# Personnel Placement

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

Display (Positions Open, Market Place, and so forth): \$5.80 per millimeter; \$1.45 minimum charge, per insertion (covers 25 millimeters on single column; 25 millimeters equals 10 lines of 50 spaces per line). No charge for use of box number. No agency commission for ads under 103 millimeters (4 inches). No cash discount. Prepayment required for foreign advertising. Purchase orders and billing information required for all oth-

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

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

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

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

Blind ad replies should be addressed as follows:

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

## **POSITIONS WANTED**

Animal Behaviorist. Ph.D. University of Chicago, 1976. Research experience on exotic birds in zoological park. Publications. Teaching experience. Seeks research or teaching position in zoo, academia, or other. Box 240, SCIENCE. X

Electrophysiologist—Sensory Systems. B.S.E.E., Ph.D. 1974, postdoctoral experience. Seeks teaching/research position. Teaching experience. Published. Box 258, SCIENCE. X

Immunologist/Cell Biologist. Ph.D. in microbiology. Experienced researcher in clinical and experimental tumor immunology, animal and human tissue culture cells, and cancer research. Box 252, SCIENCE.

Unemployed **Neurochemist** (Ph.D. biochemistry, 1966) seeks assistant professorship or research position. See longer advertisement in SCIENCE, 21 July issue. Box 408, Oak Park, Illinois 60302. 8/4, 18

## **POSITIONS OPEN**

## ASSISTANT PROFESSOR

The Department of Chemistry, University of Delaware, invites applications for a tenure-track faculty position in the field of biophysics or biophysical chemistry. Research interests in macromolecules preferred; doctorate and appropriate postdoctoral experience required. Applicants should send a curriculum vitae including bibliography, a general statement of research interests, and the names and addresses of three referees (do not send letters of recommendation at this time) by 15 September 1978, to: Faculty Search Committee, 105C Brown Laboratory, University of Delaware, Newark, Del. 19711. An Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR OF PHYSIOLOGY. We seek a faculty member dedicated to excellence in both teaching and research in such areas as cellular, both teaching and research in such areas as cellular, renal, cardiovascular, respiratory, reproductive, or endocrine (but not CNS) physiology. Ph.D. or M.D. required. Position available after 1 July 1978. Send résumé and three letters of reference by 1 September 1978 to: Director, Department of Physiology, The Johns Hopkins University School of Medicine, Baltimore, Md. 21205.

Equal Opportunity Employer, M/F

## **POSITIONS OPEN**

## ASSISTANT DIRECTOR OF FELLOWSHIPS NATIONAL RESEARCH COUNCIL

Half-time position: responsibilities include placement of foreign fellows in international program rement of foreign fellows in international program re-lated to atomic energy, general administrative duties related to two other national fellowship programs, budget and proposal preparation. Development of statistical data required for all programs. Prefer canstatistical data required for all programs. Preer candidate with Ph.D. in natural sciences or engineering and minimum of 10 years of administrative experience in higher education. Deadline for applications: 1 September 1978. Send applications to: Dr. Frank D. Hansing, Fellowship Office, National Research Council, 2101 Constitution Avenue, NW, Washington, D.C. 20418.

An Equal Opportunity/Affirmative Action Employer

### ASSISTANT PROFESSOR OF BIOLOGY

The University of Redlands is seeking a **BIOLO-GIST** to teach genetics, developmental biology, and a biology course for nonmajors beginning 1 February 1979. Ph. D. in some aspect of organismic or population genetics and some experience required. Research and publication encouraged. Private, liberal arts college; student body of 1300; biology faculty of five. For further information and application material write to: al, write to:

Dr. James B. Ifft, Dean Division of Natural Sciences University of Redlands Redlands, Calif. 92373

Apply by 15 September 1978. An Equal Opportunity/ Affirmative Action Employer.

BIOCHEMISTRY INSTRUCTOR
Position available I September. Requires Ph.D. with research and teaching experience. Duties include lecturing, developing and supervising biochemistry laboratories, and developing an independent research program. Experience in biochemical nutrition preferred. Salary: \$18,000. Send curriculum vitae and references to: Dr. Robert Gracy, Department of Biochemistry or Personnel Office, Texas College of Osteopathic Medicine, Fort Worth, Texas 76107.

An Equal Opportunity/Affirmative Action Employer

BIOLOGICAL LABORATORY TECHNICIAN (NEUROPHYSIOLOGICAL)—Permanent federal Civil Service career position (GS-9, \$15,090) in New Orleans, Louisiana. Persons with experience in experimental and analytic CNS neurophysiology (EEG, evoked potentials) and familiarity with computerized processing of large amounts of scientific data (FORTRAN) are invited to submit a SF-171 (obtainable from your local Job Information Center, consult local telephone directory for toll-free number) to: U.S. Civil Service Commission, New Orleans Area Office, 610 South Street, New Orleans, Louisiana 70130.

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

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

## FACULTY POSITION

The University of California, Irvine, College of Medicine, Department of Physiology, is seeking an assistant or associate professor. We intend to fill the position by autumn 1979.

Candidates should have research interests at the mo-Candidates should have research interests at the mo-lecular or cellular level in problems of physiological importance. Candidates should hold a doctoral de-gree (M.D. or Ph.D.), have postdoctoral training, and have shown the excellence and originality in re-search expected of a potential leader in his or her field. Duties include teaching physiology to medical students and biophysics and physiology to graduate

Applications from qualified candidates are welcome; minorities and women are encouraged to apply. Send names of four references and curriculum vitae to: Dr. Stephen H. White, Chairman, Department of Physiology, University of California, Irvine, California 92717.

## **POSITIONS OPEN**

# CHAIRPERSON DEPARTMENT OF ANATOMY

The University of South Florida College of Medi-

cine is conducting a search for a professor and chair-person for its Department of Anatomy.

The candidate should possess the M.D. and/or Ph.D. degree, recognized prominance in medical education, and a record of highly significant re-

More complete details will be made available upon

More complete details will be made a complete curriculum vitae and letter of application or nomination should be addressed to: Allen W. Root, M.D., Search Committee for Anatomy, Box 15, Medical Center, 12901 North 30 Street, University of South Florida, Tampa, Fla. 33612.

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

# THE NEW ENGLAND DEACONESS HOSPITAL AND THE HARVARD MEDICAL SCHOOL

are soliciting candidates
for the position of
CHAIRPERSON OF MEDICINE
NEW ENGLAND DEACONESS
HOSPITAL

Names of candidates with their curriculum vitae and bibliographies should be sent to:

Laurens MacLure, President New England Deaconess Hospital 185 Pilgrim Road Boston, Mass. 02215

The New England Deaconess Hospital and the Harvard Medical School are Equal Opportunity Employers.

# CURATOR OF MAMMALS-ASSISTANT PROFESSOR OF ZOOLOGY

A joint position at Michigan State University between the Museum and the Department of Zoology is open. Ability to serve as a curator in a museum oriented toward research and service is required. Other duties will include instruction of a course in mammalogy, pursuit of an active research program, maintaiogy, pursuit of an active research program, and instruction of graduate students. The appointment will commence between 1 January and 1 September 1979; all application materials should be received by 1 October 1978.

To apply, send curriculum vitae, three letters of reference, and a statement of research and teaching interests, including evidence of curatorial experience to:

Dr. Stephen C. Bromley Chairman, Search Committee
Room 141 Natural Science Building Michigan State University East Lansing, Mich. 48823

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

The School of Medicine of the University of North The School of Medicine of the University of North Carolina invites applications for the position of DI-RECTOR of the Clinical Research Unit which will become vacant on 1 July 1978. Applicants must have demonstrated competence in clinical investigation, administrative ability, and stature in the research field. Applicants should submit a complete résumé by 1 August 1978 to: Dr. H. R. Roberts, Chairman, Search Committee, University of North Carolina School of Medicine, Building 229-H, Chapel Hill, N.C. 27514.

# NEUROPHYSIOLOGY (HUMAN) ACADEMIC POSITION

Unexpected opening; immediate availability. Evoked potentials, EEG, sleep, skin conductance; applications of neurometrics to mental health. Ongoing projects include psychopharmacology and studies of hemispheric lateralization. Successful candidate expected to contribute to the ongoing research effort as well as to develop own research program. Competence in human neurophysiology, psychophysiology, and multivariate statistics essential. Skills in electronics and minicomputer programing desirable. Salary dependent upon qualifications. Send curriculum vitae to: Dr. Warren A. ming desirable. Salary dependent upon qualifica-tions. Send curriculum vitae to: Dr. Warren A. Thompson, Missouri Institute of Psychiatry, Division of the Department of Psychiatry, School of Medicine, University of Missouri-Columbia, 5400 Arsenal Street, St. Louis, Missouri 63139.

## **POSITIONS OPEN**

# SCHOOL OF MEDICINE

Emory University is conducting a search for qualified candidates for the position of dean of the School of Medicine of the university's Woodruff Medical Center. This position becomes vacant 1 September 1979 following the retirement in August 1979 of Dean 1979 following the retirement in August 1979 of Dean Arthur P. Richardson. The School of Medicine is one of three academic schools involved in the Medical Center programs of teaching, research, and patient care. Other schools and facilities include the School of Dentistry, School of Nursing, Emory University Clinic, Yerkes Regional Primate Center, Emory University Hospital, Crawford W. Long Memorial Hospital, and various affiliate institutions. The Woodruff Medical Center is located on the main campus of Emory University in suburban Atlanta, Georgia, The dean is responsible to the vice presi-Georgia. The dean is responsible to the vice president for health affairs and director of the Woodruff Medical Center and for administration of the School of Medicine and for the school's instructional and research programs. The dean also participates in the development of Woodruff Medical Center policy.

Minimum qualifications are a medical degree and demonstrated academic medical administrative, research, clinical, and teaching experience.

Interested candidates should submit a résumé and names of three professional references by I November 1978 to: E. Garland Herndon, Jr., M.D., Vice President for Health Affairs and Chairman of the Search Committee, Emory University, Atlanta, Georgia 2022

An Equal Opportunity/Affirmative Action Employer

### MANAGER

Business office of scientific society seeks person of mature years to manage staff of 6 to 8 people, membership rolls, publications, and annual meetings of Tissue Culture Association (TCA). Experience in management and some knowledge of biological sciences required. Send résumé before 21 August 1978 to: Dr. George Yerganian, Secretary, TCA, 89 Bellevue Hill Road, West Roxbury, Massachusetts 02132.

## VICE PRESIDENT FOR RESEARCH

and

## **DEAN OF GRADUATE STUDIES**

The University at Albany, one of the four university centers of State University of New York, seeks an individual to provide leadership in developing and maintaining research and graduate (masters and doctoral) programs. The Vice President for Research is central to the campus' efforts to obtain external funding. As Dean of Graduate Studies, he/she is concerned with the quality of academic programs. Qualifications: An earned Ph.D. or equivalent degree; notable record of achievement and recognition as a researcher/scholar; academic administrative experience; and demonstrated leadership capabilities. Send nominations and applications to: Professor Richard H. Hall, Chair, Search Committee (V. P./Dean), Department of Sociology, The University at Albany, 1400 Washington Avenue, Albany, New York 12222. An Affirmative Action, Equal Opportunity Employer.

## **POSITIONS OPEN**

# ACADEMIC POSITION VACANCY FISHERIES DYNAMICS MODELER

Research associate to lead new marine fisheries modeling project. Position requires Ph.D., knowledge of stock dynamics, computer modeling and programming.
Available September 1978

Send résumé and three references by 15 September to: Dr. Albert V. Tyler, Department of Fisheries and Wildlife, Oregon State University, Corvallis, Ore-

gon 97331.

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

# IGNEOUS GEOLOGIST Bowling Green State University

The Department of Geology invites applications for a faculty position to be filled before 1 September 1979. We are searching for a Ph.D. whose training and research are in igneous geology to direct graduate-student research and to teach courses in inate-student research and to teach courses in introductory geology, igneous petrology and petrography, optical mineralogy, and x-ray mineralogy. We prefer a person who has done and will continue to do field work, and who is interested in teaching field geology (summers). The department has 11 full-time faculty members representing most areas of the geosciences, and offers B.S., B.A., and M.S. degrees. Send letter of application, résumé, including list of publications, a statement of teaching and research interests. transcripts, and three supporting search interests, transcripts, and three supporting letters, by 15 December 1978, to:

Dr. J. J. Mancuso, Chairman Department of Geology Bowling Green State University Bowling Green, Ohio 43403

Bowling Green State University is an Equal Opportunity/Affirmative Action Employer.

# INSTRUCTOR/ASSISTANT PROFESSOR OF PHARMACOLOGY

A faculty position is now available in the Depart-A faculty position is now available in the Department of Pharmacology. Requirement: Ph.D. in pharmacology. Responsibilities include teaching sophomore medical pharmacology and a strong commitment to research. Previous teaching experience desirable, but not mandatory. Send curriculum vitae and three letters of recommendation to:

Venkatray G. Prabhu, Ph.D. Professor and Chairman
Department of Pharmacology
Chicago College of Osteopathic Medicine
1122 East 53 Street
Chicago, Illinois 60615

Affirmative Action/Equal Opportunity Employer

## UNIVERSITY OF MELBOURNE LECTURESHIP (LIMITED TENURE) in the DEPARTMENT OF BIOCHEMISTRY

Applicants should hold the qualification of Ph.D. or equivalent and should, preferably, have had some teaching experience in biochemistry. The appointee will be required to participate in the teaching of biochemistry at the undergraduate level and to undergraduate level and to undergraduate level and to undergraduate level and to undergraduate. take original research and the training of postgraduate students. The department has a wide range of modern research equipment.

The appointee will be expected to take up duties on 2 January 1979 or as soon as possible thereafter. The appointment will be for a fixed period of 3 years from date of commencement.

Salary: A\$15,179 to A\$19,940 per annum.

Further information, including details of application procedure and conditions of appointment, is available from: Registrar, University of Melbourne, Parkville, Victoria, 3052, Australia. Applications referring to position number 521 006 should be addressed to the registrar and close on 31 August 1978.

ORGANIC POLYMER CHEMISTRY-Applications are invited for an assistant professor level position. Candidates must have postdoctoral reposition. Candidates must have postdoctoral research experience and a demonstrated ability to conduct independent research programs. Applications containing a résumé, list of publications, future research objectives, and names of three referees should be sent no later than 1 September 1978 to: Search Committee, Midland Macromolecular Institute (MMI), 1910 West Saint Andrews Drive, Midland, Mich. 48640. MMI is an Equal Opportunity Employer and welcomes applications from women and minorities.

## **POSITIONS OPEN**

## MICROBIOLOGIST

Applications are invited for an anticipated full-Applications are invited for an anticipated full-time (12-month) tenure-track position teaching medi-cal microbiology and immunology to students of os-teopathic medicine. The appointee should have a Ph.D. in microbiology and postdoctoral experience. Rank and salary will be commensurate with experi-ence. Facilities for research are limited but available in an institutionally supported program.

Send curriculum vitae with listed references to: Dr. Wayne R. Mitchell, Acting Chairman, Department of Microbiology, West Virginia School of Osteopathic Medicine, Lewisburg, W. Va. 24901. An Equal Opportunity/Affirmative Action Employer.

## NEUROPATHOLOGIST-NEUROCHEMIST

Faculty position (associate professor or above) in eastern, university-affiliated, private mental hospital for physician-neuroscientist to investigate brain biochemistry in schizophrenia, Huntington's disease, and related neuropsychiatric disorders and to direct a center for acquisition, storage, and worldwide distribution of human brain specimens for neuropsychiatric research. Candidates must be accomplished in human neurochemical pathology and experienced in all phases of operation of major neuro-specimen collection and distribution center. Please send response with curriculum vitae to: Box 251, SCIENCE. sponse with curriculum vitae to: Box 251, SCIENCE.

An Equal Opportunity Employer

## PHARMACOLOGY

University of Wisconsin-Madison, School of Pharmacy, is seeking applications for a tenure-track faculty position in pharmacology at the assistant or associate professor rank. Responsibilities would insociate professor rank. Responsibilities would include an independent research program as well as undergraduate and graduate teaching. The individual should be well grounded in a specialty of pharmacology. Submit curriculum vitae and three letters of support to: Dr. Paul Bass, School of Pharmacy, University of Wisconsin, 425 North Charter Street, Madison, Wis. 53706 before 1 October 1978. University of Wisconsin, Madison, is an Equal Opportunity. For Wisconsin-Madison is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

## **PHYSICAL SCIENTISTS**

Assess and estimate the contamination impact on spacecraft systems and in-struments due to space shuttle ground and launch operations.

Requires advanced degree in physics, materials science, or physical chemistry and experience in data analysis, and the modeling analysis and simulation of physical processes.

Send résumé to:

**Professional Employment** Department 800

## JET PROPULSION **LABORATORY**

California Institute of Technology 4800 Oak Grove Drive Pasadena, California 91103

An Equal Opportunity Employer

## SCIENTIST **BIOCHEMISTRY/IMMUNOLOGY**

Applications are invited for a research position beginning immediately. This position involves the investigation of the interaction of Type C retroviruses with normal and malignant cells; especially of the lymphoid system. Ph.D. required, with strong biochemistry background. Knowledge of immunology, virology, and cell surface function desirable

Send curriculum vitae and names of three references

Marian L. Knill Recruitment Manager Frederick Cancer Research Center P.O. Box B Frederick, Md. 21701

An Equal Opportunity Employer

## **POSITIONS OPEN**

PLANT PATHOLOGY. Assistant professor to research diseases of apples and blueberries. Participaition in teaching programs is required. Position available 1 January 1979. Application deadline is 30 October 1978. Ph.D. in plant pathology required. Send curriculum vitae and names of three references to:

Dr. Douglas A. Gelinas Chairman, Botany/Plant Pathology University of Maine at Orono Orono, Maine 04473

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITION—TISSUE OXYGEN-ATION AND BLOOD FLOW. Available immediately for a researcher interested in investigating potential clinical applications of tissue gas and blood flow that clinical applications of tissue gas and blood flow measurements. Background in neuromuscular physiology or bioengineering desirable. Send résumé and three references to: Frederick A. Matsen III, M.D., Limb Viability Laboratory, Department of Orthopaedics, University of Washington School of Medicine, Seattle, Wash. 98195. An Equal Opportunity/ Affirmative Action Employer.

POSTDOCTORAL POSITION available in September to study the molecular action of nematocyst protein toxing the molecular action of nematocyst pro-tein toxins on erythrocyte and excitable cell mem-branes. Candidates should be interested in using toxins as probes of membrane structure/function. Experience in biochemistry and/or cell physiology preferred. Send curriculum vitae, transcripts, and three letters to: Dr. David Hessinger, Department of Physiology and Pharmacology, Loma Linda Universi-ty School of Medicine, Loma Linda, California 92354.

## POSTDOCTORAL/RESEARCH ASSOCIATE

Postdoctoral/research associate position available 1 September for work on ligand binding to hemoglobin. Experience in protein chemistry desired. Résumé and names of references to:

Dr. Q. H. Gibson Wing Hall Cornell University Ithaca, N.Y. 14853

An Equal Opportunity/Affirmative Action Employer

## **POSITIONS OPEN**

## The Department of Physiology-Anatomy UNIVERSITY OF CALIFORNIA BERKELEY

Invites applications to fill a research position at the Invites applications to fill a research position at the postdoctoral research physiologist level. This full-time position is for a PHYSIOLOGIST/BIOPHYSICIST to investigate the mechanisms and hormonal control of ionic permeability and active transport in the urinary bladder of euryhaline teleost fish.

The applicant's background should be in the areas of membrane and epithelial transport with a background in electrophysiology (including intracellular recording) and the use of radioisotopes for monitoring the fluxes of ions.

Interested individuals should write a letter explaining their qualifications for the particular posi-

plaining their qualifications for the particular posi-tion and enclose a current curriculum vitae and a list of three or more persons who could act as referees and send to:

Search Committee
Department of Physiology–Anate
2560 Life Sciences Building
University of California . Anatomy Berkeley, California 94720

Applications must be received by 15 August 1978. The University of California is an Equal Opportunity/Affirmative Action Employer.

# UNIVERSITY OF MICHIGAN MEDICAL SCHOOL DEPARTMENT OF NEUROLOGY

POSTDOCTORAL RESEARCH ASSOCIATE position available 1 September 1978 for neurophysiologist to work in field of motor control using single and multiunit recording techniques in chronic animal preparations. Send curriculum vitae and names of three references to:

> M. B. Bromberg Department of Neurology The University of Michigan Ann Arbor, Michigan 48109

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

## **POSITIONS OPEN**

- 1) PLANT SCIENTIST—To assist in developing a greenhouse screening program for identifying plant growth regulating activity of natural products. B.S. or M.S. in an allied field of plant science, with preference given to persons with greenhouse research experience.
- greenhouse research experience.

  2) CHEMIST—To assist in the isolation and purification of natural products. B.S. or M.S. in chemistry or equivalent background, since preference will be given to persons with experience utilizing GC and HPLC.

  Applicants should send résumé, indicating names and addresses of three references, to: Box 256, SCI-ENCE.

POSTDOCTORAL POSITION OR RESEARCH AS-SOCIATE in biochemistry to study the mechanism of contraction of vascular smooth muscle. Work will of contraction of vascular smooth muscle. Work will involve biochemical and spectroscopic studies on the actin-myosin interaction and on the regulation of this interaction by  $Ca^{2+}$ , tropomyosin, and myosin light chain kinase. Background in protein biochemistry is desirable. Salary range: \$12,000 to \$17,000, depending on experience. Send curriculum vitae and list of references to: Dr. John C. Seidel, Department of Muscle Research, Boston Biomedical Research Institute, 20 Staniford Street, Boston, Mass. 02114. Equal Opportunity/Affirmative Action Employer.

## TRACE METAL MARINE CHEMIST

Seeking a qualified research assistant with experience and degrees in chemistry and oceanography in ence and degrees in chemistry and oceanography in the field of trace metal geochemistry. Particular at-tention will be given to applicants with a master's degree, marine field experience, and trace metal analysis of marine samples. Opportunities will be provided for laboratory management and collabora-tive research and publication. Send résumé to:

Dr. Thomas M. Church College of Marine Studies University of Delaware Newark, Delaware 19711

# **ACRS SCIENCE AND ENGINEERING** FELLOWSHIPS

The Advisory Committee on Reactor Safeguards, U.S. Nuclear Regulatory Commission is accepting applications for appointment to the ACRS Fellowship Program. Important goals of the program are: (i) to assist the ACRS in performing its functions relative to nuclear power safety; and (ii) to provide an opportunity for talented young engineers and scientists to develop an understanding of the nuclear power licensing process and expertise in the nuclear reactor safety area

reactor safety area.

Applicants with the following backgrounds will be considered:
(i) a doctorate in scientific or engineering fields with up to 5 years of postdoctoral experience; (ii) students in science or engineering who are in the final stage of their Ph.D. work; and (iii) engineers and scientists with experience in the nuclear field, who are at a stage in their careers when they can undertake a 1- to 2-year fellowship position on a full-time or part-time basis.

Most positions will be located in downtown Washington, D.C. However, a few will be located at institutions around the nation where the necessary facilities are available to perform ACRS re-

where the necessary facilities are available to perform ACRS re-

where the necessary radiation and a full time basis will be compensated at approximately the GS-12 level—\$21,883 to \$25,528. Fellows located at various universities will be compensated at a

level competitive with other scientific and engineering graduate and postdoctoral fellowships being offered by the university.

Application for ACRS Washington Fellowships may be made on Standard Form 171, Personal Qualifications Statement. University-sponsored fellowship nominations may be submitted by letter or other means.



## U.S. Nuclear Regulatory Commission

Send applications or letters to:

ACRS/NRC, Washington, D.C. 20555 Attention: Fellowship Program

NEW ZEALAND DAIRY RESEARCH INSTITUTE
DIRECTOR

Applications are invited for the position of director of the New Zealand Dairy Research Institute as from a date early in 1979.

The institute undertakes research and development in all matters related to the conversion of milk into dairy products including, increasingly the market-oriented requirements of the New Zealand Dairy Board, through development work in new products and functional variations of traditional ones. Other major activities include work for manufacturing dairy companies and the implementation of research findings.

Excellent laboratories and pilot plant are situated at Palmerston North on the Massey University campus, adjacent to three major divisions of the New Zealand Department of Scientific and Industrial Research.

The staff totals 179 (69 research officers). Current annual expenditure, including the associated Dairy Products Development Centre, is about \$2.5 million.

Applicants should have a good degree in a relevant field, and have shown proven research leadership and ability in the management of science/technology.

Remuneration will be approximately \$25,000 per annum according to qualifications and experience. Subsidized superannuation and car are provided. Reasonable transfer expenses will be met on the successful applicant taking up the position within 6 months of appointment.

Further information may be obtained from:

The Acting Director
New Zealand Dairy Research Institute
Private Bag
Palmerston North
New Zealand

Applications marked "Confidential" and addressed to the chairman at the above address, should include personal details, curriculum vitae, and the names of three referees. Applications close on 15 September 1978.

## **POSITIONS OPEN**

## FACULTY POSITION—PHYSIOLOGY

The Physiology Department of Meharry Medical College is seeking to fill two faculty positions (Ph.D. or M.D) in cardiovascular or endocrine physiology, although applicants from other areas of specialization will also be considered. Teaching duties will ization will also be considered. Teaching duties will include participation in freshman medical and dental physiology courses and graduate courses in the applicants' area of specialization. Modest "start-up" monies are available as is ample laboratory space in a modern basic sciences building. Send curriculum vitae and names of three persons who can evaluate the quality of your teaching and research performance to: Faculty Search Committee, Department of Physiology, Meharry Medical College, Nashville, Tenn. 37208. Affirmative Action/Equal Opportunity Employer.

PHYSIOLOGIST: Ph.D. or M.D. assistant professor PHYSIOLOGIST: Ph.D. or M.D. assistant professor to teach medical and graduate student physiology; research publications and competence in membrane biophysics or biomechanics. A strong background in biological sciences is required. Postdoctoral training a prerequisite. Curriculum vitae and three letters of recommendation required of applicants no later than 15 October 1978. Send application materials to: Chairperson, Department of Physiology, Upstate Medical Center, State University of New York, 766 Irving Avenue, Syracuse, N.Y. 13210.

An Equal Opportunity/Affirmative Action Employer

## POSTDOCTORATE OR SABBATICAL LEAVE

The Upjohn Company's Agricultural Division is seeking a Ph.D.-level biochemist, endocrinologist, or physiologist to participate in multidisciplinary program aimed at understanding the relationship between trophic hormones and ani-mal growth. The applicant should have experience and interest in one or more of the following areas: hormone receptor inter-action, regulation of protein synthesis, protein metabolism. Possibility of a second-year contract by mutual agreement.

## MICROBIOLOGIST PH.D.

The Upjohn Company's Cancer Research Unit is seeking an individual with a Ph.D. in microbiology, preferably with experience in ogy, preferably with experience in microbial physiology, intermediary metabolism, molecular genetics and biochemistry. Postdoctoral training in these areas is desired. The incumbent will develop screening methodology for detection of fermentation-derived antitumor agents, apply such methodology, develop leads, and conduct research on microbial and biochemical modification of antitumor agents.

Located in Kalamazoo, a mediumsized community with excellent cultural and recreational advan-tages. Excellent company benefits. Submit résumé in confidence

Upjohn

Kent S. Morgan THE UPJOHN COMPANY 7171 Portage Road Kalamazoo, Mich. 49001

An Equal Opportunity Employer, M/F

## **POSITIONS OPEN**

From time to time, **POSITIONS** are available in the Department of Anesthesiology, Yale University School of Medicine, at the clinical faculty, research staff, resident, and technical levels. Interested individuals should apply to:

Luke M. Kitahata, M.D., Ph.D. Chairman, Department of Anesthesiology Yale University School of Medicine 333 Cedar Street New Haven, Connecticut 06510

Please respond by 1 November 1978. Equal Opportunity/Affirmative Action Employer. Qualified women, minority group members, and handicapped individuals are encouraged to apply.

# INTERNATIONAL LABORATORY FOR RESEARCH ON ANIMAL DISEASES (ILRAD) RESEARCH ASSISTANT

A research assistant is required to operate the institution's fluorescence activated cell sorter (FACS II). Research is being carried out on trypanosomiasis and theileriosis in modern research facilities located and theileriosis in modern research facilities located in Nairobi, Kenya. The individual will be working with lymphoid cells and trypanosomes, so familiarity with handling cells is essential. Experience in the use of a cell sorter is an advantage but provision will be made for training if necessary. Salary will vary, depending upon training and experience. Perquisites include house allowance computation allowance. include house allowance, commutation allowance, insurance, vacation leave, pension scheme, and others. Candidates should submit current curriculum vitae describing training and research experience and the names of three references who may be con-tracted on behalf of their candidacy. These should be sent to:

The Director ILRAD P.O. Box 30709 NAIROBI, KENYA

to reach him not later than 30 August 1978.

RESEARCH ASSOCIATE. Immediately available to study the genetic control of the biosynthesis and on-togeny of hemoglobin. A primate model for the stimulation of fetal hemoglobin synthesis in adults is being developed. Must have experience in cell sepa-ration and cell culture techniques. Send curriculum vitae and three letters of recommendation to: Dr. J. DeSimone, Center for Genetics, University of Illinois, College of Medicine, Chicago, Ill. 60612.

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

## VIRAL ONCOLOGIST

The Bureau of Biologics, Food and Drug Administration, is accepting applications from qualified physicians with experience in planning, directing, evaluating, and conducting research concerned with the biology and immunology of tumors induced by viruses, viral genomes, or other oncogenic factors. The incumbent will serve as lead medical officer and principal investigator for basic and applied research in these fields. He/she will review and evaluate scientific and clinical data plied research in these fields. He/she will review and evaluate scientific and clinical data concerning safety and efficacy of biological products. Salary range is \$40,995 to \$47,500 per year (GS-15). Send curriculum vitae and Standard Form 171, Personal Qualifications Statement, to: Bureau of Biologics, U.S. Food and Drug Administration, Public Health Service, Building 29, Room 100, 8800 Rockville Pike, Bethesda, Md. 20014, Attention: Mrs. Davis. An Equal Opportunity Employeer.

## **FELLOWSHIPS**

# POSTDOCTORAL POSITIONS IN NEUROPHARMACOLOGY

POSTDOCTORAL FELLOWSHIPS are available in the CNS division of the Department of Pharma-cology at the Medical College of Virginia. This research team is investigating the effects of drugs of abuse and neurotoxic substances on the neurochem-ical systems of the brain. Candidates with experience in neurochemistry or pharmacology are encouraged to submit curriculum vitae and bibliography to: Dr. William L. Dewey, Box 726 MCV Station, Richmond, Virginia 23298.

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## **FELLOWSHIPS**

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BIOMEDICAL SCIENCES: PHARMACOLOGY. BIOMEDICAL SCIENCES: PHARMACOLOGY. Graduate training in neuro-, behavioral-, biochemical-, cardiovascular-, molecular-, physicochemical-, and quantum-pharmacology. Stipends plus tuition assistance. September 1978 and February 1979. Department of Pharmacology, Box G, Mount Sinai School of Medicine, 1 Gustave L. Levy Place, New York, N.Y. 10029. An Equal Opportunity Employer.

## POSTDOCTORAL POSITION AVAILABLE

A POSTDOCTORAL FELLOWSHIP is available for 1 year (with possible extension to a second year) starting September to December 1978, for research on circulatory control. Preference for individual with experience in cerebral circulation. Stipend: \$12,000 plus dependent's allowance. Send curriculum vitae and references to:

lum vitae and references to:

Dr. R. R. Sonnenschein, or
Dr. E. H. Rubinstein
Department of Physiology
University of California, Los Angeles,
School of Medicine
Los Angeles, Calif. 90024
Affirmative Action/Equal Opportunity Employer.
Minority and woman candidates are encouraged to

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# POSTDOCTORAL TRAINEESHIPS IN NEURAL AND BEHAVIORAL SCIENCES

Traineeships are available in anatomy, pharmacology, physiology and biophysics, psychology, zoology, and related disciplines through an interdisciplinary U.S. PHS-NIMH Neurobehavioral Sciences Program Grant. Applicants should have a strong commitment to research in the neural and behavioral sciences. Applications, consisting of a statement of research interests, curriculum vitae, and three references must be made by 1 Sentember. statement of research meress, currently viae, and three references, must be made by 1 September 1978. Apply to: The Neural and Behavioral Sciences Committee, 2011 Gilmore Hall, The University of Iowa, Iowa City, Iowa 52242. The University of Iowa is an Equal Opportunity Employer.

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Send resume to: Diana Hammond

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Requirements include a Doctorate in Pharmacology. Hequirements include a Doctorate in Pharmacology, with up to 2 years minor in Physiology or Biochemistry with up to 2 years and a decire to develop an another doctoral experience and a decire to develop another doctoral experience another doctoral experience another doctoral experience and a decire to develop another doctoral experience another doctoral experi minor in Physiology or Biochemistry with up to 2 years and a desire to develop an experience and a desire to develop an post doctoral experience and a desire to develop an experience and a desire to develop an experience and a desire to develop an experience and a successful cannot be successful cannot be successful and the experience independent research effort. The successful canindependent research effort. The succ Pnarmacology and some working experience in drug-receptor interactions, blochemical pharmacology

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This mycotoxic disease occurs in grazing sheep and cattle during seasons in which pastures are heavily contaminated with spores of Pithomyces chartarum which contain the fungal toxin sporidesmin. Hepato-biliary injury produced by sporidesmin results in loss of production, clinical disease, and deaths.

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- Pharmaco-biochemical studies into mechanisms of the sporidesmin-initiated severe inflammatory response and its relationship to the pathogenesis of the disease,
- 2) Studies into the mechanisms of the protection which results when zinc is administered during the period of natural or experimental intake of sporides-
- 3) The identification and evaluation of synthetic and naturally-occurring anutrient stimulators of liver mixed-function oxidase activities and their in-fluence on the metabolism and toxicity of sporidesmin, and
- 4) The biochemical-genetic control of differences in animal susceptibility to sporidesmin and within the sporidesmin toxicity which is known to occur, for example, both between and within breeds of sheep.

  Applications are invited from scientists with real interest and experience in one or other of these challenging fields of scientific investigation.

or other of these challenging fields of scientific investigation. The fellow will work at Ruakura Agrant garagitary facilities are available for experimental pathology, animal genetics, biochemistry, and organic chemistry. Fellowships are normally for 2 years with the possibility of extension for a further 2 years or appointment to a permanent position. The emolument will be up to \$22,403 a year depending on experience and scientific merit. The emolument is taxable. If applicable, the employer's contribution to superannuation scheme will be paid. If reciprocal social security between the fellow's country and New Zealand does not apply, a medical insurance premium will be paid.

A grant equivalent to return economy-class air fares to New Zealand from the fellow's home or the town and country in which he/she is employed when appointed will be paid. If the fellow's spouse and family accompany him/her a grant equivalent to their return fares will also be paid. A grant will be made towards the cost of transport of personal effects. While in New Zealand reasonable travelling expenses incurred in connection with the research work will be paid. Housing is available for a married fellow.

Further details and application forms are available from:

The Director
Ruakura Animal Research Station
Private Bag, Hamilton, New Zealand

Applications close with:

The Executive Director National Research Advisory Council Box 12240, Wellington, New Zealand

on 31 December 1978.



Scientists frequently make amazing discoveries. Now they have discovered, to their own astonishment, that poster sessions at scientific meetings really work.

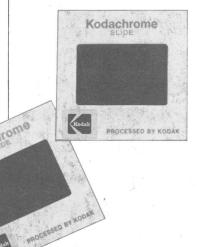
Ever since the founding of the Royal Society in the 17th century they had assumed that a proper scientist communicates science in a formal lecture. In the 19th century public entertainers introduced lantern slides, and after only a generation or two slides became not merely respectable but *de rigueur* for scientific communication.

Then, a little past the middle of the 20th century, the science fairs hit the schools that the scientists' children attended. Of those children that participated, many have now turned into scientists Eklachrome themselves and have now largely succeeded in convincing their senior colleagues that the trade-fair format for discourse is not only much older than the Royal Society but fosters discourse better pitched to the needs of the parties communicating than with one-way communication. Mutual stimulation is vital to the scientific enterprise, of course.

Trouble is that the passerby at a poster session gets to decide at which presentation to stop and which to pass by. He who is too much passed by may sour on science—a pity. This must be forestalled. He must be warned that at a poster session one does not simply letter on the wall the words that would otherwise have been read to the colleagues from a sheet of paper in the gloom whilst several dozen slides crept up cautiously to the nub of the tale. In a poster presentation the nub must

to occupy a substantial portion of the allotted wall space as a 16" x 20" color print, the other two or three a little smaller beneath it, with succinct captioning.

# What to do with your slides at a poster presentation



hit the audience first, not last, as the audience is moving.

One selects from all the slides one has accumulated in the course of the work the three or four shots which represent its essence in the most vivid, concentrated, climactic, tangible, curiosity-compelling form. The best of these is selected



Just take those few key slides into a place where the principal business is photographic. If any cropping or other special attention would help the prints make your point better, tell them. Let their experience determine

whether the job should go to us. If they feel it ought to be done by an independent lab on Kodak paper, we'll still be happy if you are.

Don't leave the other slides back home. They may be needed for some deep discussion.



Kodak Publication P-319 will offer more advice not only for presenters at poster sessions but for organizers thereof and even for those merely attending. Drop a line to Kodak, Dept. 412L-118, Rochester, N.Y. 14650 if you'd like to have "Poster Sessions" when ready. No charge for single copy.