The FASEB Journal

Information for Authors*

Purpose and Scope

The *FASEB Journal* (*FJ*) is the official publication of the Federation of American Societies for Experimental Biology (FASEB). *FJ* publishes two types of articles. These are: 1) brief, definitive, and essentially final research communications of broad interest that are considered to warrant prompt publication; and 2) state-of-the-art reviews, drawn as far as possible, from the topics of the FASEB symposia.

Manuscripts containing original communications, or proposals for reviews, should be sent to the Editor-in-Chief, Dr. W. J. Whelan, *The FASEB Journal*, P.O. Box 016129, Miami, FL 33101, USA.

Original Research Communications

*FJ* devotes a major portion of its pages (outside the meeting abstracts) to the publication of brief, definitive, original, and essentially final research communications that are considered to warrant prompt publication.

The aim of *FJ* is to illustrate the unity of biology and the interdependence of its constituent disciplines. Therefore, in keeping with this policy, and to qualify for acceptance, an original communication must not only be of outstanding scientific quality but must also be of broad interest.

The subject coverage of *FJ* is illustrated by the following disciplinary areas: biochemistry, biophysics, cell biology, developmental biology, genetics, immunology, neurobiology, nutrition, pathology, pharmacology, and physiology.

Papers should begin with an abstract written for the general reader and be free from jargon. They should continue with an introduction followed by the results and discussion; they should conclude with a succinct bibliography. Methods may be included within the figure legends and tables or as a separate section. Papers may not occupy more than four printed pages (equivalent of 4000 words and inclusive of illustrations and diagrams) and will be returned as unacceptable if they exceed this limitation.

Papers (an original and four copies) should be sent to the Editor-in-Chief. Prompt publication of acceptable papers will be ensured by careful conformity to the instructions to contributors and the expeditious return of proofs.

State-of-the-Art Reviews

*FJ* also presents research reviews. Herefrom these have been in the form of complement reports emanating from symposia or mini-symposia presented at FASEB meetings. To provide such research summaries in a more compact form and thereby to allow, within space limitations, a more comprehensive and representative survey of the acquisition of new biological knowledge, *FJ* publishes state-of-the-art reviews that emphasize interdisciplinary aspects of the growing points of research.

These reviews will serve as a window on topics addressed at Society-sponsored symposia or plenary lectures. Therefore, reviewers are sought from among those engaged in organizing the symposia. At the same time, volunteers are welcomed that embody the principles of timeliness, topicality, and broad interest. A proposal for such a review, not a completed review, should be sent to the Editor-in-Chief, who will advise on its acceptability.

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Authors will also be asked to certify that an original communication has not been published other than as an abstract and is not being considered for publication elsewhere, and that the paper will not be submitted for publication elsewhere until its acceptability for *FJ* has been decided.

Style of Manuscript

General Instructions

1) Manuscripts should be typewritten, with double spacing and 1-inch margins, on 8½ × 11 inch bond paper. Computer printouts of manuscripts must be readable; a dot-matrix printer is generally unacceptable. Metric units should be used. An original and four copies, with figures and tables, should be submitted to the Editor-in-Chief. Pages should be arranged and numbered consecutively in the following order: title page, footnotes, abstract of up to 200 words and indexing key words (maximum of five), text, references, figure legends, tables, and illustrations.

2) The title page should have the following information: title of article; author(s); laboratory or institution of origin with city and state or country; complete address for mailing proofs and telephone number for corresponding author; and shortened title (maximum of 50 characters and spaces) for the running foot.

3) The title should be brief (no more than 90 characters, including letters, spaces, and punctuation) and informative. Do not use phrases in which more than three words modify another word (use "Renal hemodynamic effects of atrial natriuretic factor" rather than "Atrial natriuretic factor renal hemodynamic effects"). Serial titles, such as "Interferon, IX," are not permitted, except as a footnote.

4) The abstract, a paragraph of no more than 200 words, should be written for the general reader and be free from jargon. It should be self-explanatory and suitable for use by abstracting services without rewriting. It should state the purpose and major findings and conclusions of the study. Citation of references should be avoided; if used, include bibliographic information.

5) Footnotes, double-spaced, should be assembled on one or more separate sheets; they should be numbered consecutively throughout.

6) The text should be readable, clear, and concise. Any necessary corrections should be neat and legible. Standard nomenclature should be used; unfamiliar or new items should be defined at first mention. (See Abbreviations section below.) Foreign words not in general use in the English language should be underlined for italic type; italics should not be used for emphasis. Latin plurals should not be used if the English language equivalent has been accepted, e.g., lamellae, not lamellae. *Webster's new collegiate dictionary* (1977) should be followed for spelling, compounding, and word separation.

7) Drugs and Trade Names. The chemical or generic name should precede the abbreviation of a drug name the first time it appears. Proprietary (trademarked) names should be capitalized and the spelling carefully checked. Trade names of chemicals or equipment should also be capitalized. Authors should supply an acceptable scientific name in every case as an alternative to the trade name. Trade names should not ordinarily be used in titles. More generally, the use of trade names should conform to the customary standards of good taste in cataloging items.

8) Active voice rather than passive voice should be used whenever possible. Present tense is used for references to existing knowledge or accepted concepts, and for proven conclusions from the present work; past tense is used when describing experimental work on which the paper is based.

Abbreviations, Symbols, and Terminology

Each author must include, as a footnote to the first page of text, a list of any new or special abbreviations used in the paper, with the spelled-out form and definition if necessary for clarity. This is not required for commonly accepted abbreviations. For information on style in general, authors are referred to the *CBE style manual*, 5th ed. (1983), prepared by the CBE Style Manual Committee (Bethesda, MD). Chemical and biochemical terms and abbreviations should be in accordance with the recommendations for usage by the International Union of Pure and Applied Chemistry (IUPAC) and its committee on nomenclature [see *Biochemical nomenclature and related documents*, a compendium of IUPAC-International Union of Biochemistry (IUB) documents, available from The Biochemical Society, P.O. Box 32, Commerce Way, Colchester, CO2 8HF, Essex, UK]. Isotope specifications should conform to the IUPAC system, with the mass number placed as a superscript.

*July 1987.*
The following abbreviations or acronyms may be used without explanation; others should be defined at first use in the text.

<table>
<thead>
<tr>
<th>Abbreviation</th>
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<td>A</td>
<td>ampere; blood group; chromosome group absorbance; area</td>
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<td>ångström</td>
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<thead>
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<td>E</td>
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<td>G</td>
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<td>l</td>
<td>lumen</td>
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<td>ln</td>
<td>natural log</td>
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log        logarithm
lx         lux
M          mega-
M,         molar mass
m          meter; milli-
m          meta-, in chemical name
m², m³     square and cubic meters
mA         milliamperes
max        maximum
meq        milliequivalent
mg         milligram
mi         mile
min        minute
mi/h       miles per hour
ml         milliliter
ml/min     milliliters per minute
mm, mm², mm³ millimeters
mm Hg      millimeters of mercury
mol        mole
mol wt     molecular weight
mol mol    millimole
mp         melting point
m/s        meters per second
mRNA       messenger RNA
ms         millisecond
mtDNA      mitochondrial DNA
mtRNA      mitochondrial RNA
µ          micro-
µeq        microequivalent
µg         microgram
µl         microliter
µm         micrometer
µmol       micromole
MW·h       megawatt-hour
× 500      magnification
n          newton
N          normal (concentration); number (statistics)
ν          nano-; neutron
n          number (statistics); normal (chemical name)
nA         nanoampere
NAD, NAD⁺,nicotinamide adenine dinucleotides and
NADH, NADP,
NADPH      phosphates
ndNA       nuclear DNA
nRNA       nuclear RNA
nm          nanometer
NMN        nicotinamide mononucleotide
NMR        nuclear magnetic resonance
no.        number
N/m²       newton per square meter
Ω          ohm
o.          ortho-, in chemical name
o.d.       outside diameter
osmol      osmole
oz         ounce
P           peta-; poise; pressure
P           phosphate other than inorganic;
            probability
P₂         inorganic phosphate
P₂         pico-
p₂         para-, in chemical name
Pa          pascal
%          percent
%e         per mille
pH          negative log of hydrogen ion
            concentration
pK          negative log of dissociation constant
            after noon
pm          picometer
PP₂        inorganic pyrophosphate
ppb         parts per billion
ppm         parts per million
Q₁₀        increase in rate of chemical reaction for
            each 10°C increase in temperature
R           roentgen
R           configuration; gas constant; resistance
r           correlation coefficient
rad         radian; radiation
ref         reference
Rh          rhesus
RNA         ribonucleic acid
 RNase      ribonuclease
rpm         revolutions per minute
rpm         revolutions per second
rRNA        ribosomal RNA
S           siemens; Svedberg unit
S           configuration
s           second
s           symmetrical, in chemical name
s.c.       subcutaneous
sd          standard deviation
se          standard error
s.e.        secondary, in chemical name
s.e.m.      standard error of the mean
sp, spp.    species, with generic name
sp gr       specific gravity
square      use exponent 2
STP         standard temperature and pressure
Sv          sievert (replace rem)
T           tera-; tesla
t           metric ton
t₁/₂        half-life (half-time)
tₘ₄        terti, in chemical name
TDP, TTP, TTP tri(thydroxymethyl)aminomethane
tRNA       transfer RNA
U           uniformly labeled; unit
uhf         ultrahigh frequency
UMP, UDP, UTP uridine phosphates
UV          ultraviolet
V           volt
V           volume
vol/vol     volume ratio
vs.         versus
W           watt
Wb          weber
W·h         watt hour
wk          week
w           weight
wt/vol      weight per volume
wt/wt       weight ratio
x           mean
XMP, XDP, XTP xanthosine phosphates
yd          yard
yr          year

Note: standard three-letter or single-letter abbreviations for amino
acids may be used in sequences and in tables and figures.

References

References should be cited in the text in numerical order, with the
numerical placed in parentheses. References should be typed
separately with inclusive pages and titles, double-spaced, with
only one reference per number. Authors are completely responsible
for the accuracy and completeness of their references; they
will not be checked in the Editorial Office.

Citations to unpublished work should not be entered in the list
of references unless the paper has been accepted for publication.
They may be included in the text by such parenthetical ac-
knowledgments as "(unpublished observations)," "personal com-
munications," or "(manuscript in preparation)," with authors' ini-
tials and surnames.

For titles of journals, follow the abbreviations listed in Serial
sources for the BIOSIS data base. The form of references to periodi-
cals should be in accordance with the following example. (Titles
and inclusive pages must be used.)

6. Fraker, P. J.; Gershwin, M. E.; Good, R. A.; Prasad, A.
   Interrelationships between zinc and immune function.
The chapter title should be underlined for italic type. When one chapter is cited its title should be included, and the book's authors or editors should be named.


Illustrations

Illustrations should be identified lightly with pencil on the reverse side with the figure number and author name(s); when necessary, the top should be clearly marked. They should be referred to as figures in the text, and should be numbered with Arabic numerals; each should have a legend.

Inasmuch as good illustrations are possible only from good copy, authors should pay particular attention to the following:

1. Illustrations should be sharp, contrasty, unmottled photographs on glossy paper. Original drawings should not be submitted. Photographs should be the width of one column (3 1/4 inches) or two columns (7 1/4 inches).

2. All drawings for reduction to a given size should be drawn and lettered to the same scale.

3. Lettering should be done in India ink and must be proportionate to the size of the illustrations if it is to be legible after reduction. Lettering should be sized so its smallest elements (subscripts or superscripts) will be readable when reduced. Typeset or computer-generated lettering is not preferred.

4. Graphs such as electrocardiograms, kymograms, and oscillograms should be prepared by a skillful photographer so that the dark cross-hatched background is eliminated, the faint portions of the graphs are intensified, and sharp, contrasty prints are obtained. To avoid this processing, use blue-ruled instead of black-ruled recording paper for the original records.

5. When possible, all lettering should be within the framework of the illustration; likewise the key to symbols should be on the face of the chart. When the figure is so filled that it is necessary to explain symbols in the legend, only the following standard characters, for which the printer has type, should be used:

\[ \square \bigcirc \triangle \blacktriangle \blacktriangledown \blacktriangledown \blacktriangleleft \blacktriangleright \]

6. Actual magnification of all photomicrographs should be given. The Editorial Office will make corrections for reduction. An appropriate scale on the photomicrograph itself, however, preferable and more accurate.

7. Arrangements must be made well in advance with the Editorial Office for the reproduction of any illustrations in color. Authors must have funds available to meet the full cost of color plates and their printing.

8. The approximate position of each figure in the text should be indicated in the margin of the manuscript.

9. Inasmuch as it is the policy of FASEB to reproduce figures and charts in the smallest size consistent with readability and purpose of the illustration, it is understood that an author will accept the decision of the Editors on the printed size; however, recommendations may be submitted for reduction or enlargement.

10. If illustrations that have been published elsewhere are included, permission must be obtained from the publisher and the author for their use in FASEB. A copy of the letters granting such permission must be submitted with the manuscript to the Editorial Office.

11. Figure legends should be typed double-spaced, consecutively on one or more sheets of paper. They should contain sufficient information to provide adequate description without reference to text.

Tables

Each should be typed, double-spaced, on a separate sheet of paper. Each should have a brief title and should be numbered with Arabic numerals. Explanatory matter should be in footnotes. Table footnotes should be listed in order of their appearance with consecutive superscript letters.

Tables should not duplicate material in text or illustrations. They should be prepared for printing either 3 1/4 or 7 1/4 inches with width. Nonsignificant figures in tabular data should be omitted. Short or abbreviated column heads should be used. Statistical measures of variation, \( P \), \( SD \), \( SE \), etc., should be identified as such.

The approximate position of each table should be indicated in the margin of the text.

Formulas and Equations

Structural chemical formulas, process flow diagrams, and complicated mathematical expressions should be precisely and carefully prepared. All calculations should be shown; they should be kept to a minimum because in typesetting they are composed by hand and are expensive. Glossy prints of complicated formulas and expressions suitable as line drawings are preferred. All subscripts, superscripts, Greek letters, and unusual characters must be clearly identified.

Acknowledgments

It is customary to acknowledge only persons who have made substantive contributions to the studies reported in the manuscript. Authors will please obtain written permission for everyone acknowledged by name (including references to unpublished work) because readers may infer their endorsement of the paper and its conclusions.

If appropriate, a statement of grant support may be included. Names of grant sources should not be abbreviated.

Experimental Procedures

This journal endorses the principles embodied in the Declaration of Helsinki and expects that all investigations involving humans will have been conducted in conformity with these principles. It is expected that the "Guiding Principles in the Care and Use of Animals" will have been observed in all animal experimentation reported in FASEB.

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Additional detailed tables, appendices, descriptions of materials and methods, mathematical derivations, extra figures, and other supplementary matter too costly to be included in the journal article may be submitted for deposition without charge to the author with the American Society for Information Science (ASIS), National Auxiliary Publications Service. Material is deposited by the Editorial Office with the consent of the author, and a footnote is carried in the published article to the effect that photoprints or microfiche copies are available at moderate cost.

Author Charges

Authors are allowed a certain amount of illustrative material free of charge. Normally this will cover the equivalent of one full page of tables, figures, and halftones, or a half page of chemical and mathematical formulas and equations. Authors are charged for material exceeding this allowance. When excess charges are anticipated, authors should make the necessary arrangements at the time a manuscript is submitted (i.e., initiation of an institutional purchase order, obligations of funds under a grant, etc.).

Page Charges

No page charges are made for any material appearing in FASEB, irrespective of the source of such material.

Page Proofs

Two sets of page proofs together with the original manuscript are sent to the author. Proofs should be carefully checked without delay and any necessary changes or printer's errors (to be marked in red) should be clearly indicated in the margins. Except for correction of typographic errors, the cost of authors' alterations of subject matter in type will be charged to authors if these charges exceed the journal's allowance. Proofs should be returned promptly to the Editorial Office, The FASEB Journal, 9650 Rockville Pike, Bethesda, MD 20814, USA. A delay in returning the proofs will result in a delay in publication.

Reprints

Each author receives with the proofs a reprint order form that must be completed and returned with the proofs to the Editorial Office if reprints are desired. Orders submitted after the journal is printed are subject to considerably increased prices.
POSITIVE AVAILABLE—Classified advertisement rates: $160.00 for the first column inch, $145.00 for each additional inch or portion thereof. A column inch consists of eight lines, each 21 picas or 3½ inches long and containing approximately 70 characters (letters, numbers, symbols, punctuation marks, spaces). Display advertisement rates: $555.00 for a ¼ page (3½ inches x 5 inches); $800.00 for a ½ page (vertical 3½ inches x 10 inches or horizontal 7½ inches x 5 inches); $1070.00 for a full page (7½ inches x 10 inches); copy received not camera-ready is subject to an additional typesetting fee of approximately 5% of the rate. Advertisements will be published in the next available issue unless otherwise specified. Payment or purchase order is required with insertion copy. Advertisements are noncancelable; no cash discounts are allowed. Blind advertisements are not accepted.

POSITIONS DESIRED—Candidates registered with the FASEB Placement Service are allowed one nondisplay advertisement of five lines, each containing approximately 70 characters (letters, numbers, symbols, punctuation marks, spaces). The issue in which the advertisement appears will be based on the date of receipt of copy. Fee for publication in additional issues: $10.00 per issue.

Primary employers desiring identification and additional details concerning Positions Desired advertisers should write to the address below, indicating the hyphenated number, as noted in the last element of the advertisement; a one-page application from advertiser(s) will be provided immediately. Advance telephonic determination of current availability of advertisers from earlier-than-current issues is recommended. Employers not currently registered with the Placement Service are charged a minimum fee of $30.00 for identification of up to 10 advertisers, plus $3.00 for each above 10, payable in advance to the FASEB Placement Service.

Some registered candidates do not prepare Positions Desired advertisements; some advertisements are published at times not coinciding with employer recruitment activities. Therefore, primary employers not finding advertisements herein that appear to match current or projected needs are invited to request a search of all active candidate files; telephone or write a description of the desired qualifications, including the date by which the position is to be filled and any special considerations. Results of the search will be discussed telephonically with the requesting official, and applications from candidates declared suitable will be forwarded. Employers not currently registered with the Placement Service are charged a minimum fee of $30.00 for up to 10 applications, plus $3.00 for each above 10; an invoice will be forwarded with the applications.

In publishing these advertisements FASEB assumes no obligations as to qualifications of prospective employees or responsibility of employers, nor shall FASEB obtain further information concerning positions advertised or those seeking employment. Accuracy and completeness of all listings are the responsibility of the submitting party. Replies to announcements should carry copies of supporting documents, not original documents.

Various U.S. state and national laws against discrimination, including the Federal Civil Rights Act of 1964, prohibit discrimination in employment in the United States because of race, color, religion, national origin, age, sex, or any reason not based on a bona fide occupational qualification. The Federation of American Societies for Experimental Biology endorses these principles and reserves the right to edit all copy and to refuse advertisements not in consonance therewith.

Employment in countries other than the United States may be restricted by government visa and other policies. Moreover, it is suggested that the generally accepted employment practices, the cultural conditions, and the exact provisions of the specific positions being considered be investigated thoroughly. The U.S. Embassies in countries of interest to potential employees should be able to provide up-to-date data concerning internal conditions.

For a description of operation at annual meetings, please refer to the January or February issue or contact the Placement Service. Address all correspondence to FASEB Placement Service, 9650 Rockville Pike, Bethesda, MD 20814. (301) 530-7020

POSITIONS AVAILABLE

ASSISTANT PROFESSOR, DEPARTMENT OF BIOCHEMISTRY, UNIVERSITY OF LOUISVILLE SCHOOL OF MEDICINE. Candidates for assistant professor (tenure track) must hold a Ph.D. or equivalent degree, have several years of postdoctoral training, and have demonstrated high-quality research and teaching abilities. Preference will be given to individuals using contemporary methods of biochemistry and molecular biology, including techniques utilizing recombinant DNA, site-directed mutagenesis, or monoclonal antibodies. The department has core facilities for nucleic acid and protein sequencing and synthesis. The successful applicant will be expected to develop and maintain an independent, funded research program, and to participate in the training of graduate students, medical students, and dental students. Interested individuals should submit a CV, a list of at least four professional references, and a brief statement of research interests to Dr. Gregory S. Schultz, Chair of Search Committee, Department of Biochemistry, University of Louisville School of Medicine, Health Sciences Center, Louisville, KY 40292. Applications will be accepted up to November 1, 1987, or until a suitable candidate is identified. The University of Louisville is an affirmative action/equal opportunity employer.

NATIONAL INSTITUTES OF HEALTH, HUMAN MONOCLONAL ANTIBODIES. Staff fellow position for M.D., Ph.D., D.D.S., or equivalent to work on human monoclonal antibodies and antiidiotype antibodies. Experience in immunology, hybridoma technology, and molecular biology is desirable. Candidate should have at least 3 years of postdoctoral experience. Starting salary range, depending on experience, is $24,000–46,000 per year. U.S. citizenship is required. The position is available immediately. Send CV to Dr. Lois Salzman, Assistant Scientific Director, National Institute of Dental Research, National Institutes of Health, Building 30, Room 131, 9000 Rockville Pk., Bethesda, MD 20892; telephone 301–496–1483. NIH is an equal opportunity employer.

ASSISTANT PROFESSOR. Tenure-track position, starting fall 1987. Department of Food Science, College of Agriculture, Penn State University. Candidates should have a Ph.D. in plant molecular biology with 3–5 years of postdoctoral experience and specialized knowledge in gene-transfer systems, especially agrobacterium. Salary and benefits competitive. Send resume plus names/addresses and phone numbers of three references to Paul J. Fritz, Ph.D., Department of Food Science, Penn State University, University Park, PA 16801. An equal opportunity employer.
Dean, College of Human Ecology  
University of Tennessee, Knoxville

Qualifications Desired:

A Ph.D. in one of the specializations related to human ecology with subsequent professional achievement consistent with an appointment as professor. Evidence of success in teaching and research. Administrative experience.

Nature of Position:

Dean of a progressive College of Human Ecology. To provide academic and administrative leadership; to work effectively with students, faculty, department heads, the central administration, and diverse external constituencies; and to promote a national and international presence for the college.

The College of Human Ecology contains three interdisciplinary departments—Child and Family Studies, Nutrition and Food Sciences, and Textiles, Merchandising, and Design. The following degree programs are available: B.S. in human ecology, B.S. in tourism, food and lodging administration, B.S. in interior design, B.S. in home economics education, M.S. in child & family studies, M.S. in home economics, M.S. in food science, M.S. in food systems administration, M.S. in interior design, M.S. in nutrition, M.S. in textiles and apparel, and Ph.D. in human ecology. The college has a professional faculty of approximately 45, a support staff of 30, and 850 undergraduate and 150 graduate students. The dean is one of 10 academic deans on the Knoxville campus, and reports to the provost. The University of Tennessee is the state’s land-grant, multipurpose, multicampus university. There are 25,000 students and 1200 faculty on the Knoxville campus.

Send a letter of application, the names of three references, and a CV to

Dr. John Smith, Chair  
Dean’s Search Committee  
110 Jessie Harris Building  
The University of Tennessee  
Knoxville, TN 37996-1900

The search committee will begin screening applications on October 15, 1987, and the search will continue until the position is filled.

U TK is an EEO/Title IX, Section 504 employer.
U.S. DEPARTMENT OF ENERGY
OFFICE OF HEALTH AND ENVIRONMENTAL RESEARCH

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THE DEPARTMENT OF MICROBIOLOGY AT THE UNIVERSITY OF VERMONT is seeking to expand its research base in molecular genetics. To do this, a significant number of tenure-track faculty will be recruited at both the assistant and associate professor levels. The department will be housed in a new microbiology center currently under construction and will have start-up funds available. Faculty members will have appointments in both the College of Medicine and the College of Agriculture and Life Sciences. Departmental teaching responsibilities are to undergraduate, graduate, and medical students. Applications will be accepted until November 30, 1987, or until satisfactory candidates are selected. Strong applicants should send their CV, present and future research plans, and the name and addresses of at least three references to Dr. Susan S. Wallace, Professor and Chairperson, Department of Microbiology, University of Vermont, Burlington, VT 05405. An equal opportunity/affirmative action employer. Women and minorities are encouraged to apply.

NATIONAL INSTITUTES OF HEALTH, IMMUNOLOGIST/MOLECULAR BIOLOGIST. Staff fellow position for M.D., Ph.D., or equivalent with experience in expression libraries and construction of vectors to work on autoimmune diseases and/or transgenic mice. The candidate should have at least 2 years of postdoctoral experience. Starting salary range, depending on experience, is $24,000-$46,000 per year. U.S. citizenship is required. The position is available immediately. Send CV to Dr. Lois Salzman, Assistant Scientific Director, National Institute of Dental Research, National Institutes of Health, Building 30, Room 131, 9000 Rockville Pk., Bethesda, MD 20892; telephone 301-496-1483. NIH is an equal opportunity employer.

RESEARCH ASSISTANT PROFESSOR OF PEDIATRICS. Opening in the Division of Pediatric Hematology, University of Pennsylvania School of Medicine, for Ph.D. with 2 or more years of postdoctoral experience in cloning, sequence determination, and functional expression of cloned genes. Hands-on experience in oligonucleotide synthesis and isolation and DNA sequence determination necessary. Will be involved in development and management of protein and nucleic acid synthesis/microsequencing facility and in collaborative studies of globin and megakaryocyte gene expression in humans. Applicant will be expected to obtain extramural funding within a reasonable period. Contact: Elia Schwartz, M.D., Director, Division of Hematology, The Children's Hospital of Philadelphia, 34th St. and Civic Center Blvd., Philadelphia, PA 19104. The University of Pennsylvania is an equal opportunity/affirmative action employer.

MOLECULAR BIOLOGIST. The Division of Atherosclerosis and Lipoprotein Research, Baylor College of Medicine and the Methodist Hospital, Department of Medicine, Houston, Texas, are undertaking a major expansion of research activities in the molecular biology of regulatory mechanisms of biosynthesis and catabolism of apolipoproteins, lipoproteins, cholesterol, and acyl lipids. Previous experience in the lipoprotein field is not necessary and those with expertise in other areas are encouraged to apply. Established investigators with an ongoing research program and national funding are particularly encouraged to apply. Please send a statement of research interests, a CV, a listing of previous and current grant support, and names of four individuals who will provide letters of recommendation. Please direct correspondence to Dr. Louis C. Smith, Chairperson, Molecular Biology Search Committee, The Methodist Hospital, Department of Medicine, Mail Station A-601, 6565 Fannin, Houston, TX 77030. The position is now open. Candidates will be evaluated until the position is filled.

ELECTRON MICROSCOPY SCIENTIST. M.D. or Ph.D. with experience in cell biology research and strong electron microscopy background including TEM, SEM, STEM, EDXQA, and quantitative morphometry are required. In addition to standard methods of sample preparation, applicants should be familiar with immunocytochemical and enzyme localization methods. Applicant should have experience in the writing of grants and procurement of grant support. Position involves full-time research within the Department of Medicine with potential for a faculty appointment. Collaboration with other investigators is encouraged. Send resume, with publications, to G. Weinbaum, Ph.D., Chief Research Division, Department of Medicine, The Graduate Hospital, 19th and Lombard, Philadelphia, PA 19146. An affiliate of the University of Pennsylvania. EOE M/F/H/V.

CHIEF RESIDENT, DEPARTMENT OF BIOCHEMISTRY, COLORADO STATE UNIVERSITY. In conjunction with a new biochemistry building scheduled for completion in 1989, we are searching for a new chairperson with a proven record of excellence in research and teaching of biochemistry or molecular biology. Applications or nominations should be sent to V. G. Murphy, Search Committee Chairperson, 100 Glover, Colorado State University, Fort Collins, CO 80523. Phone 303-491-5253. Applications should contain a letter of intent, CV, names and addresses of three or more references, and three representative publications. Review of applications will begin October 15, 1987, but applications will be accepted until suitable candidates are found. CSU is EEO/AA employer. EO Office: 314 Student Services Building.

RESEARCH POSITION: CELLULAR IMMUNOLOGY AND MOLECULAR BIOLOGY. The Pulmonary Unit (Medical Services) of the Massachusetts General Hospital has a staff opening for a Ph.D. with a strong background and experience in cellular immunology and molecular biology to work in newly expanded laboratory facilities. Experience in the use of in vitro techniques, including cell culture work, and interest in environmental/occupational immunology are desirable. Please send CV and a brief description of research interests to L. C. Giann, M.D., Pulmonary Unit, Building 1, Massachusetts General Hospital, Boston, MA 02114. An equal employment/affirmative action employer.

SENIOR RESEARCH ASSOCIATE IN LIPID NUTRITIONAL BIOCHEMISTRY. Coordinate and lead a group involved in research clarifying metabolic interrelationships between dietary polyunsaturated fatty acids and their effects on eicosanoid synthesis and regulation in cells/tissue as they pertain to cardiovascular function and inflammation; and assessment of membrane activity. Ph.D. in nutritional biochemistry; expertise in nutrition research. Analytical aptitude in lipids and eicosanoids and GC, GC-MS, HPLC, RIA experience required. Knowledge of computers and laboratory management desirable. Send application, resume, research statement, and four references to Professor J. E. Kinsella, Institute of Food Science, 106 Stocking Hall, Cornell University, Ithaca, NY 14853; telephone 607-255-7916.
FACULTY POSITION IN BIOCHEMISTRY. The Department of Biochemistry at the Uniformed Services University, Bethesda, Maryland, is recruiting candidates for tenure-track positions in biochemistry. Our program requires participation in teaching of medical and graduate students and development of individual research programs. Ph.D. or M.D. training in biochemistry and postdoctoral experience is required. We would like to receive applications from individuals with the appropriate training and interest in an academic career. Individuals with research interests in membrane biochemistry, molecular biology, nucleic acids, molecular genetics, and neurochemistry would strengthen our current activities in these areas, but we invite applications in any area as well. A brief description of current and past research activity, and the names of three references to Dr. Troy J. Beeler, C/O Civilian Personnel, 4301 Jones Bridge Rd., Bethesda, MD 20814. Uniformed Services University is an equal opportunity employer.

POSTDOCTORAL APPOINTMENTS at the Lovelace Inhalation Toxicology Research Institute in Albuquerque, New Mexico, for recent (within 30 months of doctoral degree) graduates interested in applying and expanding their knowledge in physical, biological, or medical sciences as applied to understanding the toxicity of inhaled materials or the pathogenesis of respiratory diseases. Current projects include: disposition of inhaled vapors and particles; sensitivity of isolated respiratory tract cells to toxicants; DNA adducts and other macromolecular markers of exposure to inhaldants; identification of oncogenes involved in respiratory tract carcinogenesis; toxic effects of chronic exposure to diesel exhaust; effects of oxidant gases on the respiratory tract; immune mechanisms in respiratory diseases; comparative cardio-pulmonary toxicology of laboratory animals and humans; and radiation- and chemical-induced lung cancer. The Institute employs a multidisciplinary staff of doctoral level researchers with expertise in aerosol science, chemistry, biochemistry, cell biology, physiology, pharmacology, toxicology, pathology, and molecular biology. The Institute contains three inhalation exposure suites; fully equipped laboratories for chemical, biochemical, physiological, aerosol science, and cell biology research; a veterinary hospital; animal rearing facilities and complete histopathology and pathology units. An interdisciplinary approach to research problems ensures a broadening of skills and scientific perspectives for postdoctoral research participants. A Ph.D. in a relevant discipline is required. These appointments will enhance the career options of individuals who desire to work in a multidisciplinary team environment. Starting stipend $20,000/annum plus relocation and health benefits. U.S. citizenship or permanent residence required. Personnel Unit, Lovelace Inhalation Toxicology Research Institute, P.O. Box 5890, Albuquerque, NM 87183 or call 505-844-9431. An equal opportunity/affirmative action employer.

POSTDOCTORAL FELLOWSHIPS (2) available to study the regulation of glucose-induced insulin release in pancreatic islets. Studies involve recombinant DNA technology and as well as traditional biochemical approaches. Send CV to Dr. Michael J. MacDonald, University of Wisconsin Medical School, 1300 University Ave., Madison, WI 53706. Equal opportunity/affirmative action employer.

POSTDOCTORAL RESEARCH ASSOCIATE. Site-specific mutagenesis, molecular cloning. Construct vectors for site-specific mutagenesis of his genes of Salmonella typhimurium by chemical carcinogens and mutagens that produce cyclic aducts in the base-pairing region. Experience in molecular cloning necessary; background in mutagenesis desirable. Available immediately; salary competitive. Send CV and three letters of recommendation to L. J. Marnett, Department of Chemistry, Wayne State University, Detroit, MI 48202. Wayne State University is an affirmative action/equal opportunity employer.

POSTDOCTORAL FELLOWSHIPS available in immunology from September 1, 1987, in Drs. Prakash and Nagarkatti's laboratory. Candidates should have a recent Ph.D. degree in immunology with experience in cellular immunology, immunogenetics, or immunotoxicology. Salary $15,000. Send resume and three references to Head, Department of Biology, Virginia Tech, Blacksburg, VA 24061. EO/EAP.

POSTDOCTORAL RESEARCH POSITIONS available immediately for nutritional studies of sickle cell disease, and lipoprotein metabolism. The candidates will participate in teaching nutrition to medical and dental students. Salary will depend on qualifications. Applicants interested in nutritional biochemistry, antioxidant nutrients, or sickle cell disease should contact Center for Nutrition, Meharry Medical College, Box A73, Nashville, TN 37208.

POSITIONS DESIRED

Ph.D., 1987; Immunochemistry, carbohydrate biochemistry, bacteriology; Immunoochemical and structural definition of microbial glycoconjugates for application to serodiagnosis and pathogenesis of disease by MoAb techniques, ELISA, HPLC, NMR, GC-MS, etc.; Available immed.; Postdoc. or staff pos. in academia or industry; Salary negot. 6-2191

Ph.D., 1980; Biochemist.; Experience in lipid analysis, phospholipids; metabolism in signal transduction, ligand-binding assays, vitamin A metabolism; Available fall 1987; Seek research associate position in Philadelphia-New Jersey-New York region; Salary negot. 2-2255

Ph.D., 1988 (expected); Biochemistry, enzymology/protein chemistry; Purification and characterization of LDH, dipeptidase, experience in spectrofluorometric assays, isoelectric focusing, affinity chromatography and HPLC, background in medicine; Available summer 1988; Research and/or teaching in protein biochemistry preferred; Salary negot. 3-2282

Ph.D., 1975; Pharmacology, biochemistry; Purification/characterization of P-450's, protein chemistry, stopped flow spectrophotometry, metabolite analysis by GC, HPLC, radiolabeling, spectrofluorometry, NMR, mechanisms of drug-mediated hepatotoxicity; Available immediately; Staff position in academia or industry; Salary negot. 3-2283

Ph.D., 1988 (expected); Biophysical chemistry; Structure-function-type studies on proteins and enzymes including EPS and NMR (e.g., saturation transfer EPR and paramagnetic probe distance measurements); Available summer 1988; Postdoctoral position, academic/industrial; Salary negot. 2-2284

Ph.D., 1986; Comp. physiology and biochemistry, immunology, and molecular biology; College teaching, research in biochemical adaptation, regulation of the initiation of protein synthesis and gene expression by insulin, gene cloning, protein purification, cell culture; Available Oct. 1987; Staff position in academia or industry; Salary negot. 2-2285

Ph.D., 1982; Biochemistry, tumor biology; Structural characterization of mammalian carbohydrates acting as bacterial toxin receptors, analysis of cell surface carbohydrates on tumor cells, especially glycolipids; Available January 1988; Staff position in academia or industry related to basic studies on oncofetal carbohydrate antigens; Salary negot. 2-2286

Ph.D., 1984; Physiology, endocrinology, exercise physiology; Experience with perfused organ and muscle preparations as well as incubated muscle techniques and muscle protein chemistry, research interests in muscle hormonal responses; Available 5/68; Acad. or indus.; Salary negot. 1-2287

M.S., 1985; Biochemistry, teratology; Animal handling, maternal and fetal toxicity assays (rabbits and rodents), sulfur dioxide toxicity (in vitro), gel filtration, HPLC, TLC, electrophoresis, spectroscopy (UV, VIS); Available immed.; Research associate/assistant position in academia or industry (preferred); Salary negot. 2-2288

Ph.D., 1987 (expected); Pathology/virology; Antivirals, carbohydrate chemistry, extensive exp. with HSV-1, isolation/purification, attachment, polypeptide cascade, DNA replication (TK and DNA pol.), plaque and attachment inhibition assays, monoclonal antibody tech., cell culture, electron microscopy; Staff position in academia or industry; Salary negot. 4-2289

Ph.D., 1986; Bioorganic chemistry, enzyme mechanisms/physical organic chemistry; Experience in kinetics with emphasis on measurement of substrate/solvent isotope effects and inhibitor design, techniques include HPLC, organic synthesis, and programming in BASIC; Available September 1988; Staff position in academia or industry; Salary open. 2-2290

Ph.D., 1985; Biochemistry, enzymology/protein chemistry; Enzyme kinetics and mechanism, inhibitor design, synthesis, protein purification, kinetic isotope effects, equilibrium isotope exchange kinetics, NMR, preparative and analytical HPLC; Available fall 1987; Staff position in academia or industry; Salary negot. 2-2291

Ph.D., 1988 (expected); Biochemistry, enzymology, protein chemistry; Experience in purification/characterization, kinetics, tissue culture, HPLC, protein/DNA sequencing, site-specific mutagenesis; Available winter 1988; Postdoctoral position in academia; Salary negot. 2-2292

FJ EMPLOYMENT OPPORTUNITIES

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Ph.D., 1984; Molecular physiology; Molecular cloning, nucleic acid biochemistry, recombinant DNA methods, protein purification/synthesis/degradation, organ/tissue perfusion, tissue culture of hepatocytes, hormone RIA, catecholamine pharmacology; Available fall 1987; Staff position in academia or industry; Salary negot. 2-2293

Ph.D., 1972; Biochemistry, enzymology/protein chemistry; Experience in protein or enzyme purification and characterization, assay enzymes, electrophoresis, HPLC, affinity chromatography, applied enzymology; Available immediately; R&D in industry or teaching; Salary open. 2-2294

Ph.D., 1984; Molecular biology, biochemistry, protein and nucleic acid chemistry; Molecular mechanism of DNA repair and recombination pathways in pro- and eukaryotic organisms, genetic toxicology, chemical carcinogenesis, characterization of protein-DNA interactions; Available Dec. 1987; Staff position in academia or industry; Salary negot. 2-2295

Ph.D., 1987 (expected); Biochemistry, enzymology, signal transduction; Phosphoinositide metabolism in mammalian photoreceptors, chromatography of proteins, lipids, and nucleotides, development of enzyme assays, organelle isolation, radiotope techniques; Available January 1988; Postdoctoral research; Salary negot. 2-2296

Ph.D., 1983; Cell biology, biochemistry, molecular biology; Characterization of lysosomal cysteine proteinases during muscle development, primary muscle culture, maintenance of cell lines, enzyme assays, gene cloning; mRNA analysis; Available Dec. 1987; Staff position. 2-2297

Ph.D., 1987 (expected); Cell physiology, enzymology, protein chemistry; Experience in enzyme purification, characterization, and kinetics and in antibody research, interest in enzyme studies, metabolic regulation and compartmentation in both animal and plant systems; Available Jan. 1988; Postdoctoral position in academia or industry; Salary negot. 2-2298

Ph.D., 1987 (expected); Biochemistry, enzymology, protein chemistry; Experience in purification and characterization, background in immunology, cell culture, clinical chemistry; Available Jan. 1988; Salary negot. 2-2299

Ph.D., 1987; Biochemistry, enzymology/protein chemistry; Experience in enzyme kinetics, protein purification, translational systems, and tissue culture; Available June 1988; Postdoctoral position in academia or industry; Salary open. 2-2300

Ph.D., 1986; Chemistry, enzymology/protein chemistry; Experience in isolation, purification, and characterization, HPLC, sequencing, peptide mapping, and thiol modification, development of immunoassays and radioimmunoassays; Staff or postdoctoral position in industry; Salary negot. 2-2301

Ph.D., 1975; Enzymology, molecular biology, immunology; Enzyme purification and characterization, production and use of mono- and polyclonal antibodies, ELISA/RIA development, receptor binding, column chromatography, gel electrophoresis, immunoblotting and recombinant DNA technology; Research position in industry, academia, or government. 2-2302

Ph.D., 1988 (expected); Enzymology/protein chemistry, immunology; Experience in large-scale protein purification and characterization, enzyme assay methods, including spectrophotometric and isotopic techniques, protein modification, and monoclonal antibody techniques; Available fall 1988; Postdoctoral position in academia or industry; Salary negot. 2-2304

Ph.D., 1988 (expected); Biochemistry; Studying regulation of protein synthesis and the effects of serum and growth factors, experience in mammalian cell culture, preparation of cell-free protein-synthesizing system, protein purification and Western blotting; Available 8/88; Postdoctoral position in academia or industry. 2-2305

Ph.D., 1985; Pharmacology, biochemistry; Interest in transport processes, cancer research, volume reg., broad interest in mechanisms of drug action and resist., strong background in transport, subcellular fractionation, mech. of drug resist., biochemical techniques, tissue culture, program. and use of microcomp., knowl. of mol. biology; Avail. immed.; Phila., PA/NJ area. 3-2411

Ph.D., 1985; Molecular biology/cell culture; Background in collagen mRNA metabolism and DNA-binding proteins of parasites, experience in tissue culture, cloning, sequencing, SI mapping, protein purification, teaching; Available immediately; Eastern seaboard; Staff position in industry; Salary negot. 2-2412

Ph.D., 1987; Molecular biology; E. coli genetics, mutagenesis, DNA repair; conjugation, transformation, transduction mapping, cloning, M&G and dideoxy sequencing, one- and two-dimens. electrophoresis, membrane protein isolation; Available Oct. 1987; Molecular genetics postdoctoral position, acad. or industry. 2-2413

Ph.D., 1970; Biotechnology, protein chemistry-structure, immunology, protein cell culture; Familiar with molecular biology, recombinant DNA and protein engineering, research on molecular biology of immune regulation, many publications and ideas successfully used in industry; Available immediately; Position in industry; Salary negot. 2-2414

Ph.D., 1971; Biochemistry/endocrinology; RIA/enzyme assays, ligand-receptor binding, plasma membrane isolation, protein two-dimens. PAGE, IEF/tissue culture, research hormone action in target tissues, computer programming; Avail. immediately; Desire clinical/research lab., R&D in industry/hospital/govt. E-121

Ph.D., 1988; Biochemistry, biochemical endocrinology; Research in the control of mammalian steroidogenesis, one- and two-dimens. gel electrophoresis, protein electroblotting, HPLC, steroid/peptide RIA, immunological techniques; Avail. September 1988; Desire postdoc./industry/academia. E-122

Ph.D., 1985; Reproductive endocrinology, neurochemistry, toxicology; Research: ovarian/testicular endocrinology, glycoprotein hormone physiology, tissue culture, protein chemistry, RNA techniques, HPLC, electrophoresis; Avail. Sept. 1988; Desire research/teaching/academia/private sector. E-124

Ph.D., 1983; Endocrine physiology/biochemistry (reproductive/growth and development); Four yr. postdoc., 2.5 yr. industry, research hormonal regulation of ovarian function, immunological/radioisotope assays, electrophoresis, HPLC, col. chromatography, cell culture; Avail. immediately; Desire industry/government/academia; Salary negot. E-125


M.D., 1980, ABIM, 1983; Board-certif. endocrinology/metabolism 1985, expertise clinical research, diabetes/metabolism, stable isotope glucose turnover, insulin sensitivity, currently research assistant professor; Desire clinical academic/clinical practice. E-130

Ph.D., 1978; Physiology, reproductive/neuroendocrinology; Expertise RIA, bioassay, biochemical methods, HPLC, PAGE, chromatography, tissue culture, neurosurgical techniques, RF lesion, CSF/sion blood sample cannula in primate/rodent; Desire research/teaching/industry; Avail. open. E-131

Ph.D., 1977; Physiology/endocrinology; Research pulsatile (episodic) secretion of steroids during pregnancy, mechanism of action of GnRH/di-hydrotestosterone in terminating pregnancy, supported by two NIH grants, presently associate professor; Avail. December 1987; Desire academia. E-134

Ph.D., 1985; Cellular/molecular endocrinology; Research hormonal regulation (Ca2+), hormone secretion, P1 turnover, peptide receptor regulation/cloning, gene transfer, neuropptide processing, pituitary brain receptor mechanisms/actions; Desire academia/industry/teaching; Avail. May 1988. E-136

Ph.D., 1985; Reproductive physiology/endocrinology; Training receptor binding, regulation gene expression, RIA, cell culture, enzyme assay, immunoblotting, immunoprecipitation, raising antibody, HPLC, LM, EM; Avail. October 1987; Prefer Philadelphia area; Desire research/teaching; Salary negot. E-138

M.D., 1982, ABIM, 1985; Board-eligible endocrinology/metabolism, NIH trained, research insulin receptor/glycoprotein biosynthesis, phosphorylation; Avail. July 1988; Desire academic research/clinical responsibilities/teaching. E-139
M.D., 1981; Board-certif. pediatrics 1986, board-elig. pediatric endocrinology, research enzyme regulation in cell culture; Desire teaching/practice in academia/private sector; Prefer SE/west coast; Salary $60,000+. E-141

M.D., 1980; Endocrinology/biochemistry/steroids; Metabolism, synthesis, transport, receptors, lipoproteins/enzymology/protein purification/immunology; Avail./salary negot.; Prefer NE; Desire research/academia/private sector. E-149

Ph.D., 1986; Biochemistry, molecular neurobiology/endocrinology; Research membrane receptor isolation/characterization, control receptor expression/function, second messengers/signal transduction mechanisms, regulation complex carbohydrate/lipid metabolism, neurotrophic factors in neural differentiation; Avail. now; Desire research/ teaching/research admin.; Salary negot. E-151

Ph.D., 1982, ABIM, 1985; Board-elig. endocrinology/metabolism, university trained, research neuroendocrine/immune interactions, endocrine effects cytokines, clinical neuroendocrinology/thyroid disease, tissue culture, radioimmunoassay; Avail. July 1988; Desire academia/research/teaching/practice. E-154

Ph.D., 1985; Animal physiology/endocrinology; B.S. pharmacology, research hormonal regulation of growth in large/small animals, mechanism of action of steroids, GH, IGF-1, novel adrenal inhibitors; Avail. immed.; Desire industry/research/screening; Salary $40-50K. E-155

FJ EMPLOYMENT OPPORTUNITIES
Membership in the Federation of American Societies for Experimental Biology and in Its Constituent Societies

Membership in the Federation is limited to societies; there is no individual membership. Any society in the field of biological science may apply for membership, either corporate or affiliate, and may be admitted by a three-fourths majority vote of all members of the Federation Board. The societies listed below presently constitute the Federation.

Since requirements and procedures for election to membership in the member societies vary, the following information is provided:

Corporate Members

The American Physiological Society. Any resident of the Americas who conducts and has published meritorious original research in physiology shall be eligible for proposal for Regular membership. Residents of the Americas who are engaged in research in physiology or related fields and/or teaching physiology shall be eligible for proposal for Associate membership. Residents outside of the Americas who conduct and have published meritorious original research in physiology shall be eligible for proposal for Corresponding membership. Individuals must apply in writing on forms provided by the Society. Two Regular members must sponsor a candidate for membership. Emeritus members also can be sponsors of new members. A Corresponding or Honorary member of the Society may substitute for a Regular member in sponsoring a candidate for Corresponding membership. Council nominates candidates who stand for election by the vote of Regular members at business meetings of the Society. Other classes of membership include Honorary, Emeritus, Student, and Sustaining Associate. Further information and nomination forms are printed in The Physiologist and are available from the APS Membership Services Department, 9650 Rockville Pike, Bethesda, Maryland 20814.

American Society for Biochemistry and Molecular Biology. Investigators residing in the Americas who have demonstrated the ability to conduct meritorious original research in biochemistry or molecular biology are eligible for Regular membership. Such individuals must be nominated by two Regular members of the Society and, if favorably recommended to the Council by the Membership Committee, will be elected at any regular meeting of the Society. Individuals not yet fulfilling the requirements for Regular membership may be nominated by two Regular members for Associate membership. Nominees for Associate membership become members immediately on nomination. Eminent biochemists residing in countries other than the Americas may be nominated for Honorary membership. Individuals not otherwise eligible for any type of membership, but who have made significant contributions through service to biochemistry or molecular biology are eligible for designation as a Distinguished Service Associate. Nomination forms and specific nomination criteria may be obtained from Mr. Charles C. Hancock, Executive Officer, 9650 Rockville Pike, Bethesda, Maryland 20814.

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American Association of Pathologists. Any American investigator who, through the use of experimental methods, has contributed meritorious work in pathology is eligible for membership. Candidates shall be nominated by two members and those nominations approved by the Council shall be presented to the Association members for election at the next annual business meeting. Additional information and nomination forms may be obtained from Dr. Harold Waters, Executive Officer, 9650 Rockville Pike, Bethesda, Maryland 20814.

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The American Association of Immunologists. Investigators qualified by virtue of a doctorate degree or equivalent experience and training who have conducted and published meritorious original investigations in immunology or related disciplines are eligible for membership. Candidates must be nominated by two members of the Association. The recommendations of a membership committee are submitted for election by the membership at the annual spring meeting. For application forms write to Dr. Joseph F. Saunders, Executive Officer, 9650 Rockville Pike, Bethesda, Maryland 20814.

Affiliate Member

The American Society for Cell Biology. To be considered for Regular membership, an applicant must hold the Ph.D. or equivalent degree or have equivalent experience, and be sponsored by two Regular or Emeritus members. Other classes of membership are Emeritus and Student. Further information and forms may be obtained from Ms. Dorothea C. Wilson, Executive Officer, 9650 Rockville Pike, Bethesda, Maryland 20814.
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1987 Series Completed, 1989 Topic Proposals Sought

The sixth summer of the FASEB Summer Research Conference series has been completed. This summer there were 17 conferences held at two conference sites: Saxtons River, Vermont, and Copper Mountain, Colorado. The series was established to complement the large FASEB Annual Meeting. It was designed to provide quiet settings to encourage a relaxed exchange of information on the cutting edge of biomedical research. More than 1900 scientists from the United States and 18 foreign countries enjoyed the exciting science that was presented and discussed at the meetings in 1987.

Many of the 1987 conference participants requested that their conference topics be rescheduled in the future FASEB Summer Research Conference series. Topic proposals are required from potential organizers of these conferences, as well as from those proposing new topics for consideration by the Conference Advisory Committee at its fall meeting.

The committee is seeking new topic proposals on subjects of keen interest to biological and medical researchers for fields that require concentrated 5-day programs for adequate discussions on the latest developments. A topic proposal outline is available from Dr. Robert W. Krauss, FASEB Executive Office (301-530-7093) to assist in the submission of proposals for FASEB Summer Research Conferences in 1989 or 1990.

The topics for the 1988 series have been set and are outlined below. The Conference Advisory Committee will meet in October or November of this year to establish the 1989 schedule and a tentative schedule for 1990.

1988 FASEB Summer Research Conferences

**Saxtons River, Vermont**

Yeast RNA: Transcription, Splicing, Translation, Replication and Transposition June 12-17
Chairperson: Reed B. Wickner, NIADDK, NIH

Retinoids June 19-24
Chairperson: DeWitt S. Goodman, Columbia University College of P&S

Smooth Muscle June 26-July 1
Chairperson: R. Kent Hermsmeyer, University of Nevada School of Medicine

Autoimmunity July 3-8
Chairperson: Howard L. Weiner, Brigham and Women’s Hospital

Phospholipases July 10-15
Chairperson: Moseley Waite, Bowman Gray School of Medicine

Immunopharmacology July 17-22
Chairperson: Timothy Sullivan, University of Texas Health Science Center-Dallas

Structure and Function of Cell Membranes July 24-29
Chairperson: Philip L. Yeagle, SUNY at Buffalo

Somatic Cell Genetics July 31-August 5
Chairperson: Geoffrey Wahl, The Salk Institute

Receptors August 7-12
Chairperson: Richard Klausner, National Institutes of Health

Electrophysiological Mechanisms of Propagation in and Activation of Cardiac and Smooth Muscle August 14-19
Chairperson: David R. Harder, Medical College of Wisconsin

**Copper Mountain, Colorado**

Neuroimmunomodulation June 26-July 1
Chairperson: Novera H. Spector, University of Alabama at Birmingham

Ultradian and Infradian Modulation of the Circadian System July 3-8
Chairperson: Lawrence E. Scheving, University of Arkansas

Regulation of Gene Expression in Higher Animals by Hormones and Nutritional Substrates July 10-15
Chairperson: George A. Scheele, The Rockefeller University

Molecular Biology of Infectious and Parasitic Diseases July 17-22
Chairperson: Richard A. Young, Whitehead Institute for Biomedical Research

Trichothecene, Blue-Green Algal and Marine Toxins: Mechanisms, Detection and Therapy July 24-29
Chairperson: Adrianne Rogers, Boston University School of Medicine

Folic Acid, Vitamin B-12 and One-Carbon Metabolism July 31-Aug 5
Chairperson: Raymond Blakely, St. Jude’s Children’s Research Hospital

Endothelium and Cardiovascular Function August 7-12
Chairperson: Paul M. Vanhoutte, Mayo Foundation

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     sample. What mass will you load on
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     you need to achieve optimal
     speed and resolution? At which
     wavelengths does your sample
     exhibit maximum absorbance?
     What size fractions will you
     collect? Are you interested in
     collecting peaks?

2 Examine the
   components’ specs.
   — After you’ve identified the key
     operating parameters, take a look at the
     pump, detector and fraction collector
     specifications to be sure they meet your
     needs. To illustrate, let’s look at
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3 Check for compatibility of
   components with each
   other and with your future
   needs.
   At this point, you’ve identified
   components to meet basic needs,
   but also look at the components
   as a system. Were they designed
to work together? Or will you
   need to buy complicated
   adapters and special plumbing?
   Working with a single
   supplier avoids the service and support
   problems often associated with a
   system assembled piece-by-piece.
   You should also assess your future
   needs. An LC system may work fine for
   your current application. But will you
   need to change detection wavelengths
   or collection volumes later? Is an
   upgrade to HPLC possible? If so,
   consider modular equipment that
   adapts to your changing needs easily
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4 Look at each supplier’s
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