

Personnel Placement

Personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, or handicap.

Positions Wanted: 40¢ per word; \$4 extra for use of box number. \$10 minimum charge, per insertion. Prepayment required. This rate is available only to individuals; personnel agencies, companies, colleges, and universities take display rate for all advertising.

Display (Positions Open, Market Place, and so forth): \$5.80 per millimeter; \$145 minimum charge, per insertion (covers 25 millimeters on single column; 25 millimeters equals 10 lines of 50 spaces per line). No charge for use of box number. No agency commission for ads under 103 millimeters (4 inches). No cash discount. Prepayment required for foreign advertising. Purchase orders and billing information required for all other ads.

SCIENCE is published weekly, on Friday. Copy must be received in writing by Wednesday, 3½ weeks before Friday issue date required. Send copy for all positions wanted ads and display ads under 5 inches to:

SCIENCE, Room 207
1515 Massachusetts Ave., NW
Washington, D.C. 20005
Telephone: 202-467-4456

Send copy for display ads, 1/6 page and larger, to:

Scherago Associates, Inc.
1515 Broadway
New York, N.Y. 10036
Telephone: 212-730-1050

Blind ad replies should be addressed as follows:

Box (give number)
SCIENCE
1515 Massachusetts Ave., NW
Washington, D.C. 20005

POSITIONS WANTED

Biochemical Pharmacologist/Toxicologist. Ph.D. Carcinogenesis, general pharmacology, toxicology, cellular toxicology; medical school teaching—6 years; research/industry—12 years; publications and administrative experience. Seeking academic (small university or college), industrial, or governmental position. Box 138, SCIENCE. X

Biochemist. Ph.D. 1967. Chemical carcinogenesis, drug metabolism, protein and immunochemistry, tissue culture; administrative experience; publications. Desires industrial, governmental, or academic position. Box 134, SCIENCE. X

Biologist. Ph.D. 1975. Mathematical biology, biostatistics, computer modeling at all levels of biological organization. Desires teaching/research position related to computer science—environmental biology. Extensive experience in exploratory data analysis of large data bases. Interested in developing computerized instruction techniques. Box 136, SCIENCE. X

Biomedical Engineer. B.S.E.E., M.S. physiology; 14 years of experience in bioinstrumentation R & D, biomedical electronics teaching, and management of physiology department electronics laboratory. Several publications. Seeks university, hospital, or research institution position. Box 135, SCIENCE. X

Cell-Radiation-Molecular Biology. Ph.D. 1974; 3 years of postdoctoral and teaching, research and heavy metals, radiation and anti-tumor drugs. Desires academic and/or research position. Box 137, SCIENCE. X

Earth Scientist. Employment interests, credentials, and ice-sheet-tectonics synthesis are detailed in SUBDUED THE EARTH (Delacorte). R. F. Walworth, P.O. Box 11711, St. Petersburg, Fla. 33733. Telephone: 813-360-4947. 4/21, 28; 5/5, 12, 19, 26; 6/2

Immunochemist—Membrane Biochemist—Organic Chemist. Ph.D. 1970; 7 years of research experience. Expertise in isolation, purification, and characterization of membrane glycoproteins and carbohydrates. Experience in cell culture, cytotoxicity, membrane proteins, lipids, nucleic acids, and photochemistry. Familiar with column, paper thin-layer and gas liquid chromatography, electrofocusing, IR, MNR, MS, UV, ORD, and other instrumental techniques. Box 131, SCIENCE. X

POSITIONS WANTED

Electron Microscopist/Vision Researcher: Ph.D. 1971. Looking for permanent research-teaching position, fall 1978 or 1979. Broad scientific experience: SEM/TEM/LM, shared EM facility, biomedical laser, interdisciplinary collaboration, comparative anatomy, physiology. Publications. Budget and personnel management. Interested in regional city of 350,000 or fewer. Box 130, SCIENCE. X

Plant Biologist. Ph.D., plant pathology, with 2 years of postdoctoral training in plant biochemistry. Has strong plant biology background and extensive laboratory research experience. Seeks research position in agriculture/plant biology/plant toxicology. Box 133, SCIENCE. X

Reproductive Biologist. Ph.D. Seeks teaching and/or administrative position. Eight years of experience in mammalian research including domestic species and primates. Major research interest in gamete structure, interaction, and embryonic development. Available presently. Box 132, SCIENCE. X

Scientific Photographer. Ten years of experience at major university. Excellent at designing or improvising equipment and techniques. Strong background in biological sciences, especially plant pathology and entomology (includes master's degree). Résumé and portfolio on request. Box 139, SCIENCE. 4/21; 5/19

POSITIONS OPEN

ASSISTANT PROFESSORSHIP. The Department of Nutrition and Food Science at Massachusetts Institute of Technology (MIT) has an opening at the assistant professor level beginning July 1978 for an individual with a background in chemistry or chemical engineering for collaborative research with clinicians on the medical uses of polymers and of enzyme technology for cancer research. A doctoral degree and several years of postdoctoral experience are required.

Send résumé, statement of professional interests, and names of at least three references within 1 month of the date of this issue to: **Dr. Nevin S. Scrimshaw, Department of Nutrition and Food Science, MIT, Cambridge, Mass. 02139.**

ASSISTANT PROFESSORS in the Program in Environmental Chemistry. Candidates should have a strong background in organic, bio-organic, biochemistry, or molecular biology with postdoctoral experience. They are expected to pursue independent research in the study of molecular mechanisms of the effects of toxic chemicals and radiation on biological systems and to participate in teaching and training of graduate students. Interested individuals should submit a résumé, names of three references, and a statement of future research objectives to: **Dr. Shih Yi Wang, Department of Environmental Health Sciences, The Johns Hopkins University, School of Hygiene and Public Health, 615 North Wolfe Street, Baltimore, Md. 21205. An Equal Opportunity/Affirmative Action Employer.**

ASSISTANT PROFESSOR OF PHARMACOLOGY

Applications are invited for two positions of assistant professor of pharmacology available on or after 1 July 1978. Applicants should have a doctoral degree, postdoctoral research experience, and a commitment to a research/teaching career in academic medicine. Preference will be given to specialists in the areas of biochemical, neuro-, or cardiovascular pharmacology. Send curriculum vitae, bibliography, a brief statement of career objectives, and the names of three references to:

D. R. H. Gourley, Ph.D., Chairman
Department of Pharmacology
Eastern Virginia Medical School
P.O. Box 1980
Norfolk, Virginia 23501

An Affirmative Action/Equal Opportunity Employer

CURATOR—HERPETOLOGY

Conduct herpetological research. Head the department. Qualifications require: Ph.D., significant publications, experience in obtaining grants, demonstrated ability to work well with colleagues and superiors, and at least 4 years of related work experience. Submit credentials to: **Chief Scientist, Natural History Museum, P.O. Box 1390, San Diego, Calif. 92112. An Equal Opportunity Employer.**

POSITIONS OPEN

PHARMACOLOGY/PHYSIOLOGY UCR/UCLA PROGRAM IN BIOMEDICAL SCIENCES

The University of California, Riverside (UCR)/University of California, Los Angeles (UCLA) Program in Biomedical Sciences, which offers an accelerated M.D. curriculum jointly between the University of California, Riverside and the UCLA School of Medicine, has an opening at the **ASSISTANT PROFESSOR** level. Teaching responsibilities will be in **PHARMACOLOGY** and **PHYSIOLOGY** with emphasis on the former. Suitably qualified individuals may be considered for an appointment at the associate professor level. Applicants are expected to develop or carry on with an independent research program and to qualify for a joint appointment with the Biochemistry or Biology Graduate Faculty. *The University of California is an Affirmative Action/Equal Opportunity Employer.* Applications, including a curriculum vitae and names of references, should be sent to:

Dr. Mary Ann Baker, Chair
Pharmacology Search Committee
Program in Biomedical Sciences
University of California, Riverside
Riverside, California 92521

ASSISTANT PROFESSOR IN BIOCHEMISTRY. Basic medical science teaching position for biochemist who is enthusiastic about teaching medical students in a school of osteopathic medicine using the systems approach beginning summer or fall 1978. Send curriculum vitae and bibliography. Include the names, addresses, and telephone numbers of three references. Address correspondence to: **Larry Davis, Ph.D., West Virginia School of Osteopathic Medicine, Lewisburg, West Virginia 24901. An Affirmative Action/Equal Opportunity Employer.**

ASSISTANT PROFESSOR OF BIOLOGY

Applications are invited for undergraduate teaching position to begin 15 August 1978. Applicant must have Ph.D. and be broadly trained in biology-zoology; have firm commitment to undergraduate teaching; small liberal arts college. Salary negotiable based upon previous experience. Send résumé and names of three references by 15 May to: **Rev. James Solari, Belmont Abbey College, Belmont, N.C. 28012. An Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

ASSISTANT PROFESSOR OF MICROBIOLOGY. Salary range: \$10,000 to \$18,460. The appointee will be expected to teach selected courses from microbiology, including general microbiology, medical microbiology, and general biology. Preference will be given to applications with postdoctoral study and work experience in microbiology. Applications are to include curriculum vitae, transcripts, and three recent letters of recommendation. Send directly to: **Dean A. Rosebery, Head, Division of Science, Northeast Missouri State University, Kirksville, Missouri 63501. Northeast Missouri State University is an Equal Opportunity Employer.**

UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

The Department of Pharmacology has a position available 1 July 1978 for an **ASSISTANT PROFESSOR**. M.D. or Ph.D. degree with at least 2 years of postdoctoral training in pharmacological research. Interest and experience in teaching pharmacology to graduate, medical, dental, pharmacy, and/or nursing students. Send reply to: **Box 141, SCIENCE. Code 500BO. A nondiscriminatory, Affirmative Action Employer.**

MASSACHUSETTS GENERAL HOSPITAL HARVARD MEDICAL SCHOOL

Position available for a **BIOCHEMIST** (surgery-urology) at the assistant professor level, Urological Service, Massachusetts General Hospital, and Department of Surgery, Harvard Medical School. Candidates' qualifications must include extensive experience in enzyme chemistry and purification of enzymes as well as development of radioimmunoassays, and be self-supporting via granting mechanisms. *We are an Equal Opportunity/Affirmative Action Employer.* Send reply with curriculum vitae to: **George R. Prout, Jr., M.D., Chief of the Urological Service, Massachusetts General Hospital, 32 Fruit Street, Boston, Mass. 02114.**

POSITIONS OPEN

DEPARTMENT OF PSYCHOBIOLOGY UNIVERSITY OF CALIFORNIA, IRVINE

Position anticipated at level of **ASSISTANT PROFESSOR**. Preference will be given to area of synaptic transmission; particular interests might include regulation of catecholamine metabolism, small peptide neurotransmitters, and so forth. A multidisciplinary approach is preferred and candidates should have strong background in biochemistry, emphasizing this approach in research. Postdoctoral experience desired. Applicants should submit curriculum vitae, references, publications, and a detailed statement of research plans for the next 3 to 5 years to: **Chair, Department of Psychobiology, University of California, Irvine, California 92717**. Applications from all qualified candidates are welcome; minorities and women are encouraged to apply.

BIOCHEMISTRY FACULTY MEMBER

Texas A & M University College of Medicine has a faculty opening in the Department of Medical Biochemistry which can be filled at the assistant, associate, or full professor level. Candidate should have a Ph.D. or M.D. and postdoctoral or faculty research experience. Senior position candidates should have an ongoing funded research program in a medically relevant area, experience teaching medical students, and exposure to clinical medicine. Duties will include research, course development, and teaching medical students in a new VA-related College of Medicine. Previous applications remain on file and need not be resubmitted. Send complete curriculum vitae to: **Search Committee, Department of Medical Biochemistry, College of Medicine, Texas A & M University, 110 Herman Heep Building, College Station, Texas 77843**.

*Equal Employment Opportunity
Through Affirmative Action*

BIOLOGY DEPARTMENT

Assistant or associate professor—botany. Small, liberal arts college has tenure-track position open in September 1978 for a qualified Ph.D. with strength in botany and molecular biology. Teaching responsibilities include genetics, plant physiology, and introductory biology courses. Excellence in teaching and commitment to student/faculty interaction are required. Send personal letter, curriculum vitae, academic transcripts, and three letters of reference by 8 May 1978 to: **Dr. James W. Small, Head, Department of Biology, Rollins College, Winter Park, Florida 32789**. An Equal Opportunity/Affirmative Action Title IX Employer.

TWO BIOLOGY POSITIONS available (contingent upon availability of funds) 28 August 1978 in the areas of: (i) microbiology, and (ii) mycology. A Ph.D. degree and a demonstrated commitment to teaching and research are required. Send curriculum vitae, transcripts, and three letters of reference to: **Dr. Virgil K. Howe, Chairman, Department of Biological Sciences, Western Illinois University, Macomb, Illinois 61455**. Initial applications must be received by 1 May. An Equal Opportunity/Affirmative Action Employer.

CHAIRPERSON, DEPARTMENT OF ANATOMY—Position open at the University of Massachusetts Medical School. Applications from women and minority groups are especially encouraged. Send curriculum vitae and list of publications to: **Dr. G. Majno, Chairman, Anatomy Search Committee, University of Massachusetts Medical School, Department of Pathology, 55 Lake Avenue North, Worcester, Mass. 01605**. An Affirmative Action/Equal Opportunity Employer.

CHAIRMAN DEPARTMENT OF BIOLOGICAL CHEMISTRY UCLA SCHOOL OF MEDICINE

The University of California, Los Angeles (UCLA), School of Medicine is seeking a chairman for the Department of Biological Chemistry. The position will be open on 1 July 1979.

Nominations and applications are invited. Please address them to:

**Daniel Atkinson, Chairman
Biological Chemistry Search Committee
Department of Chemistry
University of California at Los Angeles
Los Angeles, California 90024**

UCLA is an Equal Opportunity/Affirmative Action Employer. UCLA encourages minority and women candidates to apply.

POSITIONS OPEN

UNIVERSITY OF LEICESTER, ENGLAND CHAIR OF STATISTICS

Applications are invited from candidates engaged in any field of statistics for a new chair of statistics in the Department of Mathematics, tenable from 1 October 1978 or as soon as possible thereafter.

Further particulars from: **Registrar, The University, Leicester LE1 7RH, England**, to whom applications should be sent by 12 May 1978, quoting reference SCS.

We seek a **CHAIRPERSON** for the Department of Ergonomics and Physical Education, preferred starting time 1 January or 1 July 1979. The campus wishes to build a strong, research-oriented department focusing on applied human physiology and human performance, and expertise in these areas is highly desired. Candidates should have strong research records and administrative ability. Salary and level dependent upon qualifications.

Applicants should send curriculum vitae and names and addresses of six references to: **Dean Bruce Rickborn, College of Letters and Science, University of California, Santa Barbara, Calif. 93106**; applications must be received no later than 1 July 1978. Telephone: 805-961-3506.

University of California, Santa Barbara, is an Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

MARINE SCIENCE INSTITUTE CHEMICAL OCEANOGRAPHER

A 1-year research position with the Marine Science Institute is available in chemical oceanography. Continued appointment is dependent on extramural funding. Ph.D. required. Applications with curriculum vitae, list of publications, and summary of research interests should be sent before 15 June 1978 to: **Director, Marine Science Institute, University of California, Santa Barbara, Calif. 93106**. The University of California is an Equal Opportunity/Affirmative Action Employer.

The Food Safety and Quality Service (FSQS) of the U.S. Department of Agriculture (USDA) has a **CHEMIST** position, grade GS-14 (salary \$30,750 to \$39,975) on the Residue Evaluation and Planning Staff. This staff is responsible for providing residue analytical, consultative, and planning services in the scientific area of chemical biological residue control to federal, state, and foreign meat and poultry inspection programs. The incumbent serves as the staff's expert and technical adviser in chemistry and chemical methodology as it relates to residues.

Qualifications—candidates must have a bachelor's (or higher) degree in one of the physical or life sciences, or engineering, or a combination of education and experience that has provided technical and professional knowledge equivalent to that provided by the full 4-year college course; and a minimum of 3 years of professional experience in chemistry (1 year must have been at the GS-13 level or equivalent). *USDA is an Equal Opportunity Employer.* Submit an SF-171, Personal Qualifications Statement by 30 April 1978, to: **Christine Robinson, USDA, FSQS, Personnel Division, B4, WSPD, Room 3438-S, 14th Street and Independence Avenue, SW, Washington, D.C. 20250**; telephone: 202-447-6617.

Prior to completion of SF-171 applicants should request from Mrs. Robinson a copy of the selective criteria which will be used to evaluate applicants' experience, training, and education in relation to this position.

ENVIRONMENTAL SCIENCE

Teach variety of undergraduate courses with major responsibilities in air quality and land use/planning at introductory level. Should be comfortable teaching in transdisciplinary general education program emphasizing issues and values. Needs to be enthusiastic and flexible and to enjoy teaching students with varied backgrounds within context of small, liberal arts, innovative, Presbyterian-related college. Teaching experience and doctorate preferred; master's required. *Equal Opportunity/Affirmative Action Employer.* Send résumé, transcripts, and references to: **Dean Margaret Goddin, Davis-Elkins College, Elkins, West Virginia 26241**.

FACULTY POSITIONS College of Medicine, King Faisal University Dammam, Saudi Arabia

Applications are invited from qualified men and women in:

Biology	Biochemistry
Chemistry	Hematology
Physics	Biostatistics
Anatomy	Microbiology
Human Physiology	Parasitology
Pathology	Pharmacology
Epidemiology	General Surgery
Community Medicine	Internal Medicine

Doctorate or equivalent degree required. Language of instruction is English. Positions available starting September 1978; interviews scheduled with the dean in the United States and Great Britain early in 1978.

Salary ranges (monthly salary in Saudi riyals or approximate annual equivalent in U.S. dollars)—professor: SR6,000 to 6,600 or \$20,300 to \$22,300; associate professor: SR4,800 to 5,800 or \$16,300 to \$19,600; and assistant professor: SR3,600 to 4,600 or \$12,200 to \$15,600.

(M.D. degree commands a higher salary, up to 50 percent if a clinical as well as academic appointment is held.)

Free furnished accommodations. Airfare to and from Saudi Arabia once a year plus a 45- to 60-day holiday. No Saudi income tax.

Send complete curriculum vitae plus addresses and telephone numbers of three references to:

**Mohammed T. Altorki, M.D., MRCP
Dean of the Medical Faculty**

**King Faisal University
c/o Saudi Arabian Educational Mission
2223 West Loop South, Suite 400
Houston, Texas 77027**

**Mohammed T. Altorki, M.D., MRCP
Dean of the Medical Faculty**

**King Faisal University
P.O. Box 9
Isleworth, Middlesex TW7 4LZ
England**

Specify dates of teaching appointments and availability.

ELSEVIER NORTH-HOLLAND, INC. NEW YORK

Wishes to appoint a **JUNIOR SCIENTIFIC EDITOR** in the biological sciences.

Applicants should possess a degree in the biological sciences with some relevant research experience. Previous publishing experience is considered an advantage, but is not essential.

He/she will initially help the senior editors with the development of the biomedical book and journal program, but there will be excellent potential for promotion.

The job is based in New York and offers a wide developing and challenging career in scientific publishing, excellent benefits, and a competitive salary.

Applications should include a letter explaining why you are suited to this position, a full curriculum vitae, and a telephone number where you can be reached, and should be directed to: **The President, Elsevier North-Holland, Inc., 52 Vanderbilt Avenue, New York, N.Y. 10017**, and should arrive not later than 5 May 1978.

**Department of Developmental and Cell Biology
University of California, Irvine**

The following **LECTURER** and **POSTDOCTORAL POSITIONS** are available for the 1978-1979 academic year.

Two lecturer positions: one is to teach nonmajor courses in physiology and to participate in a major physiology course both in lecturing and coordinating laboratories; a second position is to assist in teaching cell and development courses, both as a lecturer and laboratory coordinator. The Ph.D. degree is required for both positions.

Postdoctoral position (M. W. Berns). Interests in one or more of the following areas: cell division, cytogenetics, myocardial function in vitro, and cellular immunology.

Postdoctoral position (J. Arditti). To work on plant physiology-biochemistry and vitamin biosynthesis.

Postdoctoral position (G. Stephens). Marine microbiology and ecology.

Postdoctoral position (A. Bennett). Activity metabolism of the lower vertebrates; expertise in biochemistry, muscle physiology, and environmental physiology.

Postdoctoral position (H. Koopowitz). Neuronal basis of behavior in flat worms using electrophysiological techniques.

Postdoctoral positions in carcinogenesis: four positions are available on an interdepartmental NIH Training Program; 23 faculty participate in this program with interests at the cellular, molecular, biochemical, organismic, and clinical levels.

Applications from all qualified candidates are welcome: minorities and women are encouraged to apply. Send curriculum vitae and the names of three references to:

**Dr. Michael W. Berns, Chair
Department of Developmental and Cell Biology
University of California, Irvine
Irvine, California 92717**

before 1 May 1978.

Physicians (Multiple Openings)—The Food and Drug Administration/Bureau of Drugs (an Equal Opportunity Employer) has career Civil Service openings for physicians. (Positions are also available in the Commissioned Corps of the U.S. Public Health Service). Physicians evaluate the results of clinical testing of new drugs (New Drug Applications) and the potential effects on humans of proposed new drugs (Claimed Exemptions for Investigational New Drugs INDs). Physicians are also needed for the bio-research monitoring program to evaluate controversial clinical data and adherence to good laboratory practices, medical ethics, etc. Anticipated vacancies available in multiple specialties (anesthesiology, cardiology, gastroenterology, internal medicine, neurology, OB-GYN, psychiatry and surgery, etc.).

Duties of the positions require judgement, effective writing and speaking and ability to organize work to meet deadlines. Grades are GS-14 and GS-15 (salary ranging from \$37,925 to \$47,500 per year, depending upon medical experience and qualifications). Comprehensive fringe benefits provided. Candidates need at least board eligibility in their medical specialty and must be: a graduate with a degree of Doctor of Medicine from a U.S. or Canadian medical school approved by the Council on Medical Education and Hospitals of the American Medical Association. Doctors of Osteopathy or graduates of foreign medical schools may also be eligible. Full details may be requested.

Send Resume or Curriculum Vitae to:

**Food and Drug Administration
Division of Personnel Management
(Room 4B-42)
Attention: George Calvert
5600 Fishers Lane
Rockville, Maryland 20857**

POSITIONS OPEN

CLINICAL-ANALYTICAL CHEMIST—Assistant professor, fall 1978. The University of Colorado, Colorado Springs, is seeking qualified candidates to supervise a new B.S. clinical chemistry program and to teach general, analytical, and clinical chemistry. Applicants must have a Ph.D. and should show promise of productive research endeavors. Submit curriculum vitae, three letters of recommendation, and transcripts to: **Search Committee, Chemistry Department, University of Colorado, Colorado Springs, Colorado 80907.** Position contingent upon approval by legislature. *Affirmative Action/Equal Opportunity Employer.*

COMPREHENSIVE MEDICINE

The University of South Florida (USF) College of Medicine invites applicants for the position of **assistant professor of comprehensive medicine.** Required qualifications include Ph.D. or M.D. degree with significant record of achievement in research in tropical medicine or nutrition. Curriculum vitae and letter of application should be addressed to: **William A. Sode-man, Jr., M.D., USF College of Medicine, 12901 North 30 Street/Box 12, Tampa, Fla. 33612.**

The University of South Florida is an Equal Opportunity Employer.

**DEAN
COLLEGE OF MEDICINE**

Applications and nominations are sought for the position of dean of the College of Medicine, University of Nebraska. Qualifications include evidence of scholarship in the medical sciences and administrative experience in a medical school. An M.D. degree is desirable. Applications accompanied by curriculum vitae should be received by 15 May 1978. Direct communications to: **Dr. Kenneth Barker, Chairman of the Search Committee, University of Nebraska Medical Center, 42nd Street and Dewey Avenue, Omaha, Nebraska 68105.**

An Equal Opportunity/Affirmative Action Employer

**DEAN FOR RESEARCH
AND PROFESSIONAL STUDIES
EASTERN NEW MEXICO UNIVERSITY**

The dean serving under the executive vice president will be director of the Research Center and coordinator of research activities and publications. The director will maintain research involvement, be responsible for seeking external funding, and ensure compliance with federal, state, and university guidelines.

Qualifications include administrative experience with grant management, earned doctorate, proven research ability, and proven grantsmanship.

Starts 1 July 1978; salary competitive.

Send application, curriculum vitae, and three written recommendations before 1 June 1978 to:

**Dr. Gordon Thomas
Search Committee
Eastern New Mexico University
Portales, New Mexico 88130**

An Equal Opportunity/Affirmative Action Employer

**THE UNIVERSITY OF MICHIGAN
SCHOOL OF MEDICINE**

Position available June 1978 for **DIRECTOR.** Unit for Human Values in Medicine with academic appointment appropriate for qualifications. Doctoral degree required. Administrative experience and academic credentials in medical ethics or humanities as related to medicine desirable. Responsibilities, in addition to unit administration, include full range of teaching, service, and research. Please reply to: **Box 140, SCIENCE.** A nondiscriminatory, Affirmative Action Employer. Code 100RO.

**UNIVERSITY OF MICHIGAN
DEPARTMENT OF NEUROLOGY**

The Department of Neurology has available the position of **INSTRUCTOR IN NEUROLOGY** for an individual who has completed accredited training in neurology and has an interest in electromyography. Qualified individuals may apply to: **Box 144, SCIENCE.** Code 300HO. A nondiscriminatory, Affirmative Action Employer.

POSITIONS OPEN

DEVELOPMENTAL BIOLOGIST

A teaching position at the assistant professor level is anticipated for the 1978-1979 academic year with possibility for renewal. A Ph.D. in developmental biology and demonstrated teaching proficiency are required. The successful applicant will be expected to conduct existing courses in embryology, histology, cytology and/or microtechnique, and tissue culture; and may be called upon to direct undergraduate and graduate research and, if continued, will have opportunity to develop new courses in areas(s) of specialization.

Send curriculum vitae and three letters of reference by 15 May to:

**Dr. H. Q. Stevenson
Chairman, Department of Biology
Southern Connecticut State College (SCSC)
New Haven, Connecticut 06515**

SCSC is an Equal Opportunity/Affirmative Action Employer.

TUSKEGEE INSTITUTE—DIRECTOR, CARVER RESEARCH FOUNDATION (CRF). Position available 1 August 1978. Earned doctoral degree or the highest earned degree attainable in field of training and experience is required. Salary commensurate with education and experience. Applications accepted through 1 June 1978. Send application to: **Dr. Eugene W. Adams, Chairman, Search Committee CRF, Tuskegee Institute, Tuskegee, Ala. 36088.** An Equal Opportunity/Affirmative Action Employer.

DIRECTOR

The position of director of the International Laboratory for Research on Animal Diseases (ILRAD) will become vacant in June 1978. The director is the chief officer of the institution and must have experience and background in disease research and in the administration of a research institution. In addition, the director must be able to relate to a variety of staff and direct the research programs of the institution as well as various other functions associated with a research program involving both basic and disease-oriented activities.

ILRAD's mandate is to develop effective control methods for trypanosomiasis and theileriasis, two important animal diseases that constrain livestock production in a number of developing countries. It is one of the International Research Centers supported by the Consultative Group on International Agricultural Research. The staff of ILRAD is recruited internationally and is engaged in multidisciplinary research activities leading to the development of immunologic or related control procedures. The ILRAD headquarters is in Nairobi, Kenya, and is a modern research complex.

Qualified candidates are requested to submit current curriculum vitae as well as a synopsis of their research and administrative experiences. Included should be the names and addresses of three referees who can be contacted in support of their candidacy. This information should be submitted to: **Chairman, ILRAD Search Committee, Rockefeller Foundation, 1133 Avenue of the Americas, New York, N.Y. 10036.** Further information can be obtained from the same address.

**DIVISION DIRECTOR FOR PHYSIOLOGY,
CELLULAR, AND MOLECULAR BIOLOGY**

National Science Foundation, Directorate for Biological, Behavioral and Social Science, is seeking qualified applicants for the position of director for the Division of Physiology, Cellular, and Molecular Biology. This division is responsible for basic research in areas such as developmental biology, genetics, human cell biology, biochemistry, biophysics, regulatory, and metabolic biology. Applicants should be recognized authorities and have demonstrated national and international leadership in one of these fields. This is a rotational position for 2 years or more. The position is excepted from the competitive civil service EE-II grade level (equivalent to the GS-17). Applicants should submit a résumé to: **the Division of Personnel and Management, Attention: E. Paul Broglio, Section B, Room 212, 1800 G Street, NW, Washington, D.C. 20550.** For further information, telephone 202-632-4106. An Equal Opportunity Employer.

POSITIONS OPEN

DIRECTOR, ISLES OF SHOALS MARINE LABORATORY, AND INVERTEBRATE ZOOLOGIST, CORNELL UNIVERSITY

Cornell University is seeking an invertebrate zoologist who will also serve as director of the Shoals Marine Laboratory. The laboratory, located on the Isles of Shoals off Portsmouth, New Hampshire, has as its primary mission the teaching of summer courses in introductory marine sciences to undergraduates, teachers, and other special groups.

Prospective candidates should have considerable experience in administration and a strong record of teaching and research in invertebrate zoology. It is expected that this position will be filled at a senior level.

In addition to administrative duties, the appointee will be involved in summer teaching at the Shoals Laboratory, offering an introductory upper division course in invertebrate zoology at Cornell in Ithaca, and maintaining an active research program, including the training of graduate students.

The position will be filled as soon as possible. A curriculum vitae, including the names of at least three references, should be sent no later than 22 May to: **Dr. Peter Bruns, Chairman Search Committee, Division of Biological Sciences, 200 Stimson Hall, Cornell University, Ithaca, New York 14853.**

Cornell University is an Equal Opportunity/Affirmative Action Employer.

EXECUTIVE DIRECTOR for the international center for cycle studies. Director must have academic background, have published in some aspects of cycle research, and be interested in theory and mechanisms of cyclic behavior and of interdisciplinary causal relationships. Location flexible. Contract would run a minimum of 2 years. Send résumé and salary requirements to: **The Foundation for the Study of Cycles, 124 South Highland Avenue, Pittsburgh, Pennsylvania 15206.**

FACULTY POSITION IN IMMUNOLOGY

A position as assistant or associate professor is available in the Department of Microbiology and Immunology at the University of Washington. The position involves research and teaching. Applicants with experience in immunogenetics are particularly sought. Applications should include full curriculum vitae and names of three referees, and must be received prior to 1 May 1978. Apply to:

Dr. Ingegerd Hellström
Search Committee Chairperson
Department of Microbiology and Immunology, SC-42
University of Washington School of Medicine
Seattle, Wash. 98195

The University of Washington is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION

The State University of New York at New Paltz is accepting applications for a tenure-track position as assistant or associate professor in the Department of Chemistry, beginning September 1978. Applicants should have a Ph.D. degree in organic chemistry at undergraduate and graduate levels, as well as biochemical subjects. Duties will also include supervising research at the undergraduate and graduate at master's level. Submit résumé, transcripts, and arrange for three letters of recommendation to be sent to: **Dr. Angelos V. Patsis, Chairman, Department of Chemistry, State University College, New Paltz, N.Y. 12562.** An Equal Opportunity/Affirmative Action Employer.

Case Western Reserve University, Department of Earth Sciences, has two faculty positions beginning academic year 1978.

GEOPHYSICIST

Candidates should be interested in mathematical modeling of geological and geophysical processes.

SEDIMENTOLOGIST

Candidates should have experience in the study of modern sedimentary environments and in the interpretation of ancient depositional environments from the study of sedimentary rocks. An interest in some aspect of fossil fuels or other natural resources is desirable.

Ph.D. or equivalent is required for each position. Please submit applications, consisting of résumé, names and addresses of three referees, transcripts, and a statement of research and teaching interests to: **Samuel M. Savin, Department of Earth Sciences, Case Western Reserve University, Cleveland, Ohio 44106.** Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITION— BIOLOGICAL CHEMISTRY

The Department of Biological Chemistry, University of California, Los Angeles (UCLA) School of Medicine invites applications from qualified individuals for an assistant professorship in the area of mammalian glycoprotein, polysaccharide or oligosaccharide metabolism, enzymology, and chemistry. A strong commitment to teaching and research is required. Applicants should send curriculum vitae, names of three references, and a précis of research plans by 15 June 1978 to: **J. G. Pierce, Chairman, Search Committee, Department of Biological Chemistry, UCLA School of Medicine, Center for Health Sciences, Los Angeles, California 90024.** UCLA is an Equal Opportunity Employer, conforming to Affirmative Action policies.

FACULTY POSITION IN DIVISION OF PHARMACODYNAMICS AND TOXICOLOGY

A position is available at the University of Kentucky College of Pharmacy for an individual with a Ph.D. degree, preferably with a professional degree in pharmacy, who is committed to being a distinguished faculty person. Level of the position is open. Primary responsibilities of the position include: sharing of undergraduate and postgraduate instruction in the life sciences area with special emphasis on physiology, pathology, pharmacology, therapeutics, and toxicology; and development of a productive research program. Excellent opportunities exist to conduct cooperative interdisciplinary basic and clinical research with faculty of the five colleges within the University Medical Center and to supervise training of advanced degree students.

Send curriculum vitae and names and addresses of three persons who can be contacted for reference to:

Joseph V. Swintosky, Dean
College of Pharmacy
University of Kentucky
Lexington, Ky. 40506

The University of Kentucky is an Equal Opportunity Employer.

Possible opening, fall 1978, for faculty member in **GEOLOGY/EARTH SCIENCE**. Candidates must be able to teach a wide range of geoscience material. Expertise in sedimentology-stratigraphy and environmental geology desirable. Evergreen is a 4-year accredited liberal arts college which emphasizes team-taught interdisciplinary studies. No departments. Salary range: \$12,940 to \$16,060. For information contact: **Dr. Willard Humphreys, Academic Dean, L2219, The Evergreen State College, Olympia, Wash. 98505.** Closing date: 30 April. Equal Opportunity/Affirmative Action Employer.

IMMUNOLOGIST

Full-time research associate position available August 1978 to assist in developing immunology program in radiation effects including carcinogenesis. D.V.M. and/or Ph.D. with training in immunology. Application deadline: 1 June 1978. Salary negotiable. **Colorado State University is an Equal Opportunity/Title IX Employer; Equal Opportunity Office: 314 Student Services Building.** Send curriculum vitae and references to: **Stephen A. Benjamin, Director, Collaborative Radiological Health Laboratory, Colorado State University, Fort Collins, Colorado 80523.**

INSTRUCTORSHIPS IN ZOOLOGY

Two 1-year instructorships available for 1978-1979 academic year to coordinate laboratories in large undergraduate courses in vertebrate physiology and in general zoology. Requires Ph.D. in zoology or related discipline. Salary is approximately \$11,700. Send curriculum vitae, statement of professional goals, transcripts, and three letters of recommendation by 8 May 1978 to: **Instructorship Search Committee, Department of Zoology, Oregon State University (OSU), Corvallis, Oregon 97331.** OSU is an Affirmative Action/Equal Opportunity Employer and complies with Section 504 of the Rehabilitation Act of 1973.

UNIVERSITY OF MICHIGAN DEPARTMENT OF NEUROLOGY

The Department of Neurology and the Kresge Hearing Research Institute have available the position of **INSTRUCTOR IN NEUROLOGY** for an individual who has completed accredited training in neurology and has research experience in neuro-otology. Qualified individuals may apply to: **Box 142, SCIENCE, Code 400HO.** A nondiscriminatory, Affirmative Action Employer.

Massachusetts Institute of Technology Center for Advanced Engineering Study

is now accepting applications for the Advanced Study Program—Fall 1978.

the Advanced Study Program is:

a Program of continuing education for experienced engineers, applied scientists, technical managers, and educators;

a unique opportunity to enhance professional capabilities through increased technical competence, and to broaden perspective and understanding of emerging technologies;

an intensive experience, individually tailored to the background of each participant.

Resources throughout MIT are available to the Fellows of the Center.

The Program combines classroom study, seminars, guided independent study, and research. The Program is divided into segments which coincide with the MIT summer, fall, and spring terms. Participants normally start at the beginning of the fall term, or at the beginning of special review subjects offered during the summer.

For more information, and an application form, please fill out the coupon below and send it to:

Advanced Study Program
Center for Advanced Engineering
Study
Room 9-335
Massachusetts Institute of
Technology
Cambridge, Massachusetts 02139

Name_____

Title_____

Address_____

City_____

State_____ Zip_____

Field of Interest_____

POSITIONS OPEN

HYDROLOGIST

The University of Pennsylvania seeks a research-oriented hydrologist to fill an anticipated 1-year joint appointment in regional planning/geology. This appointment may be converted to a tenure-track appointment in subsequent years. Interested applicants are invited to send résumés to:

Arthur H. Johnson
Chairman, Search Committee
Department of Landscape Architecture
and Regional Planning/CJ
University of Pennsylvania
Philadelphia, Pa. 19104

The University of Pennsylvania is an Equal Opportunity Employer

INSTRUCTOR, BIOCHEMISTRY, September 1978. To team-teach biochemistry and biochemistry laboratory and conduct research on the biochemical mechanism of excitation-secretion coupling in the CNS. Starting at \$13,000 to \$14,000. Position available for 5 years. Send curriculum vitae, bibliography, and three letters of recommendation to: **Dr. J. A. Babitch, Chemistry Department, Texas Christian University, Fort Worth, Texas 76129** by 31 May 1978. **POSTDOCTORAL AND GRADUATE STUDENT STIPENDS** for fall 1978 also available. *Texas Christian University does not discriminate on the basis of sex, religion, handicap, race, or ethnic origin.*

REED COLLEGE—One-year sabbatical replacement. September 1978. Teaching areas: **invertebrate zoology/comparative physiology**. All ranks considered. Send curriculum vitae and names of three references to: **Dr. L. N. Ruben, Department of Biology, Reed College, Portland, Oregon 97202** by 28 April. *Reed is an Equal Opportunity Employer.*

The Issaquah Group for Health and Environmental Research (IGHER) sponsors grant-funded research in fundamental cellular processes which may include how they are related to health. The addition of two or three innovative **INVESTIGATORS** is desired at our facility 13 miles east of Seattle. The investigators will be responsible for obtaining their own funding. The advantage of affiliation is a commitment by the group to maintain the optimum research milieu which encourages free inquiry and group cooperation while minimizing demands which are not directly related to research goals. Address inquiries to: **Scientific Advisory Committee, IGHER, 1595 Northwest Gilman Boulevard, Issaquah, Wash. 98027**. *An Equal Opportunity Employer.*

UNIVERSITY OF CALIFORNIA, IRVINE CALIFORNIA COLLEGE OF MEDICINE DEPARTMENT OF RADIOLOGICAL SCIENCES

Applicants are invited for a position at the assistant level in the **DIVISION OF NEURORADIOLOGY** (Chief of Service, Dr. Stephen Fierstien) in the Department of Radiological Sciences, University of California, Irvine, College of Medicine.

Applicants should be Board-certified (or equivalent) radiologists with at least a 1-year fellowship in neuroradiology, including computed tomography and complex tomography of the temporal bone. In addition to clinical responsibilities the successful candidate will be expected to take part in medical student and resident teaching and to develop a research program or take part in ongoing protocols within the department. A large volume of interesting case material is available and the Division of Neuroradiology is presently being completely reequipped with prototype imaging equipment. *Applications from all qualified candidates are welcome; minorities and women are encouraged to apply.* Applications, including a biography and copies of any publications, should be sent to:

Eric N. C. Milne, M.B., Ch.B., F.R.C.R.
Professor and Chairman
Department of Radiological Sciences
University of California, Irvine
College of Medicine
Irvine, California 92717

Closing date: 15 May 1978.

POSTDOCTORAL POSITIONS—Several are available in the areas of molecular biology of Papova viruses, mammalian cell genetics, in vitro chemical carcinogenesis. Send curriculum vitae with list of publications to: **Dr. G. diMayorca, Chairman, Department of Microbiology, College of Medicine and Dentistry of New Jersey, New Jersey Medical School, 100 Bergen Street, Newark, N.J. 07103**. *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

The University of Michigan is seeking qualified applicants for a full-time, 3-year, **JOINT TEACHING-RESEARCH POSITION** in the area of muscle-bone biology and craniofacial growth and development to begin 1 September 1978 or sooner, if possible. The position involves participation in an experimental research program on the growth, function, and adaptation of the masticatory complex at the Center for Human Growth and Development and the applicant must be qualified to be appointed to a 3-year term as an assistant professor and conduct teaching within one of the following departments: anatomy, anthropology, oral biology, oral surgery, or plastic surgery. Submit curriculum vitae and names of three references to: **Box 143, SCIENCE**. Application deadline is 1 June 1978. *The University of Michigan is an Affirmative Action/Equal Opportunity Employer.*

MICROBIOLOGY/IMMUNOLOGY—Faculty positions available: (i) **immunologist, immunochemist, immunogeneticist**: associate professor or professor level; (ii) **molecular biologist, DNA recombinant research and/or SV 40, polyoma molecular biology**: assistant, associate, or professor level; and (iii) **cellular biologist, mammalian cell genetics, in vitro transformation by chemical carcinogens**: assistant or associate professor level. Level of appointment dependent upon qualifications. All candidates are expected to have demonstrated outstanding research achievements and have a record of funding by national agencies. Send curriculum vitae with bibliography and a list of at least three persons who can be contacted as references to: **Dr. Marvin N. Schwalb, Department of Microbiology, Faculty Search Committee, College of Medicine and Dentistry of New Jersey, New Jersey Medical School, 100 Bergen Street, Newark, N.J. 07103**. *Equal Opportunity/Affirmative Action Employer.*

MOLECULAR BIOPHYSICIST. Research assistant professor (associated faculty) position for Ph.D. with experience in macromolecular structure studies by electron microscopy and 3-D image reconstruction. Available immediately. Send curriculum vitae and at least three letters of reference by 15 April 1978 to: **Dr. J. S. Leigh, Jr., Department of Biochemistry and Biophysics, School of Medicine, D-501 Richards/G4, University of Pennsylvania, Philadelphia, Pa. 19104**. *An Equal Opportunity Employer.*

NEPHROLOGIST—The Nephrology Research and Training Center and the Division of Nephrology in the Department of Medicine and the Department of Physiology and Biophysics at the University of Alabama in Birmingham has available a position at the professor level. The position is open to qualified individuals at a senior level. The individual must have a firm commitment to teaching programs oriented to medical students, graduate students, house officers, and fellows and should have a research background and be able to carry out independent research, preferably in the physiology of renal tubular transport processes. Apply to: **Division of Nephrology, University Station, Birmingham, Alabama 35294**; telephone: **205-934-3585**. *An Equal Opportunity/Affirmative Action Employer.* Expiration date for receipt of applications: 15 May 1978.

CALIFORNIA ORAL PATHOLOGY

The Department of Oral Medicine and Hospital Dentistry, School of Dentistry, and the Department of Pathology, School of Medicine, University of California at San Francisco (UCSF), are seeking a full-time faculty member at the assistant professor level. The successful applicant will assume responsibilities for teaching in the dental, medical, and dental hygiene curricula, in dental and medical specialty programs, and to graduate students. If qualified, the appointee will have service responsibilities in oral pathology and in pathology. Candidates should have a dental/medical degree or a Ph.D. in pathology. Formal training in pathology and oral pathology and a demonstrated ability to conduct research are required. This position will be available 1 July 1978. Applications must be received by 30 April 1978. *UCSF is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.* Send applications or nominations with curriculum vitae to: **John S. Greenspan, B.Sc., B.D.S., Ph.D., M.R.C. Pathology, Department of Oral Medicine and Hospital Dentistry, University of California, San Francisco, Calif. 94143**.

POSITIONS OPEN

NEUROANATOMIST with electron microscopic training to work with multi-disciplinary neurobiology group in West Coast medical school. Doctoral degree required. Submit curriculum vitae to: **Box 145, SCIENCE**.

PATHOLOGY RESIDENCY PROGRAM—Position open at the University of Massachusetts Medical School. Applications from women and minority groups especially encouraged. AMA approval is pending. Write to: **Dr. A. Like, Department of Pathology, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, Massachusetts 01605**. *An Equal Opportunity/Affirmative Action Employer.*

PATHOLOGISTS—Surgical pathologist/hematologist (special interest in GI pathology and experience in experimental oncology and basic research; competence in EM); **anatomic pathologist** (special interest in cardiovascular pathology and basic research). Rank commensurate with experience. Send curriculum vitae to: **Dr. G. Barry Pierce, Chairman Pathology Department, University of Colorado Medical Center, 4200 East Ninth Avenue, Denver, Colo. 80262**. *An Equal Opportunity/Affirmative Action Employer.*

Ph.D. PHARMACOLOGISTS CARDIOVASCULAR AND RENAL

We are currently seeking candidates for positions in renal and cardiovascular pharmacology and/or hypertension research. Candidates should be presently nearing completion of their postdoctoral training in pharmacology/physiology. The scientists selected will be involved in a cooperative effort in exploring new approaches to the understanding and treatment of cardiovascular or renal diseases.

Our modern research laboratories are located in West Point, Pennsylvania, a suburban location northwest of Philadelphia. Starting salary is commensurate with qualifications. Benefits are excellent.

Please send curriculum vitae with complete list of publications to:

Vaughn L. Swope
Biological Research

Merck Sharp & Dohme
Research Laboratories

West Point, Pa. 19486

An Equal Opportunity Employer

PHYSIOLOGY FACULTY POSITIONS. Assistant professor (one) and associate professor (one) positions are open in the Department of Physiology of the School of Medicine at Morehouse College; appointments to commence 1 July or 1 September. Duties include teaching medical and graduate students and developing an active research program. Interdisciplinary research activities are encouraged. Send curriculum vitae to: **Dr. Gordon J. Leitch, School of Medicine at Morehouse College, 223 Chestnut Street, SW, Atlanta, Georgia 30314**.

POSITION open for fall semester 1978; Ph.D. in **COMPUTER SCIENCE** (infield) preferred; to teach and help develop computer science courses and program. Salary competitive. Send usual application materials to: **Dr. Pu-Sen Yeh, Department of Engineering and Computer Science, Jacksonville State University, Jacksonville, Alabama 36265**. *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION LIPID BIOCHEMISTRY

Available July 1978, to Ph.D. in lipid metabolism, membrane biochemistry, physical biochemistry, or enzymology. Salary: \$12,000. Send résumé and names of two references by 15 May to: **Dr. Fred Possmayer, Department of Biochemistry, University of Western Ontario, London, Canada N6A 5A5**.

POSITIONS OPEN

POSTDOCTORAL—PROTEIN CHEMISTRY. Position available for recent Ph.D. with training in biochemistry. Research program involved in all aspects of protein chemistry and biochemistry on specialized tissues of mammalian origins. Additional strong background in organic, physical, or physical organic chemistry favored. Appointment for 1 or 2 years. Send letter, curriculum vitae, and three references to: **Biochemistry Department (F), College of Medicine and Dentistry of New Jersey, New Jersey Medical School, 100 Bergen Street, Newark, N.J. 07103.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL ASSOCIATE IN CANCER RESEARCH with previous experience in tissue culture, transplantation, and immunology. Position open 1 July 1978. Send curriculum vitae to: **Harry L. Joachim, M.D., Department of Pathology, Lenox Hill Hospital, 100 East 77 Street, New York, N.Y. 10021.**

POSTDOCTORAL FELLOW. Position available immediately for research on cardiac cell proliferation, differentiation, and injury as part of Cardiovascular Training Program. Seeking cell biologist or anatomist with experience in EM and another area. Excellent research facilities in cell culture and microscopy. Opportunity to get some teaching experience in medical school histology and cell biology. Travel to one annual meeting. Stipend at level of NIH fellowships. Send curriculum vitae and three letters of recommendation to: **Dr. Frederick H. Kasten, Department of Anatomy, Louisiana State University Medical Center, 1100 Florida Avenue, New Orleans, La. 70119.** *An Equal Opportunity Employer.*

INTERNATIONAL LABORATORY FOR RESEARCH ON ANIMAL DISEASES (ILRAD)

ILRAD is an international institution whose first assignment is to find a solution to African trypanosomiasis and theileriosis using up to date fundamental scientific knowledge and modern technology. Disciplines represented at ILRAD are biochemistry, entomology, immunology, molecular biology, parasitology, pathology, and tissue culture. A few positions are open immediately for:

BRIGHT, IMAGINATIVE POSTDOCTORAL FELLOWS IN IMMUNOLOGY

who will work in both fields of cellular immunology and immunochemistry. Excellent facilities and equipment are available for sophisticated immunological studies. Research will involve the production of monoclonal antibodies by cell fusion and the use of a fluorescence activated cell sorter (FACS II). Salaries will range from U.S. \$10,000 to U.S. \$15,000 depending on training and experience. Perquisites include housing and commutation allowances.

The successful candidates will work with Dr. George E. Roelants of ILRAD.

Applications or requests for further information should be sent to:

**Associate Director for Administration
ILRAD
P.O. Box 30709
Nairobi, Kenya**

POSTDOCTORAL POSITION—Position available in the area of physiological ecology of algae. Experience with continuous culture, GC, and pesticides useful. Initial appointment for 1 year beginning 1 September 1978. Salary range: \$13,000 to \$14,000. Please send curriculum vitae and names of three references to: **Dr. G-Y Rhee, Division of Laboratories and Research, New York State Department of Health, Albany, N.Y. 12201.**

POSTDOCTORAL RESEARCH OPPORTUNITY to do fluorescence studies of hormone-receptor interactions. Successful candidate will have opportunity to obtain hormone and receptors from three established research groups and will be principal user of SLM photon-counting spectrofluorometer and SLM lifetime instrument. Training in fluorescence interpretation and experience in protein chemistry desired. Send curriculum vitae, bibliography, and names of three references to: **Dr. John T. Penniston, Department of Molecular Medicine, Mayo Clinic, Rochester, Minnesota 55901.**

An Equal Opportunity/Affirmative Action Institution

POSITIONS OPEN

THE NEW SOUTH WALES STATE CANCER COUNCIL

SPECIAL UNIT

(situated at the Prince of Wales Hospital
Sydney, Australia)

POSTDOCTORAL FELLOW

The New South Wales State Cancer Council has a postdoctoral position available in the research laboratories of its Special Unit at the Prince of Wales Hospital.

Preferably, applicants should be experienced in cell biology and interested in studying cellular aspects of hormonal cytotoxicity and related problems.

Appointment will be at the level of scientific officer, with a salary range of \$13,985 to \$14,902. The appointment will be, in the first instance, for a period of 2 years.

Further information may be obtained from: **Dr. A. Nash, Sydney 399-0111, extension 2166.** Applications with curriculum vitae and the names and addresses of three referees should be forwarded to: **The Staff Manager, The Prince of Wales Hospital, P.O. Box 233, Matraville, New South Wales 2036, Australia.** Applications close 21 June 1978.

POSTDOCTORAL POSITIONS IN VISION RESEARCH

The Cullen Eye Institute of Baylor College of Medicine has a major commitment to basic research in the eye. Well-equipped laboratories support research in the broad areas of developmental biology, neurophysiology, biochemistry, ultrastructure, photochemistry, and mechanisms of infection.

Several NRSA Postdoctoral Fellowships are available for study in the following laboratories:

Robert E. Anderson—Retinal Lipid Metabolism, Diabetic Retinopathy

Scott F. Basinger—Molecular Biology of the Retina

C. David B. Bridges—Visual Pigments and Vitamin A

Mary T. Green—Latency in Ocular Herpes Simplex

Joe G. Hollyfield—Developmental and Cellular Biology of the Retina

Dan B. Jones—Mechanisms of Corneal Disease

Frank Kretzer—Retinal Ultrastructure

Dominic Man-Kit Lam—Synaptic Physiology and Chemistry

Gunter K. von Noorden—Experimental Amblyopia

Send letters of inquiry indicating areas of interest to:

**Robert E. Anderson, Ph.D., M.D.
Program Director
Cullen Eye Institute
Baylor College of Medicine
Texas Medical Center
Houston, Texas 77030**

POSTDOCTORAL POSITION available immediately for individual with appropriate background and interest in embryology. In vitro laboratory studies center on interacting embryonic tissues and developing mouse embryos. Send curriculum vitae and three letters of recommendation to: **Professor William E. Koch, Department of Anatomy, 111 Swing Building 217H, University of North Carolina, Chapel Hill, N.C. 27514.** *The University of North Carolina is an Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS. Two positions available for research related to the synthesis and function of proteins secreted by the porcine uterus under the influence of progesterone. Background in one or more of the following areas is desirable: protein separation techniques, in vitro protein synthesis, protein structure and function, and biochemical endocrinology. Salary: \$11,000. Please send curriculum vitae and two letters of reference to: **Dr. R. M. Roberts and Dr. Fuller W. Bazer, Department of Biochemistry, College of Medicine, University of Florida, Gainesville, Florida 32610.**

Postdoctoral Position. Recent Ph.D. interested in: (i) molecular biology of blue-green algae; gene expression, plasmids, metabolism, genetics; and (ii) evolutionary relationships between prokaryotes, eukaryotes, assessed by rRNA sequencing. Experience in molecular biology or blue-green physiology desirable, not essential. Start before December 1978. Salary: \$11,620 first year, \$12,720 second. Write: **W. F. Doolittle, Biochemistry Department, Dalhousie University, Halifax, Canada B3H 4H7.**

THE VETERANS ADMINISTRATION IS OFFERING A BASIC RESEARCH PROGRAM TO STUDY THE ETIOLOGY OF ALCOHOLISM AND TO INVESTIGATE THE BIOCHEMICAL-PHARMACOLOGIC AND CELLULAR BIOLOGIC EFFECTS AND RESPONSES TO ALCOHOL.

THREE YEAR CAREER AWARDS OF SALARY AND SUBSTANTIAL RESEARCH SUPPORT ARE AVAILABLE TO INVESTIGATORS WHOSE BASIC SKILLS CAN BE APPLIED TO RESEARCH IN THE ETIOLOGY OF ALCOHOLISM.

The laboratories will be within the Veterans Administration System.

Interested candidates (M.D. or Ph.D.) with a background in Basic Science should contact the Chairperson of the Search Committee. Information to be supplied to the Search Committee should include (1) Curriculum Vitae (2) two letters of recommendation and (3) a summary of proposed investigation. This proposal, while not to exceed 5 pages, should include enough detail to spell out methodology, aims and experimental design.

**Chairperson
Dr. Erwin Mosbach
Chief, Department Lipid Research
Public Health Research Laboratory
455 1st Avenue
New York, New York 10016**

**Members
Dr. Charles Lieber
Dr. Henry D. Hoberman
Dr. Murray Oratz**

Address administrative inquiries to:

**Dr. Marcus Rothschild (151H)
Medical Research Service
Veterans Administration Central Office
810 Vermont Avenue, N.W.
Washington, D.C. 20420**

Telephone: 202-389-5041

An Equal Opportunity Employer

POSITIONS OPEN

POSTDOCTORAL POSITION. Immediate opening for a Ph.D. physicist to develop clinical instrument for screening cataract using laser light scattering spectroscopy. Duties also include investigations of critical phenomena in protein solutions and gels. Strong background in electronics, optics, and physics is desired. Send résumé and references to: **Professor Toyochi Tanaka, Department of Physics, Massachusetts Institute of Technology, Cambridge, Mass. 02139. Equal Opportunity Employer.**

POSTDOCTORAL POSITION available immediately to work on hemoglobin synthesis. Candidates should have experience in the preparation and assay of elements of the protein biosynthetic apparatus of animal cells. Send sufficiently detailed résumé to permit preliminary evaluation of qualifications and references to: **Dr. David W. E. Smith, Professor of Pathology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, Illinois 60611. An Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION available immediately for a **PHARMACOLOGIST** interested in the anti-inflammatory and antitumor activities of copper complexes. Candidates should have a knowledge of current concepts of inflammation and experience with statistical methods. Send curriculum vitae and three references to: **Dr. John R. J. Sorenson, College of Pharmacy, University of Arkansas for Medical Sciences, 4301 West Markham, Little Rock, Arkansas 72201. The University of Arkansas is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL/RESEARCH ASSOCIATE

To investigate protein transport, IgG receptors, and coated vesicle assembly in oocytes. Salary \$10,000 to \$14,000, based on qualifications. Available immediately.

Dr. Thomas F. Roth
Department of Biological Sciences
University of Maryland Baltimore County
Catonsville, Maryland 21228
Telephone: 301-455-2254

An Affirmative Action Equal Opportunity Employer

SCIENCE AND DEVELOPMENT PROGRAM

A Washington, D.C., scientific institution is seeking candidates for **PROFESSIONAL ASSOCIATE** in the international science, technology, and development area. Responsibilities: direct work of study panels of experts concerned with technology innovation or adaptation for solving selected problems of developing countries. Qualifications: background in engineering or related sciences, master's degree or equivalent, plus 10 years of experience in technology application; broad knowledge and interest in applied technology with particular emphasis on developing country problems; and proven ability to direct studies and to write reports translating technical results into language understandable to nontechnical readers. Submit résumé to: **Box 146, SCIENCE. An Equal Opportunity Employer**

PROFESSOR AND CHAIRMAN—The Department of Medical Care Organization, School of Public Health, has an active teaching (master's and doctoral) and research program, with a current faculty of twelve. The teaching program is developing close links with two related departments, Hospital Administration and Health Planning and Administration. The search committee is seeking an established scholar, who is able to develop and maintain balanced excellence in teaching and research in the field of medical care; and to exercise leadership within the department and among his/her school colleagues. Contact: **Fred Munson, Chairman, Search Committee, School of Public Health, University of Michigan, Ann Arbor, Michigan 48109. A non-discriminatory, Affirmative Action Employer.**

RADIOTHERAPY TECHNOLOGISTS (TWO). The Division of Radiation Oncology, Downstate Medical Center, due to expansion of services, has two positions available. Downstate Medical Center is a referral center treating 12,000 cases a year and we have four megavoltage units, including linear accelerator, simulator, super and ortho voltage equipment fully computerized with a Rad-8 in addition to a 370 IBM computer. The staff consists of six medical physicists, six technologists, five secretaries, two mold technicians, six nurses, nine residents, five full-time attendings, medical physics laboratory, radiobiology laboratory, and instruments laboratory. Salary is excellent, with fringe benefits. To apply, telephone for appointment: **Joseph Bohorquez, M.D., 212-270-1592-3-4. Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH-DEVELOPMENTAL NEUROCHEMISTRY: an immediate position for research on the effects of prenatal exposure to inhalation anesthetic on CNS development. A working knowledge of GLC techniques is preferred but not essential. A strong interest in developmental neurobiology and neurochemistry is required. The minimum starting salary is \$10,000. Please send curriculum vitae and the names of three references to: **Dr. R. C. Wiggins, Department of Neurobiology and Anatomy, The University of Texas Medical School, P.O. Box 20708, Houston, Texas 77025.**

RESEARCH ASSISTANT IN BIOCHEMISTRY

Seeking individual with M.S. or B.S. degree in biochemical discipline and experience in radioimmunoassay and neurochemical methods. The individual will be responsible for setting up, modifying, and carrying out specialized chemical procedures for the assay of cyclic nucleotides, hormones, and neurotransmitters in biological tissues. Starting salary: \$9350 to \$9950. Position to be filled by mid-July. Qualified individuals please send curriculum vitae and three letters of recommendation to: **Director, Neurosciences Research Unit, Department of Psychiatry, University of Vermont, College of Medicine, Burlington, Vermont 05401.**

RESEARCH ASSOCIATE

An opening for a research associate is immediately available in the laboratory of Dr. Robert J. O'Connell to study olfactory physiology in the hamster. The research involves a multidisciplinary approach to the anatomical, behavioral, chemical, and electrophysiological substrates of olfactory communication. Send résumé, statement of research interests, and the names of three references directly to: **Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, Massachusetts 01545.**

An Equal Opportunity/Affirmative Action Employer

The Department of Morphology, University of Geneva Medical School, Geneva, Switzerland, invites applications for a position of **RESEARCH ASSOCIATE** in neuroanatomy. Candidates should be M.D. or Ph.D. with experience of teaching neuroanatomy to medical students and should be able to set up an active neuroanatomy/neurobiology research unit in the department. Ability to teach in French is mandatory. Brut salary starts at SFr.56,000 per annum. Send complete résumé to: **Dr. L. Orci, Chairman, Department of Morphology, Medical School, rue Ecole de Médecine, 1211 Geneva 4, Switzerland.**

RESEARCH INSTRUCTOR

Department of Pathology, University of Alabama in Birmingham. Position is nontenure-track. Applicant should be self-supporting (have own research funds and provide own salary), and will be expected to participate in federally sponsored (NASA) contract research. The research will be in two areas: study of the interaction of lipid vesicles with mammalian cells in culture and applications of electrophoretic separation techniques to model whole-cell systems, that is, murine lymphocytic leukemia and thymoma cells in suspension culture. Ph.D. in cellular physiology or related discipline with postdoctoral experience is required. Applicant should have experience in the following techniques: thin section and freeze-fracture electron microscopy; cell culture techniques; induction of mitotic synchrony and cell cycle analysis; iodination of plasma membrane proteins and SDS-polyacrylamide gel electrophoresis; and complement-mediated cytotoxicity assays.

Send applications to: **Dr. Jere P. Segrest, Department of Pathology, University of Alabama in Birmingham, Birmingham, Alabama 35294. Deadline for applications: 30 April 1978. An Affirmative Action/Equal Opportunity Employer.**

RESEARCH INSTRUCTOR (HALF-TIME)

Salary is dependent upon grant support. Half-time salary is \$9000 per year. Duties are entirely related to cell separation experiments. Candidates must have previous experience in the separation of cells by centrifugation in continuous gradients and must have either a Ph.D. or an M.D.

Write: **Thomas G. Pretlow, II, M.D., Department of Pathology, University of Alabama in Birmingham, Birmingham, Alabama 35294. Deadline for applications: 30 April 1978. An Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

Applications are invited for positions in **REPRODUCTIVE BIOLOGY** as Mellon Foundation Scholars in the Laboratory of Human Reproduction and Reproductive Biology, Harvard Medical School. Mellon Scholars will be considered for a primary faculty appointment up to assistant professor in one of the following departments: anatomy, biological chemistry, physiology, pharmacology, pathology, and obstetrics and gynecology. Applicant must be willing to pursue his/her objectives from a multidisciplinary point of view. Demonstrated commitment and excellence in research and teaching are essential, and 2 years of postdoctoral research experience are desirable. Send complete curriculum vitae including a statement of research interests and names of at least three references to: **Kenneth J. Ryan, M.D., Director, Laboratory of Human Reproduction and Reproductive Biology, Harvard Medical School, 45 Shattuck Street, Boston, Mass. 02115. Closing date for applications is 1 June 1978. An Affirmative Action/Equal Opportunity Employer, M/F.**

RESPIRATION PHYSIOLOGIST

Applications are invited for a permanent tenure-track position at the assistant professor level in the area of respiratory physiology. Individual will teach this area in the veterinary medical curriculum and at the graduate level and will be expected to develop a research program in this area. Although some latitude is possible, the research should supplement current interests of clinical staff in respiratory physiology of the exercising horse and/or dog. Special areas of interest include biomechanics of the airways, airway obstruction, chronic bronchitis, early detection of emphysema, and aerosol therapy.

Candidates should possess the Ph.D. degree with preference for those who also hold the D.V.M. or equivalent degree. Salary will be commensurate with qualifications. This position will be available on 21 August 1978. In order to insure full consideration, applications must be received by 15 May 1978.

Please send curriculum vitae and references to: **Dr. W. C. Wagner, Department of Veterinary Anatomy, Physiology, and Pharmacology, College of Veterinary Medicine, University of Illinois, Urbana, Ill. 61801; telephone: 217-333-2506. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.**

SENIOR ICE PHYSICIST

U.S. Coast Guard R & D Center, Groton, Connecticut. Responsible for the planning and performance of all ice research conducted at the Research and Development Center, including projects in support of Coast Guard operations in polar latitudes and such domestic areas as directed. Work requires in-house laboratory and field research, as well as external cooperation with other governmental agencies, international organizations, and universities. Results of research are used to support Coast Guard missions by providing techniques for determination of ice characteristics and the dynamics of ice movement. Applicants should be familiar with ice field measurement techniques and be conversant with the use of computers and modern methods of remote sensing ice characteristics. Incumbent must be able/willing to perform fieldwork including cruises on icebreakers, for at least 1 month per year. Ph.D. in physics, oceanography, or equivalent required. Salary commensurate with education/experience. Career Civil Service position. Submit SF-171 and current list of publications to: **Civilian Personnel (S), U.S. Coast Guard R & D Center, Groton, Conn. 06340. Applications close 15 June 1978. Equal Opportunity Employer, M/F. U.S. citizenship required.**

UNIVERSITY OF QUEENSLAND SENIOR LECTURER IN ANATOMY

Applications are invited from dental or medical graduates with teaching experience in gross anatomy. The successful applicant will be required to teach a regional anatomy course to dental students. Preference may be given to graduates with research interests in oral biology. Preclinical loading of \$2,500 is payable. Quote Reference No. 10678, 5 June 1978.

Salary: senior lecturer—A\$20,104 to A\$23,432 per annum, plus clinical loading.

Other benefits: superannuation, housing assistance, study leave, and travelling and removal expenses.

Additional information and application forms are obtainable from: **The Staff Officer, University of Queensland, St. Lucia, 4067, Queensland, Australia.**

POSITIONS OPEN

RESEARCH INSTRUCTOR IN BIOCHEMISTRY

The Department of Biochemistry of Vanderbilt University will fill a faculty opening on or before 1 January 1979, for a research instructor in biochemistry with training and experience in isolation and structural studies of glycoproteins. This is a non-tenure-track faculty position. The individual holding this position will, however, be given full consideration for appropriate tenure-track faculty positions as they occur. The position involves at least two-thirds time collaborative research on structure and function of membrane proteins. One-third time can be free for independent research, subject to independent grant support. Teaching of graduate and medical students is not required but opportunities are available on a limited scale if desired. At least 2 years of postdoctoral research experience is required.

Applicants should send curriculum vitae, bibliography, and the names of three references to: **Dr. L. W. Cunningham, Department of Biochemistry, Vanderbilt University, Nashville, Tennessee 37232.**

Vanderbilt University is an Affirmative Action/Equal Opportunity Employer.

The University of California, Irvine, Department of Pathology, is recruiting for a **VETERINARY PATHOLOGIST** with a D.V.M. and a Ph.D. in pathology. Faculty appointment at professor level. Required: administrative experience in a Department of Pathology in a school of veterinary medicine; experience in the direction and organization of research programs; experience in teaching of comparative pathology and the practice of comparative pathology related to vivarium and zoos. Must be interested in establishing a course at the graduate level in comparative pathology. *All qualified candidates welcome; minorities and women encouraged to apply.* Send curriculum vitae and references to: **E. R. Arquilla, M.D. Ph.D., Department of Pathology, University of California, Irvine, Medical Center, 101 City Drive South, Orange, California 92668** by 31 May 1978.

POSITIONS OPEN

TISSUE TYPING TECHNOLOGIST—Supervisory technologist position in Transplantation Immunology Laboratory in Southeast. Responsibilities include HLA typing, antibody screening, mixed lymphocyte culture, and other immunological testing for lymphocyte function. Must be able to develop new procedures. Interested parties please reply with curriculum vitae and salary requirements to: **Personnel Department, University of Mississippi Medical Center, 2500 North State Street, Jackson, Mississippi 39216.** *An Equal Opportunity Employer, M/F.*

The Food Safety and Quality Service of the U.S. Department of Agriculture (USDA) has an interdisciplinary position (**TOXICOLOGIST**), grade GS-13 or -14, (salary \$26,002 to \$39,975) on the Residue and Planning Staff. The incumbent serves as senior staff officer and is the expert and technical adviser on residue matters as they relate to toxicology.

Qualifications—Candidates must have one of the following: a D.V.M.; or a bachelor's (or higher) degree in one of the physical or life sciences, or engineering or a combination of education and experience that has provided technical and professional knowledge equivalent to that provided by the full 4-year college course; or a bachelor's (or higher) degree with major study in an appropriate discipline or field of the biological medical, veterinary, or physical sciences, or in pharmacy. This total course of study must have included at least 30 semester hours in chemistry and physiology and 12 semester hours in pharmacology; and a minimum of 3 years of professional experience in chemistry, veterinary medicine, or pharmacology. *USDA is an Equal Opportunity Employer.* Submit an SF-171, Personal Qualifications Statement, by 30 April 1978, to: **Christine Robinson, USDA, FSQS, Personnel Division, C6, Room 3438-S, 14th Street and Independence Avenue, SW, Washington, D.C. 20250; telephone: 202-447-6617.**

Prior to completion of SF-171 applicants should request from Mrs. Robinson a copy of the selective criteria which will be used to evaluate applicants' experience, training, and education in relation to this position.

POSITIONS OPEN

VIVARIUM DIRECTOR

Applications are invited for the position of **vivarium director** for the newly developed Northeastern Ohio Universities College of Medicine (NEOUCOM) operating in concert with The University of Akron, Kent State University, and Youngstown State University.

Vivarium director will assume responsibility for care of all animals maintained at the basic medical sciences facility of the college and provide quality care and services in support of research or teaching activities that require live animals.

Qualifications: D.V.M. degree from accredited college of veterinary medicine and license to practice in state of Ohio required; Ph.D. degree, preferably in area of laboratory animal science from institution with recognized graduate program desired; four or more years of experience in laboratory animal medicine; and administrative capacity to recommend appropriate institutional policies in laboratory animal medicine for NEOUCOM.

Send curriculum vitae no later than 27 May to: **Charles V. Blair, Vice Provost for Administration, NEOUCOM, Rootstown, Ohio 44272.** *Equal Opportunity/Affirmative Action Employer.*

COURSES

THE SHOALS MARINE LABORATORY (SML) SUMMER COURSES, 1978

SML, operated cooperatively by Cornell University and the University of New Hampshire on Appledore Island in the Gulf of Maine, will offer the following summer courses: **Introduction to Marine Science**, 1 to 28 June or 25 July to 21 August; **Anatomy of the Gull**, 29 June to 5 July; **Field Phycology**, 29 June to 19 July; **Introductory Marine Science for Teachers**, 29 June to 5 July or 6 to 12 July or 13 to 19 July; **Underwater Research**, 6 to 12 July; **Research in Biology**, dates arranged. For more information and applications write: **Shoals Marine Laboratory, 204 Plant Science Building, Cornell University, Ithaca, N.Y. 14853.**

CIBA GEIGY — INDIA

Research Director Designate

Pharmaceuticals

The India Research Centre of CIBA GEIGY, which is located on an attractive, self-contained campus in the Bombay area, has a highly competent professional staff in chemistry, biology, tropical medicine, biochemistry and toxicology.

A Deputy Research Director is to be appointed at any time before 1979, and it is intended that he will succeed as Research Director within three years.

Basic requirements are:—

- Indian nationality
- M.D. or Ph.D. microbiology, chemotherapy, parasitology or immunology (pharmacologists with background and special interest in these areas also will be considered)
- Age about 40 to 46

Experience should include:—

- Background as a group leader in multi-disciplinary projects and in administrative work

- Graduate or post-graduate training in North America, Europe or Australia
- Evidence of scientific standing (publications, international conferences, etc.)

Candidates should have a special interest in infectious and tropical diseases (parasitic, bacterial, viral), immunology and tropical medicine. Some background in pre-clinical drug evaluation and clinical work is desirable.

Salary is negotiable, depending on experience. There are attractive fringe benefits including car, driver, and excellent housing accommodation on the campus.

Please write with brief details, saying how you meet requirements for this position in our Client's organisation to: **A. E. Bull, INTEX Executives (UK) Limited, Chancery House, 53/64 Chancery Lane, London WC2A 1QU.** Telephone: 01-831 6925.

INTERNATIONAL EXECUTIVES

INTEX

COURSES

CATALINA MARINE SCIENCE CENTER

We are pleased to announce our **1978 Summer Program** of marine biology courses at Santa Catalina Island:

Ecology of the Rocky Intertidal (19 June to 22 July). Steven Murray, instructor.

Ecology of Nearshore Fishes (19 June to 22 July). Robert J. Lavenberg, instructor.

Advanced Methods in Underwater Research (31 July to 2 September). Robert Given and Andrew Pilmans, instructors.

Neurobiology (31 July to 2 September). Alvin Siger and Charles Lent, instructors.

During the academic year formal courses are also available. Research opportunities and conference facilities are available throughout the year.

For additional information, write: **Robert Given, Catalina Marine Science Center, P.O. Box 398, Avalon, Calif. 90704** or telephone: 213-741-6792.

ELECTRON MICROSCOPY. For those desiring to use TEM in biological research, the course will provide practical training in preparation of biological specimens, use and maintenance of Zeiss 9S-2 EM, darkroom procedures, and micrograph interpretation. Certificate or credit awarded. Tuition: \$425; 12 to 30 June. For information and brochure, contact: **Dan Scheirer, Department of Biology, Northeastern University, Boston, Mass. 02115; telephone: 617-437-2260.**

GRADUATE STUDY

GRADUATE STUDIES IN PATHOLOGY NORTHWESTERN UNIVERSITY

A limited number of positions are being offered in graduate education toward the Ph.D. degree in experimental pathology. Research areas include biochemistry of lipoprotein disorders, hemoglobin biosynthesis, cardiovascular and renal pathophysiology, neuropathology, chemical carcinogenesis, environmental pathology, and clinical chemistry. Stipends are available beginning with the 1978-1979 academic year. *Equal Opportunity/Affirmative Action Employer.* Contact: **Graduate Committee, Department of Pathology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, Illinois 60611.**

GRADUATE STUDIES IN BIOCHEMISTRY AND BIOPHYSICS leading to M.S. and Ph.D. degrees. Research interests include cell metabolism; protein turnover; trace mineral metabolism; lipid and nucleic acid research; analysis of macromolecular structures using X-ray crystallography, computer graphics, mass spectrometry, and protein sequencing; nitrogen fixation; neurobiochemistry; human nutrition and drug design. Limited number of research and teaching assistantships available. Apply now to: **Dr. Martyn Gunn, Department of Biochemistry and Biophysics, Texas A & M University, College Station, Texas 77843.**

TRAINING PROGRAM

ANATOMICAL SCIENCES. Predoctoral training. Graduate programs leading to the Ph.D. degree are available in the areas of cell, developmental, and reproductive biology, neurosciences, molecular evolution, and others. A limited number of teaching and research assistantships are available for qualified applicants. Beginning stipends range up to \$5,100 plus tuition. In exceptional cases a housing allowance may be available. For further information write: **Graduate Officer, Department of Anatomy, Wayne State University School of Medicine, 540 East Canfield, Detroit, Michigan 48201.**

FELLOWSHIPS

POSTDOCTORAL POSITION available 1 July 1978. Ph.D. trained in cell biology, endocrinology, or biochemistry to join a multidisciplinary research on mammary carcinoma. Fellowship is supported by a grant from the American Cancer Society. Send résumé with three references to: **Dr. Michael Tseng, Department of Anatomy, University of Louisville School of Medicine, P.O. Box 35260, Louisville, Kentucky 40232.** The University of Louisville is an *Equal Opportunity/Affirmative Action Employer.*

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP. Position available 1 July 1978 in the laboratories of Dr. B. Furie for study of the biochemistry of the vitamin K-dependent blood coagulation proteins using physical, immunochemical, and biochemical techniques. Salary based on NIH stipends. Applicants with recent Ph.D. or M.D. should have experience in peptide chemistry, protein chemistry, enzymology, or physical biochemistry. Send curriculum vitae and three references to: **Linda C. Smith, Tufts New England Medical Center, Tufts University School of Medicine, 171 Harrison Avenue, Boston, Mass. 02111.** An *Equal Opportunity Employer, M/F.*

NIH POSTDOCTORAL FELLOWSHIP—IMMUNOLOGY—IMMUNOCHEMISTRY. Research areas include: mechanisms of lymphocyte homing; lymphocyte activation, immunochemistry of cellular antigens; and tumor immunology. Send curriculum vitae and names and addresses of two references to: **Stephen I. Morse, M.D., Professor and Chairman, Department of Microbiology and Immunology, State University of New York, Downstate Medical Center, Box 44, 450 Clarkson Avenue, Brooklyn, New York 11203.** *Equal Opportunity/Affirmative Action Employer.*

Postdoctoral NIH TRAINING FELLOWSHIP in neuroendocrinology. available summer 1978. Studies on ACTH and related peptides (pituitary and brain). Eligibility limited to U.S. citizens and permanent residents. Background in immunoassay and peptide chemistry desirable. Send résumé, transcript, and three letters of reference to: **Dr. Dorothy T. Krieger, Mt. Sinai School of Medicine, 100th Street and Fifth Avenue, New York, New York 10029.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOWSHIPS IN NEUROBIOLOGY. Open to holders of Ph.D., M.D., D.Sc. Stipends (depending on experience): \$11,000 to \$16,000. Available preceptors: Doctors Wayne Albers, Gilbert Ashwell, Roscoe Brady, Harold Gainer, Helen Hess, William Jakob, Philip Nelson, Marshall Nirenberg, Sean O'Reilly, Thomas Reese, and Henry DeF. Webster. Send curriculum vitae and names of three referees to: **Dr. Sean O'Reilly, George Washington University Medical Center, 2150 Pennsylvania Avenue, NW, Washington, D.C. 20037**

POSTDOCTORAL FELLOWSHIP IN BIOCHEMISTRY available 1 November 1978, to work in the area of structure and function of hormonally controlled messenger RNA. The beginning salary is \$14,000. Background in nucleic acid biochemistry is desirable. Interested persons should send curriculum vitae and two letters of recommendation to: **Robert E. Rhoads, Department of Biochemistry, University of Kentucky, Medical Sciences Building, Lexington, Kentucky 40506.** An *Equal Opportunity/Affirmative Action Employer.*

PREDOCTORAL AND POSTDOCTORAL TRAINING IN NEUROBIOLOGY AND MEMBRANE BIOPHYSICS

The Department of Physiology and Biophysics, University of Miami, School of Medicine, emphasizes cellular and molecular approaches to physiological problems and offers training in neurobiology, developmental neurobiology, and membrane biophysics. Fellowships, traineeships, and assistantships are available. For details write: **Dr. David Wilson, Department of Physiology and Biophysics, University of Miami, School of Medicine, Box 520875, Miami, Fla. 33152.** An *Equal Opportunity/Affirmative Action Employer.*

TRAINEESHIPS

POSTDOCTORAL POSITIONS—NERVOUS SYSTEM GENERATION AND REGENERATION. Applications are invited from interested candidates for postdoctoral traineeships in a multidisciplinary research program concerned with neural plasticity. The disciplines represented in the program include electron microscopy, immunocytochemistry, neurophysiology, neurochemistry, and behavioral testing. The traineeships are for 2 years beginning 1 July 1978. Send résumé, statement of research interests, and three references to: **Dr. Leonard L. Ross, Department of Anatomy, Medical College of Pennsylvania, 3300 Henry Avenue, Philadelphia, Pa. 19129.** An *Equal Opportunity/Affirmative Action Employer.*

MARKET PLACE

AUTHORS WANTED BY NEW YORK PUBLISHER

Your book can be published, promoted, distributed by a reliable company on a subsidized basis. Fiction, non-fiction, poetry, scholarly, scientific and even controversial manuscripts welcomed. For free booklet, write: **Vantage Press, Dept. SC, 516 W. 34 St., New York 10001.**

RESEARCH TELEMETERS

Newly developed, dual-channel (two-temperature), miniature implantable telemeters. Units particularly appropriate for studying tumor and host temperatures in small animals. Suitable for chronic studies. Form-factor, location of sensor and suture points may be varied. Operation lifetime: 6 months or more; weight: ca. 7g; volume: ca. 7cc. Modest cost.

For further information, write or call: **R. M. Goodman, Principal Scientist, Physical and Life Sciences Department, The Franklin Institute Research Laboratories, 20th and Race Streets, Philadelphia, Pa. 19103 (215/448-1236)**



Microprobe THERMOMETERS

We make 14 thermometers, with digital or meter readout. All read in 2 secs, are extremely easy to use. Simply apply probe — read temperature.

Unbreakable probes are steel sheathed including World's Smallest Microprobe, 0.01" dia.

Models:
BAT-4 BIOLOGICAL
BAT-5 CRYOGENIC
BAT-7 INDUSTRIAL
BAT-8 DIGITAL °C or °F
TH-2 CLINICAL

BAILEY INSTRUMENTS INC.
Saddle Brook, N.J. 07662 • (201) 845-7252


Circle No. 31 on Readers' Service Card



Medwire Corp.
stocks a wide variety of
TEFLON* COATED
Platinum alloys, stainless steel, silver, multistrand and single strand available for prompt shipment. Write for descriptive brochure and price lists.

Medwire Corp.
Affiliate of Sigmund Cohn Corp.
122 So. Columbus Ave.
Mt. Vernon, N.Y. 10553
914-664-5300
*Reg. T.M. E. I. Dupont

Circle No. 136 on Readers' Service Card

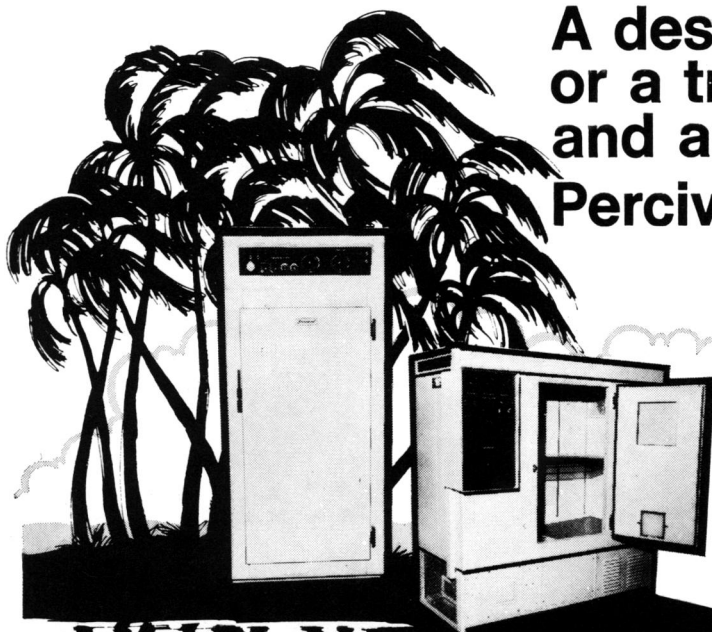


PO₂ MEASUREMENTS

- Microelectrodes, 2-µm tip diameter, for intracellular studies. Reliable in moving solutions.
- 22-gauge Needle Electrodes for extracellular PO₂.
- O₂ Meter, Calibration Cell, Other Accessories.

Call 313/769-1900 or write:
TRANSIDYNE GENERAL CORPORATION
903 Airport Dr. • Ann Arbor, MI 48106

Circle No. 222 on Readers' Service Card



A desert environment or a tropical rain forest, and anywhere in between... Percival is versatile!

You may not need a desert environment in your lab but Percival has the experience, the know-how and the product line to serve your specific needs. Whether it's a simple biological incubator or a highly sophisticated plant growth chamber, Percival can supply it for you. A chamber can easily be tailored to your requirements. We will prepare a recommendation to fit your needs, whether they be table models or giant walk-ins. Consider your requirements carefully and then contact us. Write today for more information and the new complete Percival catalog.

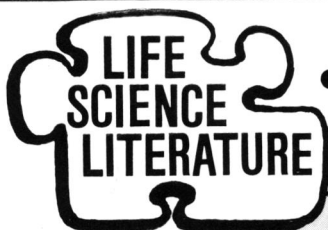
Percival

PERCIVAL MANUFACTURING COMPANY

P.O. Box 249 Dept. SC-4 Boone, Iowa 50036

... the name to remember for versatile Biological Incubators, Dew Chambers and Plant Growth Chambers.

Circle No. 261 on Readers' Service Card



...all the pieces from BIOSIS



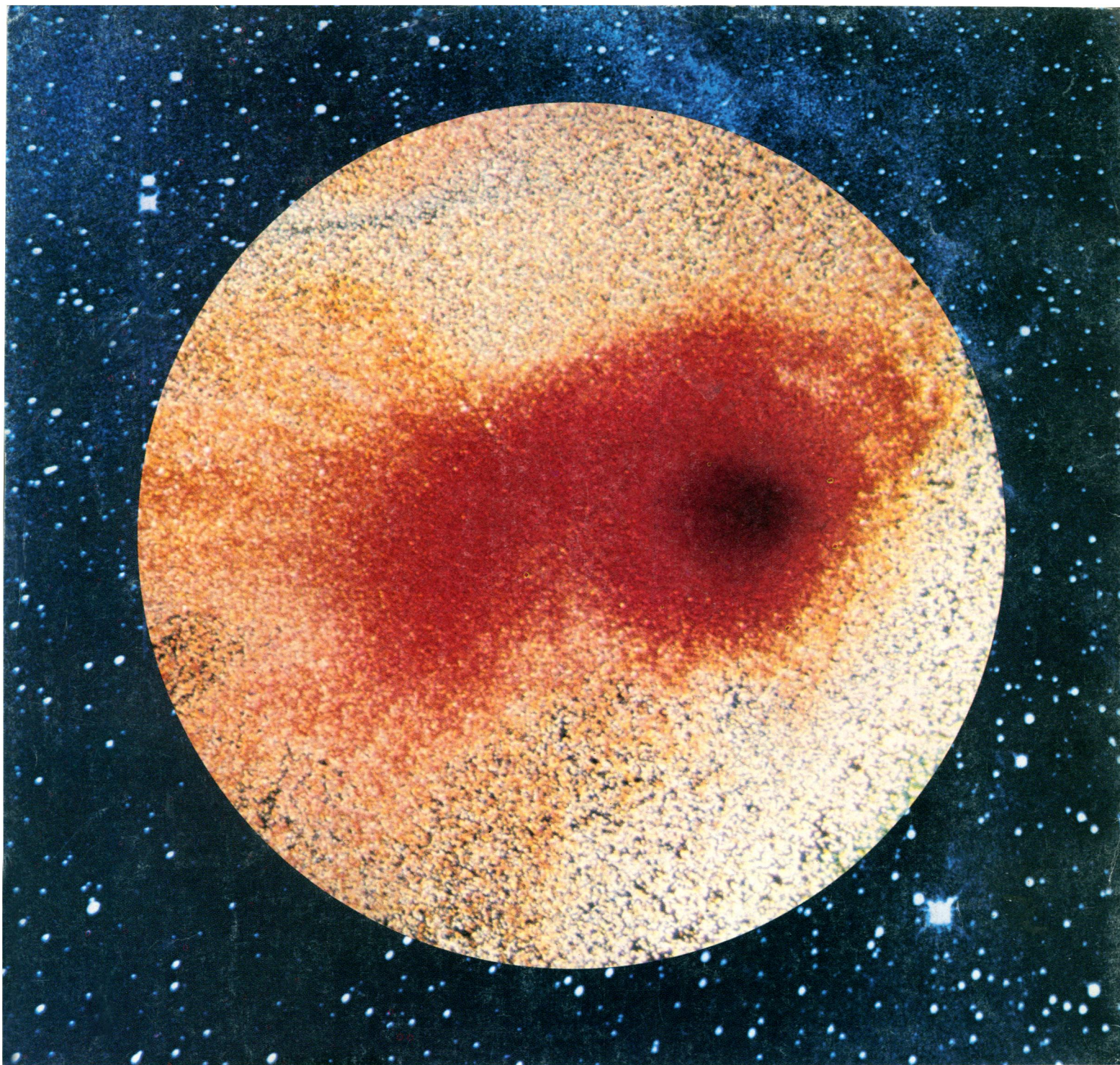
TYPE OF LITERATURE	BIOLOGICAL ABSTRACTS®	BIORESEARCH INDEX®
Annual Reports		•
Bibliographies		•
Book Chapters		•
Book Reviews (New Books)	•	•
Data Reports		•
Letters	•	•
Nomenclature Rules		•
Notes	•	•
Review Journals		•
Research Journals (Serials, including Original Russian Language Journals)	•	•
Russian Language Journals (English Translation)		•
Symposium Abstracts		•
Symposium Papers		•

In 1978, **Biological Abstracts®** will provide 149,000 abstracts;
BioResearch Index® will provide 113,000 citations.

For up-to-the-minute reports in all life science research areas,
consult BOTH **Biological Abstracts®** and **BioResearch Index®**.

For details, write BIOSIS Marketing Bureau, 2100 Arch Street, Philadelphia, Pa. 19103 U.S.A.

Circle No. 143 on Readers' Service Card



Photomicrograph by John Delly, McCrone Research Institute

FOR THE CREATIVE CHEMIST:

EASTMAN ORGANIC DYES, STAINS, AND INDICATORS.

What might be a close-up of a lunar landscape is a photomicrograph of EASTMAN Organic Chemical 1757, Acridine Orange, taken by John Delly of McCrone Research Institute. It demonstrates one small, creative aspect of chemistry.

For practical, everyday applications in your lab, start with one of our many organics and

add your imagination. Your dealer in EASTMAN Organic Chemicals offers many pH, absorption, chelometric, colorimetric, and fluorometric indicators; biological dyes and stains; buffers, cyanine dyes, and spectral sensitizers; organic laser dyes; and phthalocyanine-type compounds. Plus Eastman reagents for electrophoresis, liquid scintillation counting, and protein

chemistry. See your dealer for fast, reliable service, and a free reminder that chemistry is creative.

For complete details on dyes, stains, and indicators, send for free technical literature, JJ-196 and JJ-281. Write Eastman Organic Chemicals, Eastman Kodak Company, Dept. 412L, Rochester, N.Y. 14650.



Take a close look at EASTMAN Organic Chemicals. Dealers handling EASTMAN Organic Chemicals: American Scientific & Chemical, Bio Clinical Laboratories, Brand-Nu Laboratories, Inc., Bryant Laboratory, Inc., Custom Chemical Laboratories, Inc., Fisher Scientific, GAC Laboratories, Inc., Labproducts, Inc., Midland Scientific, Inc., North-Strong, Inc., Preiser Scientific, Sargent-Welch, Scientific Products, Scientific & Industrial Sales & Service, Inc., VWR Scientific Inc., Ward's Natural Science Establishment, Inc.