RESEARCH NEWS

(Continued from page 1271)

abandoning her career altogether. "What did we have to lose? At least we would have tried once in our life to make it on our own." Others did see a substantial risk, particularly some of the older members of the group, who might now have difficulty finding another job in astronomy. Merville says that a major factor in his decision was that he had known all of the people involved for several years under conditions of some stress and "I felt I knew how they would perform, that the personalities were compatible." Ross recalls that "the founding motivation was practical; we felt that it

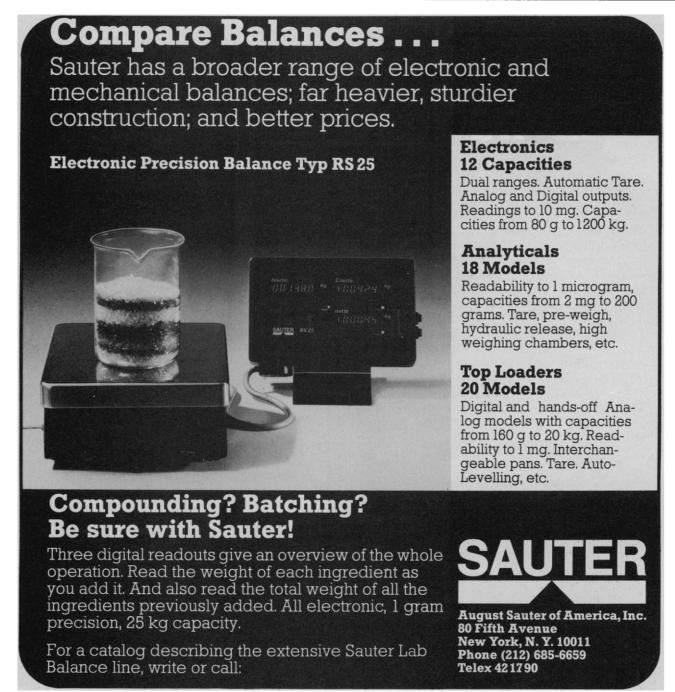
was better to hang together than separately," and besides, she liked the idea of independence from the government and other institutions.

* * *

MIRA is in fact very near to achieving its goals. Its major needs now are money to build the permanent observatory building and some further improvement in the bookstore business so that it can begin to support the group. By one measure MIRA has already proved itself a viable astronomical institution—it has begun to attract additional recruits. Despite the fact that MIRA could offer him no support, Lee McDonald, a recent graduate of Lick, decided to come to work for MIRA rather than take one of several

possible jobs at other observatories, because he liked the prospect of long-term research projects, more telescope time, and fewer "bureaucratic hassles."

The MIRA principals believe that their do-it-yourself model could be applied to other areas of science where there is also a shortage of jobs in traditional institutions. In any case MIRA is, as Bok puts it, "a very interesting experiment, and so far a successful one." The MIRA experience would seem to prove that there is still room for the initiative of individuals in this era of big science: that the Horatio Alger character is not dead, so to speak, but has just dropped out and is living in Monterey disguised as an astronomer.—ALLEN L. HAMMOND



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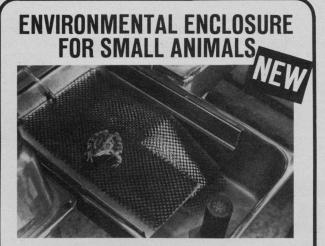
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Personnel Placement

POSITIONS WANTED

Biochemist: Ph.D., seeks faculty/research/administrative position. See Jourdikian ad in the 12 August 1977 issue of SCIENCE. 9/23, 30; 10/7

Biophysicist, Ph.D. 1977, seeks administrative position in university, government, or industry. Research experience in virology and membranes; expertise in ESR. Publications, teaching experience. Box 350, SCIENCE.

Lipid Biochemist, Ph.D. 1964; specialization in neurochemistry, arteriosclerosis; publications; desires research or teaching position. Box 351, SCIENCE.

Neuropathologist, M.D., excellent background in neuroanatomy, neurohistology, and general pathology. Good knowledge of electron microscopy. Specially skilled in silver impregnation techniques (Golgi, Cajal, Rio Hortega). Routine diagnosis. Publications (among them, a book on tumors of the nervous system). Seeks research/teaching position. F. D'Amelio, 1402 East Manlove Street, Apartment 54, Chico Apartments, Tucson, Arizona 85719. X

Translation Service. Technical, medical, and other material. Prompt. Accurate. Experienced, with Ph.D. Most European languages. \$5/100. C. Tuckerman, Averill Park, New York 12018.

Vertebrate Ecologist. Ph.D. Background in verte-Vertebrate Ecologist. Ph.D. Background in vertebrate biology, population ecology, ethology, and limnology. Interested in fish and mammals. College teaching and postdoctoral experience. Field research on environmental problems and resource management. Seeks teaching or research position. Starting date flexible. Box 352, SCIENCE.

POSITIONS OPEN

ASSISTANT OR ASSOCIATE PROFESSOR THE OHIO STATE UNIVERSITY DEPARTMENT OF ZOOLOGY

Responsibilities of position include teaching, coordinating, revising, and administering large courses in introductory biology. A strong and primary interest in undergraduate education, auto-tutorial teaching programs, and zoological research is expected.

A Ph.D in zoology and teaching experience in biology or zoology is required. This is a 9-month appointment beginning fall quarter 1978.

Send curriculum vitae and three letters of recom-Send curriculum vitae and three letters of recommendation to: Professor Tony J. Peterle, Chairman, Department of Zoology, The Ohio State University, Columbus, Ohio 43210. Applications must be received by 1 November 1977.

An Equal Opportunity/Affirmative Action Employer

ASSISTANT RESEARCH SCIENTIST

Recent Ph.D. in biochemistry to study lipid and lipoproteins metabolisms including cellular aspects. Please send résumé to: M. Kerans, Personnel Department, NEW YORK UNIVERSITY MEDICAL CENTER, 587 First Avenue, New York, N.Y. 10016. An Equal Opportunity/Affirmative Action Employer, M/F.

The Midland Macromolecular Institute (MMI) invites applications for a position at the level of assistant professor or associate professor depending upon experience and qualifications. Duties will involve research and teaching in BIOPOLYMERS (chemistry and/or physics). Required: Ph.D. with interest and experience in NMR. Applicants should submit a curriculum vitae, a list of publications, and names of three references to: BIOPOLYMERS, Midland Macromolecular Institute, 1910 West St. Andrews Road, Midland, Michigan 48640 by 1 November 1977. MMI is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ANIMAL BEHAVIORIST/ETHOLOGIST

The Department of Psychology, McMaster Uniresity invites applications for a term (tenure track) appointment at the assistant professor level beginning 1 July 1978. Some funds for research equipment are available. We are looking for an animal behaviorist/ethologist with a well-developed research program, particularly in the area of behavior development or of social behvaior. Candidates are requested to forward at their earliest convenience quested to forward at their earliest convenience three letters of reference, a curriculum vitae, and any available reprints or preprints to: Search Committee, Department of Psychology, McMaster University, Hamilton, Ontario, Canada L8S 4K1.

ASSISTANT DIRECTOR

GRADUATE MEDICAL EDUCATION

Saint Barnabas Medical Center, a member of the Council of Teaching Hospitals of the Association of American Medical Colleges, seeks an Assistant Director for the Depart-ment of Graduate Medical Education. Applicants should have a Ph.D. degree with background in administration and education. Saint Barnabas Medical Center is located in a beautiful suburban community, 45 minutes from New York City. For further information, submit curricu-lum vitae to Abdol H. Islami, M.D.

> Saint Barnabas **Medical Center** 94 Old Short Hills Road Livingston, N.J. 07039 (201) 533-5500

Saint Barnabas Medical Center is An Equal Opportunity Employer

ASSISTANT PROFESSOR OF BIOCHEMISTRY. ASSISTANT PROFESSOR OF BIOCHEMISTRY. Applications are invited for a faculty position in biochemistry which is available as early as January 1978. Candidates must have a Ph.D., postdoctoral experience, and the ability to initiate an effective, independent research program in biochemistry. A strong commitment to both research and teaching is essential. Send curriculum vitae, three letters of recommendation, and a statement of future research plans to: Dr. Donald Wetlaufer, Professor and Chairperson, Department of Chemistry, University of Delaware, Newark, Delaware 1971, before 15 October 1977. An Equal Opportunity/Affirmative Action Employer. ployer.

ASSISTANT PROFESSOR OF BIOLOGY HARVARD UNIVERSITY

The Cellular and Developmental Biology subdivision expects to make an appointment at the assistant

sion expects to make an appointment at the assistant professor level for the coming year in the field of plant molecular developmental biology. Applicants should have the Ph.D. Preference will be given to candidates with teaching experience, records of research accomplishment, and postdoctoral training. The University is an Equal Opportunity Employer; women and members of minority groups are specifically encouraged to apply. Please have three professional persons who are well acquainted with your work send letters of recommendation directly to us. Applications should include your résumé, copies of your most significant publications, and a summary of your research goals should be sent to:

Chairman, Plant Biology Search Committee

Department of Biology

16 Divinity Avenue

Cambridge, Mass. 02138

prior to 1 November 1977.

prior to 1 November 1977.

POSITIONS OPEN

ASSISTANT PROFESSOR OF BIOCHEMISTRY

In conjunction with the new University of South Carolina School of Medicine, the Department of Chemistry invites applications from individuals having a Ph.D. degree who are highly qualified in any area of biochemistry. Potential candidates should have I or 2 years of postdoctoral experience and will be expected to show promise of developing a vigorous research program. The appointee will join six other biochemists in teaching medical students as well as graduate and undergraduate students in the department. The tenurable appointment based on a well as graduate and undergraduate students in the department. The tenurable appointment based on a 12-month academic year will be effective for January 1978 or thereafter. Apply by submitting curriculum vitae, a short statement of projected research problems, and names of three references to: Professor Ronald R. Fisher, Chairman, Department of Chemistry, University of South Carolina, Columbia, South Carolina 29208. An Equal Opportunity/Affirmative Action Employer.

The University of South Carolina, School of Public Health, is seeking a Ph.D, or Dr. P.H. in ENVIRON-MENTAL HEALTH at the ASSISTANT PROFESSOR level. Duties will include teaching a graduate-level course in environmental health, and direction of graduate students at the M.P.H. and M.S.P.H. level. The appointment will be temporary for the 1977-1978 school year, but may become a permanent position the following year.

Send curriculum vitae and names of three references

W. B. Vernberg, Dean School of Public Health University of South Carolina Columbia, S.C. 29208

University of South Carolina is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR OF OCEANOGRAPHY

Field-oriented physical or chemical oceanographer reteach undergraduate introductory and advanced courses and to direct independent study and student research. Work is concentrated in the rivers, estuaries, bays, and along the coast rather than in deep water. At actively developing young state college located near Atlantic City. Position available January 1978. Base salary: \$13,815. Detailed description available from: Dean Philip Nanzetta, Stockton State College, Pomona, N.J. 08240.

Affirmative Action/Equal Opprotunity Employer

CLINICAL IMMUNOLOGIST: Major reference laboratory needs a Ph.D. to act as assistant/director of a large and actively growing Microbiology/Immunology Department, with prime responsibility for clinical immunology. Applicants must have had practical bench experience as well as a sound knowledge and understanding of both the technical and clinical aspects of diagnostic immunology and must be eligible. pects of diagnostic immunology and must be eligible for California technologist license. Managerial experience would be a strong asset as would previous experience in diagnostic microbiology. Send detailed résumé to: Dr. Robert Blaker, Director of Microbiology. biology, Bio-Science Laboratories, 7600 Tyrone Avenue, Van Nuys, Calif. 91405.

We are an Equal Opportunity Employer.

Oakes College of the Santa Cruz campus of the University of California announces the availability of a 1-year LABORATORY FACILITIES COORof a 1-year LABORATORY FACILITIES COOR-DINATOR position in its science program starting fall 1977. This will be a continuing position if funding remains available. The position requires a Ph.D. in one of the natural sciences disciplines, with prefer-ence given to a background in biochemistry or bio-medical sciences. Beaponsibilities include teaching medical sciences. Responsibilities include teaching in the introductory cross-disciplinary sciences course, lab planning, logistics and setups, super-vising student help in the facility, ordering of sup-plies and equipment, help in budget development, and advising and supporting undergraduate student independent research projects as needed. Salary range: \$15,000 to \$18,800 (9 months), dependent upon qualifications. Application deadline: 15 October 1977. Send résumé and three letters of recommendation to: Facilities Coordinator Search Committee, Oakes College, University of California, Santa Cruz, California 95064.

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

ASSOCIATE DIRECTOR FOR VETERI-NARY PATHOLOGY AND RESEARCH, Division of Pathology, Bureau of Foods, U.S. Food and Drug Administration, Wash-ington, D.C.

The responsibilities of the position include: (ii) supervision of the day-to-day in-house pa-thology studies, including leadership of the gross necropsy team; (ii) input into the selec-tion of pathology projects and their design; (iii) service as consulting expert pathologist (III) service as consulting expert pathologists to scientific and regulatory personnel including membership on Bureau of Foods committees and special task groups; (iv) supervision of histopathology evaluations and reports of staff pathologists; and (v) completion of pathology projects of interest as time permits time permits.

Qualifications for the position require a D.V.M. or M.D. degree with substantial postgraduate training and experience in diagpostgraduate training and experience in diagnostic tissue pathology and oncogenesis. Experience in toxicologic pathology and board certification are highly desirable but not essential. Salary range is from \$28,725 to \$33,789 or higher depending upon applicant's qualifications.

U.S. CITIZENSHIP REQUIRED

For further information regarding the position, telephone or write to: Morris A. Weinberger, M.D., Director, Division of Pathology, HFF-130, 200 C Street, SW, Washington, D.C. 20204; telephone: 202-245-1123.

This is a Civil Service position. FDA/An Equal Opportunity Employer

EXPERIMENTAL SPECTROSCOPIST. The Labo-EXPERIMENTAL SPECTROSCOPIST. The Laboratory for Atmospheric and Space Physics, an institute of the Graduate School of the University of Colorado, has an opening for a postdoctoral fellow in experimental spectroscopy. A background in solar physics and optics is necessary to develop an EUV solar spectrometer to be used in rocket and satellite experiments. Applicants should be proficient in the specification, design, and evaluation of precision optical instruments with emphasis on calibration and detection systems. Opportunity exists to participate in experiment planning, operations, and data analysis. Please send résumé to: Dr. Gary J. Rottman, Laboratory for Atmospheric and Space Physics, University of Colorado, Boulder, Colorado 80309. The University of Colorado is an Affirmative Action/ University of Colorado is an Affirmative Action Equal Opportunity Employer.

FACULTY APPOINTMENT DEPARTMENT OF DERMATOLOGY

Responsibilities to be fulfilled: teach basic science in dermatology and participate in all dermatology func-tions except patient care. Will do research in lipid biochemistry related to skin and be research leader. Qualifications desired: must be a Ph.D. or equiva-lent, and a demonstrated scholar and leader in lipid lent, and a demonstrated scholar and leader in lipid biochemistry. Salary: appropriate for qualifications and responsibilities. Excellent fringe benefits. Employer: The University of Iowa, Iowa City, Iowa 52242, is an Equal Opportunity Employer. Applications: interested persons are invited to direct inquiries and submit curriculum vitae to: Dr. John S. Strauss, Professor and Head, Department of Dermatology, College of Medicine, University of Iowa, Iowa City, Iowa 52242.

UNIVERSITY OF ILLINOIS, CHICAGO

The Department of Biological Sciences invites applications for FOUR FACULTY POSITIONS for September 1978. Preference will be given to candidates with postdoctoral experience who have demonstrated outstanding potential for independent research in mammalian cell and molecular biology, experimental mycology; animal physiology (two positions). Each of the four applicants selected will be expected to teach undergraduate and graduate courses in one of the following areas: (i) cell and molecular biology, (ii) general mycology, (iii) mammalecular biology, (ii) general mycology, (iii) mammalian physiology, and (iv) comparative animal physiology. All faculty members are expected to direct M.S. and Ph.D. candidates.

Applications, including curriculum vitae and letters from three references, should be sent to: Dr. S. K. Shapiro, Head, Department of Biological Sciences, University of Illinois, Box 4348, Chicago, Illinois 60680. Closing date: 21 October 1977. The University of Illinois is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

BIOCHEMISTRY FACULTY POSITIONS RICE UNIVERSITY

Applications are invited for new faculty positions in the Department of Biochemistry of Rice University (full professor, associate professor, or assistant professor). Clear distinction in creative research and education essential. Preference will be shown to candidates in the area of molecular biochemistry of nucleic acids. However, applications are encouraged from outstanding candidates irrespective of field of interest.

Rice University is an Equal Opportunity/Affirmative Action Employer.

Send résumé and brief outline of future research plans to: G. J. Schroepfer, Jr., Chairman, Department of Biochemistry, Rice University, Houston, Tex-

BIOCHEMIST-Postdoctoral position available for individual to participate in the study and development of new blood fractions used in the treatment of hemophilia. The position is for 1 year renewable to a maximum of 3 years. Salary: Canadian \$14,000 to \$16,000 per annum, plus fringe benefits. Send curriculum vitae to: Personnel Office, Connaught Laboratories Ltd., 1755 Steeles Avenue West, Willowdale, Ontario, Canada M2N 5T8.

The University of Alabama Schools of Medicine and Dentistry in Birmingham are soliciting candidates for the position of CHAIRPERSON, Department of for the position of **CHAIRPERSON**, Department of Pharmacology. The successful candidate should possess a terminal degree and a firm commitment to academic excellence. This position provides an opportunity to organize and develop a department which is responsive to the teaching and research needs of medical, dental, and allied health students in a growing health science center. Emphasis will be placed on the development of a strong graduate program which will augment and interact with established programs in cancer, cardiovascular, and dental research. Applications should be accompanied by a curriculum vitae, including a bibliography and other relevant material, and should be submitted to the chairman of the search committee: **Dr. Edward J. Miller**

Dr. Edward J. Miller Department of Biochemistry
Department of Biochemistry
University of Alabama in Birmingham
University Station
Birmingham, Alabama 35294

University of Alabama in Birmingham is an Equal Opportunity/Affirmative Action Employer.

DEVELOPMENTAL BIOLOGIST

Washington State University announces a tenurewashington State University announces a tenure-track faculty position, at the rank of assistant profes-sor or associate professor, for a developmental biolo-gist having competence in cellular or molecular as-pects of development. Candidates should: (i) have postdoctoral experience, (ii) be qualified for graduate and undergraduate instruction in cellular and deate and undergraduate instruction in cellular and developmental biology, (iii) be prepared to train graduate students in their areas of competence, (iv) be able to present a record of substantial potential in research, or (v) especially in the case of applicants at the level of associate professor, be able to present a record of substantial research accomplishment. The successful candidate will be appointed in the appropriate Life Science department(s) and/or program(s), depending on the instructional and research interests of the candidate and the instructional needs of the participating units. Application deadline (including of the candidate and the instructional needs of the participating units. Application deadline (including curriculum vitae, transcripts, and names of three references) is 15 November 1977. The position will be filled between 1 February and 15 September 1978. Send applications to: Paul C. Schroeder, Department of Zoology, Washington State University, Pullman, Washington 99164. Washington State University is an Equal Opportunity/Affirmative Action Employer.

PLANT GENETICIST-Assistant professor position beginning 1 July 1978. Duties include teaching, supervising graduate students, and research in plant genetics. Facilities include plant growth chambers, a field laboratory, and a laboratory for genetics research whether molecular, cytogenetic, or evolutionary. Send résumé and three letters of reference before 1 November 1977 to: R. C. von Borstel, Chairman, Genetics Department, University of Alberta, Edmonton, Alberta, Canada T6G 2E9.

EXECUTIVE DIRECTOR WATER RESOURCES CENTER DESERT RESEARCH INSTITUTE UNIVERSITY OF NEVADA SYSTEM

The Water Resources Center of the Desert Research Institute, Reno, Nevada invites applications and/or nominations for the position of executive director. The applicants and/or nominees should have the following qualifications:

- 1) Ph.D. or equivalent in a water resourcesrelated field,
 2) Demonstrated competence in water re-
- sources-related research.
 3) Demonstrated administrative abilities,

- 3) Demonstrated administrative abilities,
 4) Demonstrated ability to obtain research and development funds,
 5) National and preferably international recognition in water resources, and
 6) Desire and enthusiasm to pursue both administrative and research activities and to support related academic programs.

to support related academic programs.

The Water Resources Center with offices and laboratories in the Reno and Las Vegas areas has a faculty of 20 water resources scientists. Approximately 15 graduate students in the hydrology/hydrogeology, biology, and geology programs at the University of Nevada, Reno, serve as research assistants. The faculty from the Water Resources Center provides some of the teaching capability for these programs. Minimum salary is \$30,000 per year. mum salary is \$30,000 per year.

Applications for the position of executive director must be postmarked on or before 1 December 1977.

Applications or nominations should be addressed to:

The Executive Director Search Committee Water Resources Center Desert Research Institute
University of Nevada System
P.O. Box 60220
Reno, Nevada 98506

An Affirmative Action/ Equal Opportunity Employer

POSTDOCTORA

The Biological and Medical Research Division of Argonne National Laboratory offers assignments of unusual pro-fessional challenge to PhD's with a strong interest in molecular virology. Research will emphasize determining the role of Murine RNA Tumor Viruses in Radiation Oncogenesis ... and include the utilization of molecular hytechniques. Ideal candidates will have from 0-2 years of post-doctoral experience. We offer commensurate salary, fine benefits, and the potential for both career growth and recognition within the scientific community. Send resume including bibliography to: Robert P. Maxwell, Per. Bldg. 10, Box V.O., Argonne National Laboratory, 9700 South Cass Avenue, Argonne, III. 60439.



An Equal Opportunity Employer, M/F HDCPD

DEAN, DIVISION OF SCIENCES WASHINGTON STATE UNIVERSITY

Nominations and/or applications are sought for the position of dean, Division of Sciences at Washington State University. Those interested in applying, making nominations, or seeking additional information should contact: Professor Calvin T. Long, Chairman, Dean Search Committee, Department of Mathematics, Washington State University, Pullman, Wash. 99164 by 1 November 1977. Washington State University is an Affirmative Action/Equal Opportunity Employer.

DIRECTOR OF IMMUNOLOGY

West Virginia University is seeking an immunologist to direct the Immunology Section within the Department of Pathology. This section will include the Histocompatibility Testing Laboratory as part of the Transplant Center, presently being established at West Virginia University. An acceptable candidate should meet the requirements of the Department of Health, Education, and Welfare as defined for the director or supervisor of a Histocompatibility Testing Laboratory supporting a transplant center. The director or supervisor should be a physician or hold an earned doctoral degree in a biological science. Subsequent to graduation, the director should have had 4 years' experience in immunology, 2 years of which have been in histocompatibility testing. Those interested should send curriculum vitae to: Nathaniel F. Rodman, M.D., Department of Pathology, West Virginia University Medical Center, Morgantown, West Virginia University is an Equal Opportunity/ Affirmative Action Employer.

GENETICIST

Rice University has an opening at the assistant professor level for a eukaryotic geneticist whose research is at the molecular or cellular level. Candidates should be prepared to establish vigorous research and graduate programs and to teach undergraduate courses in the general area of genetics. Please send curriculum vitae, a brief description of your research program, and names of four references to:

Charles Stewart
Department of Biology
Rice University
Houston, Texas 77001

Rice University is an Equal Opportunity/Affirmative Action Employer.

GEOCHEMISTRY POSITION UNIVERSITY OF MASSACHUSETTS, AMHERST

The Department of Geology and Geography has a vacancy in low-temperature geochemistry beginning 1 September 1978. We prefer a person whose interests involve the geochemistry of sedimentary rocks, sediments, or sediment/water interaction. The department has an ETEC Automated Electron Microprobe, a Siemens Automated X-ray Emission Analyzer (XRF), an Atomic Absorption Spectrophotometer, a CHN analyzer, a variety of x-ray equipment, and a 735-square-foot laboratory equipped for faculty/student research in aqueous geochemistry. Teaching duties would include a course in introductory geochemistry, plus other courses depending on the interests of the successful candidate. We expect the position to be filled at the assistant professor level, but more senior applicants will be considered. Applicants should send a curriculum vitae and the names of at least three referees to: George E. McGill, Acting Head, Department of Geology and Geography, University of Massachusetts, Amherst, Mass. 01003. The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.

INSTRUCTOR OF PATHOLOGY

Position primarily concerned with basic research in pathology. Ph.D. required in biological science with 4 to 6 years of experience in cell culture research with emphasis on biochemistry techniques, use of circular dichroism and spectropolarimeter, interference microscopy, and virus and cell culture techniques. Send curriculum vitae and references to: Chairman, Pathology Department, TEMPLE UNIVERSITY SCHOOL OF MEDICINE, Philadelphia, Pa. 19140. An Equal Opporunity/Affirmative Action Employer.

POSITIONS OPEN

ENGINEER-PHYSIOLOGIST

Engineer-physiologist (doctoral degree in engineering science) with several years experience in temperature regulation, circulatory and exercise physiology, experience in mathematical modeling, computer programming and instrumentation to join major university medical center. Write to John A. Downey, M.D., Chairman, Department of Rehabilitation Medicine, Columbia-Presbyterian Medical Center, 630 West 168th Street, New York, N.Y. 10032. Affirmative Action/Equal Opportunity Employer.

EPIDEMIOLOGIST faculty position at assistant professor level; M.D or Ph.D. with experience in health service planning, research, and teaching. Send curriculum vitae to: Arthur W. Chung, M.D., Department of Community Medicine, Charles R. Drew Postgraduate Medical School, 1621 East 120th Street, Los Angeles, Calif. 90059.

Applications are Invited for the Position of EXECUTIVE DIRECTOR

Atmospheric Sciences Center Desert Research Institute University of Nevada System Reno, Nevada

The executive director of the Atmospheric Sciences Center is responsible to the president of the Desert Research Institute for the scientific leadership and management of a growing group of some 30 professional physical scientists and engineers working in the atmosphic sciences. Research projects currently include the physics and chemistry of aerosols, clouds and precipitation, and the structure of the planetary boundary layer. The Center effort covers both basic research and applications, including related energy topics. Candidates should hold a Ph.D. degree or have equivalent research experience, and have a record of achievement shown through their publications in topics relevant to the interests of the Center. Experience should include a minimum of 5 years of increasing responsibility of leadership and management in an appropriate combination of academic, industrial, and/or government positions. Applications must be postmarked by midnight, 14 November 1977. The Desert Research Institute is an Affirmative Action/Equal Opportunity Employer. Send inquiries and applications to:

Twyla Harrison, Personnel Officer Desert Research Institute P.O. Box 60220 Reno, Nevada 89506

STATE UNIVERSITY OF NEW YORK AT ALBANY GEOPHYSICIST-SOLID-EARTH

The Department of Geological Sciences invites applications for a position as assistant or associate professor in the field of solid-earth geophysics effective in fall 1978. We seek candidates with broad research interests and a strong background in geology as well as geophysics. Applicants should send a full curriculum vitae, including names of four references, to: Dr. Kevin Burke, Department of Geological Sciences, State University of New York at Albany, 1400 Washington Avenue, Albany, N.Y. 12222. State University of New York is an Equal Opportunity/Affirmative Action Employer.

PROFESSOR OF MICROBIOLOGY AND HEAD OF THE DEPARTMENT

The Harvard School of Public Health invites applications and nominations for the position of professor of microbiology and head of the Department of Microbiology. Candidates should have a demonstrated record of scientific achievement, a desire to build bridges between the basic sciences and microbiological problems of public health significance, a proven excellence in teaching and the ability to attract promising students, fellows, and faculty to the Microbiology Department.

proven excellence in teaching and the ability to attract promising students, fellows, and faculty to the Microbiology Department.

Harvard University is an Equal Opportunity Employer with an Affirmative Action Program. Qualified women and minority group members are encouraged to apply.

A statement of interest and résumé should be sent to:

Dr. Jere Mead Department of Physiology Harvard School of Public Health 665 Huntington Avenue Boston, Massachusetts 02115

POSITIONS OPEN

HYDROGEOLOGIST for Water Resources Center to perform field and office research on hydrogeologic problems such as contaminant transport in ground-water systems and chemical and flow regimes in carbonate terrain. Requires Ph.D. in hydrogeology, geology, hydrology or closely related field, or M.S. with 2 years of experience; thorough knowledge all aspects hydrogeology; and knowledge of quantitative groundwater modeling techniques. Application deadline: 31 October 1977. Minimum starting salary: \$16,000. Send applications to: Twyla Harrison, Personnel Office, Desert Research Institute, University of Nevada System, P.O. Box 60220, Reno, Nevada 89506. An Affirmative Action/Equal Opportunity Employer.

MICROBIOLOGIST: ASSISTANT PROFESSOR. Position available January 1978. Academic year appointment. Ph.D. with postdoctoral research experience and evidence of strong research potential required. Candidate expected to develop research program in area of interest. Responsibilities will include teaching microbiology courses at the undergraduate and graduate level. Applications including curriculum vitae, transcripts, and three letters of recommendation should be sent to: Dr. M. D. Socolofsky, Chairman, Department of Microbiology, Louisiana State University, Baton Rouge, La. 70803. An Equal Opportunity Employer.

MOLECULAR BACTERIAL GENETICIST. The Institute for Cancer Research is seeking applicants for a position in the area of molecular bacterial genetics. We are looking for an individual who is exploiting a prokaryotic system both by genetic as well as direct physical techniques, including electron microscopy, biochemical manipulation, and physical chemical and DNA sequencing techniques. Individuals at all levels of experience may apply. Send curriculum vitae, along with a statement of research interest and the names of three references (letters need not be sent at this time) to: Dr. Alfred G. Knudson, Jr., The Institute for Cancer Research, 7701 Burholme Avenue, Fox Chase, Philadelphia, Pa. 19111. An Equal Opportunity/Affirmative Action Employer.

MOSQUITO GENETICIST. Recent Ph.D. (U.S. citizen) to participate in laboratory and field research studies on malaria vectors in Pakistan. Appointment for 1 to 3 years; travel, housing, and American education for grade- and high-school dependents provided. Salary commensurate with training and experience. Submit curriculum vitae by air mail to: Dr. Richard H. Baker, Pakistan Medical Research Center, University of Maryland, 6 Birdwood Road, Lahore, Pakistan.

Interviews this fall for THREE OPENINGS in spring 1978. Graduate study areas required are physical-engineering-computer, mathematical-statistical-computer, and social-political-economic sciences. Send résumé to: P.O. Box 823, Rockville, Maryland 20851, by 1 October 1977.

PHARMACOLOGIST

The Rockford School of Medicine, College of Medicine, University of Illinois, is seeking two new faculty members at the assistant professor level for its Division of Biomedical Sciences. Both positions are available on or about 1 January 1978. The Division of Biomedical Sciences is responsible for instruction of medical students as well as residents and for a multidisciplinary basic and clinical research program. Individuals with teaching experience and particular interest in pharmacokinetics, drug metabolism, and toxicology will be preferred but all interested applicants are encouraged to apply. A complete curriculum vitae should be sent to: Acting Director, Division of Biomedical Sciences, Rockford School of Medicine, 1601 Parkview Avenue, Rockford, Illinois 61101.

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITION available for 1 or 2 years beginning fall 1977 for research in transplantation immunology; involves immune monitoring and studies of mechanisms of rejection in human renal and cardiac transplant recipients. Studies focus on T-cell cytotoxicity, serum blocking factors, and suppressor T-cell activity. Additional project to study immune monitoring in primate transplant recipients. Immunology training required. Position and projects funded by NIH grants. Send curriculum vitae and references to: Dr. J. Thomas, Box 756, Medical College of Virginia, Richmond, Va. 23298.

CSIRO POSTDOCTORAL FELLOW RESEARCH SCIENTIST DIVISION OF FISHERIES & OCEANOGRAPHY NORTHERN TERRITORY

YARRAMA KANTANIA KANT

CSIRO has a broad charter for research into primary and secondary industry areas. The organization has approximately 7000 employees, 2200 of whom are research and professional scientists, located in divisions and sections throughout Australia. FIELD: FISH BIOLOGY

GENERAL: The division is Australia's principal marine research institution with about 50 scientists investigating the fisheries resources and the physical, chemical, and biological features of the oceans and estuaries around Australia. Headquarters of the division are at Cronulla, Sydney, with regional laboratories in Perth, Brisbane, and Karumba. The appointee will be located in an air-conditioned caravan at the road crossing of the Alligator River, N.T., near the Ranger uranium site. A small vessel, a coxswain, and a professional assistant will be provided. Some fieldwork will be conducted in the vicinity of Karumba and Cairns, N. Queensland. Library and limited laboratory facilities will be available in Darwin, 3 hours drive on paved roads.

In addition to a 12-metre vessel, a four-wheel drive vehicle and large laboratory van with its own power supply will be available.

DUTIES: To organise and conduct a research program on Barramundi in cooperation with Northern Territory and Queensland fisheries authorities.

QUALIFICATIONS: A Ph.D. or the equivalent in one of the ecological sciences with some training in zoology, together with demonstrable research ability and ability to work in the field.

SALARY: within the range of research scientist: A\$14,012 to A\$17,204 per annum.

TENURE: 3 years.

Applications, stating full personal and professional details, the names of at least two referees, and quoting reference number 320/585 should reach: The Chief, Division of Fisheries and Oceanography, CSIRO, P.O. Box 21, Cronulla, N.S.W. 2230, Australia, by 31 October 1977.

CSIRO APPOINTMENT OF OFFICER-IN-CHARGE CENTRE FOR ANIMAL RESEARCH AND DEVELOPMENT BOGOR, INDONESIA

CSIRO has a broad charter for research into primary and secondary industry areas. The Organization has approximately 7000 employees, 2200 of whom are research and professional scientists, located in divisions and sections throughout Australia.

GENERAL: The position of **OFFICER-IN-CHARGE** of the CSIRO Centre for Animal Research and Development, Bogor, Indonesia, will become vacant in July 1978 when the term of the current officer-in-charge, A. F. Gurnett-Smith, expires. Mr. Gurnett-Smith has indicated that he is unavailable for a further term.

The Centre, situated at Ciawi near Bogor in West Java, is a joint activity of the Australian Development Assistance Bureau (ADAB), the Indonesian Department of Agriculture, and CSIRO. Its establishment phase will be completed in mid-1978 when the construction of facilities is complete. Currently, it has a staff of about 25 Australians and 100 Indonesians. The Australian complement is nearing the maximum envisaged, but the Indonesian Government intends to appoint a further 150 staff over the next 2 years. Total staff, when the Centre is fully operational, is expected to be about 300, including 50 professional scientists.

The research programme is broadly aimed at increasing the productivity of the Indonesian livestock industries to meet the increasing demand for food of animal origin. The research will be concerned with the nutrition, reproduction, health, and other aspects of the husbandry of chickens, ducks, cattle, buffalo, sheep, goats, and pigs.

Supporting the research effort are analytical and veterinary services, mainly concerned respectively with feedstuffs analysis and disease screening and diagnosis for the Centre's experimental livestock.

DUTIES: The officer-in-charge is responsible to the CSIRO Executive for the conduct and direction of research activities, and for the general administration of the Centre, including the control of funds available to it. The appointee will be expected to develop close relationships with Indonesian government officials and with representatives of the livestock industries. The appointee will also be expected to promote active collaboration with other research bodies and with CSIRO divisions, particularly the Division of Animal Production.

Salary will be the subject of negotiation and will be in the range of chief research scientist grade 1 (A\$28,666 per annum) to chief of division grade 111 (A\$34,110 per annum). Overseas service allowances are also payable.

TENURE: A minimum term of 3 years is offered with options, if mutually desired, of either a further term or a senior research position elsewhere in the Organization.

FURTHER INFORMATION: Dr. K. A. Ferguson, an associate member of the CSIRO Executive and chairman of the Appointment Committee for this position, would be pleased to discuss the appointment with prospective applicants or with other interested parties who may have advice to offer on how the position might be filled.

Further information on the Centre is available on request from: the Secretary, CSIRO, P.O. Box 225, Dickson, A.C.T. 2602, Australia.

APPLICATIONS: Applications for the position stating full personal and professional details, the names of at least two referees, and quoting reference number 1000/25 should reach: **The Secretary, CSIRO., P.O. Box 225, Dickson, A.C.T. 2602, Australia,** by 18 October 1977.

SENIOR BIOCHEMIST PhD Enzymology or Molecular Biology

A new and challenging position was evolved within the Biochemistry Department of our Labelled Chemical Division located in Boston.

This situation calls for a bright hands-on post doctoral Biochemist or Molecular Biologist who has had significant exposure (1-3 years) to Protein Chemistry, Peptide Synthesis and/or enzymatic modification of proteins.

Responsibilities will include synthesis of labelled peptides and proteins and developmental work in 2 major areas: (1) modification of current procedures to achieve increased yields and to expand product line, and (2) providing a strong technical resource for the group.

This department and division have had a history of expansion and promotion from within. This position will offer the successful candidate ample opportunity for growth. We are willing to offer the successful candidate an exceptional salary commensurate with quality of experience and an all-inclusive compensation package which covers relocation expenses.

Interested candidates seeking a technical career with a world leader in Research Products should develop a cover letter, salary history and resume, including technical accomplishments, and send it to John R. Chabot, New England Nuclear, 549 Albany Street, Boston, MA 02118



An Equal Opportunity Employer



National Research Council Canada Conseil national de recherches Canada

ASTRONOMER

The Herzberg Institute of Astrophysics has an opening for an astronomer at its Dominion Astrophysical Observatory, Victoria, British Columbia. The incumbent will be expected to undertake independent research observational astronomy.

QUALIFICATIONS:

Candidates should have a Ph.D. or equivalent degree in astronomy or in a related discipline with several years of experience in astronomical research. Preference will be given to applicants with experience in extragalactic astronomy.

Salary will depend upon qualifications and experience.

Apply in writing giving complete details of education and experience to: the Employment Officer, National Research Council of Canada, Ottawa, Ontario, Canada K1A OR6. Include a list of publications and the names of referees from whom confidential evaluations can be sought. In reply, please quote: HIA-35.

PESTICIDE CHEMIST

Applicants are invited for the position of chief chemist for the federally funded University of Hawaii, Hawaii Epidemiologic Studies Program. The appointee will be responsible for the operation of an analytical laboratory with major emphasis on the analysis of pesticides in human and environmental samples. Duties will include the supervision of one technician and completion and evaluation of prescribed routine and developmental analysis. Ph.D. in chemistry or biological sciences required with 3 years of advanced research experience in the area of pesticide chemistry, residue analysis, and methods development. This is a nontenured faculty position. Send curriculum vitae and three letters of reference by 30 September 1977 to: Lyle Wong, Project Director, Hawaii Epidemiologic Studies Program, Pa-

Director, Hawaii Epidemiologic Studies Program, Pacific Blomedical Research Center, University of Hawaii at Manoa, 3675 Kilauea Avenue, Honolulu, Hawaii 96816. An Equal Opportunity/Affirmative Action Functions tion Employer.

PHYSICAL STRATIGRAPHY and sedimentation position available at The University of Michigan beginning September 1978. Level and salary negotiable. Proven research ability and a strong interest tiable. Proven research ability and a strong interest in teaching at both the graduate and undergraduate levels required. Well-equipped laboratories, including computing and analytical facilities (SEM and microprobe) and a large collection of cores and cuttings from the Michigan Basin available. Send curriculum vitae, names of three individuals from whom we can request letters of recommendation, and a statement of research interests to: Dr. D. F. Eschman, Acting Chairman, Department of Geology-Mineralogy, 1006 C. C. Little Building, Ann Arbor, Mich. 48109. A Nondiscriminatory, Affirmative Action Employer.

PHYSICIAN. M.D. or doctorate degree for Director PHYSICIAN. M.D. or doctorate degree for Director of Center for Sensory Deficits located in a university-affiliated pediatrics center. Experience in program development and administration in a multi-disciplinary setting. Excellent fringe package. Forward résumé, including salary requirements, to:

Box 353, SCIENCE

Equal Opportunity Employer

PLANT PHYSIOLOGIST for September 1978. The Department of Botany, Washington State University, seeks candidates for associate professor who have demonstrated excellence in and commitment to research, demonstrated ability or potential to attract extramural funding, and ability and interest in directing graduate students. Persons who have research interest in biochemical or biophysical assearch interest in biochemical or biophysical aspects of ion transport, water stress physiology, nitrogen fixation or photorespiration are sought but outstanding candidates with research interest in other areas of plant physiology will be considered. Send, before 15 December 1977, résumé, statement of research interest, plans for extramural funding and teaching, names of four references, and copies of three significant publications to:

Plant Physiology Search Committee
Department of Botany
Washington State University
Pullman, Wash. 99164

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

POSTDOCTORAL. Calorimetric studies of thymidylate synthetase. Must be skilled in protein purifications. Knowledge of instrumental methods desirable. Two years, starting November 1977. Send résumé and names of two references to:

Neal Langerman
Utah State University
Department of ChemistryLogan, Utah 84322

TUMOR IMMUNOLOGIST. Faculty appointment. Basic and applied tumor immunology relating to response of tumor to local irradiation; murine and clinsponse of tumor to local irradiation; murine and clinical studies. Facilities: a defined flora, SPF mouse colony (C3H, BALB/c, normal, nude), excellent general laboratory research opportunity. Active clinical trials of immunopotentiators in progress. Qualifications: M.D. or Ph.D.; at least 1 year of postdoctoral work. Start: 15 October 1977. Apply: Dr. H. D. Suit, Department of Radiation Medicine, Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts 02114. Equal Opportunity Employer. tunity Employer.

POSITIONS OPEN

TWO POSTDOCTORAL POSITIONS available immediately for 1 or 2 years to study role of mitogen receptors in regulation of cell replication in uninfectreceptors in regulation of cell replication in uninfected and chemical-virus-transformed cultured cells and in perfused hepatectomized and tumor-bearing liver. Candidates should have Ph.D. in biochemistry, cell biology, or physiology, and background in endocrinology. Stipend: \$10,000 to \$12,000. Send curriculum vitae and three letters of reference to: Dr. J. F. Perdue, Lady Davis Institute for Medical Research, Jewish General Hospital, Montreal, Quebec, Canada H3T 1E2.

POSTDOCTORAL POSITION. Investigate platelet function in renal metabolism and cardiovascular disease. Possible extension of aggregation studies into prostaglandin biochemistry and properties of platelet membranes. Replies to:

Dr. James Bemis Manhattan Kidney Center 40 East 30 Street New York, N.Y. 10016

POSTDOCTORAL POSITIONS (three) available 1978 for new or recent Ph.D's or M.D.'s interested in the area of biochemical mechanisms involved in the the area of biochemical mechanisms involved in the metabolic actions of insulin, glucagon, cate-cholamines, and glucocorticoids. Persons with a background in hormone binding, enzymology, protein chemistry, or membrane biology preferred. Research will be carried out in the laboratories of the Howard Hughes Medical Institute to be completed in early 1978. Competitive salaries with fringe benefits with the previously that the territory of the complete of the provided by the Jestitute Ageliance. in early 1978. Competitive salaries with fringe benefits will be provided by the Institute. Applicants should send résumés and names of references to: Dr. John H. Exton, Director, Howard Hughes Medical Institute Laboratories for the Studies of Metabolic Disorders, Department of Physiology, Vanderbilt University Medical School, Nashville, Tenn. 37232. An Equal Opportunity Employer.

POSTDOCTORAL POSITION MASSACHUSETTS INSTITUTE OF TECHNOLOGY

One postdoctoral position is immediately available in the Department of Nutrition and Food Science at the Massachusetts Institute of Technology. The re-search program is centered on the control of fatty acid and cholesterol synthesis in the perfused liver and kidney from rats as well as in vivo. Applicants should have some experience in metabolite analysis and in small animal surgery. For information, contact: Dr. H. Brunengraber, Room 56-229, Massachusetts Institute of Technology, Cambridge, Mass. 02139. Telephone: 617-253-6783. An Equal Opportu-

POSTDOCTORAL POSITION available immedi-POSTDOCTORAL POSITION available immediately for enzymological investigations on the regulation of phospholipid and/or triacylglycerol biosynthesis. Ph.D. in biochemistry with experience in enzymology, purification, membranes, and/or cell culture techniques helpful. Send curriculum vitae and the names of two references to: Dr. Robert M. Bell, Department of Biochemistry, Duke University Medical Center, Durham, North Carolina 27710.

POSTDOCTORAL RESEARCH ASSOCIATE

Ph.D. (biochemistry, cell biology) or M.D., to study iron storage in cell culture. Salary from \$15,000, plus fringe benefits. To start immediately. Write:

Leon Sokoloff, M.D. Department of Pathology
School of Basic Health Sciences
State University of New York at Stony Brook
Stony Brook, New York 11794

Equal Opportunity/Affirmative Action Employer

PRESIDENT wanted for

Enterprising, successful, scientific and development company with microbiology and virus background; science marketing skills essential. Salary negotiable; send résumé. Reply to:

Box 354, SCIENCE

PROJECT ASSOCIATE position available immediately for research on the molecular mechanism of skin carcinogenesis. The candidate must have a Ph.D. and documented research experience on the relation of retinoids, prostaglandins, cyclic nucleotides, and polyamine biosynthetic enzymes to skin tumor promotion as well as the capability to collaborate in the evidence of creduce cycles are collaborated. rate in the guidance of graduate student research in this area. Salary: \$11,700. An Equal Opportunity Employer. Box 355, SCIENCE.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE

Texas A & M University is seeking a postdoctoral research associate. Applicants should have a Ph.D. or M.D. with experience in molecular biology and DNA electron microscopy to map ribosome binding sites, promoters, and recombinant DNA. Opportuomplete curriculum vitae to: Dr. Garret Ihler, Department of Medical Biochemistry, Texas A & M University; Attention: Route 3, College Station, Texas 77843. Equal Employment Opportunity Through Affirmative Action.

POSTDOCTORAL TRAINEE position available now to study the molecular biology of lysosomal sulfohydrolases from human sources. A recent Ph.D. in fohydrolases from human sources. A recent Ph.D. in biochemistry with background in protein chemistry and enzyme mechanisms is preferred. Stipend amount is \$10,000. Apply with curriculum vitae and two references to: Dr. John Edmond, Department of Biological Chemistry, Mental Retardation Research Center, The Neuropsychiatric Institute, University of California School of Medicine, Los Angeles, California 90024. The University of California is an Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE position available fall or winter 1977. Recent Ph.D. in biochemistry with interest in cellular and molecular biology to work with terest in cellular and molecular biology to work with group studying biochemical events associated with uterine implantation. Salary up to \$13,000. Send curriculum vitae and names of three references by 30 September 1977 to: Dr. B. Baggett, Chairman, Department of Biochemistry, Medical University of South Carolina, 171 Ashley Avenue, Charleston, S.C. 29403. The Medical University of South Carolina is an Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSOCIATE. Postdoctoral position available in second half of 1978 to study H ion transport and intracellular pH regulation, employing microelectrode and radioactive tracer methodologies. The laboratory is part of an active group concerned with the mechanisms of ion regulation in cells. Inter-ested candidates should send résumé and three letters of recommendation to: Dr. Albert Roos, Department of Physiology, Washington University School of Medicine, 660 South Euclid Avenue, St. Louis, Mis-

An Equal Opportunity/Affirmative Action Employer

RESEARCH ASSOCIATE OR POSTDOCTORAL RESEARCH ASSOCIATE OR POSTDOCTORAL POSTTION to study membrane reactions involving purification of membrane proteins and reassembly of vesicles with activity. Experience in enzymology or protein chemistry and some knowledge of microbiology are needed. Send curriculum vitae and three references to: Dr. D. R. Sanadi, Boston Biomedical Research Institute, 20 Staniford Street, Boston, Mass. 02114. An Equal Opportunity/Affirmative Action

RESEARCH ASSOCIATE in behavioral pharmacology. Ph.D. in pharmacology. To participate in a re-search program involved in pharmacological and behavioral influences on drug self-injection in primates. Salary negotiable; position available now. Send curriculum vitae and letters of reference to:

Dr. J. H. Woods Department of Pharmacology University of Michigan Medical School Ann Arbor, Michigan 48109

An Affirmative Action, Nondiscriminatory Employer

RESEARCH ASSOCIATE. Available immediately for recent Ph.D. in biochemistry, biophysics, or physiology for research in noninvasive measurements of intermediary metabolism of the cornea and ments of intermediary metabolism of the cornea and the relationship between corneal metabolism and active transport. Should be familiar with techniques and instrumentation for spectrofluorometry, spectroscopy, electrical measurements, and on-line data acquisition and processing. For more information send résumé and three references to: Dr. R. A. Laing, Department of Ophthalmology, Boston University School of Medicine, Boston, Mass. 02118. An Equal Opportunity Employer.

STAFF ASSOCIATE position available 1 January 1978, for work on neural control of behavior in adult and developing *Aplysia*. Qualifications: Ph.D.; experience in intracellular electrophysiology and behavior; experience in aquaculture of marine mollusks helpful. Salary: \$10,000. Send curriculum vitae and addresses of three references to: Dr. J. Koester, Physiology Department, Columbia University, 630 West 168 Street, New York, N.Y. 10032. Telephone: 212-694-4091. *Affirmative Action Employer*.

LABORATORY SUPERVISOR

Merck Sharp & Dohme, a leader in the field of biological products, is presently offering an excellent career opportunity for a Laboratory Supervisor in our Virus and Tissue Culture Testing area. Responsibilities include supervising technicians involved in tissue culture and egg safety tests, control of line cells, primary trypsinization and various virus potency assays.

A B.S. or M.S. in Biology or Microbiology with 1-2 years of supervisory experience is required.

Excellent salary and benefits accompany this position at our modern suburban Philadelphia location.

If interested, send resume of education and experience with salary requirements to: Jacques P. Kueny

Merck Sharp & Dohme

Div. of Merck & Co., Inc. West Point, Penna. 19486
An Equal Opportunity Employer

CARDIOVASCULAR PHARMACOLOGIST-PhD

SmithKline Corporation, a diversified multi-national pharmaceutical firm located in Philadelphia, Pa. is

seeking an experienced Pharmacologist to supervise an existing Cardiovascular Pharma-cology Laboratory. The successful candidate will be responsible for the discovery and pharmacological characterization of new anti-hypertensive drugs. In addition the candidate will be expected to explore alternative therapeutic approaches to the treatment of cardiovascular disease.

Preference will be given to individuals with the following qualifications:

- PhD in Pharmacology with broad graduate training in
- the cardiovascular area.

 3 or more years of direct supervisory laboratory experience beyond the Doctorate in cardiovascular pharmacology, perferably industrial.
- demonstrated capability in initiating and conducting independent cardiovascular research.

SmithKline offers an excellent compensation program and opportunity for professional growth. Please send resume with salary history to: Mr. W. B. Flagg, SMITH KLINE & FRENCH LABORATORIES, A Division of SmithKline Corporation, 1512 Spring Garden Street, P.O. Box 7929, Phila., Pa. 19101. An equal opportunity employer, M/F.

smithKline

CHIEF, LABORATORY OF **PHARMACOKINETICS**

The National Institute of Environmental Health Sciences (NIEHS), National Institutes of Health, Public Health Service, Research Triangle Park, North Carolina, invites applications for the position of Chief of the Laboratory of Pharmacokinetics.

NIEHS is responsible for conducting and supporting basic and applied research on the biological and public health aspects of chemical, physical and biological substances in the environment in order to develop understanding of the mechanisms of action of such substances, provide the scientific knowledge for evaluating their extent and severity on a national scale, and to define and develop methods for the prevention, diagnosis and treatment of environmentally induced disease and disorder in man.

The Laboratory of Pharmacokinetics serves as the NIEHS focal point for studies on the disposition of environmental chemicals, extrapolation of pharmacokinetic information from species to species, and utilization of pharmacokinetics in understanding and predicting chemical toxicity.

As Laboratory Chief, the incumbent will plan, direct, and evaluate research programs in the areas of: (1) the development of mathematical pharmacokinetic models, (2) the assessment of the pharmacokinetic properties of environmental chemicals, and (3) the use of isolated organs and cells in the processes responsible for the uptake, metabolism, storage and release of chemicals from organs and cells.

This position requires a Ph.D. or the equivalent in pharmacology, mathematics, biophysics, chemical engineering, biochemistry, chemistry, biopharmaceutics, or other appropriate discipline with knowledge and experience in applying sophisticated pharmacokinetic techniques for evaluating the disposition of environmental chemicals and potential interactions of chemicals with biological systems. Recognition as a distinguished authority in some field of pharmacokinetic applications to biological studies is essential as is leadership ability and ability to manage groups of scientists of diverse backgrounds.

This position will be filled through a career Civil Service appointment and the salary and qualifications of the proposed incumbent are subject to approval by the U.S. Civil Service Commission. Salary will range from \$33,800 to \$47,500 per annum, depending on qualifications. Personal Qualifications Statement, SF-171, curriculum vitae, and bibliography should be mailed by Oct. 14, 1977, to:

Samuel G. Jones Personnel Office

National Institute of **Environmental Health Sciences**

P. O. Box 12233

Research Triangle Park, N. C. 27709

An Equal Opportunity Employer

23 SEPTEMBER 1977 1313

PHYSIOLOGIST

The University of California, Irvine, College of Medicine Department of Physiology, is seeking an assistant or associate professor.

Candidates should be broadly trained in physiology with research interest and training (including post-doctoral) in the molecular basis of muscular contractions. Candidates should hold a doctorate degree (M.D. or Ph.D.) and have shown excellence and originality expected of a potential leader in research. Duties include teaching physiology to medical students and biophysics and physiology to graduate students.

Applications from qualified candidates are welcome; minorities and women are encouraged to apply. Send names of four references and curriculum vitae to: Dr. Peter F. Hall, Professor and Chairman, Department of Physiology, University of California, Irvine, California 92717, by 24 October 1977 (formerly 15 October).

TOXICOLOGIST, BRANCH CHIEF

National Institute for Occupational Safety and Health (NIOSH), CDC, PHS, needs a toxicologist for the development and implementation of a broad in-house and extramural research program focusing on the toxic effects of occupational hazards. The current program includes studies of carcinogenic, teratogenic and mutagenic effects, acute and chronic inhalation studies, and metabolism/mechanism studies. Applicants must have extensive background in toxicology, including inhalation toxicology.

Position is in Federal Civil Service (Career-GS-15) or the Public Health Service Commission Corps.

Interested candidates should send applications to: Jon Ruse, NIOSH Personnel Office, 4676 Columbia Parkway, Cincinnati, Ohio 45226.

An Equal Opportunity Employer

VETERINARY ANATOMISTS. (i) Assistant or associate professorship for a person with training and interest in teaching, research, and writing about embryology, teratology, and developmental anatomy of domestic animals. To develop a research program and supervise graduate training; to teach an 8-week course in developmental anatomy to veterinary students; and to assist in teaching first- or second-term gross anatomy, and (ii) assistant or associate professorship for a person with experience and interest in applied anatomy of domestic animals to teach a two-term course in applied anatomy and to assist in the teaching of first- or second-term gross anatomy. Emphasis is on the living animal. Ample opportunity for graduate teaching and multidisciplinary research collaboration within college and university. Qualifications for position (i): D.V.M., Ph.D., M.D., or D.D.S. with relevant research and teaching experience. Qualifications for position (ii): D.V.M. or opuivalent degree and teaching experience. Salary and rank dependent upon experience and accomplishment. Applicants should send curriculum vitae, professional desires and plans, and references to: Dr. Howard E. Evans, Chairman, Department of Anatomy, College of Veterinary Medicine, Cornell University, Ithaca, N.Y. 14853. An Affirmative Action/Equal Opportunity Employer.

VISION SCIENTIST. Full-time tenured position for established investigator to carry out research and teaching in vision and ophthalmology. Patient care opportunities if desired. Effective date and salary negotiable. Send curriculum vitae, bibliography, and description of research interests to: Dr. A. H. Bunt, Chairman, Bishop Professor Search Committee, Department of Ophthalmology, RJ-10, University of Washington, Seattle, Wash. 98195. An Affirmative Action/Equal Opportunity Employer.

CONFERENCE

CONFERENCE ON POLYBROMINATED BIPHE-NYLS (PBB). The Agricultural Experiment Station will present a Conference on the Scientific Aspects of Polybrominated Biphenyls to be held at the Kellogg Center for Continuing Education, Michigan State University, 24 and 25 October 1977. Invited papers and posters will be presented, as well as a round-table discussion at the conclusion of the conference. The proceedings will be published in Environmental Health Perspectives. Space consideration requires limiting attendance on a first to register basis (\$25 registration fee). For further information and registration forms write: Conference on PBB, The Kellogg Center for Continuing Education, Michigan State University, East Lansing, Michigan 48824.

PROGRAM

PRE- AND POSTDOCTORAL TRAINING PROGRAM IN MOLECULAR AND CELLULAR IMMUNOLOGY

The University of Texas Medical Branch (UTMB) announces a new training program in immunology. The fellowships are sponsored by a grant from the James W. McLaughlin Fellowship Fund. The purpose of the fund is to establish and maintain fellowships for the investigation of infection and immunity. The primary area of research interests will be the role of thymosin and the endocrine thymus in immunity and infectious diseases. Specific areas of research will include chemical and biological characterization of thymosin, role of thymosin in disease processes (aging, cancer, autoimmune diseases, infectious diseases), molecular biology of lymphocyte activation, and characterization of T-cell subpopulations. The predoctoral training program will lead to a Ph.D. in biochemistry with emphasis in immunology. Beginning 1 January 1978, predoctoral fellowships (\$4400 to \$5400 per year depending on number of dependents) and postdoctoral fellowships (\$12,500 to \$15,700 per year depending on previous experience) will be available. In addition, both preand postdoctoral fellowships carry 10 percent staff benefits plus a research stipend (\$1000) and travel allowance (\$500). Send inquiries, curriculum vitae, and three letters of recommendation to:

Allan L. Goldstein, Ph.D. Professor and Director Division of Biochemistry The University of Texas Medical Branch Galveston, Texas 77550

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP

Immediate opening for Ph.D. or M.D. with strong background in immunology and electron microscopy to work on mechanisms of proteinuria in experimental renal diseases. Salary to \$11,000. Send curriculum vitae with three references to:

Sterling K. Ainsworth, Ph.D.
Department of Pathology
Division of Immunopathology
Medical University of South Carolina
Charleston, South Carolina 29403

C. H. BEST FOUNDATION POSTDOCTORAL FELLOWSHIP

Applications are invited for the C. H. Best Foundation postdoctoral fellowship, in the Banting and Best Department of Medical Research. The fellowship is tenable approximately 1 July 1978 for 2 years with a taxable stipend of about \$14,000 for the first year, plus traveling and dependent allowance. The fellowship is available to a candidate with less than 2 years of postdoctoral experience. Research interests of the department include molecular biology, differentiation, structure and function of membranes, fat and lipid metabolism, and molecular endocrinology. A list of staff members and their research interests will be sent on request. Applications, complete with curriculum vitae and the names of three references, must be received by 1 January 1978. Please address application or inquiries to:

Dr. J. H. Dorrington Banting and Best Department of Medical Research University of Toronto Toronto, Canada M5G 1L6

SPECIAL FELLOWSHIP IN ONCOLOGIC EDUCATION Temple University School of Medicine

An innovative 2-year program for a physician with training or strong interest in medical, surgical, pediatric, gynecologic, or radiation onocology, which will qualify him/her as a teacher of oncology in a medical school. Pathologists and psychiatrists or others with similar interests are invited to apply. One-half time will be spent in coordinating cancer education resources of Temple University School of Medicine and one-half time will be devoted to developing his/her teaching skills at medical education centers throughout the country and imparting these skills to the Temple faculty. Apply to: R. V. Smalley, M.D., Section of Medical Oncology, Temple University Hospital and Medical School, 3401 North Broad Street, Philadelphia, Pa. 19140. An Equal Opportunity/Affirmative Action Employer.

FELLOWSHIPS

GRADUATE STUDENT RESEARCH FELLOWS. Ph.D. program for training and research in tumor virology and cellular transformation. Available July 1978 with an annual stipend of \$4500. Write to: Viral Oncology Training Program, Department of Microbiology, Health Sciences Center, State University of New York at Stony Brook, Stony Brook, New York 11794. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIPS available for investigation of neurochemical aspects of audition, especially role of cyclonucleotides in cochlear function. Send curriculum vitae and references to: Jochen Schacht, Ph.D., Assistant Professor of Biochemistry, Kresge Hearing Research Institute, University of Michigan Medical School, Ann Arbor, Mich. 48109.

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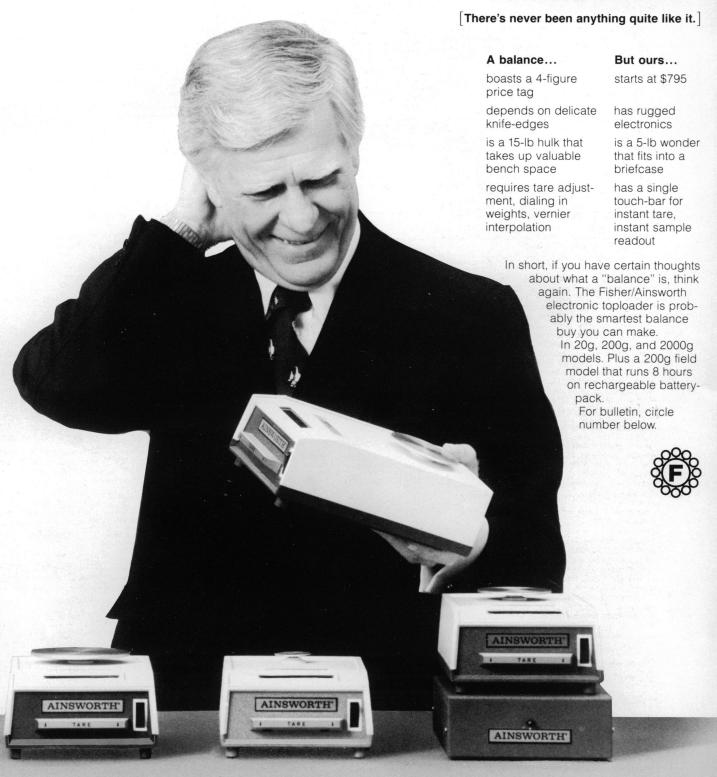


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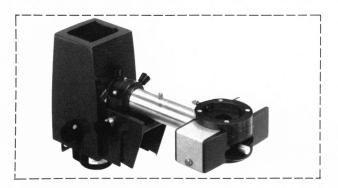
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