Personnel Placement

SCIENCE publishes each Friday, except the last Friday of the year. Advertising closing for a particular Friday issue is Wednesday, 3¹/₂ weeks **before**. Advertising is accepted only in writing; no abbreviations. Also, person-nel advertising is accepted only with the understanding that the advertiser does not discriminate among appli-cants on the basis of race, sex, religion, age, color, na-tional origin, or handicap.

POSITIONS WANTED: 40¢ per word, plus \$4 for use of box number, per insertion. \$10 minimum, per insertion. Prepayment required. This rate is available only to individuals seeking jobs.

DISPLAY (POSITIONS OPEN, COURSES, FELLOW-SHIPS, MARKET PLACE, and so forth): \$6.40 per milli-meter; \$160 minimum, per insertion (minimum charge covers 25 millimeters on a single column; 25 millime-ters equals 10 lines of 50 spaces per line). No charge for use of box number. No agency commission for ads less than 103 millimeters (4 inches). No cash discount. Prepayment required for all foreign ads. Purchase or-ders and billing information required for all other adver-tising tising.

Send copy for all **Positions Wanted** ads and **Display** ads less than 1/6 page in size (125 millimeters) 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

Algal Ecologist: environmental/evolutionary approach; chlorinated hydrocarbons; exciting red tide toxin proposal; publications; teaching experience. R. Michaels, Ecology and Evolution Department, State University of New York, Stony Brook, N.Y. 11794. 4/27;5/4,11

Biologist/Biochemist. Ph.D. 1970. Developmental, cellular biologist; nucleic acid biochemist. Seven years of teaching; numerous publications; demon-strated grantsmanship. Seeks relocation to North-east in research oriented, intellectually stimulating environment (university, government, or industry) Box 132, SCIÈNCE.

Biologist. Ph.D. Tumor biology, experience pre-dominantly in cell culture of functional human and mouse tumors and development of corresponding animal model systems. Seeking challenging, collabo-rative, or administrative research position in aca-demia, government, or industry. Publications. Box 139, SCIENCE. X

Environmentalist seeks research position in industry. Established research physiologist in thrus-try. Established research physiologist interested in the regulatory aspect of environment on plant me-tabolism (entire plant, cells in culture); solid back-ground. European experience. Box 140, SCIENCE.

General Biologist—M.S. marine biology. Broad background includes mycotoxin research, fishery bi-ology, animal behavior, mariculture, environmental biology, thermal biology. Seeking research or other responsible position in industry, university, or gov-ernment. Box 141, SCIENCE. X

Microbiologist/Biochemist, Ph.D. Postdoctoral experience. Publications. Presently employed with Ger-man pharmaceutical company. Seeks industrial posi-tion. Box 142, SCIENCE. X

Renal Pharmacologist. Ph.D. 1976. Seeks industrial position. Three years of postdoctoral experience in-cluding acute and chronic renal clearance prepara-tions. Box 143, SCIENCE. X

27 APRIL 1979

POSITIONS WANTED

Life Sciences Writer/Editor seeks free-lance assign-Life Sciences Writer/Editor seeks free-lance assign-ments or position in university, foundation, associa-tion, government, or industry. Ten years of editorial experience includes magazine and newspaper jour-nalism, scholarly articles and books, ghostwriting, advocacy. Expert in interpreting arcane matters for laymen and helping professionals be more lucid. Au-thor of more than 200 signed biomedical encyclope-dia articles. Awards. University teaching and re-search background in basic and clinical sciences. P. L. Petrakis, Ph.D., M.P. H., 12115 Bluhill Road, Sil-yer Spring. Maryland 20902 Telephone: 301-949ver Spring, Maryland 20902. Telephone: 301-949-4226. 4/27; 5/11

Reproductive Biologist. Ph.D. Desires teaching/research position (no postdoctoral) in reproduction, endocrinology, or physiology; experience, publications. Box 135, SCIENCE. X

Research Consultant—Biomedical engineering/bio-physics, extensive background in cardiovascular/ blood flow research, neuroscience, experimental surgery, mechanical systems, electronics, and medi-cal instrumentation. Telephone: 212-829-2284. X

POSITIONS OPEN

MASSACHUSETTS COLLEGE OF PHARMACY ADMINISTRATIVE/ACADEMIC POSITION ASSISTANT/ASSOCIATE PROFESSOR OF **BIOPHARMACEUTICS/PHARMACOKINETICS**

Applications are invited from persons holding a Ph.D. or Pharm.D. degree in biopharmaceutics/ pharmacokinetics for a full-time 12-month faculty appointment. The individual should possess a backappointment in the international information possible as a back-ground in dosage form design and development as well as biopharmaceutics/pharmacokinetics and would be expected to develop a vigorous research program, contribute to instruction of undergraduate and graduate students and direct the activities of the college's established and excellently equipped Phar-macokinetics Laboratory. Competitive salary.

Send curriculum vitae, including the name and addresses of at least two references, to: Dr. H. I. Silverman, Massachusetts College of Pharmacy, 179 Longwood Avenue, Boston, Mass. 02115; telephone: 617-734-6700.

The Massachusetts College of Pharmacy is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT DIRECTOR NEUROSCIENCE PROGRAMS

Faculty position. Applicant must have a doctorate or Faculty position. Applicant must have a doctorate or its research equivalent in one of the basic sciences associated with neurological disciplines; previous teaching and administrative experience preferred; an M.D. helpful but not required. Significant research experience in the neurophysiology or neuropharma-cology of pain, cerebral blood flow, and/or genetic disorders relating to the nervous system preferred. Teaching responsibilities will be at the under-graduate, graduate, and postgraduate levels. Prima-ry appointment will be in the Department of Surgery with associate appointment in the basic science department of specialty, with level of appointment commensurate with applicant's experience.

Send curriculum vitae including bibliography to:

Henry D. Garretson, M.D., Ph.D. Department of Surgery University of Louisville P.O. Box 35260

Louisville, Kentucky 40232

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

The Department of Microbiology and Immunology of the University of Louisville, School of Medicine, is recruiting an ASSISTANT PROFESSOR IN VI-ROLOGY. The position requires a Ph.D. degree and 2 years of postdoctoral experience; appointee will be expected to develop and direct a quality research program and advise graduate students in molecular virology. This will include participation in the core courses for professional students and development of a graduate-level course in advanced virology. The applicant must show evidence of expertise or ac-complishment, publications, and awards. Reply to: Department of Microbiology and Immunology, Uni-versity of Louisville, Louisville, Ky. 40201. The Uni-versity of Louisville is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR—The Department of Pa-thology at the Harvard Medical School is seeking a qualified applicant for the position of assistant pro-fessor. This is a joint appointment with the Division fessor. This is a joint appointment with the Division of Tumor Immunology at the Sidney Farber Cancer Institute. Applicant must have a Ph.D. degree in bio-chemistry and prior experience in biochemical char-acterization of human HLA and Ia antigens is desir-able. Candidate is expected to establish an inde-pendent research program in the area of membrane biochemistry of normal and malignant human lym-phoid cells. Teaching requirements will include par-ticipation in the tumor immunology course at the Harvard Medical School.

The annual salary will be established between \$22,000 and \$27,000 commensurate with experience, training, and scientific achievement.

Send curriculum vitae, list of publications, names of three references, and a summary of proposed re-search to: Dr. Stuart Schlossman, Chairman of Tu-mor Immunology, Sidney Farber Cancer Institute, 44 Binney Street, Boston, Mass. 02115. An Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF GUELPH Department of Animal and Poultry Science

Applications are invited for the position of **assistant professor**, probationary appointment (tenure-track). The position involves approximately equal time in teaching and research with a small component for teaching and research with a small component for extension activity. Teaching includes diploma, un-dergraduate, and graduate levels. Knowledge of the relationship of live animals to carcass characteristics and composition is required and a research emphasis in the biochemistry, physiology, or genetics of growth helpful. The major emphasis in the research area is in beef but work on other food producing spe-cies is noscible cies is possible.

Salary commensurate with qualifications and experi-ence. Direct replies to: W. D. Morrison, Chairman, Department of Animal and Poultry Science, Ontario Agricultural College, University of Guelph, Guelph, Ontario, Canada N1G 2W1.

Duties to commence 1 September 1979. Closing date for applications: 1 July 1979 or until position is filled. Position subject to final budgetary approval.

Applications are invited for two faculty positions, tenure-track, in the Department of **BIOCHEMIS**-**TRY** at the rank of **ASSISTANT** or **ASSOCIATE PROFESSOR** which are anticipated to be available in fall 1979. Applicants should have postgraduate ex-perience and be capable of developing an independ-ent research program. The department has a prefer-ence for persons with research interest in the following areas: genome organization and regulation of gene expression in eukaryotic cells, membrane and gene expression in eukayout cells, memorane and protein biochemistry, prostaglandin biosynthesis and function, metabolic regulation and hormonal in-duction processes. Teaching responsibilities include participation in medical biochemistry instruction and in teaching graduate students. Please send curriculum vitae, description of intended research pro-gram, and at least two letters of recommendation to:

Search Committee, Department of Biochemistry The University of Texas Health Science Center at Dallas 5323 Harry Hines Boulevard Dallas, Texas 75235

An Equal Opportunity/Affirmative Action Employer

MICROBIOLOGY-ASSISTANT PROFESSOR

A regular tenure-track position is available com-mencing 1 July 1979 for an M.D. or a Ph.D. with a minimum of 2 years of postdoctoral training in mi-crobial physiology or in infectious disease. Send cur-riculum vitae and names of three referees to: Dr. Da-vid Eidinger, Head, Department of Microbiology, University of Saskatchewan, Saskatoon, Saskatche-wan, Canada S7N 0W0.

BIOCHEMIST

A position at the rank of assistant professor is avail-able in the Department of Biochemistry, College of Medicine, University of Saskatchewan. Applicants must have a Ph.D. and/or M.D. degree. Duties will include research and teaching of biochemistry to un-dergraduate and graduate students. Salary will be commensurate with experience and training. Send curriculum vitae and names of three referees to: Dr. J. D. Wood, Head, Department of Biochemistry, Uni-versity of Saskatchewan, Saskatoon, Saskatchewan, Canada S7N 0W0. Effective date of appointment is negotiable. negotiable.

ASSISTANT/ASSOCIATE PROFESSOR OF MEDI-ASSISTANT/ASSOCIATE PROFESSOR OF MEDI-CAL MICROBIOLOGY AND IMMUNOLOGY. The University of Alabama in Huntsville, School of Primary Medical Care. Ph.D. with 5 years of post-doctoral experience and competence in clinical laboratory immunology and diagnostic virology, teaching of medical students and residents, grant preparation, and guidance for other faculty in re-search program development are all required. Please submit curriculum vitae, including bibliography and names of three references, by 10 May 1979 to: John R. Montgomery, M.D. Chairman of Pediatric Programs University of Alabama in Huntsville School of Primary Medical Care Clinical Science Center

Clinical Science Center 109 Governors Drive, SW Huntsville, Alabama 35801 Telephone: 205-536-5511, extension 305

The University of Alabama in Huntsville is an Af-firmative Action/Equal Opportunity Institution.

BIOLOGY INSTRUCTOR

Instructor in biology. It does not lead to tenure. Primary duties: supervision and coordination of labora-tory preparation for multisection courses in biology tory preparation for multisection courses in biology staffed by Botany-Bacteriology and Zoology Depart-ments; lecture one section. M.S./M.A. in biological sciences minimal; experience desirable. Twelve-month appointment; salary: \$12,500-\$13,000. Send curriculum vitae and three letters of recommenda-tion by 31 May 1979 to: Dr. Raj V. Kilambi, Biology Chairman, Science Building, Room 405, University of Arkansas, Fayetteville, Arkansas 72701.

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

BIOSTATISTICS/EPIDEMIOLOGY SPECIALIST

Seek individual with Ph.D. in biostatistics or epide-miology with strong training in both disciplines, knowledge of use-oriented programming languages, and teaching experience at graduate level. Duties of the position include assisting faculty in coordinating the position include assisting faculty in coordinating the graduate training program in biostatistics and epidemiology, preparing data from ongoing faculty research for student use, assisting students in re-search projects, providing logistical support for these projects, assisting in programming, and partic-ipating in seminar discussions. Send curriculum vitae, transcripts, publications, and names and ad-dresses of three references to: Dr. Steve Selvin or Dr. Mary-Claire King, Department of Biomedical and En-vironmental Health Sciences. School of Public Health. vironmental Health Sciences, School of Public Health, University of California, Berkeley, Calif. 94720. The University of California is an Equal Opportunity/Af*firmative Action Employer*. Application review will begin 15 May 1979.

STATE UNIVERSITY OF NEW YORK (SUNY) COLLEGE AT OLD WESTBURY

COLLEGE SCIENCE LABORATORY MANAGER Responsibilities include preparation of materials for laboratory classes in biology, chemistry, and phys-ics; maintenance of stockrooms includig invento-ries and ordering of supplies and equipment; maintenance of ledgers for departmental budgets including grants. Expertise in field of scientific instruments or electronics is desirable. Applicants must have a min-imum of a B.S. degree in a science area and 2 years of experience in laboratory preparation. Salary com-mensurate with qualifications and experience. Mini-mum salary: \$12,000. Starting date as soon as possible. Send résumé to:

Search Committee SLM SUNY/College at Old Westbury Box 210

Old Westbury, N.Y. 11568

Deadline for applications: 11 May 1979. An Affirmative Action/Equal Opportunity Employer

UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

The Department of Radiology has position available for INSTRUCTOR, ASSISTANT PROFESSOR, AS-SOCIATE PROFESSOR, or PROFESSOR beginning 1 July 1979. The physician will take part in the program of patient care, teaching, and research carried on in the Department of Radiology. He/she will supervise the activities of the residents and medical pervise the activities of the residents and medical students. Must be Board-eligible or Board-certified. Entering level commensurate with qualifications and experience. Reply to: **Box 137, SCIENCE.** Code 900B0. A nondiscriminatory, Affirmative Action Employer

POSITIONS OPEN

CHAIRPERSON DEPARTMENT OF MICROBIOLOGY COLLEGE OF SCIENCE, SOUTHERN ILLINOIS UNIVERSITY, CARBONDALE

Applications are invited from highly qualified senior faculty to assume the position of chairperson of the department effective after 1 July 1979. Applicants department effective after 1 July 1979. Applicants should have an earned Ph.D. degree, evidence of ad-ministrative and leadership abilities, experience in teaching at graduate and undergraduate levels, a rec-ord of significant scholarship and an active research program in some area of microbiology.

program in some area or microbiology. The department offers mature programs leading to the B.A., M.S., and Ph.D. degree and has a strong commitment to research. It is housed in a modern, well-equipped facility with ample space. There will be seven faculty complimented by eight cross-ap-pointed for the graduate program from the School of Medicine in Springfield. The chairperson is director of the graduate program of the graduate program.

Applicants should submit curriculum vitae and request that four letters of recommendation be sent. Applications and supportive material are due 30 May 1979. Applications or nominations should be subtit Applications and supportive matchai are due 30 May 1979. Applications or nominations should be sent to: Dr. Jack Parker, Search Committee Chairman, De-partment of Microbiology, Southern Illinois Universi-ty, Carbondale, Ill. 62901.

outhern Illinois University at Carbondale is an Equal Opportunity/Affirmative Action Employer.

DEAN, ALLIED HEALTH SCIENCES UNIVERSITY OF HEALTH SCIENCES/ THE CHICAGO MEDICAL SCHOOL SEARCH REOPENED

DEAN sought for School of Related Health Sciences DEAN sought for School of Related Health Sciences in small, private university devoted to educating health professionals. Master's programs in physical therapy, immunohematology, and health services administration; baccalaureate programs in physical therapy, medical technology, and radiological sci-ences. Qualifications: doctorate, experience in allied health administration, teaching, and curriculum de-velopment. Send résumé and three letters of refer-ence by 15 May 1979 to: Joseph M. White, M.D., President, University of Health Sciences/The Chicago Medical School, 2020 West Ogden Avenue, Chicago, III. 60612. An Affirmative Action/Equal Opportunity Employer. Employer

THE UNIVERSITY OF FLORIDA invites applications and nominations for the combined position of DEAN OF THE GRADUATE SCHOOL AND DIRECTOR OF SPONSORED RESEARCH

The University of Florida awards more than 1500 In Conversity of Florida awards more than 1500 graduate degrees annually including 300 doctoral de-grees. These are awarded in 90 fields of graduates from 17 colleges. The Graduate School is respon-sible for the development and coordination of all graduate programs.

The Division of Sponsored Research is respon-sible for the administration and promotion of university-wide research programs sponsored by federal, state, and private agencies. The Division of Spon-sored Research coordinated programs in 1977-1978 of approximately \$50 million.

Candidates should have achieved distinction in their own disciplines and have administrative experi-ence in a large university system. In addition, they must have a commitment to quality graduate training and a strong research program.

Applications and nominations should include résumés and the names of three references. To ensure full consideration, credentials should be submitted by 15 May 1979 to: Dr. Wayne H. Smith, Chairman, Search and Screen Committee, G-027 McCarty Hall, IFAS, University of Florida, Gainesville, Florida 32611.

An Equal Opportunity/Affirmative Action Employer

COLLEGE OF THE VIRGIN ISLANDS SCIENCE FACULTY POSITIONS 1979-1980 Plant Physiologist, Invertebrate Biologist, Chemist

One of the biology positions will be filled by an es-tablished scientist visiting for one semester with as-sociate or full professor rank. The other two posi-tions will be filled at the instructor or assistant pro-fessor level (\$12,730 to \$17,740 plus housing for 10-month appointment). Apply by 30 April to: Dr. Wil-liam P. MacLean, Chairman, Division of Science and Mathematics, College of the Virgin Islands, St. Thom-as, U.S. V.I. 00801. Affirmative Action/Equal Oppor-tunity Employer and Educator.

POSITIONS OPEN

DEVELOPMENTAL NEUROBIOLOGIST AND DEVELOPMENTAL PSYCHOLOGIST

The Institute for the Study of Developmental Dis-abilities, a joint program of the University of Illinois at Chicago Circle and the state of Illinois, has several research positions in developmental areas of be-havior and biology. Qualified investigators with a a research positions in developmental areas of ob-havior and biology. Qualified investigators with a doctorate and a demonstrated history of research in areas relevant to developmental disabilities should apply. Desirable areas of specialization include cog-nitive and motor development, infant development, social psychology, developmental neurophysiology, neuromorphology, and neurochemistry. Salary is on an annual basis and commensurate with experience. Beginning date is 1 September 1979 or later. Dead-line for receipt of applications is 1 June 1979. Can-didates should send curriculum vitae, including the names and addresses of three references, to: Illinois Institute for Developmental Disabilities, 1640 West Roosevelt Road, Chicago, Illinois 60608. Behavioral scientists should address their applications to: Dr. Arnold J. Sameroff, while biological scientists should address theirs to: Dr. Emanuel Pollack. The Illinois Institute for Developmental Disabilities is an Affirmative Action/Equal Opportunity Employer.

EXPERIMENTAL PSYCHOLOGIST-The Department of Neurology at the University of Massachu-setts Medical Center is seeking a clinical experimensetts Meucar Center is seeking a chincar experimen-tal psychologist with a Ph.D. in psychology or its equivalent. The psychologist will be an active mem-ber of an investigative team studying the pharmaco-logical treatment of memory disorders in aging and dementing individuals. Candidates must have a demdementing individuals. Candidates must have a dem-onstrated ability to conduct research and to commu-nicate their findings. A background in neuropsy-chological testing, experimental design, statistical methods, and basic neuroscience, including pharma-cology, is preferred. Level of appointment (research associate, instructor, or assistant professor) and sal-ary are dependent on the successful candidate's euclidections and experience. Candidate nease ary are dependent on the successful candidate s qualifications and experience. Candidates please contact: Dr. David A. Drachman, Professor and Chairman, Department of Neurology, University of Massachusetts Medical Center, 55 Lake Avenue North, Worcester, Mass. 01605; telephone: 617-856-3081. An Equal Opportunity/Affirmative Action Em-ployer. ployer.

KINGDOM OF SAUDI ARABIA RIYADH UNIVERSITY FACULTY OF SCIENCE

The Chemistry Section of the Faculty of Science, Riyadh University, has faculty positions available in the following specializations:

Nucleic Acids and Protein	(Biochemistry)
Biosynthesis	
Body Fluids	(Biochemistry)
General Metabolism	(Biochemistry)
Thermodynamics	(Physical Chemistry)
Chemical Kinetics	(Physical Chemistry)

Applications are invited for positions at the asso-ciate and assistant professor level for the coming 1979-1980 academic year.

QUALIFICATIONS

Ph.D. degree within the last 10 years,
 Minimum of 3 years of university teaching experi-

ence, and 3) Prefer Arabic-speaking ability.

Please submit résumé along with copies of all documents (certificates, diplomas, transcripts, and references) as soon as possible to:

Chemistry Department Faculty of Science Riyadh University P.O. Box 2455

Riyadh, Saudi Arabia

FACULTY POSITION ANATOMY AND PHYSIOLOGY

The Basic Science Division seeks candidates for the The Basic Science Division seeks candidates for the full-time, permanent, nontenure-track position with the rank of instructor. Candidates should have M.S. or Ph.D. with broad-based training/experience and interest in teaching students at the professional lev-el. Duties include course in human muscle anatomy, and involvement in physiology and histology labora-tories. Position is open 15 August 1979. Salary com-mensurate with qualifications and experience. Send résumé, transcripts, and three letters of recommen-dation to: Dr. Grace E. Jacobs, Faculty Search Com-mittee, Northwestern College of Chiropractic, 1834 South Mississippi River Boulevard, St. Paul, Minne-sota 55116. An Equal Opportunity/Affirmative Action Employer.

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BIRZEIT UNIVERSITY

An independent Arab University in the Israeli-occu-An independent Arab University in the Israeli-occu-pied West Bank of Jordan has the following faculty openings for the academic year 1979–1980: BIOL-OGY-BIOCHEMISTRY, CHEMISTRY (PHYS-ICAL, INORGANIC, ORGANIC), MATHEMATICS (ALGEBRA, ANALYSIS, MATHEMATICAL STA-TISTICS), PHYSICS (EXPERIMENTAL AND THE-ORETICAL). English is the basic language of in-struction and candidates should have a Ph.D. preferstruction and candidates should have a Ph.D. prefer-ably or a master's degree with experience. Starting annual salary for Ph.D. is 2700 Jordanian Dinars (current exchange 1 J.D. = U.S.3.35). Optional summer teaching extra. Fringe benefits include relo-tion effective degree for the start of selection. cation allowance (15 percent of salary). Transporta-tion also provided. All applications should be ad-dressed to: Dean of the Faculty of Science, Birzeit University, Birzeit, West Bank via-Israel.

FIELD ECOLOGIST

Biologist II to conduct research on successional veg-etation and exotic plants in Everglades National Park. Minimum qualifications include B.S. in biol-ogy plus 1 year of experience or M.S. Salary is \$10,670. Request application forms for position 2566 from: Thomas Hanna, Scientific Employment Office, J-347, JHMHC, University of Florida, Gainesville, Fla 32611 Fla. 32611.

Equal Opportunity/Affirmative Action Employer

GLOBAL TECTONICS

The California Institute of Technology is seeking to create a professional position in the general area of global tectonics. Applications are invited for eiof global tectonics. Applications are invited for ei-ther a junior appointment, at the assistant professor level, or a more senior tenure appointment. The areas of specialization preferred include mantle dy-namics, theory and driving mechanism of plate tec-tonics, global geophysics, and internal fluid dynam-ics of the earth and planets. Please send résumé, publications, and names of three references to: Barclay Kamb, Chairman, Divi-sion of Geological and Planetary Sciences, California Institute of Technology, Pasadena, California 91125. An Equal Opportunity Employer.

NITROGEN FIXATION RESEARCH. Postdoctoral or research associate position available for micro-biologist to participate in research on the physiology and genetics of *Rhizobium* as related to symbiotic nitrogen fixation in legumes. Initial appointment can be for up to 3 years with a starting salary of \$10,800 to \$13,735 depending on qualifications. Apply to: Dr. H. M. Schulman, Lady Davis Institute, 3755 Cote Ste. Catherine Road, Montreal, Quebec, Canada H3T 1E2.

OCEANOGRAPHER. Assistant professor, tenure-track position is open for applicant with: Ph.D.; competence and interest in trace metal research focompetence and interest in trace metal research fo-cused on marine chemical, geochemical, or bio-chemical problems; and demonstrated ability to con-duct research. Duties include the teaching and su-pervision of graduate students. Submit résumé and names of three references by 15 June 1979 to: G. Ross Heath, Dean, School of Oceanography, Oregon State University, Corvallis, Oregon 97331. An Affir-mative Action/Equal Opportunity Employer, in com-pliance with Section 504, Rehabilitation Act of 1973.

POSTDOCTORAL FELLOW

Positions available for Ph.D. or M.D. in cancer re-Positions available for Ph.D. or M.D. in cancer re-lated research in: (i) cell kinetic effects of irradiation, drugs, and radiation-drug combinations on normal and malignant cell populations, (ii) human tumor bi-ology, (iii) virus leukemias, and (iv) cancer immuno-biology. Positions (up to 3 years) available immedi-ately. Cancer Research Unit is closely associated with Divisions of Radiation Oncology and Medical Oncolony. Sand curriculum vitro. Oncology. Send curriculum vitae, summary of past research, and names of references to: Dr. Samuel W. Lesher, Cancer Research Unit, Allegheny-Singer Re-search Corporation, 320 East North Avenue, Pitts-burgh, Pa. 15212.

POSTDOCTORAL POSITION available immediate-ly at SRI INTERNATIONAL, Menlo Park, Calif. Ph.D. in cell biology or related field. A strong tissue culture and biochemical background necessary. Must be capable of working independently to assist with ongoing project whose objective is the in vitro cultivation of *Treponema pallidum*. Send inquiries to: Mel Zaragoza, Personnel Department, SRI IN-TERNATIONAL, 333 Ravenswood Avenue, Menlo Park, Calif. 94025. Equal Opportunity Employer.

UNIVERSITY OF MAINE

With the establishment of the Center for Marine Studies, the University of Maine is placing priority emphasis on the development of a strong, competitive research and graduate education program in marine resources. Nominations and applications are invited for the following positions.

CHAIRPERSON DEPARTMENT OF OCEANOGRAPHY

The Oceanography Department, a graduate department offering M.S. and Ph.D. degrees, is primarily housed at the University's marine laboratory at Walpole, Maine. It currently has a faculty of 8. Present research activities include ecology of sub-boreal estuarine organisms, environmental biology and geochemistry, aquaculture and geological oceanography.

to serve as chief administrative officer, and develop a coordinated research program in physico-chemical es-Responsibilities Qualifications:

- tuarine processes. (1) innovative leadership and administrative capability, (2) continuing scholarly achievements
 - continuing scholarly achievements, evidence of consistent success in funded research, earned doctorate.

Academic appointment as Associate or Professor, tenure track. Salary open within University constraints.

FISHERIES POPULATION DYNAMICIST DEPARTMENT OF ZOOLOGY

The Zoology Department, with a current faculty of 18, is primarily housed on the Orono campus, and includes the Cooperative Fisheries Unit. Ten of the faculty have research interests in marine or freshwater biology.

Responsibilities: to develop a graduate education and research program on population dynamics of fishes. Qualifications: earned doctorate,
 additional professional experience in marine fisheries biology desirable

Academic appointment as Assistant Professor, initially one year with probability of additional 2-4 year University commitment.

MIGRATORY FISH BIOLOGIST **MIGRATORY FISH RESEARCH INSTITUTE**

The Migratory Fish Research Institute is an interdisciplinary group of primarily Zoology faculty whose research interests focus on the biology of migratory fishes.

to collaborate in research on oceanic and estuarine migrations of larval and juvenile eels, and to assist in research proposal development. (1) earned doctorate (2) training and experience in fish migration and orientation preferred, and (3) marine background or orientation. Responsibilities: Qualifications

Research appointment, initially one year with probability of second year continuation and possibility of third year depending an extramural program funding.

MARINE STATION ADMINISTRATIVE OFFICER

The Ira C. Darling Center is the marine laboratory of the University of Maine. It is located on a 152 acre site on the Damariscotta estuary and includes Lowe's Cove. The facility comprises 10,000 square feet of laboratory and teaching space, including an Aquaculture Center, a developing conference center, a library, dockside facilities, and a fleet of small vessels.

Responsibilities:	to serve as the Chief Administrative officer of a semiisolated marine facility in support of educational and research programs, to be responsible for budget development and control, and for an expanding promo- tional/developmental activity.
Qualifications:	(1) extensive administrative experience,
	(2) evidence of ability to communicate effectively with the public, and
	(3) experience in a sea-oriented organization including logistics, desirable.
Salary \$16,000-	\$18,000.

Applicants should send complete resumes, samples of publications, and names of three referees, by May 15, 1979, to:

> Secretary, Search Committees **Center for Marine Studies** Room 14, Coburn Hall University of Maine at Orono Orono, ME 04469 U.S.A.

The University of Maine is an Equal Opportunity/Affirmative Action Employer

ORNITHOLOGIST

The Charles Darwin Foundation is seeking a field biologist with specific interest in seabirds as resident scientist at the Charles Darwin Research Station, Galápagos Islands; minimum of 2 years. Responsibilities include approximately half-time supervision of pre- and postdoctoral Ecuadorian students, halftime conservation research (project to be negotiated), plus general administration of seabird program.

M.S. or Ph.D. in ecology or related subjects and Spanish required. Salary is U.S. \$6000 (tax-free), travel expenses, plus rent-free accommodations provided. Send curriculum vitae by air mail to arrive by 1 June to:

> Director Charles Darwin Research Station Casilla 58-39 Guayaquil, Ecuador An Equal Opportunity Employer

PHYSICAL OCEANOGRAPHER, Ph.D. level.
 PHYSICIST, Ph.D. or M.Sc. level.

Research positions are available at Israel Oceanographic and Limnological Research Haifa, beginning immediately. Candidates will be required to join research cruises and participate in data analysis. Send curriculum vitae and references to:

Professor Y. Palti, P.O. Box 8030, Haifa, Israel.

POPULATION ECOLOGIST (FISHERIES)

Academic position (assistant research biologist, University of California) available starting spring or summer 1979 for a Ph.D. experienced in working with the population dynamics of nearshore marine fishes. The successful candidate will assist the principal investigator of a multidisciplinary research program assessing environmental impacts of a southern California power plant on the local fish fauna. Applicants must have: (i) experience in solving problems related to the size, growth, yield, and mortality of fish stocks, (ii) demonstrated ability in scientific writing, and (iii) some practical experience in environmental consulting. Salary to depend on experience. Send résumé, including a brief description of experience in applied research and the names of three references, to: Dr. E. DeMartini, 533 Stevens Avenue E-55, Solana Beach, California 92075, before 4 May 1979. The University of California is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL ASSOCIATE. Available 1 June 1979, for microbiologist to study lignocellulose biodegradation. Experience in analytical organic chemistry and/or bacterial genetics desirable. Salary approximately \$12,000 per year for 2 years. Send résumé, transcripts, and three letters of recommendation to: Dr. Ronald L. Crawford, University of Minnesota, Gray Freshwater Biological Institute, Box 100, Navarre, Minnesota 55392. Equal Opportunity Educator and Employer.

POSTDOCTORAL POSITION. Join group probing mechanisms of proteolytic enzymes. Experience in protein purification, organic synthesis, and FT-NMR helpful but not required. Annual salary: \$14,000. Available 1 May 1979 through 31 August 1980, with possibility of longer appointment. Send résumé to: Dr. Michael S. Matta, Department of Chemistry, Southern Illinois University, Edwardsville, Illinois 62026. As an Affirmative Action Employer, this university offers Equal Employment Opportunity without regard to race, color, creed or religion, sex, national origin, or handicap.

POSTDOCTORAL POSITION available immediately to Ph.D. in biochemistry or physiology for research on the metabolism of rat adipose tissue. Emphasis on actions of insulin. Send curriculum vitae and two references to: Dr. R. L. Jungas, Department of Physiology, University of Connecticut Health Center, Farmington, Conn. 06032.

An Equal Opportunity/Affirmative Action Employer

Two **POSTDOCTORAL POSITIONS** available immediately to study structural organization of nitrogen fixing gene cluster of *Klebsiella*. One additional position available 1 June to clone plant DNA in *Escherichia coli* and in yeast. Requirements: Ph.D. in biochemistry or molecular biology. Research experience in phage, viral, or plasmid systems preferred. Send curriculum vitae and two references to: **Dr. A. A. Szalay, Boyce Thompson Institute at Cornell University, Tower Road, Ithaca, N.Y. 14853.** *Affirmative Action/Equal Opportunity Employer*.

POSITIONS OPEN

POSTDOCTORAL POSITION available for research on nonlinear fluctuations in condensed matter physics, including experimental investigations of low frequency noise in submicron metallic conductors and semiconductors, superconductors, and optically excitable insulators. Begins July 1979. Contact: **Professor Watt W. Webb or Professor Mark Nelkin, Applied Physics, Clark Hall, Cornell University, Ithaca, New York 14853. An Equal Opportunity/ Affirmative Action Employer.**

POSTDOCTORAL POSITIONS available for research in cell membrane biophysics. Mechanisms of mobility and immobilization, motility, intracellular and transmembrane coupling on normal and transformed cells are studied by biophysical methods. Experience in biophysics, biochemistry, or eucaryotic cell biology would be helpful, particularly relevant are tissue culture, immunofluorescence, optical spectroscopy, and microscopy. Contact: Professor Watt W. Webb, Applied Physics, Clark Hall, Cornell University, Ithaca, New York 14853. An Equal Opportunity/Affirmative Action Employer.

Two **POSTDOCTORAL POSITIONS** available 1 July 1979. One to study regulation of gene expression in cell culture. Prefer background in somatic cell genetics or cell biology, with interest in nuclear proteins. Second position, study of inborn errors in metabolism in cell culture. Ph.D. in biochemistry with interests in enzymology preferred. Salary to \$16,000. Send curriculum vitae and three references to:

Dr. Rody P. Cox Department of Medicine Case Western Reserve University Veterans Administration Medical Center 10701 East Boulevard Cleveland, Ohio 44106

POSTDOCTORAL POSITIONS. (i) Genetic and ESR analysis of mitochondrial respiration and (ii) laser flash-photolysis optical and ESR studies of oxygen evolution in photosynthesis. Available immediately. Send résumé and three letters of recommendation to:

J. T. Warden Chemistry Department Rensselaer Polytechnic Institute Troy, N.Y. 12181

POSTDOCTORAL POSITION MEDICAL ULTRASOUND

The position is funded by a NIH research grant, renewable annually through February 1982. Candidates must possess a strong background in medical-physics and have computer programming experience. The research involves the application of pattern recognition techniques to clinically derived ultrasound data.

The closing date for applications is 31 May 1979. Candidates should send their résumés to: Dr. William Swindell, Radiology Department, Arizona Health Sciences Center, Tucson, Arizona 85724. A list of at least four professional references who may be contacted regarding the candidate's qualifications should be provided.

Telephone: 602-626-1940 for further information. *The University of Arizona is an Equal Opportunity/Af-firmative Action/Title IX/Section 504 Employer.*

POSTDOCTORAL POSITIONS

Postdoctoral positions for chemists with environmental chemistry or toxicological experience or toxicologist with strong background in chemistry for pesticide-environmental chemistry research programs. Salary up to \$15,700. Send résumé to: Dr. James P. Minyard, Jr., State Chemist, Mississippi State Chemical Laboratory, P.O. Box CR, Mississippi State, Miss. 39762. Mississippi State Chemical Laboratory is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately for research in the control of cell differentiation. Approach will involve application of somatic cell hybridization procedures to myogenic cells. Previous experience in developmental cell biology, immunochemistry, or cell hybridization desirable. Appointment renewable annually; salary ranges from \$11,000 to \$14,000, depending on experience. Send curriculum vitae, summary of research interests, and three letters of reference by 15 June to: **Dr. John R. Coleman, Division of Biology and Medicine, Brown University, Providence, R.I. 02912.**

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

POSTDOCTORAL POSITION IN AVIAN BEHAV-IORAL ECOLOGY available approximately 1 September 1979 for 2 years. Research on avian mating systems and related environmental and social factors. A combination of field, theoretical, and data processing skills desirable. Applicants should contact: Lewis W. Oring, Department of Biology, The University of North Dakota, Grand Forks, N.D. 58202.

Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL POSITION available for research in developmental biochemistry and biochemistry of inborn errors of metabolism. Strong background in biochemistry is essential. Send curriculum vitae and names of three references to: Dr. F. A. Hommes, Department of Cell and Molecular Biology, Medical College of Georgia, Augusta, Ga. 30901. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS

Biology of avian retroviruses in normal and diseased tissue. One position available immediately; the other in June 1980. Apply to: Dr. Harriet Robinson, Personnel Office, WORCESTER FOUNDATION FOR EXPERIMENTAL BIOLOGY, 222 Maple Avenue, Shrewsbury, Mass. 01545.

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITION. To study the interaction of the killer toxin protein with cell surface receptors in yeast. Experience in protein chemistry and/or yeast genetics useful. Appointment for 1 year initially, with renewal for a further 2 years. Salary: C\$13,000 per annum. Applications and two letters of recommendation should be sent to: Dr. H. Bussey, Department of Biology, McGill University, 1205 Avenue Docteur Penfield, Montreal, Quebec, Canada H3A 1B1.

POSTDOCTORAL POSITION. Experience in contractile protein or membrane biochemistry desirable. To study **PROTEIN PHOSPHORYLATION** in smooth muscle. Available June 1979. Salary: \$13,000 to \$16,500; renewable. Send résumé, with references, to: Dr. R. A. Janis, Department of Physiology, Northwestern University Medical Center, 303 East Chicago Avenue, Chicago, Illinois 60611. An Affirmative Action Employer.

POSTDOCTORAL POSITION – NEUROANATOMY

Available 1 July 1979 for training in neuroanatomy. Training will include the use of a variety of techniques, and may be carried out in one of a number of areas including cerebral cortex, auditory system, retina, neuroendocrine systems, limbic system, and hippocampus. For further information contact: Dr. Allan Peters, Chairman and Professor, Department of Anatomy, Boston University School of Medicine, 80 East Concord Street, Boston, Mass. 02118.

An Equal Opportunity Employer, M/F

POSTDOCTORAL POSITION is available immediately on NIH training grant for biochemistry or molecular biologist to study the transforming products of the DNA tumor viruses and their interaction with host macromolecules. Experience in protein and enzyme characterizations useful. Send curriculum vitae and names of three references to: Dr. Robert B. Carroll, Department of Pathology, New York University School of Medicine, 550 First Avenue, New York, N.Y. 10016.

POSTDOCTORAL POSITION IN SENSORY NEU-ROPHYSIOLOGY, beginning September 1979, to use electrophysiological unit recording techniques to study somesthesis in awake, behaving preparations. Research focuses on coding mechanisms used by single neurons in cerebral cortex and subcortical relay nuclei, and on the relation of these mechanisms to pattern perception. Prior research experience in neurophysiology essential. Send curriculum vitae to: Dr. Esther Gardner, Department of Physiology and Biophysics, New York University Medical Center, 550 First Avenue, New York, N.Y. 10016. An Equal Opportunity Employer.

SCIENCE, VOL. 204

MONASH UNIVERSITY CHAIR OF PHYSIOLOGY

Monash University is seeking to fill this position which became vacant on the retirement of Professor A.K. McIntyre. The new Professor will be expected to assume Chairmanship of the Department by arrangement with the present Chairman and take the leadership role in organizing the teaching and research functions of the Department.

The present research interests of the Department are in neuropharmacology, neurophysiology, endocrinology, brain structure and muscle physiology. The appointee should be an established scientist whose field of interest could be within or complementary to one of these areas.

Information about the Department can be obtained from the Chairman, Professor R. Porter.

Salary: \$A33,061 per annum. A loading of \$A2,500 per annum will be paid to a medically qualified appointee. Superannuation. Travel and removal allowance.

Application procedure and further particulars available from the Academic Registrar, Monash University, Clayton, Melbourne Victoria, 3168, Australia.

Applications close 30 June, 1979.

Mobil

The Mobil Environmental and Health Science Laboratory in Princeton, N.J. has immediate openings for qualified applicants in several fields. These positions provide exceptional opportunities for personal growth in a newly developing Toxicology Division which serves a large petroleum/chemical complex.

Senior Toxicologist

Ph.D. with bench experience. Broad responsibilities for development and conduct of intramural testing programs involving mammalian systems. Interest and experience in toxicology data control systems is highly desirable. Opportunities for independent or collaborative research. (Preference will be given to affiliates of the American College of Toxicology, Society of Toxicology, FASEB.)

Senior Pathologist

Board qualification and/or extensive experience with laboratory animal species, with an abiding interest in structure/function relationships. Responsibilities for program development, and for gross and microscopic pathology in intramural tests; some responsibility for contract laboratory relationships. Opportunities for independent or collaborative research. (Preference will be given to affiliates of the American College of Veterinary Pathologists, American College of Toxicology, FASEB.)

Pathology Laboratory Supervisor

Experience and formal qualification in a broad variety of histomorphological techniques essential; supervisory experience and GLP familiarity highly desirable; academic degree preferred. Responsibilities for development and function of histology laboratory, special histological and histochemical techniques, and specimen archive.

For confidential consideration, submit resume and salary requirements to: D.L. Loveless, Employee Relations, Mobil Oil Corp., P.O. Box 1026, Princeton, N.J. 08540.

An Equal Opportunity Employer

Mobil

Biochemical Toxicology

Mobil's expanding Toxicology Division has opportunities available at its new facility near Princeton, N.J.

 SUPERVISOR OF METABOLISM/ PHARMACOKINETICS (Ph.D.)

Responsibilities include delineating metabolic pathways of test substances using in vivo and in vitro systems and supervising a group of analytical chemists and clinical biochemists. Applicant should possess a degree in biochemistry, analytical chemistry or a closely related discipline and have several years experience in metabolism/pharmacokinetics and analytical instrumentation.

 SUPERVISOR OF MUTAGENESIS/ CARCINOGENESIS (Ph.D.)

Responsibilities include designing, instituting and supervising a research effort aimed at detecting chemical mutagens and carcinogens. The applicant should possess a degree in cell biology, microbiology, biochemistry or a closely related discipline and have extensive experience with short term assays in carcinogenesis and mutagenesis.

MICROBIOLOGIST/BIOCHEMIST (BS/MS)

Primary responsibility will be to perform short term assays for the detection of chemical mutagens and carcinogens. Applicant should possess a degree in microbiology, cell biology, biochemistry or a closely related discipline and have extensive experience with in vitro bioassay techniques.

For all positions, membership in one or more professional societies (A.C.T., F.A.S.E.B. or S.O.T.) is desirable.

For confidential consideration, submit resume and salary requirements to: D.L. Loveless, Employee Relations, Mobil Oil Corp., P.O. Box 1026, Princeton, N.J. 08540.

An Equal Opportunity Employer

Geologist (1) Seismologist/ Geophysicist (2)

Attractive career positions exist in our Bethesda, Maryland Headquarters for qualified individuals to review and evaluate geologic and seismic hazards at existing and proposed nuclear plant sites. Knowledge in respective technical fields must be sufficient to evaluate and advise the Commission on licensing applications. Applicants should have formal education and experience equivalent to the MS or Ph.D. level.

Send resume with salary information or Government application (Standard Form 171) to:



Commission Division of Organization & Personnel Recruitment Branch: GP Washington, D.C. 20555

An Equal Opportunity Employer, M/F/Hdcp. (LS. Citizenship Required

POSTDOCTORAL POSITION open for recent Ph.D. in biochemistry or cell/molecular biology. Project involves both biochemistry and immunological studies in brain. Experience with protein purification, electrophoresis, and peptide mapping required. Experience or familiarity with neurobiology and immunochemistry highly desirable. Salary: \$12,000 to start. Send curriculum vitae and names of three references to: Dr. T. J. Sprinkle, VA Medical Center, Research Service (151), Augusta, Ga. 30904. Equal Opportunity Employer, M/F

The School of Life Sciences each year has a number of **POSTDOCTORAL POSITIONS** based primarily on monies available through grants, and so forth. The number of positions will vary from year to year. We invite applicants for potential 1- to 3-year positions as postdoctoral research associates in the following areas of the School of Life Sciences at the University of Illinois: botany; ecology, ethology, and evolution; entomology; genetics and development; microbiology; and physiology and biophysics; and the following interdisciplinary programs in the area of biology, cell biology, neurobiology, plant physiology, ecology, and genetics. Applicants should have the Ph.D. and strong interests in experimental research. Salary: open. Applicants should search interests to: **The School of Life Sciences**, University of Illinois, Urbana, III. 61801. The University of Illinois is an Affirmative Action/Equal Opportunity Employer and encourages applicants from minorities and women.

POSTDOCTORAL SENIOR RESEARCH ASSOCIATE

An immediate opening is available for a Ph.D. immunochemist or biochemist with experience in radionuclide labeling of immunoglobulins, in addition to protein fractionation. Responsible for the development of radiolabeled antibodies for use in clinical and experimental studies of radioimmunodetection of human tumors. Salary negotiable in the range of \$14,000 to \$18,000 per annum. Send résumé, list of publications, and names of three references to:

Dr. David M. Goldenberg, Director Division of Experimental Pathology MS 409 University of Kentucky Medical Center Lexington, Kentucky 40536

Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL RESEARCH ASSOCIATE

The Biology and Society Branch of the Cornell University Program on Science, Technology, and Society seeks a social scientist with special expertise in the study of environmental and population policy issues and with a substantial background in the relevant biological sciences for a 1-year appointment that combines teaching and research activities. Send statement of interests, résumé, and three letters of reference to: Stuart M. Brown, Jr., Associate Director, Program on Science, Technology, and Society, 632 Clark Hall, Cornell University, Ithaca, New York 14853 by 15 May 1979.

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL RESEARCH POSITIONS in radiation biophysics at the molecular and cellular levels. Available immediately. Competitive salary. Ph.D. in physics, biophysics, or chemistry required. Send résumé and three letters of recommendation to: Professor L. I. Grossweiner, Biophysics Laboratory, Physics Department, Illinois Institute of Technology, Chicago, Illinois 60616. Illinois Institute of Technology is an Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATES, Ph.D., biochemistry or cell biology are immediately available for a minimum of 3 years. The research will involve studies of multienzyme systems in respiratory and tumor tissues which regulate the composition, synthesis, and secretion of cell surface antigens and mucin glycoproteins in these tissues. A second position is available to study the role of phosphorylation of soluble enzymes and membrane proteins in the mechanism of hormone action in kidney. Salaries for these positions range from \$12,500 to \$15,000, commensurate with experience. Send résumé and names of references to: **Dr. Josenh Mendicino**

Dr. Joseph Mendicino Department of Biochemistry University of Georgia Athens, Georgia 30602

PREDOCTORAL AND POSTDOCTORAL TRAIN-ING OPPORTUNITIES for qualified applicants in the areas of animal virology, biochemistry, cell and membrane biology, genetics, immunology, infectious diseases, oral biology, biology of aging, and molecular biology.

Send curriculum vitae and inquiries to: Dr. Kenneth J. Roozen, Vice-Chairman Department of Microbiology University of Alabama Medical Center Birmingham, Alabama 35294 An Affirmative Action/Equal Opportunity Employer

NATIONAL SCIENCE FOUNDATION (NSF)

DIVISION OF MATHEMATICA AND COMPUTER SCIENCES

AND COMPUTER SCIENCES The Computer Science Section of NSF will have openings for PROGRAM DIRECTORS for its Intelligent Systems and Theoretical Computer Sciences Programs beginning 1 September 1979 for a 1or 2-year rotator appointment. Salary range of \$32,442 to \$47,500 per annum is negotiable. Health, life insurance, and leave benefits are available depending upon the length of assignment. Applicants should have a Ph.D. or equivalent experience and training in an appropriate field plus 6 years of successful scientific research experience. A broad general knowledge of the field and some administrative experience are also required. Send curriculum vitae and statement of interest to: Division of Personnel and Management, National Science Foundation, Attention: E. Paul Broglio, 1800 G Street, NW, Washington, D.C. 20550. For further information, telephone: 202 632-4106. The National Science Foundation is an Equal Opportunity Employer.

RESEARCH ASSISTANT PROFESSOR University of Pennsylvania for work in cardiac ischemia Write: Dr. J. R. Williamson Department of Biochemistry and Biophysics Room 601, New Biology Building Philadelphia, Pa. 19104

STAFF POSITION

Department of Biochemistry is seeking a biochemist, cell biologist, or biophysicist capable of developing an outstanding, independent research program involving lipids and membrane phenomena. Please send curriculum vitae, list of publications, statement of research interest, and names of three references to: Dr. Martin Morrison, Department of Biochemistry, St. Jude Children's Research Hospital, Memphis, Tennessee 38101. We are an Equal Opportunity/Affirmative Action Employer.

VERTEBRATE BIOLOGIST. One-year assistant professorship to replace faculty on released time; possibility of second year. To teach a one-term introductory course on organisms and evolution, field ecology, specialty course, and general studies. Fivecourse load. Ph.D. required. Evidence of particular success in teaching desirable. Base salary: \$14,500. Send letter of interest, résumé, and names, addresses, and phone numbers of three references by 11 May to: Philip Nanzetta, Dean, Natural Sciences and Mathematics, Stockton State College, Box 7440, Pomona, N.J. 08240. Affirmative Action/Equal Opportunity Employer.

VICE PRESIDENT FOR RESEARCH UNIVERSITY OF UTAH

Applications and nominations are invited for the above position which has administrative responsibility for research grants and contracts of some \$50 million primarily in the fields of engineering, medicine, minerals, pharmacy, and science. Primary responsibilities include contacts with federal granting agencies and foundations, keeping faculty and other state colleges informed of grant opportunities and application procedures, and participating in the development of general university policies.

Desired qualifications include an earned doctorate in technical discipline, demonstrated success in working with federal and private granting agencies from an academic base, a knowledge of research accounting and contracting procedures and requirements, and previous high-level administrative experience. Biographical data and names of references should be sent by 30 May to: Dr. Anthony Morgan, Search Committee, 211 Park, University of Utah, Salt Lake City, Utah 84112.

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

RESEARCH ASSISTANT PROFESSOR. Nontenure-track appointment in the Department of Anatomy, University of Pennsylvania Medical School, available for individual to carry out research program investigating neural cell lineages in vertebrates. Applicants must have Ph.D. and at least 5 to 10 years of experience and background in cellular differentiation, in identification of nervous-systemspecific antigens, and in analysis of cytoplasmic filaments, and expertise in each of the following: protein purification and characterization, immunochemistry and immunohistochemistry, cell culture of vertebrate neural tissue, and electron microscopy. Apply to:

A. M. Nemeth, M.D. Director, Search Committee Department of Anatomy/G3 University of Pennsylvania Medical School Philadelphia, Pa. 19104

RESEARCH ASSOCIATE. Medical school in Northeast seeks applications from cell biologists-biochemists engaged in research on ontogenetic aspects of the mechanism of action of sex steroids. Experience in immunochemistry, purification of proteins, and tissue culture essential. Applicant should be able to supervise postdoctoral fellows and students. Qualifications required: M.D., Ph.D., or equivalent degree. Annual salary: \$16,000 to \$18,000. Send curriculum vitae and references to:

Box 136, SCIENCE

An Equal Opportunity/Affirmative Action Employer

RESEARCH ASSOCIATE—BIOCHEMISTRY. Immediate opening in a large university in northeastern United States. Position involves preparation, modelling, and analysis of enzyme reactors for medical applications. Candidates must have a Ph.D. degree in biochemistry or biochemical engineering. Preference will be given to those with experience in enzymology of phenylalanine ammonia-lyase or carboxypeptidase G. Salary range: \$11,000 to \$13,000 per annum. Send curriculum vitae and list of publications to:

Box 138, SCIENCE

Affirmative Action/Equal Opportunity Employer, M/F

TEACHING/RESEARCH POSITION IN TOX-ICOLOGY. Applications are invited from individuals with Ph.D. in toxicology for tenure-track position to begin 1 August 1979. Responsibilities include some teaching, research, and the training of graduate students for careers in toxicology. The appointee will be expected to establish a high-quality research program that will augment existing research of the center. Prior academic experience is desirable and demonstrated contributions to critical areas of toxicology are essential. Academic rank and salary commensurate with qualifications. Applications deadline: 1 June 1979. Interested applicants should send curriculum vitae and names of references to:

Dr. H. Wyman Dorough, Director Graduate Center for Toxicology University of Kentucky (00916) Lexington, Kentucky 40546

UNIVERSITY OF OKLAHOMA VICE PROVOST FOR RESEARCH ADMINISTRATION AND

AND DEAN OF THE GRADUATE COLLEGE

Applications are invited for the Vice Provost for Research Administration (Norman Campus) and Dean of the Graduate College (university-wide) beginning on or about 1 January 1980. Responsibilities include: providing active leadership in the support and expansion of research and creative endeavors and the administration of the graduate college. A suitable candidate must be a person who has earned the highest academic degree in his/her field; has taught graduate courses and directed doctoral dissertation; has exerted a demonstrable scholarly and professional influence; is committed to research and creative activity in all areas of the university as well as in particular fields of specialization; has demonstrated the capacity to be an imaginative and impartial administrator; and has the experience and ability to provide leadership for the faculty and programs of the university. Applicants should send curriculum vitae with the names of four references before 11 May 1979 to: Professor Eddie Carol Smith, Chairperson of Search Committee, 620 Parrington Oval, University of Oklahoma, Norman, Oklahoma 73019. The University of Oklahoma is an Equal Opportunity/Affirmative Action Employer.



RESEARCH ASSOCIATE position available now for Residence in the posterior of the corotid body. Projects concern ultrastructure, catechola-minergic system, mechanisms of feedback control. Write: Dr. Elliott Mills, Department of Pharmacolo-gy, Duke University Medical Center, P.O. Box 3813, Durham, N.C. 27710; telephone: 919-684-4276. Duke University is an Faul Opportunity Fundaver University is an Equal Opportunity Employer.

RESEARCH ASSOCIATE. Available after 1 July **RESEARCH ASSOCIATE.** Available after 1 July 1979 for investigation of gene regulation in amylase system in *Drosophila*. Ph.D. trained in molecular biology; experience in isolation and purification of eukaryotic messenger RNA's and their analysis by RNA-DNA hybridization using complementary DNA and cloned DNA approaches. Starting salary up to \$14,000; faculty benefits. Send curriculum vitae, re-prints, and three references to: **Professor W. W. Doane. Denartment of Zoology Arizons State Univer-**Doane, Department of Zoology, Arizona State Univer-sity, Tempe, Arizona 85281.

SYMPOSIUM

The American Malacological Union and the West-ern Society of Malacologists will hold a joint meeting (La Quinta Royale Motel) in Corpus Christi, Texas, from 5 to 11 August. Papers on molluscan-related topics will be presented. A cash award will be given for the best 'student paper.' Symposia will be LIFE HISTORIES OF MOLLUSKS and MOLLUSKS OF THE GULF OF MEXICO. Those interested in attending should write: Wil-

Those interested in attending should write: Wil-liam Old, President, American Malacological Union, c/o American Museum of Natural History, 79th Street and Central Park West, New York, N.Y. 10024.

CONFERENCES

ENVIRONMENTAL STUDIES

A conference on UNDERGRADUATE CURRICULA A conference on UNDERGRADUATE CURRICULA in environmental studies will be held at Stockton State College, Pomona, N.J., 11 to 13 June 1979. Topics include integrating natural sciences, social sciences, and humanities in the curriculum; senior level synthesis courses; and career development. Program will include addresses, workshops, and panel discussions. For further information write or call: Center for Environmental Research, Stockton State College, Pomona, N.J. 08240. Telephone: 609-652-1776. 652-1776.

UPCOMING BIOMEDICAL CONFERENCES

SUBJECT New Technologies in Health Care	LOCATION San Francisco London	1979 DATE 21 to 22 May 11 to 12 June
Respiratory Therapy and Anesthesiol- ogy Products	Tarrytown, N.Y.	10 to 11 Sep- tember
	Brussels	24 to 25 Sep- tember
Scientific, Medical, and Industrial	Amsterdam	17 to 18 Sep- tember
Instruments	Chicago	29 to 30 Octo- ber
Diagnostic Imaging in Europe	Brussels	22 to 23 Octo- ber
Computers in Medicine	Düsseldorf	19 to 20 Novem- ber
	Chicago	3 to 4 December
SEND FOR	R DETAILED PROG	RAMS
	RT S. FIRST, INC	

White Plains, New York 10604

COURSES

PLANNING FOR NUCLEAR EMERGENCIES 14 to 18 May 1979 School of Public Health Harvard University

This course provides detailed coverage of all aspects of emergency planning, including case histories and scenarios, the nature of gas and aerosol transport; standards and guides for emergency action; interstandards and guides for emergency action; inter-relationships among the nuclear plant operator and federal, state, and local agencies; procedures for pop-ulation evacuation; and current research. Fee \$500. Contact: Short Course Coordinator, Environmental Health Sciences Department, Harvard School of Pub-lic Health, 665 Huntington Avenue, Boston, Mass. 02115. Telephone: 617-732-1171.

COURSES

COURSES				
1979 SUMMER COURSE OFFERINGS Field Station, College of Marine Studies				
Introduction to Estuar- ine and Coastal Ecology (4 credits)	18 June to 21 July			
Recent Sedimentary Environments (3)	18 June to 21 July			
Internship in Marine Chemistry (1)	18 June to 21 July 24 July to 24 August			
Oceanographic Prac- ticum (1 or 2)	18 June to 21 July 24 July to 24 August			
Introduction to Comput- er Methods in Marine Studies I and II (2 and 2)	I: 18 June to 21 July II: 24 July to 24 August			
Special 2-Week Courses				
Attached Algae (2)	18 June to 29 June			
Septimatic Biology of Mid-Atlantic Mollusca (2)	2 July to 13 July			
Molluscan Reproduc- tion and Larval Ecology (2)	16 July to 27 July			
Coastal Botany (2)	30 July to 10 August			
Address inquiries to:				
Summer 1979 College of Marine Studies University of Delaware Newark, Delaware 19711				
m 1 1 200 700 01//				

Telephone: 302-738-8166

ASSISTANTSHIPS

GRADUATE ASSISTANTSHIPS for Ph.D. candi-GRADUATE ASSISTANTSHIPS for Ph.D. candi-dates in anatomy, biochemistry, microbiology, phar-macology, and physiology. \$5000 per year. Well-equipped laboratories and excellent library re-sources. Programs are designed to meet particular interests, aptitudes, and needs of individual stu-dents. Address inquiries to: Office of the Dean, School of Medicine, East Carolina University, Green-ville, N.C. 27834. An Equal Opportunity/Affirmative Action Employer. Action Employer.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP available now rostDocTORAL FELLOWSHIP available now in the Laboratories of Connective Tissue Research of the Department of Biochemistry, Baylor College of Medicine, Houston, Texas 77030, for a Ph.D. (bio-chemistry or organic chemistry) with good working experience in enzymology or chemistry of structural proteins. Send curriculum vitae and three letters of recommendation, or write for additional information to: Dr. Nicola Di Ferrante at the above address. An Equal Opportunity Employer

POSTDOCTORAL TRAINING FELLOWSHIPS in the structure and function of extraocular muscle fi-bers. These positions are NIH-sponsored and immediately available. Traineeship in muscle ultrastruc-ture (J. Davidowitz, preceptor) would emphasize serial morphometric analysis of fiber types. Traineeship in muscle function (D. J. Chiarandini preceptor) would emphasize electrophysiology and contractility. Send curriculum vitae and names of three references to: Jose A. Zadunaisky, Program Di-rector, Department of Ophthalmology, New York University Medical Center, 550 First Avenue, New York, N.Y. 10016. preceptor) would emphasize electrophysiology and

An Equal Opportunity Employer

POSTDOCTORAL FELLOWSHIP available immediately for 2 years. Studies on enzyme, post-translational modification during erythrocyte devel-opment. Ph.D. required with experience in enzyme isolation and protein chemistry. Send curriculum vitae and two letters of recom-mendation by 1 June 1979 to:

Dr. H. Richard Levy

Biological Research Laboratories Syracuse University 130 College Place Syracuse, N.Y. 13210

Syracuse University is an Equal Opportunity/Affirmative Action Employer.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIPS IN DEVELOPMENTAL BIOLOGY AND DEVELOPMENTAL BIOLOGY AND DEVELOPMENTAL PSYCHOLOGY

The Institute for the Study of Developmental Disabilities, a joint program of the University of Illinois at Chicago Circle and the state of Illinois, has several postdoctoral research positions in developmental areas of behavior and biology. Qualified investigators with a doctorate and research interests in areas relevant to developmental disabilities should apply. Desirable areas of specialization include cognitive, motor, and psychophysiological development, infant development, early family interaction, developmental neurophisiology, neuromorphology, and neuro-chemistry. Beginning date is 1 September 1979 or later. Candidates should send curriculum vitae, in-cluding the names and addresses of three references, to: Illinois Institute for Developmental Disabilities, 1640 West Roosevelt Road, Chicago, Illinois 60608. Behavioral scientists should address their appli-cations to: Dr. Arnold J. Sameroff, while biological scientists should address theirs to: Dr. Emanuel Pol-lack. The Illinois Institute for Developmental Disabilities is an Equal Opportunity/Affirmative Action Employer.

TOXICOLOGY POSTDOCTORAL FELLOW-**SHIPS**—The Toxicology Training Program at the University of Rochester invites applications for training in environmental toxicology. This lateral entry program features course work and seminars, as well as research opportunities in the laboratories of faculty members with interests in behavioral, bio-chemical, developmental, and inhalation toxicology. It is designed to allow individuals with training in It is designed to allow individuals with training in other disciplines to pursue careers in the toxicology of environmental agents. Only candidates who are U.S. citizens or permanent residents will be eligible for support from a National Research Service Award. For more information please write: Dr. Vic-tor G. Laties, Acting Director, Toxicology Training Program, P.O. Box Toxicol., University of Rochester School of Medicine and Dentiety. Rochester School of Medicine and Dentistry, Rochester, N.Y. 14642.

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