## Personnel Placement

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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.

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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**

Biologist (Microbiology): M.T., B.S., Florida Medical Technology License. Broad interests and experience: bacteria, culture, therapy, serology, immunology, clinical chemistry, hematology. Seeks supervisory position in clinical laboratory or position as an assistant in applied/basic research/development program in United States or abroad. Available immediately. Résumé on request. Box 306, SCIENCE. X

Botanist-Cytogeneticist. Ph.D. (Cornell). Long-time college teacher: cytogenetics, histotechnique, plant breeding, tissue culture, general botany; research publications. Seeking research/curatorial position. Will consider term appointment. Box 307, SCI-

Instrument Designer/Maker, with 10 years of experience in collaboration with biologists and physicists in the custom designing and making of scientific apparatus. Seeking career growth position in an innovative environment. Box 302, SCIENCE. X

Neurologist/Neuroscientist. Board-certified, 1977. Ph.D. anticipated 1979. Seeks clinical academic setting with research position. Experience in developmental neurochemistry, spinocerebellar degenerations, (Na<sup>+</sup> + K<sup>+</sup>)-ATPase. Publications. Recommendations. Box 305, SCIENCE. X

Pharmacologist/Physiologist, Ph.D., M.B.A. Broad interests. General management business degree. Experience in teaching, electronic design and troubleshooting, computer programming, radiation biology, myoneural research, cardiovascular research. Seeks research/administrative/teaching or combination position. Location unimportant. Box 304, SCIENCE.

Scientist/Lawyer. Ph.D. (biochemistry, 1974); J.D. (June 1979). Seeks any type of legal position where scientific expertise is useful. Postdoctoral experience in cancer research. Publications (scientific and legal). Box 300, SCIENCE.

Veterinary Parasitologist, Ph.D. Ten years of university experience in teaching and research; extensive experience in biochemical, immunological, and chemotherapeutical aspects of parasitic diseases; excellent publications. Looking for research, industrial, or teaching position. Contact: Dr. A. Dey, Suesseroder Strasse 47, 3000 Hannover 73, West Germany.

#### **POSITIONS OPEN**

#### ANATOMY FACULTY POSITIONS

Applications are invited for two tenure-track faculty Applications are invited for two tenure-track faculty positions, one in histology/embryology and one in neuroscience. Preference will be given to persons capable of maintaining an active research program in reproductive biology, neuroendocrinology related to reproductive biology, or in experimental diabetes mellitus. Send curriculum vitae and the names of three references to: Carl R. Morgan, Ph.D., Professor and Chairman, Department of Anatomy, East Carolina University School of Medicine, Greenville, North Carolina 27834.

An Equal Opportunity/Affirmative Action Employer

ANATOMIST/PHYSIOLOGIST. Position available as early as 1 February 1979 for an assistant professor qualified to teach human gross anatomy. Postdualities to teach numan gross anatomy. Post-doctoral experience is desirable. Research area is open in the fields of anatomy and physiology. Active research and teaching in the appointee's specialty are required. Send curriculum vitae, three letters of recommendation, and reprints to: Steven D. Skopik, Ph.D., Physiology Section, School of Life and Health Sciences, University of Delaware, Newark, Del. 19711. Closing date: 1 November 1978. The University of Delaware is an Equal Opportunity/Affirmative Action Employer.

Coastal and Oceanographic Engineering Department at the University of Florida invites applications for an ASSISTANT PROFESSOR position. Desired areas of expertise are ocean wave mechanics, wave spectra, and coastal zone dynamics. Ph.D. in related field required. Inquiries and résumés should be sent to: Dr. D. Max Sheppard, Acting Chairman, Coastal and Oceanographic Engineering Department, Univer-sity of Florida, Gainesville, Florida 32611.

#### UNIVERSITY OF ILLINOIS, CHICAGO

THE DEPARTMENT OF BIOLOGICAL SCIENCES invites applications for four positions at the rank of assistant professor for September 1979. Preference will be given to candidates with postdoctoral experience who have demonstrated outstanding potential for independent research in: (i) immunobiology, (ii) microbial physiology, (iii) molecular evolution, and (iv) plant ecology. The applicants selected will be expected to teach undergraduate and graduate courses in their general fields and to direct M.S. and Ph.D. candidates.

Applications, including curriculum vitae, reprints, a Applications, including curriculum vitae, reprints, a statement of research plans, and three letters of reference, should be sent to: Dr. S. K. Shapiro, Head, Department of Biological Sciences, University of Illinois, Box 4348, Chicago, Illinois 60680. Closing date: 20 October 1978. The University of Illinois is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT/ASSOCIATE PROFESSOR with teaching and research interest in psychological acoustics to assume academic responsibilities as a acoustics to assume academic responsibilities as a member of the faculty of a university center department of hearing and speech dependent on qualifications. Starting date open. Send curriculum vitae and three letters of reference to: Gerald N. McCall, Chairman, Department of Hearing and Speech Sciences, University of Maryland, College Park, Md. 20742. An Equal Opportunity/Affirmative Action Employer. Women and minority applicants are especially encouraged to apply.

Position for ASSISTANT PROFESSOR available in the genetics laboratory of the Wistar Institute of Anatomy and Biology in Philadelphia. Research in somatic cell genetics, molecular genetics, cyto-genetics, and cell genetics. Experience in chromo-some banding techniques required. Send curriculum vitae, bibliography, statement of research interests and plans, and three letters of reference to:

The Wistar Institute 36th and Spruce Streets Philadelphia, Pa. 19104

BIOCHEMIST, with Ph.D. from American university, for assistant professorship to teach medical and graduate students. Applicant must be able to use the Korean language with fluency. Applications must include curriculum vitae and names of references.

Dr. Yoon Soo Kim, Chairman

Department of Biochemistry

Yonsei University College of Medicine

International P.O. Box 71

Seoul, Korea

#### **POSITIONS OPEN**

#### ASSISTANT, ASSOCIATE **PROFESSORS**

Department of Physiology with active program in cell and membrane biology and biophysics has two openings for individuals committed to excellence in research and teaching. Applications should include curriculum vitae, letter, and references addressed to: Dr. Richard Berlin, Head, Department of Physiology, University of Connecticut, Health Center, Farmington, Conn. 06032

An Equal Opportunity Employer, M/F

ASSISTANT PROFESSOR AND DIRECTOR OF ELECTRON MICROSCOPY CENTER (anticipated). School of Veterinary Medicine, Ph.D. required in biological science or medically related field with in biological science or medically related field with emphasis on electron microscopy. Experience and working knowledge of transmission and scanning electron microscopy. Duties include supervision of electron microscopy center, research, and teaching. Incumbent will hold fiscal year academic position in appropriate department. Curriculum vitae and letters sent from three referees to: Dr. M. Pat Crawford, Chairman, Search Committee, Department of Veterinary Physiology, Pharmacology and Toxicology, School of Veterinary Medicine, Louisiana State University, Baton Rouge, Louisiana 70803.

Affirmative Action|Equal Educational and Employ-

Affirmative Action/Equal Educational and Employment Opportunity Employer.

### DEPARTMENT OF CHEMISTRY UNIVERSITY OF CALIFORNIA, BERKELEY

Applications are invited for several anticipated Applications are invited for several anticipated positions at the level of assistant professor of chemistry, beginning fall 1979. We are interested in outstanding candidates, with exceptional promise in teaching and research, whose interests lie in any area of modern chemistry. Particular emphasis for one of these positions will be placed on candidates in physical chemistry. physical chemistry.

Candidates should submit curriculum vitae (in-Candidates should submit curriculum vitae (including a list of publications and a summary of their teaching and research objectives), and request three letters of reference, all to be sent to: Chairman, Department of Chemistry, University of California, Berkeley, Calif. 94720. Deadline for receipt of applications is 1 December 1978. The University of California, and Affirmation from Employee. fornia is an Affirmative Action Employer.

ASSISTANT PROFESSOR OF NEUROLOGY. A research-line position is available in the Department of Neurology, Stanford University School of Medicine, for a Ph.D. neuroscientist with postdoctoral experience in mammalian neuroanatomy and neurophysience in mammalian neuroanatomy and neurophysiology, to join an on-going research program in the pathophysiology of CNS axons. Experience with mammalian intra- and extracellular and axonal recordings, field potential studies, and intracellular single cell marking techniques is essential. Please send curriculum vitae and names of three referees to: David A. Prince, M.D., Chairman, Department of Neurology, Stanford University School of Medicine, Stanford, Calif. 94305. Stanford University is an Equal Opportunity Employer and welcomes nominations of women and minority group members and applications from them. applications from them.

## ASSISTANT PROFESSOR OF PHYSIOLOGICAL CHEMISTRY University of Wisconsin-Madison

Two faculty positions at the level of assistant professor will be available on or after 1 July 1979 and 1 January 1980 for persons with strong biochemical research and teaching interests. Members of this desearch and teaching interests. Members of this department have active research programs and teach graduate, medical, and other health science students. Applicants should submit curriculum vitae citing teaching and funding experience, a complete bibliography, letters of reference from three persons knowledgeable of the candidates research or teaching abilities, and a brief statement of future research interests. These materials should be received by Dr. James E. Dahlberg, Chairman of Research Committee, 589 Medical Sciences Building, University of Wisconsin Medical Center, Madison, Wis. 53706 not later than 1 November 1978. The University of Wisconsin School of Medicine is an Equal Opportunity consin School of Medicine is an Equal Opportunity

The Department of Microbiology, School of Medicine, University of South Dakota, invites applications from qualified individuals for a position as ASSISTANT PROFESSOR OF IMMUNOLOGY. Candidates must possess a Ph.D. degree, have completed postdoctoral training, and possess an interest in teaching medical, graduate, and allied health students. Development of an independent imaginative research program is imperative.

Interested individuals should submit curriculum vitae and names of three references to: Paul F. Smith, Ph.D., Professor and Chairman, Department of Microbiology, School of Medicine, University of South Dakota, Vermillion, South Dakota 57069. An Equal Opportunity/Affirmative Action Employer. University of South Dakota, invites appli-

The Department of Microbiology, School of Medicine, University of South Dakota, invites applications from qualified individuals for a position as ASSISTANT PROFESSOR OF MICROBIAL GE-ASSISTANT PROFESSOR OF MICROBIAL GE-NETICS. Candidates must possess a Ph. D. degree, have completed postdoctoral training, and possess an interest in teaching medical, graduate, and allied health students. Development of an independent imaginative research program is imperative. Interested individuals should submit curriculum vitae and pages of three references to Poul F.

vitae and names of three references to: Paul F. Smith, Ph.D., Professor and Chairman, Department of Microbiology, School of Medicine, University of South Dakota, Vermillion, South Dakota 57069. An Equal Opportunity/Affirmative Action Employer.

#### ASSISTANT PROFESSOR-NEUROPHYSIOLOGY

The Department of Anatomy at Wayne State University School of Medicine invites applications for a tenure-track position at the assistant professorial level. The highly qualified individual should have in-terest in central nervous system neurophysiology combined with neuroanatomical and/or neurochemical approaches. Excellent facilities and support are available. Teaching responsibilities will be in medical student gross anatomy and neuroanatomy and graduate student neuroscience courses. Applicants should send curriculum vitae, brief summary of resarch interests, and the names and addresses of three references who may be contacted to: Thomas V. Getchell, Ph.D., Morin Memorial Laboratory, De-partment of Anatomy, Wayne State University School of Medicine, 540 East Canfield Avenue, Detroit, Michigan 48201.

#### ASSISTANT PROFESSOR, PHYSIOLOGY

The Department of Physiological Sciences in the School of Veterinary Medicine at the University of California at Davis, invites applications from qualified individuals for a position at the level of assistant professor in the field of systemic physiology. Preference will be given to individuals with areas of speence will be given to individuals with areas of specialization encompassing either gastrointestinal or enal systems. Applicants must have Ph.D. in physiology or related fields; special consideration will be given to applicants who also have D.V.M. degrees. Primary responsibilities will be lecture and laboratory instruction for students in the D.V.M. curriculum, both in the areas of specialization and general aspects of systemic physiology. There will also be opportunity to instruct graduate students in formal courses as well as in individual and research areas. The development of a creative and productive research program is a fundamental and indispensable requirement of the position. Send curriculum vitae. requirement of the position. Send curriculum vitae, a list of publications, and names of three references before I November 1978, to: Dr. S. N. Giri, Search Committee Chair, Department of Physiological Sciences, University of California, Dayis, Calif. 95616. University of California is an Equal Opportunity/Affirmative Action Employer. Women, minorities, and handicapped persons are encouraged to apply and to identify themselves as such on their applications.

CHAIRPERSON. Seton Hall University invites applications for the position of chairperson, Department of Chemistry, to be filled in July 1979. Candidates should combine a record of scholarship with didates should combine a record of scholarship with a history of extramural contract or grant support, and should have demonstrated leadership in development of educational and research programs. Research interests may be in any area of chemistry. The department has strong programs at all levels through the doctorate, and maintains close ties with the large New Jersey industrial community. Applications, including a list of at least three references, should be sent to: Chairperson, Search Committee, Chemistry Department, Seton Hall University, South Orange, N.J. 07079. An Equal Opportunity/Affirmative Action Employer.

#### **POSITIONS OPEN**

ASSISTANT RESEARCH SCIENTIST/PHARMA-COLOGY—Postdoctoral fellow with background in ll biology and/or biochemistry for the study of cellular differentiation, intermediary metabolism. Experience in tissue culture and/or high pressure liquid chromatography desirable. Send curriculum vitae and references to: M. Kerans, Personnel Department, New York University Medical Center, 568 First Avenue, New York, N.Y. 10016. An Equal Opportunity/Affirmative Action Employer, M/F.

#### HARVARD UNIVERSITY

The Kennedy School of Government invites appli-The Kennedy School of Government invites applications for the position of ASSOCIATE PROFESSOR OF PUBLIC POLICY in the field of international security and arms control. The holder of this position will share a major responsibility for a coordinated program that includes research, teaching, and conferences, and must have shown an active and continuing interest in international security and arms control. Women and members of minority groups are encouraged to apply. Send résumé, list of references, and list of publications to:

E. M. Stokey, Secretary John Fitzgerald Kennedy School of Government Harvard University Cambridge, Massachusetts 02138

An Affirmative Action/Equal Opportunity Employer

#### BIOCHEMIST—MOLECULAR BIOLOGIST

Anticipated faculty position at the University of California, Santa Barbara, Department of Biological Sciences, Section of Biochemistry Molecular Biology. Effective 1 July 1979. Applications are sought from biochemists whose research interests lie in the use of a combined genetic and biochemical approach the of a combined generic and obschemical approach
for the study of eukaryotic systems. The applicant
will be expected to contribute to our general courses
in biochemistry and genetics. Rank and salary depend on qualifications and experience.

Applications with curriculum vitae, list of pub-

lications, names of references, and summary of re-search interests should be sent to: Chairman, Desearch interests should be sent to: Chairman, Department of Biological Sciences, University of California, Santa Barbara, California 93106. Letters of reference should not be sent until requested. Applications must be postmarked no later than 31 December 1978. The University of California is an Equal Opportunity/Affirmative Action Employer.

**BIOCHEMIST**—Postdoctoral position available immediately for studies on mitochondrial ion transport mechanisms. Send curriculum vitae, including summery of pertinent experience and names of three references, to: Keith D. Garlid, M.D., Department of Pharmacology, Medical College of Ohio, C.S. 10008, Toledo, Ohio 43699.

An Equal Opportunity Employer

BIOCHEMIST-Physical chemistry of collagen and related proteins. One- to 2-year appointment as a re-search associate (adjunct instructor) beginning about January 1979. Challenging opportunity to work with energetic team of biochemists on the triple-helical structure of collagen and procollagen and the coil-to-helix transition during the biosynthesis of collagen, to manage one research laboratory and to assist in teaching biochemistry to medical students.

Successful candidates must possess a Ph.D. in biochemistry and have at least 2 years of postdoctoral experience working on the physical chemistry of collagen and related proteins.

Salary range: \$19,526 to \$22,088, depending on background and experience. Excellent benefits and working conditions.

Please submit résumé to: Department of Biochemistry, College of Medicine and Dentistry of New Jersey, Rutgers Medical School, P.O. Box 101, Piscataway, New Jersey 08854. Equal Opportunity/Affirmative Action Employer, M/F

University of California, Los Angeles (UCLA), School of Medicine, seeks appropriate candidates School of Medicine, seeks appropriate candidates for the DELLA MARTIN CHAIR IN PSYCHIATRY, newly endowed professorship for distinguished aca-demic psychiatrist (English-speaking, eligible Cali-fornia licensure) committed to research especially on major mental illnesses of adolescents and young adults. Equal Opportunity/Affirmative Action Employer. Send curriculum vitae, letter discussing career goals, and five references to:

Arnold B. Scheibel, M.D., Chairman Della Martin Search Committee 760 Westwood Plaza Los Angeles, California 90024

#### **POSITIONS OPEN**

BOTANIST, assistant professor, to complement teaching and research of faculty in organismic biology and ecology. Various areas of organismic biology of terrestrial plants suitable, for example, autecology, field botany, population biology. Preference will be given to candidates who work with field-oriented problems. Ph. D. required; postdoctoral experience preferred. Available 1 September 1979. Send application by 1 December 1978, including curriculum vitae, reprints and manuscripts submitted for publication, and names of those who have been requested to write letters of recommendation, to: requested to write letters of recommendation, to: Dr. G. Fred Somers, School of Life and Health Sciences, University of Delaware, Newark, Delaware

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

#### CELL BIOLOGISTS

The University of North Carolina at Chapel Hill invites applications for junior and senior faculty positions in the Laboratories for Cell Biology of the Department of Anatomy. Applicants must have post-doctoral research experience and goals in the areas of biology of cell surfaces, membranes, receptors, or cytoplasmic organelle systems. Teaching opportunities will be in graduate level courses in areas of cell biology, medical histology, or human gross anatomy. Send curriculum vitae, a brief description of current research interests, and a list of three references, or requests for additional information to: Dr. Charles R. Hackenbrock. Chairman. Department of Charles R. Hackenbrock, Chairman, Department of Anatomy, School of Medicine, University of North Carolina at Chapel Hill, Chapel Hill, N.C. 27514.

An Equal Opportunity/Affirmative Action Employer

CHAIRMAN, Department of Natural Sciences, Florida State Museum. To administer research-oriented department of 12 curators in natural history. Research in any related field. Twelve-month position begins 1 July 1979. Application deadline: 1 November 1978. Name three references and send curriculum vitae to: Search Committee, Department of Natural Sciences, Florida State Museum, University of Florida, Gainesville, Fla. 32611. An Equal Opportunity/Affirmative Action Employer. tunity/Affirmative Action Employer

COMPUTER SCIENCE/MATH RESOURCE PER-SON. Full-time position (12 months), renewable for second and third year under terms of National Science Foundation (NSF-CAUSE) grant. Project to strengthen the quality of science instruction by utilizing the property of the science instruction by utilizing the property of the science instruction by utilizing the property of the science instruction by utilizing the science in the science in the science in the scien strengthen the quality of science instruction by utilizing modern computer technology as an integral part of the science curriculum (biology, chemistry, mathematics, physics). Assist with faculty development, curriculum modification, and expansion of present campus computer capabilities. Possibility of permanent faculty position following expiration of grant. Qualifications: Ph.D. (or near) in mathematics computer science or related field. Region 10 decisions. grant. Qualincations: Ph.D. (or near) in mathematics, computer science, or related field. Begin 1 October or 1 November 1978, or as soon before or after as possible. Send full credentials, including transcripts and three letters of reference, to: Dr. Denton B. May, Academic Dean, King's College, Wilkes-Barre, Pa. 18711. An Equal Opportunity/Affirmative Action Employer. Action Employer.

#### UNIVERSITY OF MASSACHUSETTS, AMHERST

#### DEAN AND DIRECTOR

Joint position of dean, College of Food and Natural Resources; director, Agricultural Experiment Station; and director, Cooperative Extension Service. Academic, administrative, and fiscal responsibility. Demonstrated administrative ability; spokesperson and advocate within and outside the university; program development and implementation; effecting working relationships with faculty, staff, and students; Ph.D. degree; knowledge of the land grant system; professional competence. Academic appointment sional competence. Academic appointment in appropriate department. Tenure depen-dent upon qualifications. Nominations or applications with curriculum vitae and three references by 1 November 1978 to: T. W. Fox, Chairman, Dean Search Committee, 312 Stockbridge Hall, University of Massachusetts, Amherst, Mass. 01003. An Affirmative Action/Equal Opportunity Employer.

#### CURATORIAL TRAINEES MARINE BIOLOGY

Applications are wanted for curatorial trainees in marine biology. The individual applying must possess an advanced degree. Applicants must have a strong desire to handle the management and exhibition of diverse aquatic animals, principally fish—fresh- and saltwater species—from all parts of the world. The candidates must be able to write for technical and popular audiences, take charge of projects, manage animal-care staff, establish care and feeding techniques, exhibit design, and identify and label

Applicants should submit curriculum vitae to:

James B. White, Personnel Department New York Zoological Society
185th Street and Southern Boulevard
Bronx, N.Y. 10460
An Equal Opportunity Employer, M/F

#### DEVELOPMENTAL BIOLOGIST

Tenure-track faculty position for Ph.D. with research interest in developmental biology. Duties include teaching comparative embryology and freshan biology. Position to begin either 9 January or 20 August 1979. Please send curriculum vitae, statement of research interest, reprints, and three references by 20 October 1978 to: Chairman, Develop-

An Equal Opportunity/Affirmative Action Employer

**DEVELOPMENTAL BIOLOGIST.** Assistant professor, tenure-track. Fall 1979 appointment. Ph.D. resor, tenure-track. Fall 1979 appointment. Ph.D. required. Preference will be given candidates with undergraduate teaching experience in molecular genetics, embryology, physiology, and introductory biology. Send résumé and three letters of reference to: Dr. J. C. Streett, Texas Wesleyan College, P.O. Box 3277, Fort Worth, Texas 76105. Closing date: 1 December 1978. An Equal Opportunity/Affirmative Action Employer. Action Employer.

## SCHOOL OF SCIENCE BROOKLYN COLLEGE OF C.U.N.Y.

Applications are invited for the following faculty positions in the School of Science for the Fall, 1979. Applicants should possess relevant working and teaching experience. Doctorate and postdoctorate experience necessary. Publications and demonstrated record of research funding required.

Position in Botany, Physiology or Developmental Anatomy. Rank open.

#### CHEMISTRY

Associate Professor in biochemistry or bio-organic chemistry.

#### COMPUTER SCIENCE

Specialty in computer science, theoretical and/or applied areas; applications to urban problems of particular importance. Rank open.

#### HEALTH SCIENCE

Emphasis in Community and Public Health—administration, basic health, counseling, epidemiology, environ-mental, evaluation, human sexuality, occupational health and safety, philosophy and physiology. Rank open.

#### PHYSICS

Assistant or Associate Professor in Solid State Physics (experimental and theoretical) and in Astrophysics.

Send curriculum vita and names of references to Chairman, Specific Department listed above, Brooklyn College, Brooklyn, New York 11210.

An affirmative action/equal opportunity employer.

#### **POSITIONS OPEN**

#### DIRECTOR, CANCER RESEARCH GROUP

The University of Western Ontario and the National The University of Western Ontario and the National Cancer Institute of Canada invite applications for the post of director of a cancer research group. The present laboratories, which are fully equipped to undertake research on most problems in modern biology, occupy approximately 10,000 square feet and are joined to the Health Sciences Centre and the University Hospital. Support for the research program and the salaries of senior staff members are provided by the National Cancer Institute of Canada. It is customary for senior staff members (usually da. It is customary for senior staff members (usually five) to hold academic appointments, to be eligible to nve) to hold academic appointments, to be eligible to accept graduate students, and to accept a modest teaching load. The salary will be dependent on experience and on levels prevailing at the University of Western Ontario. The deadline for receipt of applications is 1 January 1979 and the appointee could commence duties as early as 1 July 1979. Applications and enquiries should be addressed to:

Dr. O. H. Warwick Chairman, Selection Committee
c/o Office of Vice President, Health Sciences
University of Western Ontario
London, Ontario, Canada N6A 5C1

#### DIRECTOR OF INPATIENT PSYCHIATRIC SERVICE

Mental Health Services of the Roanoke Valley and the Roanoke Memorial Hospitals are soliciting can-didates for the above position. Board-certified or Board-eligible. Outstanding full-time opportunity to Board-eligible. Outstanding full-time opportunity to direct inpatient service of a general hospital and to participate in the teaching of family practice residents and medical students. University of Virginia faculty appointment available for qualified candidate. Private practice possible. Salary: \$40,000, plus fringe benefits. Must have or be eligible to obtain license to practice in Virginia. Contact: Marvin E. Perkins, M.D., Medical Director, Mental Health Services of the Roanoke Valley, 920 South Jefferson Street, Suite 500, Roanoke, Va: 24016. Equal Opportunity Employer, MIF. tunity Employer, M/F.

FACULTY APPOINTMENT. The Division of Environmental Studies at the University of California, Davis, is seeking applications for a regular faculty position at any academic level in RESOURCE ECO-NOMICS. A Ph.D. degree (or equivalent qualifica-tions) and evidence of experience in, and promise of, tions) and evidence of experience in, and promise of, scholarly contributions to the areas of the analysis and evaluation of public policies for environmental quality and natural resources management are required. Teaching duties will be in the fields of required. Teaching duties will be in the fields of resource management, environmental economics, policy analysis, or regional economics. Deadline for applications is 15 November 1978. Applicants should submit curriculum vitae, transcripts, names and adresses of three references, and copies of relevant publications. For further information, contact: Peter J. Richerson, Chair of the Search Committee, Division of Environmental Studies, University of California, Davis, California 95616. The University of California is an Equal Opportunity/Affirmative Action Employer and invites applications from all qualified individuals.

FACULTY POSITIONS. Williams College Biology Department has three anticipated openings for fall 1979:

- A tenure-track position for a GENETICIST with research interests in cell biology to teach a one-semester course in genetics and another course in an area of specialty, preferably immunology or
- an area of specialty, preferably immunology or virology. A tenure-track position for a COMPARATIVE ANIMAL PHYSIOLOGIST broadly trained in physiology to teach a one-semester course in comparative animal physiology and another course in endocrinology. A 2-year visiting appointment for a PHYSIO-LOGICAL ECOLOGIST qualified to teach a one-semester course in introductory ecology and another course in either evolution or marine biology.

ogy. In addition to duties listed above, all faculty in the department are required to direct a tutorial for one semester in a senior-level advance topics course and are expected to carry on an active research program. Ph.D. degree is required. Completed application containing résumé, description of research interests, and three letters of recommendation must be received by 15 November. Send to: Dr. W. DeWitt, Chairman, Biology Department, Williams College, Williamstown, Mass. 01267. Equal Opportunity/Affirmative Action Employer.

#### **POSITIONS OPEN**

#### **ENGINEERING SCIENCES**

The Department of Engineering Sciences of the Col-The Department of Engineering Sciences of the College of Engineering of the University of Florida has two tenure-acquiring positions for which appointments will be made during the academic year 1978–1979. The dates of appointment can be arranged to be effective anytime between 22 January 1979 and 8 September 1979. The appointments will be partially funded from the Center of Excellence Program of the State University System of Florida. The applicants should demonstrate interest in teaching elementary courses in engineering mechanics and inicants should demonstrate interest in teaching ele-mentary courses in engineering mechanics and ini-tiating and maintaining a significant research pro-gram in the areas of mechanics of composite materials and/or fracture mechanics leading to the development of new materials or of the analysis and/ or design of intelligent machines. A doctoral degree or its equivalent is required. Salary and rank will be commensurate with experience although preferential consideration will be given to applicants for the lower academic ranks. Please send résumés with the lower academic ranks. Please send resumes with the names of three professional references to: Search Committees, Department of Engineering Sciences, University of Florida, Gainesville, Florida 32611 before the deadline date, 15 January 1979. The University of Florida is an Equal Opportunity/Affirmative

EXECUTIVE DIRECTOR, BIORESOURCES CEN-TER, to direct and conduct R & D in fields of aquaculture utilizing low-grade geothermal sources, bio-conversion of solar energy aquatic and riparian habi-tat surveys, zonational effects of power plants on terrestrial habitats, and possibility of harvesting desert plants. Requires Ph.D. in life sciences; broad desert plants. Requires Ph.D. in life sciences; broad background in terrestrial and aquatic ecosystems; demonstrated ability to obtain, perform, and administer grant and contract R & D; experience in performing interdisciplinary R & D; ability to interface with UNR and UNLV in research programs; and willingness to interact with state/federal agencies and private industry. Understanding of terrestrial and aquatic biological systems in western United States desirable. Minimum starting salary: \$30,000. Send résumé, postmarked by 31 October 1978, to: Executive Director Search Committee, Personnel Office, Desert Research Institute, University of Nevada System, P.O. Box 60220, Reno, Nevada 89506. Affirmative Action/Equal Opportunity Employer.

#### GEOLOGY AND GEOPHYSICS UNIVERSITY OF CALIFORNIA, BERKELEY

An assistant professorship in geology is an anticipated vacancy, pending budgetary approval, to be filled 1 July 1979 in the Department of Geology and Geophysics. Candidates must have an expertise which will contribute to an integrated program of field and laboratory research and teaching. Research emphasis may be in the areas of metamorphic petrology, structure-stratigraphy, or tectonics. The position will require teaching and research supervision in the field. The Ph.D. degree is required.

Applications should be submitted by 15 December

Applications should be submitted by 15 December 1978 to:

T. V. McEvilly, Chairman Geology and Geophysics University of California Berkeley, Calif. 94720

and should include the names of three academic referees

The University of California is an Affirmative Action

IMMUNOLOGIST. Assistant professor, Ph.D. or M.D. Postdoctoral experience desirable. Starting date negotiable but not later than 1 October 1979. date negotiable but not later than 1 October 1979. Responsibilities include the development of an independent research program in immunology, supervision of graduate student (M.S. and Ph.D.) research projects, and participation in undergraduate and graduate teaching in the Department of Microbiology. Opportunity exists to teach in the WAMI Medical Program. Academic year appointment. Salary negotiable. By 1 February 1979, send curriculum vitae and three letters of reference to: Immunology Search Committee, Department of Microbiology, Montana State University, Bozeman, Montana 59717. An Equal Opportunity/Affirmative Action Employer.

ONE MEDICAL BIOCHEMIST AND ONE SYNTHETIC CHEMIST, both with Ph.D.'s, wanted by leading Japanese pharmaceutical company to work in their R & D institute in Japan. Top salary, plus housing. Three-year contract. Send résumé to: IM-CA, 1111, TBR Building, 2-10-2, Nagata-cho, Chiyoda-ku, Tokyo, 100 JAPAN.

## HEAD, DEPARTMENT OF GEOLOGICAL SCIENCES UNIVERSITY OF ILLINOIS CHICAGO CIRCLE CAMPUS

Applications and nominations are invited for depart-Applications and nonlinations are invited to department head at the rank of professor. A record of research productivity, teaching experience, and administrative ability is required. Applicants in any geology-related field will be considered.

The department has 11 full-time faculty and offers The department has 11 full-time faculty and offers broad bachelor's and master's degree programs. Exceptional students can obtain doctoral degrees through a coordinated program with the College of Engineering. Current enrollment includes about 25 graduate and 85 undergraduate students. The department is well equipped with complete mineral synthesis, x-ray, sedimentology, hydrology, and electron microprobe laboratories.

Applications and inquiries should be sent to: Dr. K. Rodolfo, Chairman of the Search Committee, Department of Geological Sciences, University of Illinois at Chicago, Chicago, Ill. 60680. Deadline for the receipt of applications is 15 November 1978.

University of Illinois is an Equal Opportunity/Af-firmative Action Employer.

NEUROSCIENCES FACULTY. Faculty positions available in the Neurosciences Program, Maryland Psychiatric Research Center, affiliated with the University of Maryland School of Medicine. One position is open to a scientist with rigorous postgraduate training in neuroendocrinology, basic expertise in hormone assay procedures, and the capability to study functional aspects of hormones/polypeptides in a multidisciplinary clinical research center. The in a multidisciplinary clinical research center. The second position is for a scientist with rigorous postsecond position is for a scientist with rigorous post-graduate training in a neurobiology specialty with preference given to strength in biochemistry and/or genetics plus experience in cell or organ culture techniques. Submit curriculum vitae, summary of research interest, and two letters of reference by 15 November 1978 to: Neurosciences Search Committee, Maryland Psychiatric Research Center, Box 3235, Baltimore, Md. 21228. An Equal Opportunity Em-player.

#### POSITIONS OPEN

#### HISTOLOGIST/HISTOCHEMIST

The University of Arkansas Pathology Services Project (PSP) at the National Center for Toxicological Research (NCTR) has an opening for a histologist/histochemist. Applicants should possess the Ph.D. degree. Knowledge of histology, histologic technique, and histochemistry essential. Experience in autoradiography and electron microscopy desirable. Duties include (i) supervision and administration of a histopathology laboratory, (ii) histochemical evaluation of tissues from rodents involved in toxicological studies, and (iii) involvement in medical and graduate education. Salary commento: Director, PSP-NCTR, HFT-230, Jefferson, Ark. 72079. Equal Opportunity Employer.

#### MUTAGENESIS—CARCINOGENESIS

Immediate opening for a postdoctoral research posi-tion: in vitro mutagenesis and carcinogenesis in-duced by protracted exposures to radiation and chemical carcinogens. Expertise in mammalian cell culture or somatic cell mutation desirable. Please send curriculum vitae and references to:

Dr. Tom M. Yau Division of Radiation Biology Department of Radiology
Case Western Reserve University
Cleveland, Ohio 44106

#### NEUROCHEMIST/BIOCHEMIST

The Neurotoxicology Unit at Albert Einstein College of Medicine, Bronx, N.Y. 10461, invites applications for the position of principal associate of neurology (salary: \$18,000 per annum). Applicants must have a Ph.D. in biochemistry, 4 to 5 years of postdoctoral experience in axonal transport and biochemistry of the nervous system with particular reference to myelin. Practical experience with neurotoxins affecting PNS/CNS is desirable. Candidate must have the ability to obtain funding in support of research. Send curriculum vitae and names of three references to: Herbert H. Schaumburg, M.D. (telephone: 212-430-3366, -2519) at the above address. An Equal Opportunity Employer. tunity Employer

#### **POSITIONS OPEN**

MOLECULAR GENETICIST. Washington State MOLECULAR GENETICIST. Washington State University is seeking a molecular or microbial geneticist with postdoctoral experience for February 1979. The successful candidate will have experience with contemporary DNA technology, demonstrated research ability, and the capability of establishing a sound research program. Primary teaching responsibility will be procaryotic genetics—graduate level. This faculty position is tenure-track at the assistant professor level. Applicants send curriculum vitae, transcripts, and the names of three references to:

David Hinrichs Chairman, Search Committee Washington State University Pullman, Washington 99164

Affirmative Action/Equal Opportunity Employer

Two POSTDOCTORAL POSITIONS available imnwo Postboctoral Postfilons available im-mediately to study: (i) membrane interactions in coated vesicle self assembly or (ii) LDL transport into chicken oocytes. Salary: \$11,000 to \$14,000. Experience in cell biology or biochemistry desirable. Send curriculum vitae and telephone numbers of three referees to: Dr. Thomas F. Roth, Department of Biological Sciences, University of Maryland Balti-more County, Catonsville, Maryland 21228.

An Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL POSITION available immediately to study connective tissue changes with aging. Ph.D. in biochemistry with background and experi-Ph.D. in blochemistry with background and experience in protein chemistry; knowledge of tissue culture and immunology helpful. Curriculum vitae and references should be sent to: Dr. Donald J. Cannon, Medical Research Service, VA Hospital, 300 East Roosevelt Road, Little Rock, Arkansas 72206. University of Arkansas for Medical Sciences is an Affirmative Action/Equal Opportunity Employer.

IMMUNOLOGY POSTDOCTORAL POSITIONS— IMMUNOLOGY POSTIDOCTORAL POSTITONS— Multidisciplinary interest in cell regulation, immu-nogenetics, autoimmunity, immunodeficiency. Got an idea? Work on it in the Palouse atmosphere. Send curriculum vitae to: David Hinrichs, Department of Bacteriology and Public Health, Washington State University, Pullman, Washington 99164.

## PHARMACEUTICAL

Anticipating completion of our research complex expansion (more than doubling laboratory space) early next year, we have determined those staff additions for the first quarter 1979:

• SR. RESEARCH PHARMACOLOGIST (Ph.D.)

• RESEARCH BIOANALYTICAL

- SH. RESEARCH PHARMACOLOGIST (Ph.D.)
  Evaluation of anti-arthritic drugs in animal models. Cartilage alterations, synovial fluid and enzyme determinations. In vivo/in vitro immunologica methodologies. Requires significant lab experience beyond Doctorate, with demonstrated ability to develop new procedures. Training in pharmacology, immunology, blochemistry. macology, immunology, biochemistry.

  SR. PHARMACOLOGIST (MS/BS)
- Renal and anti-inflammatory programs. To screen compounds and eval-uate data. Training in pharmacology, physiology, or biology. Direct ex-perience in renal and rheumatoid arthritic studies advantageous.
- PHARMACOLOGIST (BS)
   Entry level openings for well trained biologists to engage in broad spectrum of our programs—above plus GI, CNS, Pulmonary.
- RESEARCH BIOARALTIICAL
  CHEMIST (MS/BS)
   Drug Metabolism unit. Three years industrial experience methods development. Competence in Pharmacokinetic treatment of toxicological data. GC/MS experience desirable.

   RESEARCH BIOCHEMIST (MS/BS)
- - Experience in drug metabolism with emphasis on in vitro biotransformation studies. To isolate and identify new metabolites from in
- vitro studies,

   BIOCHEMIST (MS/BS)

  Routine chemical determinations/interpretations of clinical pathology and hematology lab results. Instrument maintenance—pH Meter, Spectrophotometer, Atomic Absorption. Documentation of data for regulatory authorities.

INFORMATION SCIENTIST (TOXICOLOGY) (MS/BS)
 Collate protocol/report information from Safety Evaluation laboratories. Collect, file and transfer study data to archives. Present tabulations/graphs for reports and meetings. Contribute to lab SOP's. Relevant experience should include fertility reproduction, teratogenic tests, and pathologic techniques. Preparation of protocols essential. Knowledge of GLP expected.

Also, our MEDICINAL CHEMISTRY section has determined manpower needs for scientists of varying degrees of drug experience to engage in anti-arthritic, bronchodilator, diuretic, and anti-motility discovery and development.

Corporation is diversified American subsidiary of world leader in pharmaceuticals which has introduced anti-hypertensives, anti-arrhythmics, hypolipodemics, psychotropics, anti-bacterials, corticosteroids, and anesthetics. Expanded North American program will be ICI's largest research effort outside United Kingdom and will emphasize Central Nervous System, Gastrointestinal, Immunologic, and Renal disorders. Campus setting in suburban community, equidistant to New York and Washington, D.C., 25 miles south of Philadelphia. Competitive salaries and benefits include unique deferred compensation/investment program. Please submit detailed C.V. in confidence, stating salary expectation.

## Charles T. Brodigan



ICI Americas Inc.

Wilmington, Delaware 19897

An Equal Opportunity Employer M/F

PHARMACOLOGIST at the level of assistant or associate professor to teach second-year medical stu-dents. Position is available as of 1 July 1979, pending the availability of funds, at the University of Minne-sota, Duluth, School of Medicine. Qualifications: a doctoral degree; a commitment to quality teaching; an interest or experience in teaching pharmacology of chemotherapeutic agents; and experience in re-search autonomic pharmacology, neuropharmacology, mechanisms of hormone action, or pharmacology of chemotherapeutic agents. However, individ-uals who have demonstrated excellence in research in other areas are also encouraged to apply. A willingness to collaborate with departmental faculty in areas of common interest will be considered positively. Send curriculum vitae, a summary of teaching and research interests, reprints of publications, the names of references, and compensation history to: Dr. Edward Knych, University of Minnesota, Du-luth, School of Medicine, Duluth, Minnesota 55812 by 1 November 1978. An Equal Opportunity/Affir-mative Action Employer.

#### PHYSIOLOGIST

Instructor or assistant professor interested in teach ing physiology, including an introductory course on human physiology to nonscience students. Can-didate should have a Ph.D. or M.D. degree and didate should have a Ph.D. or M.D. degree and should be qualified to teach organ and environmental physiology, including endocrinology, neuromuscular function, and nutrition. Appointment is temporary for 2½ years, starting in January 1979. Send curriculum vitae, statement of teaching experience and research interests, plus three letters of reference by 31 October 1978 to: Dr. Peter Stewart, Division of Pielogy and Medicine Beyond University Devidence Biology and Medicine, Brown University, Providence, Rhode Island 02912.

Equal Opportunity/Affirmative Action Employer

#### POPULATION ECOLOGY

The Department of Ecology and Behavioral Biology, University of Minnesota, invites applications for a faculty position in the biology of populations. for a faculty position in the biology of populations. Preference will be given to persons active in experimental research with plants or animals and with skills in such areas as population theory, statistics, modeling, and population genetics. The position begins September 1979 at assistant professor or possible higher rank. Review of applications will begin 15 November. Applications should include curricular theories of publications transcript of many control of the professor of publications transcript of many control of the professor of publications transcript of many control of the professor of publications transcript of many control of the professor of publications transcript of many control of the professor of publications transcript of many control of the professor of publications transcript of many control of the professor of publications transcript of the professor of publications and publications are professor of publications and publications are professor of professor of publications and publications are professor of publications and publications are professor of professor of publications and publications are professor of lum vitae, copies of publications, transcript of grad-uate work, statement of research plans and teaching interests, one letter of recommendation (sent sepa rately), and names of two additional references addresses and telephone numbers. Respond to: E. J. Cushing, Search Committee Chair, Department of Ecology and Behavioral Biology, University of Minnesota, 318 Church Street, SE, Minneapolis, Minnesota 55455

An Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL—CANCER RESEARCH. Position available for a Ph.D. interested in the chemical characterization, biosynthesis, ultrastructure, and turnover of mammalian plasma membrane components and to engage in research designed to develop tumor membrane modifiers as cancer chemother apeutic agents. Contact: Dr. Ralph J. Bernacki, Department of Experimental Therapeutics, Cancer Drug Center, Roswell Park Memorial Institute, 666 Elm Street, Buffalo, New York 14263.

POSTDOCTORAL IN EXPERIMENTAL PATHOL-POSTDOCTORAL IN EXPERIMENTAL PATHOLOGY to participate in federally funded multidisciplinary training program focusing on the cellular and subcellular effects of xenobiotics. Ph.D. or M.D. with strong research interest. Salary up to \$14,000. Dr. R. Abraham, Center of Experimental Pathology and Toxicology, Albany Medical College, 47 New Scotland Avenue, Albany, N.Y. 12208.

POSTDOCTORAL POSITION in MEMBRANE PROTEIN BIOCHEMISTRY is available immediately. The project involves biochemical and immunochemical studies of the acetylcholine receptor protein. Experience with protein purification and characterization, electrophoresis, peptide mapping, and some sequencing required. Experience or familiarity with neurobiology and impunechemistry designation. with neurobiology and immunochemistry desirable. One year salary and benefits guaranteed, continuation dependent on fellowship or other arrangements. Send curriculum vitae, two letters of reference, and names of two other references to:

Jon Lindstrom
Salk Institute for Biological Studies
P.O. Box 1809 San Diego, California 92012

1258

#### **POSITIONS OPEN**

MICROBIOLOGIST. Assistant professor position open immediately. Background in bacterial physiology and genetics of oral microorganisms preferred. Responsibilities include teaching and research. Salary commensurate with training and background. Sand curriculum vitae, references, and reprints to: Professor B. F. Hammond, Department of Microbiology, University of Pennsylvania School of Dental Medicine, Philadelphia, Pa. 19104. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer Action Employer.

#### POPULATION BIOLOGY/ECOLOGY

The Department of Zoology at Oregon State University invites applications for a tenure-track assistant professorship in population biology/ecology. Prefer-ence will be given to individuals whose interests span the population and community interface and span the population and community interface and whose research is concept-oriented and involves reliance on controlled field experimentation. A Ph.D. is required and postdoctoral experience is desirable. Other qualifications are open. Applications consisting of a parisolable pitter of the property of Sisting of a curriculum vitae, representative reprints, and three letters of reference should be directed to: Population Biology Search Committee, Department of Zoology, Oregon State University, Corvallis, Ore. 97331 by 31 October 1978.

Oregon State University is an Affirmative Action/ Equal Opportunity Employer and complies with Section 504 of the Rehabilitation Act of 1973.

POSTDOCTORAL POSITION Available immediately to participate in ongoing study of transplanta-tional changes involved in embryonic development of muscle tissue. Prefer individual with experience or interest in isolation and characterization of messenger RNA. \$12,000 per year. Send curriculum vitae and references to: Dr. Charles P. Ordahl, Medical Research Building, Temple University School of Medicine, 3420 North Broad Street, Philadelphia, Pa. 19140. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION—SURFACE CHEM-ISTRY. Position available October 1978 for quasi-elastic light-scattering studies on the structure and dynamics of lipid monomolecular films. Biochemical dynamics of lipid monomolecular nims. Biochemical or biophysical background with light-scattering experience desirable. Salary: \$13,400 for 12 months. Send résumé and names of three references to: Dr. Ronald D. Neuman, Department of Forest Products, University of Minnesota, St. Paul, Minn. 55108. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately. Involves use of photoaffinity probes to study nucleotide regulated phenomena. Biochemistry or molecular biology background required. Main emphasis will be on adenosine and guanosine nucleotide receptor proteins, for example, adenyl cyclase and protein kinases. Send résumé and letters of reference to: Dr. Boyd Haley, Department of Blochemistry, University of Wyoming, Box 3944, Laramie, Wyoming 82071. Telephone: 307-766-2150. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION: microbiology, Oregon State University (OSU), 1 November 1978; renewable to 2 years, \$11,000 per year. Microbiology and chemistry of turbid drinking-water supplies. Send résumé, list of familiar techniques, and three references to: Dr. R. J. Seidler, Microbiology, University of Maryland, College Park, Md. 20742. OSU is an Affirmative Action/Equal Opportunity Employer and complies with Section 504 of the Rehabilitation Act of 1073.

POSTDOCTORAL POSITIONS in chemical carcinogenesis and DNA repair; position available for re-cent Ph.D. in cell biology, biochemistry, or molecu-lar biology: (i) to study the induction of DNA repair by metal carcinogens in human cells; (ii) to study the role of enzyme alteration in carcinogenesis. Salary negotiable. Send application with curriculum vitae and names of two references to: Dr. Michael A. Sirover, Fels Research Institute, Temple University School of Medicine, Philadelphia, Pa. 19140. An Equal Opportunity/Affirmative Action Employer

#### POSTDOCTORAL RESEARCH ASSOCIATES

Two positions available for persons with Ph.D. or M.D. and research experience in reproductive biology, cytomorphometric analysis, or experimental diabetes mellitus. Send curriculum vitae and the names of three references to: Carl R. Morgan, Ph.D., Professor and Chairman, Department of Anatomy, East Carolina University School of Medicine, Greenville, North Carolina 27834.

An Equal Opportunity/Affirmative Action Employer

#### **POSITIONS OPEN**

Two POSTDOCTORAL POSITIONS in molecular genetics and/or somatic cell genetics available immediately at the Wistar Institute of Anatomy and Biology in Philadelphia. Send curriculum vitae, bibliography, and three references to:

The Wistar Institute 36th and Spruce Streets Philadelphia, Pa. 19104

#### POSTDOCTORAL RESEARCH ASSOCIATE

Recent Ph.D. with background in aquatic ecology and/or limnology to carry out paleolimnological re-search on effects of atmospheric inputs of acids and search on effects of atmospheric inputs of acids and heavy metals on lake plankton, including diatom and cladoceran analyses of lake sediment cores. Essential prior experience in: (i) diatom taxonomy and identification, and (ii) multivariate statistics and associated computer programming. Send curriculum vitae and names of three references to: Ronald B. Davis, Department of Botany and Plant Pathology, University of Maine, Orono, Maine 04469. Equal Opportunity/Affirmative Action Employer.

#### UNIVERSITY OF MINNESOTA DEPARTMENT OF ASTRONOMY

Applications are invited for a POSTDOCTORAL RESEARCH ASSOCIATE position in the Department of Astronomy. Candidates should be experienced in radio interferometry and prepared to conduct and collaborate in research using the VLA raduct and collaborate in research using the VLA radio telescope. The appointee will be expected to establish an initial VLA map analysis system and to participate in development plans for a permanent facility at the University of Minnesota. The position is available for 1 year, beginning on 2 January 1979. The possibility of an extension of the appointment for a second year is under consideration.

Candidates should send a letter of application, including curriculum vitae and bibliography, and the names of three references who have been asked to submit letters of recommendation to: Dr. W. B. Burton, Chairman, Department of Astronomy, University

ton, Chairman, Department of Astronomy, University of Minnesota, 116 Church Street, SE, Minneapolis, Minnesota 55455. The deadline for receipt of applications is 31 October 1978. The University of Minnesota is an Equal Opportunity Educator and Employ-

POSTDOCTORAL RESEARCH POSITION for recent M.D. or Ph.D. in Department of Pharmacology for the study of neuropeptides. Salary: \$14,000. Must have experience and superior qualifications in one of the following areas: protein chemistry, isola-tion and characterization, proteins and peptides, cell differentiation in tissue culture, immunology and RIA. Send curriculum vitae, list of publications, and names of three references to: Dr. Jose M. Musacchio, Department of Pharmacology, NEW YORK UNIVERSITY MEDICAL CENTER, 550 First Avenue, New York, N.Y. 10016. An Equal Opportunity/Affirmative Action Employer, M/F.

AND POSTDOCTORAL POSITIONS are available for studies on the protein synthesizing system with special emphasis on ribosomes—topogra-phy, biogenesis, and function—under various conditions of growth and development. Teaching opportunities available. Reply with résumé to:

Professor Bruce H. Sells Laboratories of Molecular Biology Faculty of Medicine
Health Sciences Complex
Memorial University of Newfoundland
St. John's, Newfoundland, Canada A1B 3V6

Max-Planck-Institut für Biologie, Tübingen.

#### RESEARCH ASSISTANT

Applications are invited for a postdoctoral fellow to join a group studying the mechanism of endocytosis and membrane recycling in the amoeba *D. discoideum*. Applicants should have previous experience in genetics and cell biology.

The appointment will start as soon as possible and will initially be for 1 year.

Applications to: Dr. P. Overath, Corrensstrasse 38, D-74 Tübingen, Federal Republic of Germany.

RESEARCH ASSOCIATE IN BIOCHEMISTRY OR BIOCHEMICAL PHARMACOLOGY, to work on 5year grant on the purification and study of micro-somal enzymes from the liver. Salary: \$13,000 to \$17,000; no postdoctoral experience necessary. Contact: Jordan L. Holtzman, M.D., Ph.D., Clinical Pharmacology, VA Hospital, Minneapolis, Minnesota



# THE INTERNATIONAL CENTRE OF INSECT PHYSIOLOGY AND ECOLOGY

Namobi Kenya

Applications are invited from suitably qualified candidates for the following vacancies, to be filled immediately:

#### 1. SENIOR RESEARCH SCIENTIST (CHEMISTRY AND BIOCHEMISTRY RESEARCH UNIT) REF: SCI/78/20

#### Qualifications:

Candidates must be scientists who are internationally recognised in the field of natural products chemistry. Wide experience in the isolation, structural elucidation of physiologically active substances, chemical synthesis, and other chemical experience is essential. Evidence for leadership of a research group or research projects will be a distinct advantage.

#### Responsibilities:

The successful candidate will work in the area of phytochemistry, particularly in those fields vital to plant/insect relationships. The overall objective of this research programme is to discover novel materials for insect control. Willingness to collaborate with colleagues in other disciplines, especially in the biological sciences, is of paramount importance. He will, in particular, collaborate with a number of other research scientists in the Unit of which he will be a leading member.

## 2. RESEARCH (CHEMISTRY AND BIOCHEMISTRY RESEARCH UNIT) REF: SCI/78/21

#### Qualifications:

Suitable candidates should be experienced in natural products chemistry. Experience in the isolation, structural elucidation of physiologically active substances, and other chemical experience (including organic chemistry or biochemistry) is essential. The right candidate is one who is in possession of at least five years postdoctoral research experience, and who is becoming well known in his area of competence.

#### Responsibilities:

The successful candidate will be required to work in the area of phytochemistry or phenomones, particularly in those fields vital to plant/insect relationships, or chemical communication among insects. The overall objective of this research is to discover novel materials

for insect control. Willingness to collaborate with colleagues in other disciplines, especially in the biological sciences, is of paramount importance.

## 3. POSTDOCTORAL RESEARCH FELLOW (CHEMISTRY AND BIOCHEMISTRY RESEARCH UNIT) REF: SCI/78/22

#### Qualifications:

Young postdoctoral scientists, newly graduated, whose experience is in insect or relevant sciences. High quality research for Ph. D and evidence for excellence since doctorate will be a distinct advantage.

#### Responsibilities:

The successful candidate will carry out research in the field of phytochemistry, or chemical communication, or immunochemistry, or enzyme biochemistry in insect/parasite relationships, vital to plant/insect relationships. Willingness to collaborate with colleagues in other disciplines, especially in the biological sciences, is of paramount importance.

#### **INFORMATION FOR ALL POSITIONS**

#### Salary:

According to qualifications and experience, but will be attractive and negotiable.

#### Other benefits:

Gratuity, housing allowance, group medical aid insurance scheme, passages for the appointee and his family and attractive commutation allowance.

#### General:

Applications giving detailed information on general education, professional qualifications, research experience, marital status, age, present terms of employment (including salary and benefits), names and addresses of four referees (including one personal referee), and photocopies of relevant certificates and diplomas, and reprints of four or more recent scientific publications, considered by the candidate to represent his work best, should be sent to:

Administrate Manager, I.C.I.P.E. P.O. BOX 30772, NAIROBI, KENYA.

to reach him as soon as possible.

#### POSTDOCTORATES IN DEVELOPMENTAL NEUROBIOLOGY

Four positions are available with members of Four positions are available with members of the Developmental Biology Program at the University of Cincinnati, contingent on ex-pected approval of funding. Availability of positions is expected 1 January 1979. Re-search projects include: (i) histologic and im-munologic analysis of the effects of neural antibodies on pervous system development antibodies on nervous system development, with Dr. Richard Akeson; (ii) use of neural antibodies to trace migration of murine neural crest cells into craniofacial area, including palate, with Dr. Ernest F. Zimmerman; (iii) an immunological and biochemical analysis of the interactions of contractile proteins and their role in development, with Dr. James Lessard; and (iv) an analysis of neuro-behavioral alterations in offspring after prenatal exposure of animals to toxicants, with Dr. Jeanne Manson. Salaries are negotiable, dependent on experience. Send curriculum vitae and names and addresses of three references to: Dr. Ernest F. Zimmerman, Director of Developmental Biology Program, Children's Hospital Research Foundation, Cincinnati, Ohio 45229. An Equal Opportunity Emplover.

The University of Alexandria Research Centre (UNARC), Alexandria, Egypt, announces POSTS (starting 15 September 1979) for experts with at least 5 years of postdoctoral research experience in: (i) corrosion science, (ii) semiconductors and/or integrated circuits, and (iii) laser physics. There is also corrosion science, (ii) semiconductors and/or integrated circuits, and (iii) laser physics. There is also a post (iv) for a laboratory engineer having a B.E. with adequate practical experience. The experts will be required to conduct and supervise predoctoral research, collaborate with the postdoctoral fellows, give advanced courses and hold seminars in their respective specializations. The laboratory engineer will maintain, repair, and design the laboratory equipment, as well as train local counterparts in laboratorial operations.

Appointments will be made on contractual basis for 1 year at the candidate's present substantive salary, to be paid in the United States, plus different allowances and passage money (for candidate and family), including transportation of household.

Working language is English, with knowledge of Arabic desirable. Interested scientists should apply before 1 December 1978 to: Director, UNARC, Box 832, Alexandria, Egypt. Further information is available from: Edgar Pike, NE/Tech., U.S. AID, U.S. Department of State, Washington, D.C. 20523.

#### RESEARCH ASSISTANT

M.S. organic chemist or equivalent with several years of experience in synthesis and analysis needed for research program on chemistry of nitrosamines. Ability to perform analysis for nitrosamine precursors required. Interested candidates should send résumé and names of three references to:

Marian Knill, Recruitment Manager Position #1038
Frederick Cancer Research Center
Litton Bionetics, Inc. P.O. Box B Frederick, Md. 21701

An Equal Opportunity Employer, M/F

## RESEARCH INVESTIGATOR/BIOSTATISTICS GREAT LAKES RESEARCH DIVISION THE UNIVERSITY OF MICHIGAN

Applicant must have all Ph.D. requirements completed at the time of application, a working knowledge of aquatic ecosystems (primarily phytoplankton) and an ability to prepare extensive research re-ports. Primary responsibilities include the statistical integrity of a large environmental impact project, supervision of some laboratory personnel, writing required reports on one or more of the limnological aspects of the project, and editing of environmental reports.

Submit résumé to:

Dr. Ronald Rossmann Great Lakes Research Division University of Michigan 2200 Bonisteel Boulevard Ann Arbor, Michigan 48109

The University of Michigan is a nondiscriminatory, Affirmative Action Employer.

#### **POSITIONS OPEN**

#### PROFESSOR OF PATHOLOGY

Applications are sought for the position of professor of pathology in the Eastern Virginia Medical School. We seek a candidate with M.D. degree and school. We seek a candidate with M.D. degree and experience in anatomical pathology both at the academic- and hospital-practice level to participate in an active educational program for the teaching of nedical students and residents. Excellent department research facilities available, including electron ment research facilities available, including electron microscopy. Applications should include curriculum vitae, bibliography, and letters of recommendation. Please send to: Robert J. Faulconer, M.D., Chairman, Department of Pathology, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, Virginia 23501. An Equal Opportunity/Affirmative Action Employer. Employer.

#### AMBAC SABBATICAL PROFESSORSHIPS IN TAIWAN

Opportunities for teaching and research in the Republic of China on Taiwan are offered by several of its academic institutions.

Well-established medical faculties, and newly established schools, offer 3-month, 6-month, and 10month professorships in basic sciences, medical and surgical specialties, and other health disciplines, including nursing, dentistry, and public health. Inquiries for these positions, I to 4 years in advance, are invited. American Bureau for Medical Advancement in China, Inc., 1790 Broadway, New York, N.Y.

Alaska Trollers Association, a nonprofit commercial fisherman's organization, seeks applicants for **PROJECT LEADER (FISHERIES)** of a logbook data collection program. Duties include data management and analysis, program management and administration, and coordination of efforts with state and federtion, and coordination of efforts with state and federal agencies. Applicants must possess an advanced degree in fisheries related field, experience in computer programming and knowledge of commercial fishing industry. Position available immediately. Send résumé, names of three references, and supporting materials to: Alaska Trollers Association, Logbook Program Search Committee, P.O. Box 5825, Ketchikan, Alaska 99901.

RESEARCH ASSOCIATE. Analytical chemist to join clinical research group interested in the neurochemistry of mental disorders. Main responsibility is in development of methods, particularly with GCMS. Experience preferred but not necessary. Available immediately: salary range: \$15,000 to \$18,000. Send curriculum vitae to: Philip A. Shea, Ph.D., Department of Psychiatry, Institute of Psychiatric Research, Indiana University Medical Center, 1100 West Michigan Street, Indianapolis, Ind. 46202. Indiana University is an Equal Opportunity/Affirmative Action Employer. mative Action Employer.

#### RESEARCH MICROBIOLOGIST/IMMUNOLOGIST

Person with Ph.D. or equivalent is needed immedi-Person with Ph.D. or equivalent is needed immediately for faculty position. Postdoctoral experience in mucosal immunology preferred. Research laboratory in the Department of Otolaryngology at the Ohio State University Hospitals. Rank and salary open. Send curriculum vitae and references to: Dr. David J. Lim, Director, Otological Research Laboratories, 456 Clinic Drive, Columbus, Ohio 43210.

An Equal Opportunity Employer

#### STAFF MEMBER—CHEMICAL CARCINOGENESIS

The Christ Hospital Institute of Medical Research is seeking applicants for a staff member to establish a laboratory of molecular chemical carcinogenesis in 1979. Applicants at all levels of experience will be considered, but candidates suitable for appointment at the associate or full professor level are preferable. at the associate or full professor level are preferable. We are seeking an individual who has demonstrated significant research productivity and is committed to a program of excellence. This nonprofit, private research institute provides excellent physical facilities as well as opportunities for collaborative studies with existing laboratories. Appointment to the faculty in a department at the University of Cincinnati College of Medicine is also available if desired. Send curriculum vitae, list of publications, a description of research plans, and the names of four references before 15 December 1978, to Dr. Robert G. Krueger, The Christ Hospital Institute of Medical Research, 2141 Auburn Avenue, Cincinnati, Ohio 45219. An Equal Opportunity/Affirmative Action Employer.

#### **POSITIONS OPEN**

#### UNIVERSITY OF MUNICH PETTENKOFER-INSTITUTE RESEARCH FELLOW

Applications are invited for a position in the viral hepatitis research group supported by the Deutsche Forschungsgemeinschaft. Background in virology

Pettenkofer-Institute, Pettenkoferstrasse 9a, D 8000 München 2, West Germany.

RESEARCH POSITION is presently open for an individual with experience in peptide synthesis and purification. Research involves the chemical synthesis of insulin analogs. Appointment is for 2 to 3 years. Applicant should submit curriculum vitae and letters of reference to: Dr. P. G. Katsoyannis, Chairman, Department of Biochemistry, THE MOUNT SINAI SCHOOL OF MEDICINE, One Gustave L. Levy Place, New York, N.Y. 10029. An Equal Opportunity Employer.

Application from Ph.D's with medical school teaching experience are invited for TEACHING POSITIONS in the following courses:

**Medical Writing Techniques** Biochemistry **Human Anatomy** Physiology Haematology Parasitology Epidemiology Pharmacology

The university is located in the West Indies. Please send curriculum vitae

> St. George's University c/o Foreign Medical School Service Corporation One East Main Street Bay Shore, New York 11706

#### VASCULAR PLANT REGULATORY BIOLOGIST

The Department of Biology of the University of Oregon expects to make a regular faculty appointment during the academic year 1979–1980. The appointment will be made at the assistant or associate professor level. We will consider proposals also from two qualified persons wishing to share the posi-

Applicants should be broadly trained in the biology of higher plants and demonstrate the ability to carry on a sustained research program, applying ge-netic, molecular, or biophysical approaches to investigations in areas such as mechanisms of action of plant hormones, developmental genetics, organelle biogenesis, tumorigenesis, membrane function, and nuclear cytoplasmic interactions. Ample labora-tory space and certain shared facilities and equipment will be made available.

Teaching responsibilities will include participation

leaching responsibilities will include participation in our undergraduate program and development of graduate courses in fields of particular interest.

Applications from all qualified candidates are welcome; women and members of minority groups are encouraged to apply. Send curriculum vitae, a statement of research interest, copies of publications, and the names of three references by 1 January 1979

Dr. Donald R. Hague Chairman, Search Committee Department of Biology University of Oregon Eugene, Oregon 97403

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VIROLOGIST—Ph.D. virologist or immunologist and experienced virologic technician for conduct of 2-year vaccine study to start 1 October 1978. Send résumé to: Dr. E. D. Kilbourne, Department of Microbiology, Mt. Sinai School of Medicine, Fifth Avenue and 100th Street, New York, N.Y. 10029. An Equal Opportunity Employer, M/F.

#### ANTICIPATED FACULTY POSITIONS THE COLLEGE OF MEDICINE THE UNIVERSITY OF SOUTH FLORIDA

Vacancies are available during the 1978-1979 academic year for full-time and part-time faculty in the following departments:

#### Department

Anatomy Biochemistry Comprehensive Medicine Family Medicine Internal Medicine Medical Microbiology Obstetrics/Gynecology Ophthalmology Pathology **Pediatrics** Pharmacology and Therapeutics Physiology Psychiatry

Radiology

Surgery

#### Chairperson

Dr. James Miller (Acting) Dr. Joseph Cory Dr. William Sodeman Dr. Ronald Blankenbaker Dr. Roy Behnke Dr. Lois Paradise (Acting) Dr. James Ingram Dr. William Edwards Dr. Reginald Mason Dr. Lewis Barness Dr. Andor Szentivanyi

Dr. Carleton Baker Dr. Anthony Reading Dr. Arthur Graham Dr. Roger Sherman

Applications should include curriculum vitae addressed to the appropriate chairperson at: The Medical Center, University of South Florida, College of Medicine, 12901 North 30th Street, Tampa, Fla. 33612.

The University of South Florida is an Affirmative Action Employer. Certain veterans and spouses of veterans receive preference in employment.

#### DEAN, COLLEGE OF SCIENCES SAN DIEGO STATE UNIVERSITY

PROPERTO DE PROPERTO DE PARA DE PORTO DE PARA DE PARA

Applications and nominations are invited for the position of dean of the College of Sciences at San Diego State University. The dean of the College of Sciences reports to the vice president for academic affairs and serves as chief administrative officer for a college consisting of 11 departments, several auxiliary areas and field stations, 235 full-time faculty, 260 part-time faculty, and 80 secretaries and technicians. He or she provides leadership for the college in the maintenance of the instructional adversarial control of the college in the maintenance of the instructional and the statement of the statement of the statement of the college in the maintenance of the instructional and the statement of the statement of the college in the maintenance of the instructional and the statement of the statement of the statement of the statement of the college in the maintenance of the instructional and the statement of the statement tional and research program; provides direction to and receives recom-mendations from appropriate committees involved in curriculum and personal matters and makes separate recommendations to the vice president for academic affairs; supervises the preparation and administration of the budget; makes allocations of instructional positions, staff, and available funds for instruction and research to the various departments and units of the college; and serves on the Conference of Deans to provide interaction and cooperation with the other academic units on cam-

Desired qualifications include an earned doctorate; extensive academic and administrative experience at the university level; demonstrated scholarly and professional competence; experience in obtaining and administering grants; and the ability to provide innovative leadership for scientific colleagues.

The salary will be commensurate with the qualifications of the appointee, with a present range from \$29,748 to \$35,976 per year. The position will be available 1 September 1979. Nominations or letters of application with résumés must be sent by 15 November 1978, to the following:

**Dean's Search Committee** College of Sciences
Col Dr. Albert W. Johnson
Vice President for Academic Affairs (Acting)
San Diego State University
San Diego, California 92182

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possédant un doctorat en médecine, pharmacie, biochimie ou chimie.

Cette personne doit être bien introduite dans les milieux scientifiques et douée d'une grande facilité de contact.

Elle devra notamment dialoguer avec nos clients et des experts officiels nationaux et internationaux ; elle organisera, auprès de laboratoires indépendants, les essais biologiques, dermatologiques et toxicologiques de nouvelles substances selon les méthodes et exigences les plus récentes, et sera responsable du service de documentation dans ces domaines.

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#### MEDICAL RESEARCH COUNCIL, LONDON NATIONAL INSTITUTE FOR MEDICAL RESEARCH DIVISION OF BIOCHEMISTRY

Applications are invited for the post of **HEAD OF THE DIVISION OF BIOCHEMISTRY**. The division at present has a staff of 31 and its main areas of activity are in cell membrane structure and function, reg-ulation of protein biosynthesis, and in ribosome and nuclear biochemistry. The future form of the divi-sion has yet to be decided and can be discussed with potential candidates.

The post is a permanent one carrying a salary within the professorial range.

Inquiries should be addressed to: Director, National Institute for Medical Research, The Ridgeway, Mill Hill, London NW7 1AA, England, to arrive not later than 31 October 1978.

GENERAL BIOLOGY INSTRUCTOR-Applica-GENERAL BIOLOGY INSTRUCTOR—Applications are invited for a tenure-track position as instructor of biology available September 1979. Duties involve planning and coordinating multiple general biology laboratory sections and lecturing in general biology and other areas as needed. M.S. degree and teaching experience required. Send curriculum vitae, transcripts, and three letters of reference by I November to: Dr. Michael McCracken, Chairman, Department of Biology, Texas Christian University, Fort Worth, Texas 76129. TCU does not discriminate on basis of sex, religion, race, handicap, or ethnic origin.

#### POSTDOCTORAL APPOINTMENT

For research on the regulation of purine transport in reticulocytes. Good training in cell biology and/or biochemistry essential. \$10,000 to \$11,000. Available 1 September 1978. Send curriculum vitae and names of references to: Dr. Oscar P. Chilson, Department of Biology, Washington University, St. Louis, Mo. 63130.

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POSTDOCTORAL POSITIONS—Two fellowships for research on murine tumor dormant states. One to study immunologic mechanisms involved in estab-lishment and termination of tumor dormant states. Ishment and termination of tumor dormant states. The other to study the role of RNA tumor viruses in establishment of both viral and chemically induced tumor dormant states. Research experience in cellular immunology and RNA tumor virology desired. Send curriculum vitae and names of three references to: Dr. E. Frederick Wheelock, Department of Microbiology, Thomas Jefferson University, 1020 Locust Street, Philadelphia, Pa. 19107. Equal Opportunity/ Affirmative Action Employer.

TOXICOLOGIST, director of B.S. program. Academic rank dependent on experience. Duties include teaching undergraduate and/or graduate courses, directing new B.S. program, and carrying out an independent research program. Ph.D. or equivalent required. Send résumé and three confidential letters of recommendation to: Chairman, Toxicology Search Committee, 312 Mugar Building, College of Pharmary and Allied Health Profession. Northeastern University cy and Allied Health Professions, Northeastern University, Boston, Mass. 02115. An Affirmative Action/ Equal Opportunity/Title IX University.

VIROLOGY. The Cell Biology Group of the Worcester Foundation for Experimental Biology announces faculty-level positions in animal cell virology. We are seeking individuals with outstanding research potential. Inquiries should be directed to Drs. Ronald Luftig, Harriet Robinson, or Thoru Pederson through the Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, Massachusetts 05145. The Worcester Foundation for Experimental Biology is an Affirmative Action, Equal Opportunity Employer.

#### **PROGRAM**

PROFESSIONAL PROGRAM: DOCTOR OF OP-**TOMETRY** (O.D.). Accelerated program of two calendar years specifically designed for the Ph.D. in the sciences to earn the O.D. degree. Excellent opportunities in health-related teaching and research; opportunity for an independent professional career. Program starts June 1979. Division of Vision Sciences, The New England College of Optometry, 424 Beacon Street, Boston, Mass. 02115. Telephone: 617-261-3430, extension 34.

#### SCIENTIFIC EXCHANGES

#### SCIENTIFIC EXCHANGES WITH U.S.S.R. AND EASTERN EUROPE

Commission on International Relations

(U.S.S.R./E.E.)

National Academy of Sciences
2101 Constitution Avenue, Washington, D.C. 20418

Applications are invited from American scientists in-Applications are invited from American scientists interested in professional visits (1 to 12 months) between September 1979 and August 1980 in the U.S.S.R., Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Romania, and Yugoslavia. Applicants must be U.S. citizens and have a doctoral degree in the natural or social and behavioral sciences. Deadline for completed applications is 17 November 1978.

#### **GRADUATE STUDY**

## NEUROSCIENCES AT BAYLOR COLLEGE OF MEDICINE

An interdepartmental program in the neurosciences is offered at Baylor College of Medicine for students interested in advanced study leading to the Ph.D. in neuroscience. The program consists of faculty with common interests in neurobiology who strive to promote collaborative research efforts to maximize the interdisciplinary nature of the student's education. Applications must be completed by 1 February. Applications are notified regarding admission and financial support by 15 April. Information regarding the graduate curriculum, research activities in the program and application procedures. tivities in the program, and application procedures may be obtained from:

Ernest J. Peck, Jr., Ph.D Director, Neuroscience Graduate Studies Baylor College of Medicine Texas Medical Center Houston, Texas 77030

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#### **TRAINEESHIPS**

POSTDOCTORAL TRAINEESHIPS IN NEURO-PLASTICITY. Positions are available for training in research related to the development and regeneration of the nervous system. The traineeships, supported by an NINCDS training grant, are available to individuals with the Ph.D. or M.D. degree beginning 1 January or 1 July 1979. This multidisciplinary ning I January or I July 1979. This multidisciplinary program has as available preceptors Doctors N. Berman, T. Cunningham, M. Goldberger, H. Murphy, M. Murray, L. Pubols, L. Ross, and B. Weiss. Applications, consisting of a statement of research interests, curriculum vitae, and three references, should be sent to: Dr. Leonard L. Ross, Department of Anatomy, Medical College of Pennsylvania, 3300 Henry Avenue, Philadelphia, Pa. 19129. An Equal Opportunity/Affirmative Action Employer.

#### **POSTDOCTORAL** TRAINEESHIP BASIC CANCER RESEARCH

Traineeships will be available in late 1978-Traineeships will be available in late 1978—early 1979 at The Wistar Institute, Philadelphia, Pennsylvania, for postdoctoral training in basic cancer research. The National Research Service Awards pay \$10,000 to \$13,000 per annum, depending on experience. Training and research opportunities are available in the fields of somatic cell generated the service of the s netics, tumor immunology, diet and cancer, control of cell proliferation, cellular difcontrol of cell proliferation, cellular dif-ferentiation, chemical carcinogenesis, mem-brane biochemistry, oncogenic viruses, and tumor cell biology. Only U.S. citizens or permanent residents are eligible. Inquiries, along with a résumé, list of publications, graduate school grades, and three letters of recommendation, should be sent to:

**Coordinator of Research Training** THE WISTAR INSTITUTE 36th Street at Spruce Philadelphia, Pa. 19104

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#### **TRAINEESHIPS**

#### POSTDOCTORAL TRAINEESHIPS DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY UNIVERSITY OF WASHINGTON

Applications are invited for traineeships focusing on the molecular and cellular basis of the pathogenesis of infections. Salaries and conditions are those of other NIH-funded traineeships. Duration of appoint-

ment will usually be 2 years.
For further information contact: Dr. Stanley Falkow or Dr. John Sherris, Department of Microbiology and Immunology, SC-42, University of Washington, School of Medicine, Seattle, Wash. 98195.
The deadline for applications will be 31 October

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#### **FELLOWSHIPS**

FELLOWSHIP—Postdoctoral position in visual sciences. NIH traineeship available immediately to study immunological and biochemical aspects of ocular disease. Interdisciplinary program in depart-ment with strong commitment to clinical and basic research. Biochemical or immunological back-ground preferred. Send curriculum vitae and names of three references to: Dr. Walter L. Henley, Depart-ment of Ophthalmology, THE MOUNT SINAI SCHOOL OF MEDICINE, One Gustave L. Levy Place, New York, N.Y. 10029. An Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP. Molecular systematics and evolution of prokaryotes. Salary competitive. Send curriculum vitae, bibliography, and names of three references by 15 November to: Dr. R. R. Colwell, Department of Microbiology, University of Maryland, College Park, Maryland 20742. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIPS will be available in July 1979 in a basic neuropharmacology laboratory with an interest in (i) adrenergic receptor regulation and (ii) the role of receptor in axonal sproutratory with an interest in (i) adrenergic receptor regulation and (ii) the role of receptor in axonal sprouting. Fluorescence histochemistry, autoradiography, radioligand binding, cyclic AMP, adenylate cyclase, and radioenzymatic assays are used in the laboratory. Interested applicants should forward curriculum vitae to: Dr. James N. Davis, Box 3850, Duke University Medical Center, Durham, N.C. 27710.

POSTDOCTORAL FELLOWSHIP IN ENVIRON-MENTAL TOXICOLOGY—Postdoctoral position for a self-motivated analytical or organic chemist. for a self-motivated analytical or organic chemist. Project involves separation, characterization, and toxicological evaluations of organic compounds from industrial waste or drinking waters. Well-equipped laboratory provides an excellent opportunity to gain experience in environmental toxicology. Salary: \$10,000 to \$12,000 per year plus fringe benefits. Contact (before 1 November 1978): **Dr. Satu M.** Somani, Southern Illinois University School of Medicine, P.O. Box 3926, Springfield, Ill. 62708. Telephone: 217-782-2875. An Equal Opportunity/Affirnative Action Employer.

POSTDOCTORAL FELLOWSHIPS are available immediately for research in preclinical and/or clinical psychopharmacology. Specific areas of investigation include: (i) cholinergic and adrenergic mechanisms in neurological and behavioral disorders (animal models and initial models). mal models and clinical studies); (ii) role of brain catecholamines in response to physiological and behavioral stress; (iii) compensatory neurochemical responses to CNS damage; and (iv) regulation of cate-cholamine and acetylcholine synthesis. Training cholamine and acetylcholine synthesis. Training available in basic or clinical sciences, or both. Salary range: \$10,000 to \$13,000. Interested candidates with M.D. or Ph.D. should send curriculum vitae, three references, and statement of interests to: Dr. Israel Hanin, Department of Psychiatry (WPIC), Dr. Edward M. Stricker, Department of Psychology, or Dr. Michael J. Zigmond, Department of Biological Sciences, University of Pittsburgh, Pittsburgh, Pa. 15260. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP IN DEVELOP-MENTAL RENAL PHYSIOLOGY available for Ph.D. with prior training in renal physiology or related fields such as biochemistry and membrane transport. Reply to: Dr. Adrian Spitzer, Director, Dision of Pediatric Nephrology, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, New York 10461. An Equal Opportunity Employer.

#### DIRECTOR

#### YOUTH DEVELOPMENT RESEARCH CENTER

Nominations and applications are being received for the position of Director of the Boys Town Center for the Study of Youth Development.

Established in 1974, the Boys Town Center has attracted a recognized professional staff in the social and behavioral sciences. The Center's mandate is to conduct significant interdisciplinary research and to disseminate findings related to problem prevention and the rehabilitation of troubled youth. The Center occupies new research facilities which are augmented by computer facilities, a specialized library, and conference accommodations. Center activities are supported by an annual budget from Father Flanagan's Boys' Home, Omaha, Nebraska.

The Director is the principal executive officer of the Center and reports directly to the Executive Director of Father Flanagan's Boys' Home and its Board of Directors. The Center Director is responsible for the total operation of the Center including establishing program priorities, professional staff recruitment and evaluation, and fiscal management. The Director also coordinates research and dissemination activities between the Center and regional centers located at Catholic University of America and Stanford University.

University.

The Director must have a combination of education and experience commensurate with the responsibility and authority assigned to the position. He/She must have a doctorate degree, preferably a Ph.D., in an area related to human development and shall have a minimum of five years of administrative-research experience with two years in a senior administrative-research experience with two years in a senior administrative role. It is desirable that the Director have an outstanding research/publication record. The Director must have the ability to establish a planning process resulting in policies and annual budgets for a large research operation. He/She must have the ability to recruit outstanding scholars in the field of youth development and to coordinate the efforts of a highly qualified and diverse professional staff. The Director must be familiar with research administration, extramural funding procedures, dissemination techniques, data processing functions, library activities, training methodology, and conference programming. He/She must be able to represent the Center effectively to the Executive Director, Board of Directors, the scholarly community and the general public.

The Director position is available 1 January 1979. Salary is competitive. Nominations and applications, including resume and three references, should be submitted by 30 October 1978 to:

Dr. Claude H. Organ, Jr. Chairman, Search Committee The Boys Town Center Boys Town, NE 68010

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A major, international fine chemicals and pharmaceuticals company, we seek an individual interested in sharing in the development of CNS-active agents.

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psycho-active agents.
To qualify, you should possess a strong background in pharmacology and a thorough knowledge of the neuro-sciences. At least 2 years of post-doctoral experience is desirable.

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Mercury Communications 730 Mission St., Suite 200 Santa Cruz, CA 95060 COMBATING THE #1 KILLER
The SCIENCE Report on
Heart Research

Jean L. Marx and Gina Bari Kolata

Cardiovascular diseases — diseases of the heart and blood vessels — are the leading cause of death in this country. They afflict more than 29 million people and are responsible for almost a million deaths per year in the United States alone. The American Heart Association estimates that the total economic costs of these diseases in 1978 will be in excess of \$28 billion.

Medical scientists would like very much to know the causes of cardiovascular diseases. This knowledge would help prevent the diseases and reduce the death rate. But the causes are still eluding investigators despite vast expenditures of time and money.

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