# Personnel Placement

Only those employers and individuals who do not dis-criminate on the basis of race, sex, religion, age, color, or national origin should submit Personnel Placement advertising.

POSITIONS WANTED: 40¢ per word; use of Box Num-ber counts as 10 additional words. Minimum charge \$10. Prepayment required. This rate applies to individ-uals only; personnel agencies, companies, colleges, and universities take display rate for all advertising.

DISPLAY (POSITIONS OPEN, MARKET PLACE, AND SO FORTH): \$130 per inch, minimum, per insertion (1 inch is equivalent to 12 lines of 48 characters each). Ads over 1 inch billed to nearest quarter inch. No charge for Box Number. Rates net. No agency commission al-lowed for ads under 4 inches. No cash discount. Pre-payment required for foreign advertising. Purchase or-ders and billing information must accompany all other advertising. advertising.

COPY for ads must reach SCIENCE by Wednesday,  $3\cdot1/2$  weeks before issue date (Friday of each week) requested. Send copy for all positions wanted ads and display ads under 5 inches to:

SCIENCE, Room 207 1515 Massachusetts Ave., I Washington, D.C. 20005 NW

Send copy for display ads, 1/6 page and larger, to: Scherago Associates, Inc. 11 West 42nd Street New York, N.Y. 10036

BLIND AD replies should be addressed as follows

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

### **POSITIONS WANTED**

**Biochemist/Protein Chemist.** Ph.D. 1967. Experienced in protein structure, protein purification, and immuno-chemistry. Publications. Seeks position in university, research institution, or industry. Box 45, SCIENCE. x

Biologist. Advanced degree with extensive editorial-in-dexing experience. Desires stable position with govern-ment or industry. Box 46, SCIENCE. X

**Biologist/Biochemist.** Ph.D. 1971. One year of post-doctoral and  $3\frac{1}{2}$  years of additional research experi-ence in protein chemistry/immunology. New York State qualified in clinical chemistry/endocrinology. Excellent teacher. Seeks career-oriented position in in-dustry/hospital/academia in New York metropolitan area. Available immediately. Box 47, SCIENCE. X

Biomathematics. Ph.D. (May 1976). Teaching and math. Modeling applications to community health or related fields. Three years of teaching, 2 years of bio-medical research laboratory experience. I. J. Shiffer, Department of Statistics, North Carolina State University, Raleigh, N.C. 27607. 2/6, 13

**Biophysicist**, Ph.D. (expected August 1976). Specialty: membrane biophysics. Experience: ESR, spin labeling, lipidology, theoretical physics, thermodynamics, teach-ing. Not U.S. citizen. Desires postdoctoral research as-sociateship or research/teaching position. Box 48, SCI-SOCIALES ENCE.

Clinical Biochemist: Ph.D. Member AACC, Board-eli Clinical Biochemist: Ph.D. Member AACC, Board-ell-gible. Two years postdoctoral in clinical chemistry. Di-rector chemistry university hospital. Responsible for service, also training of residents and medical tech-nologists. Certified by New York State as lab director in clinical chemistry. Seeks challenging position in hos-pital, private laboratory, or industry. Box 36, SCI-ENCE. 2/6, 13, 20

Energy/Environmental Policy Analyst, ABD, 3 years of experience with emphasis on nuclear energy. Seeks postdoctoral research and/or teaching position. Box 49, SCIENCE. X

6 FEBRUARY 1976

### **POSITIONS WANTED**

Geneticist/Biologist. M.S. and Ph.D. in *Drosophila* population genetics. Postdoctoral in *Drosophila* developmental genetics and cytogenetics. Very broadly trained in biology. Desires college/university teaching/research position. J. Pyati, Department of Zoology, Indiana University, Bloomington, Indiana 47401. X

Mammalian Neurophysiologist/Computer Scientist, Ph.D. Broad background in theoretical as well as ex-perimental studies of neural systems. Experienced in course development and program organization. Seeks challenging teaching/research position. Box 21, SCI-ENCE.

Mycologist-Botanist-Microbiologist. Ph.D 1970. Teaching experience, publications. Seeks teaching posi-tion. Box 50, SCIENCE. X

Neurochemist, Ph.D. organic chemistry, 1970. Experi-ence in neurochemical basis of psychoses, psycho-pharmacology, neuroenzymology, structure-activity relationships of drugs and their design and synthesis. Seeks research, industrial, or teaching position. Publi-cations. Box 51, SCIENCE. X

Paleontologist/Sedimentologist, Ph.D., 3 years of teaching experience, publications, active research pro-gram in tertiary mammalian biostratigraphy and ter-rigenous deposition. Loves teaching. J. Schiebout, De-partment of Geological Sciences, San Diego State Uni-versity, San Diego, California 92182. 2/6, 27

Plant Physiologist, Ph.D., research experience with plant growth regulators and water stress. Publications. Teaching experience in biology and botany. Desires ac-ademic or industrial position. Box 52, SCIENCE. X

Regulatory Affairs Scientist. Ph.D. toxicology-pharma-cology. Successful record FDA regulatory affairs. Ex-perience Canadian and foreign registrations. Five years director, ethical pharmaceutical company. Twelve years administrative experience in drug and other in-dustries. Box 53, SCIENCE. 2/6, 13, 20

Sociologist, Ph.D., seeks research/evaluation director's position. Fourteen years of experience conducting large-scale state-federal studies on alcoholism and mental health. Available 1 July 1976. Box 54, SCI-ENCE.

Summer School; Botany. Two experienced college teachers, Ph.D.'s (Washington University, 1971; Cor-nell University, 1975), desire summer position(s) teaching botany, plant systematics, physiology, or mor-phology. Box 55, SCIENCE. X

Vertebrate Zoologist, Ph.D. 1974. Desires position at 4-year institution. Broad experience; ornithology, comparative anatomy, vertebrate evolution, human ecology. Teaching experience and publications. Box 56, SCIENCE. X

Water Quality Geochemist, M.S.,  $1\frac{1}{2}$  years Ph.D. research, fresh and marine experience, heavy metals, sediments, and soils. Seventeen publications. Desires research position. Foreign assignments considered. Box 57, SCIENCE. X

Zoologist/Limnologist, Ph.D. 1971. Broad teaching experience. Interests include invertebrate zoology, field biology, aquatic biology, introductory ecology, field biology, aquatic biology, introductory ecology, com-parative anatomy. Some publications. Environmental grants: water quality studies of impoundments. Box 58, SCIENCE. X

### POSITIONS OPEN

### ANIMAL PHYSIOLOGIST

Assistant professor, preferably with specialty in renal or neurophysiology. Start September 1976. Ph.D. re-quired. Send résumé and names and addresses of at least five references to Dr. James E. Deacon, Chairman, Department of Biological Sciences, University of Ne-vada, Las Vegas, Nevada 89154. Equal Opportunity/ Affirmative Action Employer, M/F.

### POSITIONS OPEN

UNIVERSITY OF TRIPOLI FACULTY OF PHARMACY P.O. BOX 4022, TRIPOLI LIBYAN ARAB REPUBLIC

Academic vacancies for the year 1976-77.

The faculty of pharmacy of the University of Tripoli requires teaching staff members in the following fields:

Pharmaceutics

Pharmacognosy Pharmacology

Industrial pharmacy Medicinal and pharmaceutical chemistry

The appointee, who should have a Ph.D., will be ex-

The appointce, who should have a Ph.D., will be ex-pected to teach undergraduate courses in English and to participate in establishing modern research facilities in the new school of pharmacy. The University of Tripoli offers competitive salaries based on qualification, experience and background, and attractive fringe benefits complemented by an environ-ment geared to personal growth and development. Fur-ther details and conditions of appointment are avail-able from the faculty.

ther details and conditions of appointment are area able from the faculty. Send application with complete curriculum vitae and the names of at least two references by 15 March 1976 to: Academic Staff Affairs, University of Tripoli, Gener-al Administration, P.O. Box 398, Tripoli, Libyan Arab Republic.

Table of Salaries				
Grade	Start- ing rate	Maxi- mum rate	Amount of incre- ment	Num- ber of incre- ments
Assistant professor	4400	5000	100	6
Lecturers	4000	4600	100	6

### ALGOLOGIST

The Botany Department hopes to fill a vacant posi-tion at the assistant professor level by August 1976. Research-oriented persons with Ph.D. who are able to initiate an active teaching and research program in al-gology and to assist in the general botany program are invited to apply. Interested applicants should send a curriculum vitae, most significant reprints, a short statement of projected research problems, and names of three references to:

Dr. Thomas J. Leonard Department of Botany University of Wisconsin-Madison Madison, Wisconsin 53706 An Equal Opportunity/Affirmative Action Employer

**Ph.D. ANALYTICAL CHEMISTS** are sought for permanent positions to work on analytical problems in environmental and biological areas. Expertise in separation techniques with a broad and diverse experi-ence (up to 5 years) in environmental sampling and analysis and instrumental methods is required. Prefer-ence for one of the positions will be given to candidates with training in gas chromatography. Please send résumé to: résumé to:

Dr. Edo D. Pellizzari Research Triangle Institute P.O. Box 12194 Research Triangle Park, N.C. 27709

University of Idaho. ASSISTANT PROFESSOR teaching position. Terminal degree (M.L.A. or Ph.D.) in either landscape architecture or horticulture. Must in either landscape architecture or horticulture. Must have degrees in both fields. To teach courses in land-scape design, landscape history, and in ornamental plants. Available 1 August 1976. Closing date for ap-plications is 15 March 1976. Request application forms from Dean Raunio, College of Letters and Science, Uni-versity of Idaho, Moscow, Idaho 83843. An Equal Op-portunity/Affirmative Action Employer.

Botany Department at Connecticut College has an opening in September 1976 for an ASSISTANT PRO-FESSOR. Recent Ph.D. with broad knowledge of FESSOR. Recent Ph.D. with broad knowledge of plants and special competence in plant anatomy and de-velopment. Teaching duties include courses in anatomy and morphogenesis and team-taught general biology and general botany courses. Active research program involving undergraduates is expected. Send biographi-cal data and three letters of recommendation to Dr. B. F. Thomson, Botany Department, Connecticut College, New London, Conn. 06320. Connecticut College is an Equal Opportunity Employer.

The University of Windsor, Department of Biology, invites applicants for the positions at the rank of ASSISTANT PROFESSOR (\$14,016 to \$20,233) in the following areas: molecular biology (regulation of gene function, developmental mechanisms); physiological ecology (adaptation of vertebrate and invertebrate systems); and systems ecology (population, community, or ecosystems modeling). Successful candidates will be expected to teach at the graduate and undergraduate levels and to develop programs of independent research and graduate student supervision, (M.Sc., Ph.D.). Send curriculum vitae and names of three references to: Dr. H. D. McCurdy, Professor and Head, Department of Biology, University of Windsor, Windsor, Ontario, Canada N9B 3P4.

### ASSISTANT PROFESSORSHIPS—ANATOMY

Ph.D. (or virtual completion of Ph.D.) in anatomy required. To teach gross anatomy and histology/or neuroanatomy. Develop independent and/or collaborative research program. If interested, send curriculum vitae, list of publications, statement of research interests, and names of at least three references before 15 March 1976 to: Chairman, Search Committee, Department of Anatomy, The Chicago Medical School/University of Health Sciences, 2020 West Ogden Avenue, Chicago, Illinois 60612. Affirmative Action/Equal Opportunity Employer.

The Department of Pharmacology, Columbia University, invites applications from outstanding candidates who have been trained in **BIOCHEMICAL PHAR-MACOLOGY**, have completed several years of postdoctoral training, and have demonstrated ability to teach graduate students and candidates for M.D. and D.D.S. degrees and to conduct research of high quality. Applicants will be judged in part in terms of their published original research and ability to obtain grant support. Appointment will be at the level of **assistant professor**. A qualified person interested in applying for this position should send a copy of his curriculum vitae, bibliography, a brief description of his research and teaching experience, a statement of career objectives and the names of three people who might be asked to provide a letter of reference. All correspondence should be sent to: **Brian F. Hoffman, M.D., College of Physicians and Surgeons, 630 West 168 Street, New York, N.Y. 10032.** Columbia University is an Affirmative Action/Equal Opportunity Employer.

The Department of Physiology, College of Medicine of the University of South Florida, Tampa, Florida, has a tenure-earning faculty opening (Ph.D. and/or M.D.) at the ASSISTANT PROFESSOR level. Teaching and research ability are of primary consideration. Research areas: cardiovascular, renal, neurophysiology, or muscle mechanics. Teaching responsibilities include medical, nursing, and graduate students. The individual should be able to effectively teach areas other than the primary research interest. Salaries are negotiable. The University of South Florida College of Medicine is a new medical college now completing its fourth year of operation. The Department has new, well-equipped quarters. Send curriculum vitae and three letters of reference to: Carleton H. Baker, Ph.D., Professor and Chairman, Department of Physiology, College of Medicine, University of South Florida, Tampa, Florida 33620. The University of South Florida is an Affirmative Action/Equal Opportunity Employer.

### **BIOCHEMIST**

Position available immediately for experienced B.S. or M.S. junior scientist to work in a basic research group in the Merck Institute for Therapeutic Research. The group uses physical biochemistry (NMR, fluorescence, circular dichroism, ultraviolet spectroscopy) for studies related to rational design of drugs. Successful applicant must have experience in protein purification, enzymology, or related disciplines. This is a career opportunity with excellent prospects for professional and scientific advancement. Please send résumé, including salary requirements, in confidence, to: W. T. Jackson, Employment Supervisor.

### MERCK & CO., INC. Rahway, N.J. 07065

Equal Opportunity Employer, M/F

### POSITIONS OPEN

### ASSISTANT PROFESSOR DEVELOPMENTAL/CELL BIOLOGY

The Department of Biology will have an opening at the assistant professor level for a Ph.D. with interests in molecular or genetic aspects of the regulation of development. Teaching duties include an intermediate-level core course in development, major responsibility for one term of the introductory sequence, and participation in a senior bidisciplinary offering. Opportunity to supervise undergraduate honors and independent study and to develop the cell biology area. Salary competitive. Send résumé, description of professional interests, and three letters of reference to: Dr. David A. Sleeper, Department of Biology, Hobart and William Smith Colleges, Geneva, New York 14456. An Equal Opportunity Employer.

### ASSISTANT/ASSOCIATE RESEARCH SCIENTIST

Position available immediately for Ph.D. in biochemistry or related area with interest and expertise in melanoma, tumor antigen, isolation, and characterization. Submit curriculum vitae, statement of research interest, bibliography, and three references to: Dr. J. C. Bystryn, Department of Dermatology, New York University School of Medicine, 550 First Avenue, New York, N.Y. 10016. An Equal Opportunity/Affirmative Action Employer, M/F.

### BIOLOGIST—CORNELL UNIVERSITY

One-year position in biology with teaching responsibilities for the large introductory biology course for nonbiology majors. Available July or August 1976. Minimum requirement: Ph.D. and general biology teaching experience. Title and salary commensurate with experience. Forward résumé and personal qualifications before 1 April 1976 to Professor J. C. Thompson, Jr., Department of Physical Biology, Cornell University, Ithaca, New York 14853. Three letters of recommendation should also be mailed directly by supporters to the same address. Cornell University is an Equal Opportunity/Affirmative Action Employer.

THE DEPARTMENT OF BIOLOGICAL SCI-ENCES, State University of New York at Albany, invites applications for two positions at the rank of assistant professor beginning August 1976. The State University of New York is an Affirmative Action/ Equal Opportunity Employer and encourages applications from women and members of minority groups.

PLANT ECOLOGIST: Applicants should have demonstrated research experience in either plant community structure and theory or interactions at the ecosystem level.

**BIOCHEMISTRY**: (Contingent upon availability of funds.) Applicants should have demonstrated research experience in an area of physical biochemistry which will complement existing programs in bioenergetics, mitochondrial biogenesis, in vitro transcription/translation.

Postdoctoral experience is required. Teaching duties include courses at both undergraduate and graduate levels. Applications are due by 1 March 1976 and should include curriculum vitae, names of at least three references, reprints of published papers, and copies of unpublished manuscripts, Respond to Dr. F. H. Truscott, Chairman, Department of Biological Sciences, State University of New York at Albany, Albany, New York 12222.

### CHAIRMAN OF BIOLOGY

Applications are invited for an appointment as chairman and professor of the Department of Biological Sciences at the State University of New York at Albany beginning August 1976.

The applicant must have demonstrated excellence in research and graduate training. The appointment carries a substantial salary and fringe benefits for an applicant qualified to carry out the administrative and scientific leadership of the department. The department has 37 full-time faculty, 60 graduate students, and 600 upper-division undergraduate majors. Areas of strength are in ecology, developmental biology, neurobiology, cell and molecular biology, and genetics.

Send curriculum vitae, résumé of current research, and names of references to Chairman, Search Committee, Department of Biological Sciences, State University of New York at Albany, Albany, New York 12222.

The State University of New York is an Equal Opportunity/Affirmative Action Employer.

### **POSITIONS OPEN**

ASSISTANT PROFESSOR OF MICROBIOLOGY. Ph.D., experience in microbiology, virology, or immunology. Required to assist in teaching medical microbiology, virology, immunology, and genetics to medical and graduate students and to maintain a vigorous research program. Salary dependent on qualifications. Send curriculum vitae, bibliography, and three recommendations by 1 April 1976 to: Dr. Fred Rapp, Department of Microbiology, M. S. Hershey Medical Center, The Pennsylvania State University, Hershey, Pennsylvania 17033. An Equal Opportunity/Affirmative Action Employer.

### SLIPPERY ROCK STATE COLLEGE Two Positions in Biology

Permanent position to begin 23 August 1976 at rank of assistant professor for qualified environmental biologist with strong background in vertebrate zoology. The Ph.D. is required. Primarily a teaching position but research is encouraged. Major teaching responsibilities will be in aquatic animals and wildlife management.

Full-time, temporary (1-year) position to begin 23 August 1976 at rank of instructor for person to teach introductory biology lecture and laboratory courses. Master's degree plus college teaching experience required.

Complete credentials, including all transcripts, curriculum vitae, and three letters of recommendation should be sent to:

Dr. R. G. Hart, Chairman Personnel Committee Department of Biology Slippery Rock State College Slippery Rock, Pennsylvania 16057

The deadline for receiving the complete application is 15 March 1976. Slippery Rock State College is an Equal Opportunity/Affirmative Action Employer.

BOTANIST/MICROBIOLOGIST. To teach undergraduate courses in introductory botany, microbiology, and an advanced course in area of specialty. Appointee will also participate in all-college "Foundations Program" (general studies). Assistant professor, Ph.D. Research expected. Send three letters of recommendation and curriculum vitae to: Dr. George K. Reid, Collegium of Natural Sciences, Eckerd College, St. Petersburg, Florida 3733. Deadline: 15 March 1976. Eckerd College (formerly Florida Presbyterian College) is an Equal Opportunity/Affirmative Action Employer.

### CARDIOVASCULAR D.V.M.

With minimum of 2 years of postdoctoral research experience in cardiovascular physiology is sought to participate in physiologic evaluation and to provide clinical care during in vivo evaluation of mechanical circulatory assist devices. Please apply to Dr. J. E. Chimoskey, Taub Laboratories, Baylor College of Medicine, Houston, Texas 77025, by 29 February 1976. Equal Opportunity/Affirmative Action Employer.

### CARDIOVASCULAR BIOENGINEER

With physiology Ph.D. and undergraduate engineering degree, or bioengineering Ph.D. with exceptionally strong physiology background, and minimum of 2 years postdoctoral research experience is sought, to coordinate physiologic evaluation of mechanical circulatory assist devices and interface with design and in vitro evaluation of such devices. Please apply to Dr. J. E. Chimoskey, Taub Laboratories, Baylor College of Medicine, Houston, Texas 77025, by 29 February 1976. Equal Opportunity/Affirmative Action Employer.

#### SIMON FRASER UNIVERSITY BRITISH COLUMBIA, CANADA DEPARTMENT OF BIOLOGICAL SCIENCES CELL BIOLOGIST

CELL BIOLOGIST Applications are invited from suitably qualified persons. Qualifications: Ph.D. Nature of duties: teach cell physiology and develop a strong research program in the general area of cell differentiation and interaction. Salary and rank: assistant or possibly associate professor with salary commensurate with experience and qualifications. It is anticipated that the position will be available from September 1976. Letters of application, including curriculum vitae and the names and addresses of three referees, should be sent to Dr. J. M. Webster, Department of Biological Sciences, Simon Fraser University, Burnaby, B.C., Canada, V5A 156. Closing date for applications will be when the position is filled.

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BIOLOGIST. Ph.D. with laboratory competence who is open to exploring the theoretical aspects of biology and interrelationships with other areas of knowledge. Two-thirds of a student's program is a historical-philo-sophical-conceptual series of interdisciplinary courses. Essential for faculty is a desire to explore original sources and connections between disciplines. Persons with competence in organic chemistry or mathematics also needed for similar positions. Write: Dean, Shimer College, Mt. Carroll, Illinois 61053.

### CELL BIOLOGIST/BIOCHEMIST

To supervise a research group involving the use of micrurgical procedures on *Amoeba* species, biochemi-cal fractionations, and the enucleation and reassembly of cultured fibroblasts as a means to investigate cell senescence, membrane function, and the production of artificial cells.

Applicants must have a Ph.D. and a number of years of postdoctoral research experience. Previous responsi-bility in planning the work of a research team is re-quired, involving the supervision of technical personnel. graduate students, equipment acquisition, and general

grant management. Familiarity with the field of genetic engineering is es-sential and some teaching contribution will be expected

in microbiology. Send résumé to: Sandra Morrow, Life Sciences De-Mass. 01609. We are an Affirmative Action Employer.

### CELL AND MOLECULAR BIOLOGIST

The Department of Biological Sciences of the Universi-ty of Illinois, Chicago, invites applications for a senior faculty position, beginning September 1976. Preference will be given to candidates who have an ongoing re-search program in mammalian cell and molecular biol-ogy, and who have had at least 5 years of experience in research and teaching beyond the Ph.D. degree. Salary and rank commensurate with experience. Teaching re-sponsibilities include undergraduate and graduate courses in cell and molecular biology and direction of M.S. and Ph.D. students. Applicants should send résumés including research and teaching experience and the names of four references to Dr. S. K. Shapiro, Head, Department of Biological Sciences, University of Illinois, Chicago, Box 4348, Chicago, Illinois 60680. Closing date: 1 March 1976. The University of Illinois is an Affirmative Action/Equal Opportunity Employ-The Department of Biological Sciences of the Universiis an Affirmative Action/Equal Opportunity Employer.

## CHAIRPERSON DEPARTMENT OF PSYCHOLOGY

St. Cloud State University, St. Cloud, Minnesota, invites applications for the position of chairperson of the Department of Psychology effective September 1976. The Department consists of 27 full-time faculty who represent a wide variety of teaching and research interests in the following psychological areas: behavior analysis, counseling, developmental, educational, ex-perimental, industrial, social, and physiological. Applicants must possess a doctoral degree (50 per-cent or more of the graduate course work must be in recognized areas of psychology) and must have had

recognized areas of psychology) and must have had teaching experience in higher education and/or profes-sional experience in psychology. In addition, experi-ence in research and/or administration is preferred. Rank and salary are negotiable dependent upon experience

ence. Further information and application materials can be obtained from: Dr. Robert Murphy, Chairperson, Search Committee, Department of Psychology, St. Cloud State University, St. Cloud, Minnesota 56301. The deadline for the completion of application and the submission of all supporting materials is 1 March 1976. A final decision will be made on or before 1 May 1076.

1976

St. Cloud State University is an Equal Opportunity/ Affirmative Action Employer.

## UNIVERSITY OF CALIFORNIA SANTA BARBARA

SANIA BARBARA One or more positions, including chairperson, in the Department of Ergonomics and Physical Education. Departmental emphasis on human performance; candidates sought with interests in motor learning, biomechanics, and/or public health. Strong research, teaching record, and Ph.D. or equivalent degree required. Salary level dependent on qualifications. Applications, with curriculum vitae, should be sent by 15 April 1976 to Professor Steven Horvath, Institute of Environmental Stress, University of California, Santa Barbara, Calif. 93106.

Equal Opportunity/Affirmative Action Employer

6 FEBRUARY 1976

### **POSITIONS OPEN**

### CHAIRPERSON

Applications are being accepted for position of chairperson, Department of Medical Psychology, School of Medicine, Uniformed Services University of the Health Sciences (USUHS), a component of the De-partment of Defense to be located in Bethesda, Maryland.

Qualified applicants should submit a current curricuum vitae, a summary of their teaching and research ex-perience, and a statement of their philosophy on medi-cal education. The names of three persons who are qualified to assess the applicant's teaching and research potential should be included. Forward to

# Dean Jay P. Sanford, M.D. School of Medicine, USUHS 6917 Arlington Road, Room 303 Bethesda, Maryland 20014

Consideration will be given to all qualified applicants without regard to race, color, sex, age, or national origin

Salaries and benefits comparable to similar positions within the vicinity of the District of Columbia.

## UNIVERSITY OF SOUTH CAROLINA DEAN OF MEDICINE

The University of South Carolina invites appli-cations from, and nominations of, qualified individuals for the position of dean of its medical school which is Administration Hospital under the Columbia Veterans Administration Hospital under the authority of the Veterans Administration Medical School Assistance and Health Manpower Training Act of 1972. Letters of application or nomination should include a curriculum

application of noninnation scena and vitae. Candidates should possess a medical degree and/or a doctoral degree in a basic medical science. Adminis-trative experience and demonstrated qualities of leadership are essential.

Correspondence should be addressed to: Dr. James B. Caulfield, Department of Pathology, University of South Carolina School of Medicine, Columbia, South Carolina 29208. The University of South Carolina offers equal op-

portunity in its employment, admissions, and educa-tional activities, in compliance with Title IX and other civil rights laws

### DENTAL RESEARCH ASSOCIATE

DENTAL RESEARCH ASSOCIATE An excellent opportunity, available 1 July, for an in-dividual with a Ph.D. in biochemistry to join an ongo-ing long-term research program. A background in col-lagen biochemistry and/or protein chemistry essential. Familiarity with electron microscopy (transmission and SEM), tissue culture, and microbiology preferred. Responsibilities include active participation in current studies, development of new research projects, and su-pervision of technician(s). This position offers excellent publication potential as well as participation in both basic and applied research programs in dentistry. Can-didates are requested to send their curriculum vitae and names of three references to Dr. Joseph H. Kronman, Tufts University School of Dental Medicine, 136 Harri-son Avenue, Boston, Massachusetts 02111. Tufts University is an Equal Opportunity and Affir-mative Action Employer.

mative Action Employer.

### DEVELOPMENTAL BIOLOGIST

Opening at assistant professor level for fall 1976. Seek-Opening at assistant professor level for fall 19/6. Seek-ing person using cell or tissue culture methods in study-ing problems of developmental (or genetic) nature at cellular level. Teaching involves cell biology course lec-ture section, advanced developmental biology as appro-priate and a coation of introductor biology as approbackground in cell biology required, and priority given background in cell biology required, and priority given to individuals with postdoctoral experience. Salary competitive, Closing date for receipt of applications: 31 March 1976. Send curriculum vitae and reprints and have three letters of reference sent to **Dr. Charles R.** wyttenbach, Department of Physiology and Cell Biol-ogy, University of Kansas, Lawrence, Kansas 66045. An Equal Opportunity/Affirmative Action Employer

### POSTDOCTORAL POSITION

Carbohydrate biochemist, recent Ph.D. in biochemistry or plant physiology, interested in the biochemistry of plant cell walls. Experience in methylation analysis of polysaccharides desired. Available 1 April. Send résumé, including research experience, to Dr. Lincoln Taiz, Thimann Labs, University of California, Santa Cruz, Santa Cruz, California 95064.

## **ENVIRONMENTAL** SCIENTISTS

The Environmental Services Group of Williams Brothers Engineering Com-pany is expanding its staff to meet increasing work load requirements.

The work includes environmental impact assessments on major industrial projects, preparation of studies and reports.

The desired experience is 2-10 years in: environmental work or something directly applicable, scientific/technical writing, meetings with clients, subcontractors, and government aaencies

The desired skills are excellence in: oral and written communication, dealing with people, working independently, understanding research, and understanding technical pro-cesses that affect environment.

The positions are:

### Atmospheric Scientist

Ph.D. or M.S. in atmospheric science; know reactions of pollutants, regulations, measurement techniques, relation of pollutants to physiology

### Aquatic Environmental Scientist

Ph.D. or M.S. in aquatic chemistry, physics, or related field; know reactions of pollutants, regulations, measurement techniques, relation of pollutants to physiology.

### Aquatic Invertebrate Zoologist

M.S. in aquatic invertebrate biology/ecology; experience in ter-restrial invertebrate zoology.

### Acoustic Scientist

Ph.D or M.S. in Physics or related field, experience in dealing with environmental problems related to sound, knowledge of detection and correction technique

### Senior Environmental Geologist

M.S. in Geology, Hydrology, or Soil Science. Experience related to geological impact of industrial operations required, knowledge of governmental regulating au-thorities and environmental assessment reporting.

For immediate consideration send resume including salary history to:

JVA



A RESOURCE SCIENCES COMPANY **Resource Sciences Park** 6600 South Yale Avenue Tulsa, Oklahoma 74136 [918] 496-5000 An Equal Opportunity Employer M/F

# DEAN OF GRADUATE STUDIES AND RESEARCH PORTLAND STATE UNIVERSITY PORTLAND, OREGON

Portland State University, an urban institution, invites nominations and applications for this position.

Seeking Ph.D. with strong academic and research background; administrative experience to guide and strengthen master's and Ph.D. programs and to pro-vide aggressive leadership in defining appropriate ad-ministrative structures for graduate studies and re-search; directly responsible for developing focus on re-search and training programs; should be familiar with sources of research funds and have demonstrated expe-rience in the acquicition of grants and contracts rience in the acquisition of grants and contracts.

Applications and/or letters of nomination (with full professional curriculum vitae) should be sent by 15 March 1976 to: George Carbone, Chairman, Office of Academic Affairs, Portland State University, P.O. Box 751, Portland, Oregon 97207.

Portland State University is an Equal Opportunity (M/F)/Affirmative Action Employer. All interestedpersons, regardless of ethnic bäckground, sex, religion,national origin, age, handicap, and veteran status, areencouraged to apply.

**DEVELOPMENTAL BIOLOGIST.** Department of Biology, Eastern Washington State College, has a new position for fall 1976. Ph.D. required with advanced training in developmental and cellular biology. Teach-ing duties will include undergraduate developmental and cellular biology and graduate cellular biology. Send résumé and names of three references to F. Gib-son, Chairman of the Search Committee, Department of Biology, Eastern Washington State College, Cheney, Wash. 99004. An Affirmative Action/Equal Opportu-nity Employer.

## DEVELOPMENTAL BIOLOGIST NORTHWESTERN UNIVERSITY

Full-time faculty position (assistant professor) available for 1 September 1976 in the Department of Bio-logical Sciences. Research interests in the control of gene transcription or translation, preferably empha-sizing embryonic systems. Applicants should be trained in both developmental biology and molecular biology. Postdoctoral experience is required.

Send curriculum vitae and names of three referees to: Neena Schwartz, Department of Biological Sciences, Northwestern University, Evanston, Illinois 60201.

Northwestern University is an Equal Opportunity Employer

DIRECTOR OF CARDIOVASCULAR RESEARCH DIRECTOR OF CARDIOVASCULAR RESEARCH AND TRAINING CENTER. The School of Medicine at the University of Alabama Medical Center has available this position. Candidates should have an es-tablished career in cardiovascular research with experi-ence in administration and teaching. Apply to Cardio-vascular Research and Training Center, Attention: Mr. Terry Holloway, Room 305 Zeigler Building, University of Alabama Medical Center, Birmingham, Alabama 35294. An Equal Opportunity/Affirmative Action Em-ployer. Expiration date for receipt of applications is 1 March 1976.

**EXECUTIVE POSITION** for bioscientist with proven **EXECUTIVE POSITION** for bioscientist with proven administrative ability. Doctorate preferred and must have leadership ability with an interest in scientific communications. This person will participate in policy decisions especially as they relate to communications within scientific community. Submit résumé and salary requirements to **Box 60**, SCIENCE. An Equal Oppor-tunity Employer.

# FACULTY POSITION IN OCCUPATIONAL AND ENVIRONMENTAL MEDICINE

To assist in the development of a clinically oriented program in occupational and environmental medicine, conduct research in environmental medicine, and de-velop and participate in graduate teaching program in

Graduate training in occupational or environmental Graduate training in occupational or environmental medicine (M.P.H.) required. Experience in clinical oc-cupational medicine and Board certification in occupa-tional medicine or eligibility therefore preferred. Posi-tion available immediately. *Women and minorities are encouraged to reply*. Send résumé and references to Chairman, Department of Environmental Health, SC-34, University of Washington, Seattle, Wash. 98195.

### **POSITIONS OPEN**

**DIRECTOR OF MARINE SCIENCE AND EDUCA-TION** for SEA Semester, Woods Hole-based. Boston University-sponsored undergraduate program com-bining classroom instruction ashore with apprentice-ship at sea aboard R/V *Westward*. Applicants must satisfy associate professor standards and have demon-strated capacity for administering an interdisciplinary educational program ashore, coordinating a multi-disciplinary oceanographic research and training pro-gram at sea and teaching introductory marine science. orscipinary oceanographic research and training pro-gram at sea, and teaching introductory marine science. Minimum of 2 months per year spent at sea. Requires entrepreneurial ability, energy, flexibility. Send cur-riculum vitae to: Chairman, Scientific Advisory Board, Sea Education Association (SEA), Box 6, Woods Hole, Mass. 02543.

# THE UNIVERSITY OF PETROLEUM AND MINERALS DHAHRAN, SAUDI ARABIA

DHAHRAN, SAUDI ARABIA The Department of Physics will have FACULTY POSITIONS open September 1976. Experimental physicists with Ph. D. degrees and background in nucle-ar physics, cryogenics, and surface science willing to develop laboratories for M.Sc. program in these areas are sought. There are also openings for teachers with M.Sc. degree and teaching experience. Facilities available are IBM 370/158; PDP 11's; Mossbauer; Neutron Generator. On order and ex-pected for September 1976 are: nitrogen and helium liquefiers; x-ray spectrometer; GCA/McPherson ESCA-36; Varian FC 12 E UHV Chamber with Leed, Auger and Photoemission capabilities; and Varian

Auger and Photoemission capabilities; and Varian 3117 Sputtering Equipment. Rank and salary open. Candidates please send complete résumé and a letter explaining how your background and interest make you particularly suitable for one of these positions. Please send application to:

se send application to. University of Petroleum and Minerals c/o Saudi Arabian Educational Mission 2223 West Loop South Suite 400 United Towas 77027 Houston, Texas 77027

FACULTY OPENINGS anticipated for 1976-77 by FACULTY OPENINGS anticipated for 1976-77 by innovating, interdisciplinary, small state college. Appli-cants must be able to demonstrate successful teaching at the college level. Primary academic areas to be con-sidered include biology, physics, anthropology, chem-istry, history, economics, ceramics, and psychology. Deadline for applications. I March 1976. Hiring Com-mittee, Thomas Jefferson College, Grand Valley State Colleges, Allendale, Michigan 49401. Grand Valley State Colleges is an Equal Opportunity Employer.

THREE FACULTY POSITIONS IN GEOPHYSICS. THREE FACULTY POSITIONS IN GEOPHYSICS. Oregon State University will receive applications for three positions in geophysics until 15 March 1976; as-sistant professor—paleomagnetics and/or marine mag-netics; assistant professor—seismology and/or acous-tics; associate professor—secialty in solid earth geo-physics. Applicants should have Ph.D. in geophysics or related field (for example, physics, math, earth science) and demonstrated ability to conduct productive re-search program. Send applications with résumés and names of references to: Dr. John V. Byrne, Dean, School of Oceanography, Oregon State University, Cor-vallis, Ore. 97331. Oregon State University is an Equal Opportunity/Affirmative Action Employer.

JUNIOR AND SENIOR FACULTY POSITIONS. East Tennessee State University College of Medicine invites nominations/applications from highly qualified persons for: chairmen of pediatrics and psychiatry; Community Hospital Residency Program directors in medicine, pediatrics, surgery, Ob-Gyn; one assistant dean-DME position. Employment in 1976 and 1977. Initial efforts will be in executing residency programs and curriculum development for this new school which will utilize three community hospitals and the Mt. Home V.A. Hospital as clinical teaching resources. Primary care interest. Appropriate research. Delightful community with excellent public schools. Send nominations/curriculum vitae to Associate Dean,

# Send nominations/curriculum vitae to Associate Dean, Clinical Affairs, East Tennessee State University Col-lege of Medicine, Johnson City, Tenna 37601. No person shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be sub-

jected to discrimination under any academic, extracur-ricular, research, occupational training, or other train-ing program or activity operated by the East Tennessee State University College of Medicine. East Tennessee State University is an Equal Opportunity/Affirmative Action Employer.

### POSITIONS OPEN

### FACULTY POSITION

The University of Montana, School of Pharmacy, is seeking an individual qualified to teach support courses seeking an individual qualified to teach support courses in pharmacology and clinical pharmacy and to partici-pate in the continuing development and implementa-tion of the School's clinical pharmacy program. To be considered for the position, applicants must possess an undergraduate degree in pharmacy. Salary and rank: commensurate with education and experience. The starting date of the position is 1 September 1976. Applications must be received by 1 April 1976. Résumés and names of references should be sent to: Dr. Philip Catalfonno. Dean. School of Pharmacy. Universi-

Philip Catalfomo, Dean, School of Pharmacy, Universi-ty of Montana, Missoula, Montana 59801. The University of Montana is an Equal Opportu-nity/Affirmative Action Employer and welcomes ap-plications from members of minority groups and wom-

Applications are invited for the position of HEAD, LABORATORY OF LARGE ANIMAL PATHOLO-GY, School of Veterinary Medicine, University of Pennsylvania.

Requirements: D.V.M. degree, advanced training in pathology and/or certification by the American Col-lege of Veterinary Pathologists and several years of ex-perience in diagnostic pathology.

Faculty rank and salary negotiable.

Applications, including curriculum vitae and the Applications, including currential vitae and the names of at least three referees, should be send to: Dr. W. T. Weber, Department of Pathobiology, School of Veterinary Medicine, 3800 Spruce Street, Philadelphia, Pa. 19174.

The University of Pennsylvania is an Equal Oppor-tunity/Affirmative Action Employer.

#### HUMAN ANATOMY AND PHYSIOLOGY

Assistant professor, starting September 1976. Primary duties will be teaching human anatomy and physiology for majors and nonmajors at the undergraduate level. Ph.D. and experience with human cadavers required. Must have strong interest in teaching: research activity encouraged. Application deadline: 15 February. Sub-mit résumé and three letters of recommendation to Dr. F. D. McCarthy, Department of Biological Science, California State College, Dominguez Hills, Calif. 90747. An Affirmative Action Employer.

### HUMAN CYTOGENETICIST

A position in human genetics, at the assistant profes-sor level, is available in the Department of Biological Sciences at the University of Delaware. Candidates are expected to have training in mammalian cytogenetics and a research program in human cytogenetics. Re-sponsibilities will include the teaching of human genet-ics and assistance in developing the area of human ge-netics within the State of Delaware. The position will be available in 1 September 1976. Inquiries should be accompanied by curriculum vitae and reprints of past work and should be addressed to Dr. Arnold M. Clark, Department of Biological Sci-ences, University of Delaware, Newark, Delaware 19711. The University is an Equal Opportunity/Affir-mative Action Employer.

**INFRARED ASTRONOMER:** Postdoctoral position may open starting spring 1976. Experience in observations from aircraft important.

M. Harwit Space Sciences Cornell University Ithaca, N.Y. 14853

MICROBIOLOGIST/VIROLOGIST. The Depart-ment of Microbiology, Temple University School of Dentistry, invites applications for a position of assis-tant professor; Ph.D. or Ph.D./D.D.S.; 1 to 2 years of postdoctoral experience. Teaching duties involve den-tal, pharmacy, and oral hygiene students; applicants expected to develop vigorous research program. Virol-ogy and tissue culture expertise essential. Expertise in one or more of the following areas, in addition, highly desirable; electron microscopy, medical or clinical mi-crobiology, immunology, or molecular biology. *Temple University is an Equal Opportunity/Affirma-tive Action Employer*. Send curriculum vitae to Dr. Normal Willett, Department of Microbiology, Temple University School of Dentistry, 3223 North Broad Street, Philadelphia, Pa. 19140. MICROBIOLOGIST/VIROLOGIST. The Depart-

The American Red Cross Blood Research Laborato-ry, Bethesda, Maryland, has permanent positions for **INVESTIGATORS** of proven capabilities in the fol-lowing areas: (i) structure and sequencing of proteins, (ii) development of new and rapid methods of protein separation, (iii) cell separation techniques, (iv) cellular immunology, (v) process engineering, and (vi) devel-opment of assay systems for protein functionality fol-lowing isolation. Successful candidates will have con-siderable latitude in developine their own programs lowing isolation. Successful candidates will have con-siderable latitude in developing their own programs within the broad objectives of the Laboratory but pref-erence will be given to candidates willing to interact strongly with other staff members. The Blood Research Laboratory is located close to NIH and with easy ac-cess to the larger metropolitan area. Forward curricu-lum vitae to Ms. Sue Behrens, Office of Personnel, American National Red Cross, 18th and E Streets, NW, Washington, D.C. 20006. Equal Opportunity Employ-er.

### NEUROANATOMIST

Postdoctoral fellow with experience in fluores-Postdoctoral fellow with experience in fluores-cent histochemistry or amine cytochemistry to join collaborative research project in biogenic amines, behavior, and neurological diseases. New York area. **Box 62, SCIENCE**. *An Equal* Opportunity Employer.

### POSTDOCTORAL TRAINEESHIP

Two years, NIH supported. Available July 1976. To study cerebral capillary transport mechanisms. New York area. Box 61, SCIENCE. An Equal Opportunity Employer

PHYSIOLOGIST

Applications are invited for the position of assistant or associate professor beginning fall 1976. Duties: un-dergraduate and graduate teaching in human physi-ology. Candidate's area of specialization open but the following would be considered advantageous: (i) ability to contribute to ongoing research program in cardio-vascular pulmonary physiology and (ii) experience/in-terest in development of audiotutorial/self-paced in-struction. Applications, including curriculum vitae and names of three referees, should be sent by 28 February to Dr. Dela Jackwan, Chairman Denamet of Biol names of three referees, should be sent by 2s reordary to Dr. Dale Jackson, Chairman, Department of Biol-ogy, The University of Akron, Akron, Ohio 44325. The University of Akron is a consortium member of the newly established North Eastern Ohio Universities College of Medicine. An Equal Opportunity Employer.

### PHYSIOLOGIST

The Department of Biological Sciences of the Uni-The Department of Biological Sciences of the University of Southern California announces two va-cancies for physiologists at the level of assistant profes-sor. Some preference will be given to a comparative physiologist with emphasis in marine biology and to a neurophysiologist with interest in animal behavior. The appointments are to regular faculty positions and the duties include teaching at graduate and undergraduate levels together with the establishment of active re-search programs. Encouragement will be given to research programs. Encouragement will be given to par-ticipate in interdepartmental programs and to utilize the facilities of the Allan Hancock Foundation for Ma-The Science and the Santa Catalina Marine Biology Laboratory. Applications, including curriculum vitae and the names of three references should be addressed to Dr. Bernard C. Abbott, Chairman, Biological Sci-ences, University of Southern California, Los Angeles, California 90007. An Equal Opportunity Employer.

TWO PHYSIOLOGY POSITIONS: ASSISTANT PROFESSORS. Beginning 15 August 1976. One posi-tion is for a vertebrate systems physiologist (cardiovas-cular, renal, reproductive, and so forth). The second position is for a neuro- or sensory physiologist working with any animal group at any level (pharmacological, electrical, biochemical, and so forth). For both posi-tions an active research program is expected. The teaching load will be one graduate-level course to fit into the existing physiology program (one semester), and either undergraduate physiology or general zoolo-gy (the other semester). Please submit transcripts, three letters of recommendation, all reprints, and a curricu-lum vitae (giving details of research and teaching inter-sets) to: Physiology Search Committee. Department of Zoology and Physiology. Louisiana State University, Baton Rouge, La. 70893. An Equal Opportunity Em-ployer. Deadline: 1 March 1976.

6 FEBRUARY 1976

### POSITIONS OPEN

PHARMACOLOGIST (Ph.D., M.D., or D.V.M.) reequired with teaching experience in medical pharmacol-ogy. Appointee expected to conduct an independent re-search program in the endocrine aspects of calcium metabolism. Salary and appointment (assistant or as-sociate professor) commensurate with qualifications and experience. Candidates should submit curriculum vitae and three names for reference purposes to: Dr. Al-exander D. Kenny, Chairman, Department of Pharmacology and Therapeutics, Texas Tech University School of Medicine, Lubbock, Texas 79409. An Equal Opportunity Employer.

PHYSIOLOGICAL PSYCHOLOGIST, assistant professor, Ph.D. combining interests in behavior with pharmacology, neurochemistry, or hormones and cen-tral nervous system. Duties include teaching under-graduate and graduate courses in experimentally ori-ented program. Promise of excellence in teaching and research required. Salary open. Position anticipated to begin fall 1976. Send curriculum vitae, three letters of reference and research required. Dep Demis M Eccency begin fail 1970. Send curriculum vitae, three fetters of reference, and recent reprints to Dr. Dennis M. Feeney, Psychobiology Search Committee, Department of Psy-chology, University of New Mexico, Albuquerque, New Mexico 87131. An Equal Opportunity Employer.

### PHYSIOLOGY

Assistant professor to teach medical and graduate students. Ph.D. with at least 2 years of postdoctoral ex-perience. Research in human or animal physiology with experience in muscle fatigue and cardiovascular, respiratory, and electromyographic studies. Salary \$16,000 to \$19,000. Send résumé to: Dr. A. R. Lind, Professor and Chairman, Department of Physiology, St. Louis University Medical School, 1402 South Grand Boulevard, St. Louis, Missouri 63104.

### POSTDOCTORAL FELLOW

Opening available for a postdoctoral fellow with a Ph.D. in biochemistry and so forth.

Send résumé and two letters of recommendation to: Dr. H. L. Gurtoo Cancer Drug Center Roswell Park Memorial Institute 666 Elm Street

Buffalo, New York 14263 Telephone: 716-845-3160

Postdoctoral Fellow/Research Associate. Ph.D. required immediately for a 3-year program on mechanisms of metal antitumor drugs. Demonstrated abilities required in analysis of DNA, RNA, or proteins. Forward curriculum vitae, any relevant publications, names of three ref erees, and salary requirements to: Dr. Asher Kelman, Department of Microbiology, Boston University Medical Cen-ter, 80 East Concord Street, Boston, Mass. 02118. An Equal Opportunity and Affirmative Action Employer.

POSTDOCTORAL POSITION is immediately available for interdisciplinary study of neurotransmitter sys-tems in retina and brain. Preference given to candidates with strong neuroscience background. Contact:

Dr. Dianna A. Redburn Department of Neurobiology and Anatomy The University of Texas Medical School at Houston P.O. Box 20708 Houston, Texas 77025

**POSTDOCTORAL POSITION** for 1 or 2 years is available at Dartmouth Medical School, Hanover, N.H., 1 July or sooner. Ph.D. or M.D. with a strong background in biochemistry or molecular biology to work on problems of tumor cell growth.

**Box 519, SCIENCE** 

Affirmative Action/Equal Opportunity Employer

**POSTDOCTORAL POSITION**: Recent Ph.D. in biochemistry to study basic enzymology, particularly structure-function relationships. \$10,000. Available im-mediately. Send curriculum vitae including names of three references to: Dr. J. S. Nishimura, Department of Biochemistry, University of Texas Health Science Cen-ter, 7703 Floyd Curl Drive, San Antonio, Texas 78284. An Equal Opportunity/Affirmative Action Employer.

### POSITIONS OPEN

### PLANT PHYSIOLOGIST AND ANATOMIST

Two Ph.D.'s or equivalent to teach graduate and un-dergraduate courses. Physiologist to teach courses in general botany and plant physiology; anatomist to teach human physiology to nursing and physical educateach human physiology to nursing and physical educa-tion students; both to teach general biology courses. \$10,108 to \$13,540 (9 months). Available September 1976. Application deadline: 15 March 1976. Send résumé with transcripts and references to Robert W. Bernhardt, Department of Biology, West Chester State College, West Chester, Pennsylvania 19380. An Equal Opportunity/Affirmative Action Employer

### POSTDOCTORAL-RESEARCH ASSOCIATES

The New York State College of Veterinary Medi-The New York State College of Veterinary Medi-cine is seeking to fill three academic positions in the Department of Physical Biology. The scientists will conduct research on the physiological, biochemical and molecular biological aspects of epithelial transport of metal cations and inorganic anions. Specific investiga-tions will include the metabolism and action of vitamin D and other steroids in relation to ion transport and the translocation of toxic metal ions. translocation of toxic metal ions.

- The PHYSIOLOGIST should possess a Ph.D. in cellu-lar and/or membrane physiology. Experience in de-termining the mode of accumulation and transport of substrates by tissue and cellular systems is essen-tial. Knowledge of biochemistry is desirable.
- The NUTRITIONAL PHYSIOLOGIST should possess a Ph.D. and have experience with intestinal ab-sorptive systems. Background in biochemistry is re-quired. Knowledge of radioisotopic and perfusion techniques is desirable.
- The BIOCHEMIST should possess a Ph.D. in lipid and membrane biochemistry. Experience in the iso-lation, characterization, and quantitation of mem-brane lipid components is essential. Experience with radioisotopic, HP-LC, and GC techniques is desir-

Salaries are dependent on qualifications and experi-ence up to \$11,000.

Applicants should send complete curriculum vitae, personal bibliography, and a list of three references to:

Dr. R. H. Wasserman Department of Physical Biology New York State College of Veterinary Medicine Cornell University Ithaca, New York 14853 An Equal Opportunity Employer

POSTDOCTORAL RESEARCH ASSOCIATE. Im-mediate opening for recent Ph.D. in chemistry or bio-chemistry. Research on chemical oncogenesis and in-teraction of oncogens with proteins and nucleic acids. Send curriculum vitae and two letters of recommendacond curriculum vitae and two letters of recommenda-tion to Dr. Gerhard Stöhrer, Department of Chemical Carcinogenesis, Sloan-Kettering Institute for Cancer Research, 145 Boston Post Road, Rye, New York 10580.

**RESEARCH ASSOCIATE, BIOCHEMISTRY.** Available immediately. Ph.D. in biochemistry or bio-chemical pharmacology. Experience in the area of drug metabolism and drug effects during development. Sala-ry range \$11,300 to \$14,300 depending upon qualifica-tions. Send résumé and references to Dr. Kenneth Swia-tek, Illinois Institute for Developmental Disabilities, 1640 West Roosevelt Road, Chicago, Illinois 60608. *Ar. Equal Opportunity (Affensition 4 arting Europeace*)

An Equal Opportunity/Affirmative Action Employer

### **RESEARCH SCIENTIST**

An expanding biomedical research firm in suburban Washington, D.C., currently has positions available for qualified professional senior and technical personnel, in the following disciplines:

Immunology-Immunochemistry

- Radioimmunochemistry Oncogenic virology-cell biology

- Mouse genetics Lipid biochemistry Analytical tobacco chemistry

At least 2 years of postdegree experience preferred. In-terested individuals should submit references, salary re-quirements and curriculum vitae in complete con-fidence to:

MELOY LABORATORIES, Inc. 6715 Electronic Drive Springfield, Virginia 22151 ATTN: Code R30 Equal Opportunity Employer, Male/Female

**RESEARCH ASSOCIATE:** Function of actin in muscle and cells; experience in protein chemistry and enzymology desired. Experience in ESR and fluores-cence will be gained through collaboration with biophysicists. Send curriculum vitae and three references to Dr. A. Weber, Department of Biochemistry and Biophysics, University of Pennsylvania, Philadelphia, Pa. 19174. Salary range: \$11,000 to \$16,000.

**RESEARCH ASSOCIATE** position for at least 2 years available at Christ Hospital Institute of Medical Research, Cincinnati, Ohio, I July or sooner. Ph.D. or M.D. with strong background in biochemistry or im-munology to work on characterization of unique myeloma immunoglobulins.

Box 59. SCIENCE Affirmative Action/Equal Opportunity Employer

# SENIOR GLYCOPROTEIN CHEMIST NATIONAL CANCER INSTITUTE OF CANADA GROUP THE MONTREAL GENERAL HOSPITAL RESEARCH INSTITUTE McGILL UNIVERSITY

Applications are invited for the post of senior inves-tigator in a research program largely concerned with the study of human tumor antigens. Candidates should have an interest in cancer research and should have a thorough background in glycoprotein physical chem-istry and the theory and techniques related to the struc-tural analysis of glycoprotein molecules. Appropriate applicants will initially qualify for the post of assistant professor. The starting salary range will be \$15,000 to \$18,000 per annum depending upon qualifications and experience. Send applications, with curriculum vitae and the names of two referees, to Dr. Phil Gold, Room 7135, The Montreal General Hospital, 1650 Cedar Ave-nue, Montreal, Quebec, Canada H3G 1A4. Applications are invited for the post of senior inves-

WILDLIFE ECOLOGIST. Assistant professor. Ph.D. in wildlife ecology or closely related field with firm background in vertebrate zoology and wildlife manage-ment. Experience and interest in habitat-related re-search desired. Position includes half-time teaching, quarter-time advising, and quarter-time research. Sala-ry commensurate with qualifications. Begin August 1976. Apply to Dr. James H. Shaw, School of Biologi-cal Sciences, Oklahoma State University, Stillwater, Oklahoma 74074, by 20 February.

Oklahoma State University is an Affirmative Action/ Equal Opportunity Employer.

### ZOOLOGIST-ANIMAL PHYSIOLOGIST

Ph.D. with strong research background. Must be ca-pable of teaching invertebrate and vertebrate biology and invertebrate and vertebrate physiology. Entomo-logical, mammalogical, or ornithological interests also desirable

Position involves undergraduate and master's teach-ing and research. Rank and salary dependent upon qualifications. Send curriculum vitae by 15 February 1976 to Biology Search Committee, California State College, California, Pennsylvania 15419, for September 1976 employment.

An Equal Opportunity/Affirmative Action Employer

### **SYMPOSIUM**

### SYMPOSIUM

A symposium on "Chemical Signals in Vertebrates" will be held 7 to 9 June 1976, Gideon Putnam Hotel, Saratoga Springs, N.Y., to explore the interface be-tween chemistry and animal behavior from chemo-reception to ecology. For information contact: Dean, Contituing Education, State University of New York, College of Environmental Science and Forestry, Syr-acuse, N.Y. 13210.

### **FELLOWSHIPS**

### FELLOWSHIPS

Postdoctoral research fellowships in cardiovascular, rostuoctoral research fellowships in cardiovascular, endocrine, and renal physiology. Candidates must have M.D. or Ph.D. degree and be U.S. citizens. Applicants should send curriculum vitae and names of three refer-ences to Chairman, Department of Physiology, Dart-mouth Medical School, Hanover, New Hampshire 03755.

### FELLOWSHIPS

### POSTDOCTORAL FELLOWSHIPS IN REPRODUCTIVE BIOLOGY

A small number of 1- or 2-year fellowships will be available, beginning in the summer or fall of 1976. Areas of research include dynamics of steroid hormone distribution and metabolism, uterine protein secretion, and neurotransmitter control of gonadotropin secretion. Applications should include a complete curricu-lum vitae, a statement of the applicant's research inter-est and aims, and three letters of recommendation, and should be addressed to Dr. R. B. Billiar or Dr. B. Little, Department of Reproductive Biology, Case Western Re-serve University, Cleveland, Ohio 44106.

### SUMMER RESEARCH FELLOWSHIPS

Gerontological Society invites applications from social and biomedical gerontologists for 20 positions in gov-ernmental offices on aging. Fellows' interests will be matched with agencies' needs. Possible projects: needs assessment, nutrition services, curriculum devel-opment, home health care, intergovernmental organi-zation. The program is designed to provide the aca-demic with exposure to the administrative process zation. The program is designed to provide the aca-demic with exposure to the administrative process. Awards of \$2000 plus travel expenses for 8-week fel-lowship and training/review sessions. Deadline: 1 April. More information: Gerontological Society, One Dupont Circle, Washington, D.C. 20036; or Project Of-fice, 2728 Durant Avenue, Berkeley, California 94704. Administration on Aging-Department of Health, Edu-cation, and Welfare grant-supported.

### POSTDOCTORAL FELLOWSHIPS BEGINNING SUMMER 1976

BEGINNING SUMMER 1976 University of California, Irvine. Several positions available for postdoctoral fellows, beginning summer 1976, in the Center for Pathobiology. Recent Ph.D. re-quired, preferably in the area of cell biology, devel-opmental biology, or genetics. Candidates to work on problems of pattern formation, determination or mor-phogenesis in hydra (with Drs. R. D. Campbell or H. R. Bode), Drosophila (with Drs. P. J. Bryant or H. A. Schneiderman), or amphibian appendages (with Dr. S. V. Bryant). Applications from all qualified candidates are welcome; minorities and women are encouraged to apply. Send résumé, the names of three referees, and a brief description of research interests to: Dr. S. V. Bryapply-Sett prior of research interests to: Dr. S. V. Bry-ant, Center for Pathobiology, University of California, Irvine, Irvine, California 92717. Closing date for appli-cations: 7 March 1976.

## QUEEN ELIZABETH II FELLOWSHIPS PHYSICAL AND BIOLOGICAL SCIENCES

To commemorate the Royal Visit to Australia in 1963 the Australian Government established the Queen Elizabeth II Fellowships Scheme. Under this scheme Elizabeth II Fellowships Scheme. Under this scheme up to ten fellowships may be awarded each year for full-time research by young scientists of exceptional promise and proven capacity for original work. These are postdoctoral awards tenable in an Australian uni-versity or approved research institution normally for 2 years. Tenure of a fellowship is expected to commence within 9 months of the announcement of the award.

Qualifications: Queen Elizabeth II Fellows must be ei-Qualifications: Queen Elizabeth II Fellows must be el-ther Australian or United Kingdom citizens. They should have a Ph.D., or equivalent qualifications, in one of the physical or biological sciences (which are deemed to include mathematics and the scientific as-pects of statistics, engineering, metallurgy, agriculture and medicine). Awards will, in general, be restricted to applicants who are not more than 30 years of age on the date when applications close. the date when applications close.

Stipend: \$13,158 (Australian) per annum, increased to \$14,190 per annum at age 28 years.

Allowances: Payable in respect of a fellow's dependent spouse (\$500 per annum), each dependent child (\$200), superannuation payments (up to 10 percent of stipend), appropriate insurance coverage and necessary travel expenses.

Applications: Persons interested in applying for the above fellowships should obtain application forms and a statement of the conditions of award from the Secrea statement of the conditions of award from the Secre-tary, Queen Elizabeth Fellowships Committee, Depart-ment of Science and Consumer Affairs, P.O. Box 449, Woden, A.C.T. 2606, Australia; Education Liaison Of-ficer, Canberra House, Strand, London, WC2R 3EH, England, or the Consul General, Australian Consulate General, 636 Fifth Avenue, New York, N.Y. 10020. Ap-plications for the next round of awards, which will be announced in June 1976, close at the Canberra address on 12 March 1976 on 12 March 1976.

### **FELLOWSHIPS**

STUDENT FELLOWSHIPS available for U.S. citizens toward Ph.D in pharmacology. Diversified train-ing related to the pharmacological and biochemical basis for drug action with emphasis on cancer therabasis for drug action with emphasis on cancer thera-peutics: inhibition of nucleic acid, protein and mem-brane components, enzyme activity regulation, coen-zyme action and inhibition, basis for selective toxicity, pharmacokinetics and drug metabolism in animals and cells, immunotherapy, immunosuppression, experi-mental chemotherapy, molecular pharmacology, endo-crine pharmacology and metabolic regulators, hema-tology, preclinical and clinical pharmacology. Sti-pends are \$3900 per annum. Write to E. Mihich, M.D., Chairman, Graduate Pharmacology Program, Roswell Park Memorial Institute, Buffalo, N.Y. 14263.

### COURSES

Temple University, Department of Biology, will offer two courses in Developmental Biology of Marine In-vertebrates at the Marine Biological Laboratory, Woods Hole, Mass., 9 May to 5 June 1976 (4 weeks). One course (six credits) will consist of an intensive lec-ture and laboratory survey of the development of all major and some minor marine invertebrate phyla from both descriptive and experimental points of view. The second course (six credits) will provide an opportunity for guided research on a problem in invertebrate devel-opment. Space for 15 in the survey course and 5 in the research course; dormitory lodging and food costs, \$256. For further information, write to: Dr. Rich-ard L. Miller, Department of Biology, Temple Universiard L. Miller, Department of Biology, Temple Universi-ty, Philadelphia, Pennsylvania 19122. Telephone: 215-787-8569. Deadline for receipt of completed appli-cations: I March 1976.

The Department of Pathology, Eastern Virginia Medi-cal School, Norfolk, Virginia, will offer a 5-week in-tensive course, 14 June to 20 July, in theory and prac-tice of electron microscopy. A certificate will be awarded upon successful completion. For further infor-mation please contact: Dr. S. H. Vernick, Eastern Vir-ginia Medical School, Department of Pathology, P.O. Box 1980, Norfolk, Virginia 23507. Telephone: 804-423-8280.

## MARINE SCIENCE DUKE UNIVERSITY MARINE LABORATORY

Summer Courses-Graduate/Advanced Undergrad-uate. 14 June: marine ecology, invertebrate em-bryology, phytoplankton systematics, physiological ecology, chemical oceanography, marine phycology, electrobiology. 19 July: invertebrate zoology, environ-mental oceanography, microbiology, geological ocean-ography, comparative biochemistry, biological ocean-ography. Write: Director, Duke University Marine Laboratory, Beaufort, North Carolina 28516.

# ENVIRONMENTAL PHYSIOLOGY AND BIOCHEMISTRY MARINE BIOLOGICAL LABORATORY

MARINE BIOLOGICAL LABORATORY "Environmental Physiology and Biochemistry" will be the topic of the Experimental Invertebrate Zoology course during the summer of 1976. A formal 6-week program (13 June to 24 July) including lectures, labo-ratory, and field trips, will be followed by a postcourse research period for selected students (26 July to 28 Au-gust). The course is aimed primarily at graduate stu-dents and advanced undergraduates familiar with in-vertebrate taxonomy and morphology. The focus will be on adaptations of cell and organ-system function to the habit and habitat of the animal, and on the homeostatic mechanisms by which orga-nisms adjust to their environments. Subject matter will include feeding, digestion and nutrition; water and ion regulation; nitrogen excretion; metabolism, respiration, and circulation, temperature adaptation; neural, effec-tor, and behavioral mechanisms; and population genet-ics. Taxonomy and ecology of Cape Cod invertebrates will be surveyed. Instructors will include: S. H. Bishop (Baylor Col-lege of Medicine); J. H. Crowe (University of Califor-nia, Davis); M. J. Greenberg (director, Florida State); R. L. Pardy (University of California, Irvine); S. K. Pierce, Jr. (University of Maryland); David Prior (Uni-versity of Kentucky); and T. J. M. Schopf (University of Chicago). Tuition is \$600 for the formal course and \$250 for

of Chicago).

of Chicago). Tuition is \$600 for the formal course and \$250 for the postcourse period. Dormitory, including board for 6 days, is from \$42 per week. For additional informa-tion and application forms write. Admissions Office, Marine Biological Laboratory, Woods Hole, Mass. 02543. Applications close I March. Marine Biological Laboratory admits students of any race, color, and national or ethnic origin.

# Mass Spectrometry Research SAN FRANCISCO BAY AREA

-Sr. Researcher--Post Doctoral Candidate--Sr. Technician-

A sr. researcher, a post doctoral candi-date, and a senior experienced techni-cian are needed by an active group at Stanford Research Institute's Mass Spectrometry Center involved in instru-mentation and methodology develop-ment. Experience in ion molecular re-actions, gas phase chemical kinetics, ion optics, photochemistry and related electronics is desirable. Salaries are commensurate with experience.

Stanford Research Institute is a world-wide, non-profit Institute performing contract research in a variety of fields for government and industry.

Please send resume (in confidence with salary requirements, to Ruth Goertler, Senior Person-nel Representative, SRI, 333 Ravenswood Ave., Menlo Park, CA 94025. An equal opportunity employer. employer.



## **Animal Surgery**

Lederle Laboratories, a leading pharmaceutical and surgical products company, has challenging position available in its Medical\_Products Research and Development section for a Research Biologist to conduct animal research studies. Purpose: to evaluate new suture and other surgical products. Candidate will work closely with development engineers and polymer chem-ists on new products. Will also design preclinical animal efficacy protocols.

Position requires PhD biologist or equivalent with several years experience in animal surgery and evaluation of biomedical implants. Supervisory ability essential.

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### THE INTERNATIONAL CENTRE OF **INSECT PHYSIOLOGY AND ECOLOGY**

### VACANCIES

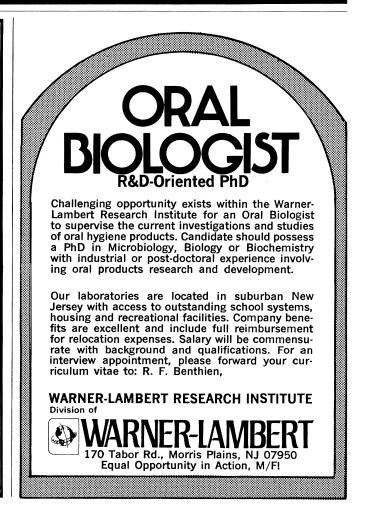
Applications are invited from suitably qualified candidates for the follow-

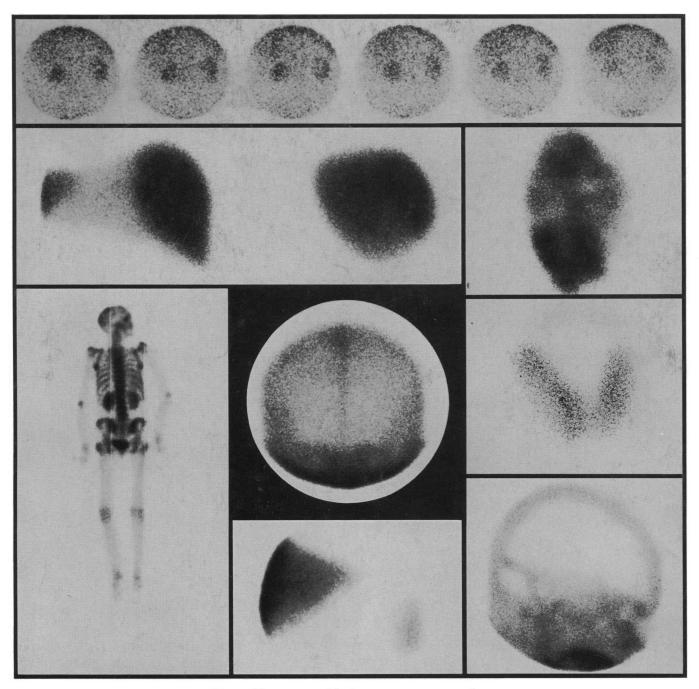
THE DOSIS. RESEARCH SCIENTIST (BIOCHEMIST/IMMUNOCHEMIST) for the Salivary Gland Physiology Program. (Ref. SC1/76/1)

- e Salivary Gland Physiology Program. (Ref. SC1/76/1) Qualifications: Ph.D. degree in biochemistry, immunology, or physiology. The position is open to postdoctoral scientists who have interest in immunology, enzyme biochemistry, or immunochemistry. Research experience with insects or other anthropods would be an advantage. Responsibilities: The successful candidate will be a member of the Tsetse Salivary Gland Physiology Program and will be required to collaborate in the biochemical and immunological investigations of the salivary glands (and other tsetse tissues) and their relationship to the immunological and parasitological development of the resident trypanosomes. somes
- somes. Salary: This will depend on qualifications and experience, but will be in any case not less than KShs.44,000/- per annum. There are also other benefits, for example housing allowance, group medical insurance, and passages for the appointee and his/her family.
- RESEARCH SCIENTIST (FINE STRUCTURE). (Ref. SC1/76/2)
- Qualifications: Ph.D. in biological science with considerable training and
- Qualifications: Ph.D. in biological science with considerable training and technical expertise in electron microscopical techniques. Responsibilities: The successful candidate will be responsible for the organization of the work of the Fine Structure Research Unit under the general supervision of the Directors of Research. He/she will also be able to pursue his/her own research in insect fine structure, including cytochemistry and autoradiography, and to assist other scientists with their work involving electron microscope techniques. The position is a responsible one, and requires an experience electron microscopist with organizational ability and enormous technical experience. Salary: According to qualifications and experience. But, in any case, will be not less than KShs.65,000/- per annum. Other benefits include housing allowance, group medical insurance, and passages for the appointee and his/her family.

Applications, in six copies, should give the following information: general education, professional qualifications, experience, marital status, age, present salary and other details of terms of service, and names and address-es of four referees (including one personal reference). Photostat copies of relevant diplomas and certificates should be enclosed.

Applications should be addressed to: The Administrative Manager, I.C.I.P.E. Research Centre, P.O. Box 30772, Nairobi, Kenya, to reach him not later than 28 February 1976.





# Radionuclides at work. Preferences vary on how best to see them.

Röntgen was a physicist, not a physician. He demonstrated the reality of x-rays with a picture of the bones in his wife's hand. Before he did so, physicians had not known how to see the bones underneath the living, intact flesh. Afterwards, though, Röntgen would not have been the best person to ask how your fracture was healing or whether you had a tumor.

So it goes in medical instrumentation. First the physicists fire off a concept, then the engineers rassle it back down to practical hardware, but all it does is make headlines until a substantial number of physicians have learned how to use the new hardware as an extension of the sensoriums they tote around between their personal ears.

Facilitating in more ways than one the impression of the visual image on the medical mind is basic business with Kodak. This endeavor is in full swing in nuclear medicine,

as it has long been in radiology. The term covers the use of radionuclides to delineate things going on within the body.

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