional Registration $30 ($35 after April 13, 1994) $___

Student Registration $15 ($20 after April 13, 1994) $___

Non-Member - includes membership for FIRST TIME members only.

Professional Registration $70 ($75 after April 13, 1994) $___

Student Registration $30 ($35 after April 13, 1994) $___

RENEWAL of Membership in The Ohio Academy of Science

Student $15 Professional $50 Family $60 $___

MEALS (available ONLY by preregistration. N.A. after April 13, 1994)

Friday, April 22 Dinner $20.00 $___

Saturday, April 23 Banquet $20.00 $___

TOTAL ENCLOSED $___

WHICH OF THE FOLLOWING WILL YOU ATTEND?

FRIDAY, April 23, 1994

Geology Symp. Tour of Sun Oil Co. Refinery

SATURDAY, April 23, 1994

Technical Section paper and poster presentations

All-Academy Lecture

Internet Workshop (Advance registration required)

SUNDAY, April 24, 1994

Geology Field Trip

METHOD OF PAYMENT: Phone and FAX registrations will be accepted

if Purchase Order, MasterCard, or VISA are used. NO REFUNDS AFTER


Confirms a phone or FAX registration.

Check enclosed (payable to Medical College of Ohio - CCE)

I have enclosed a purchase order.

Charge my credit card. VISA MASTERCARD

Card Number Exp. Date

Cardholder signature

MAIL FORM WITH PAYMENT TO:

Center for Continuing Education
Medical College of Ohio
OAS Annual Meeting Registration
P.O. Box 10008
Toledo OH 43699

Phone (419) 381-4237
FAX (419) 381-4025

Advance Registration Deadline:
April 13, 1994
Preliminary

Call for Papers

104th Annual Meeting -- April 28-30, 1995

The Ohio Academy of Science

To be held at

Otterbein College,

Columbus,

and Co-hosted by

Ross Products Division of Abbott Laboratories,

Columbus

Poster and Podium Presentations on Saturday, April 29, 1995

Abstract deadline: Postmarked by December 1, 1994

For additional abstract forms
or further information call or write:

The Ohio Academy of Science
P.O. Box 12519
Columbus, OH 43212-0519
Phone or FAX (614) 488-2228
THE OHIO JOURNAL OF SCIENCE considers for publication submissions of the following nature:

1. Solicited Submissions - Book Reviews, Research Reviews.
2. Unsolicited Submissions - Brief Notes, Research Reports.

Solicited submissions will be requested by the editor or by a member of the editorial board. Book Reviews will be requested of individuals expert in the subject matter of the book to be reviewed. The approximate length will be 750 words, and the text will include a brief description of the subject matter addressed by the volume, its outstanding strong points, and any obvious weaknesses. Research Reviews will be requested to serve as extensive surveys of the literature and an area of science in which Academy members have an interest. In general, reviews will comprise five to ten printed pages. Organization and format of solicited material will be determined by the author(s) and the editorial staff.

Unsolicited submissions, in the form of presentations of quantitative or qualitative data pertinent to any of the sections of the Academy listed in the Foreword, may be considered for peer review. Brief Notes are manuscripts which will be published on less than two printed pages (i.e., less than six pages of typescript) and will contain no more than one piece of illustrative material (i.e., table, figure, or other illustrations). The editor will identify papers which meet these criteria as Brief Notes if not so categorized by authors. Research Reports are papers which will extend beyond two printed pages and which will contain two or more pieces of illustrative material. Regardless of the length of manuscript, unsolicited submissions should be organized according to the following format:

Page 1 - Title, Author(s), Affiliation(s), Abstract

Page 2 and the remainder - Body of the Paper in the order: Introduction, Materials and Methods, Results, Discussion, Acknowledgements, Literature Cited, Tables, Figure Legends, Figures.

STYLE. The general style of papers previously published by THE JOURNAL should be employed, and can be determined by reading recent issues of THE JOURNAL. Manuscripts should be typewritten with wide margins on 21.0 x 27.9 cm (8.5 x 11 in) paper, and be double-spaced throughout including the title and abstract. The only words to be underlined are scientific names. Spell out numbers one through nine and use Arabic numerals above nine. Extensive quotations in the text should be typed slightly indented from the text. Acceptable symbols and abbreviations for units of measurement should be used as given in the CBE Style Manual, 5th ed. (Council of Biology Editors, 960 Research Pk., Bethesda, MD, 1981). This volume serves as a reference for editorial decisions with regard to style. Primary text reference should use the International System of Units in all cases, with parenthetical reference to English units at the discretion of the author.

The following guidelines should be adhered to in the organization of the manuscript.

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 should be typed twice at upper and lower case 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) where the research was done should be typed directly below the name of the author. If more than one institution is to be credited, they should be typed in italics (roman type). If typed by word processor, copy should not be justified. Please use 12 (12 characters per inch) type. A running head of no more than 58 letters and spaces should be typed in capital letters between the address and the abstract.

ABSTRACT. The abstract should be a meaningful summary of the significant findings reported in the Brief Note or Research Report. It should be self-sufficient for the presentation of main conclusions and any new methods or procedures critical to the results of the study. The abstract should be brief (250 words or less) but self-sufficient for the presentation of main conclusions and any new methods or procedures critical to the results of the study. The abstract should be typed twice at upper and lower case 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) where the research was done should be typed directly below the name of the author. If more than one institution is to be credited, they should be typed in italics (roman type). If typed by word processor, copy should not be justified. Please use 12 (12 characters per inch) type. A running head of no more than 58 letters and spaces should be typed in capital letters between the address and the abstract.

MATERIALS AND METHODS. This section should contain sufficient detail to allow the reader to attempt replication of the reported research. If reference is made to a procedure previously published by others, any unique modifications of the standard procedure should be explained. Any statistical methods used in the analysis of data should be described and documented.

RESULTS. The text of the results should be a descriptive narrative of the main findings, both positive and negative if the latter occurred, of the reported study. This section should not be simply a listing of the 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 consist of the comparing and contrasting of data collected in the presented study with that previously reported in the literature. A goal is to incorporate at least one literature citation and one reference to illustrative material from the Results section into each paragraph of discussion. Unless there are specific reasons to combine the two, as explained by the author in the letter of transmittal, Results and Discussion should be separate sections.

ACKNOWLEDGEMENTS. 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 according to the following examples.


Abbreviation of journal titles should be supplied by the author, and should follow either CBE Style Manual or Medical Subject Headings (MeSH). For the sake of economy, close to the form of Patterson (1940) or Patterson (1940), if more than two authors appear, the form should be Patterson et al. (1940), with all authors listed in the Literature Cited section.

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 single or 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. General style of tables can be seen in recent issues of THE JOURNAL.

FIGURE LEGENDS. Each figure must have a complete legend even though the material is described in the text. The legends 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).

FIGURES. All illustrations are referred to as "figures," and must be numbered consecutively. Figures may be photographs, or hand- or computer-generated line drawings in black ink. For the sake of economy, close to the form of Patterson should be grouped and mounted close together on white cardboard for reproduction as a single unit; however, line drawings and photographs should not be grouped together or combined in a single figure. Each figure, or collection of figures in a plate, should be identified along the top of the figure number, and on the back with name of author(s) and manuscript title. Illustrations other than those generated by the author must bear permission for use and credit to the originator. ORIGINAL ART WORK WILL NOT BE RETURNED UNLESS SPECIFICALLY REQUESTED AT TIME OF SUBMISSION. THE AUTHOR MUST SUPPLY A STAMPED SELF-ADDRESSED ENVELOPE FOR RETURN.

The size and proportions of each illustration or group of illustrations should be suitable for reduction to the width and length of the printed page (17.8 x 24.1 cm; 7 x 9.5 in). Care should be taken to minimize the space occupied by any figure, and excessive white space should be avoided. Line drawings should not exceed 20 x 25 cm (8 x 10 in). If carefully drawn, figures need be no less than 33% larger than the size they will be reduced to in printing. Lettering should be large enough to be readable after reduction. On maps and other illustrations where original size is a concern, a graphic scale should be incorporated into the figure. Besides the original art work for each illustration, two photocopies of each should be submitted to avoid delay in the review process.

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 a 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. In no case should literature citations be inserted as footnotes. They must be listed in the Literature Cited section. 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, by examining papers in recent issues of THE JOURNAL, or by the CBE Style Manual, 5th ed., should be addressed to the editor.
103rd Annual Meeting

The Ohio Academy of Science

Hosted by

The Medical College of Ohio

Toledo

April 22-23-24, 1994

General Schedule

Friday, April 22, 1994

8:00 AM - 3:00 PM  Registration in the Dana Conference Center
9:00 AM - 11:30 AM  Tour of Sun Oil Company Refinery
9:00 AM - noon  Geology Symposium
12:00 noon  Lunch (on your own)
1:30 PM - 5:00 PM  Geology Symposium
2:00 - 5:00 PM  Ohio Academy of Science Governing Council Meeting
3:00 - 5:00 PM  OBS Executive Committee Meeting
5:00 - 6:00 PM  Reception
6:00 PM  Joint Dinner of Ohio Academy of Science and Ohio Biological Survey
8:00 PM  Ohio Biological Survey Advisory Committee

Saturday, April 23, 1994

8:00 AM - 3:00 PM  Registration in Dana Conference Center
8:00 AM - 9:00 AM  Past Presidents Breakfast
9:00 AM - 11:00 AM  Morning poster and podium presentations
9:00 AM - 11:00 AM  Environmental Symposium
9:00 AM - 10:00 AM  Internet Workshop
11:15 AM  ALL ACADEMY LECTURE by Dr. Roger C. Bone, MCO President
12:00 noon  Lunch (on your own)
1:30 PM - 5:00 PM  Afternoon poster and podium presentations
5:15 PM  Annual Business Session for Members Only
5:30 - 6:30 PM  Reception
6:30 PM  Banquet and Awards Ceremony

Sunday, April 24, 1994

9:00 AM - noon  Geology Field Trip to Esrock Materials, Inc. quarry.