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1. Mackey, et al., *Biochemistry* **16**, 4478-4483 (1977)
2. Soeda et al., *PNAS* **75**, 162-166 (1978)

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POSITIONS WANTED

Biochemist. Ph.D. 1970. Experience in lipid and lipoprotein metabolism, enzymology and protein purification, RIA and clinical chemistry. Seeks position in industry, hospital, or academic institution. Publications. Telephone Kris at 312-947-6433. X

Biologist. M.S. Seeking teaching position at community college level. Strong academic background in physiology/anatomy and vertebrate biology. Teaching experience includes 3 years instructing laboratory classes in anatomy/physiology and general biology. Lecture experience. Temporary position acceptable. Box 216, SCIENCE. 6/16; 7/14

Cell Biologist: 2 years of postdoctoral experience in pharmacology, hematology, and tissue culture, plus teaching experience in microbiology. Seeking administrative or other nonlaboratory position in the Baltimore-Washington area. Box 217, SCIENCE. X

Cell Biologist/Microbiologist. Ph.D. 1977. Postdoctoral. Publications. Experience in subcellular fractionation, somatic cell genetics, biochemistry of lipids, proteins, and nucleic acids, immunological methods. Seeking stable academic, government, or industrial position. Box 218, SCIENCE. 6/16, 30

Clinical Chemist. ABCC Board-eligible. Postdoctoral training in all areas of clinical chemistry including toxicology, RIA, QC, management. Supervisory experience. Available immediately. R. P. McKnight, Ph.D., Clinical Chemistry, Harborview Medical Center, Seattle, Washington 98104. 6/16, 30

Immunochemist. Ph.D. biochemistry, M.S. physiology. Strong background in protein chemistry, radioassays, fluorescent techniques, sub-cellular fractionation, IgG receptor isolation, affinity chromatography. Three-year postdoctoral at leading cancer center; publications. Desires research position in area of immune regulation, isolation of suppressor factors. Box 200, SCIENCE. X

Microbiologist/Cell Biologist. Ph.D. 1971. Research experience in hemopoietic differentiation, bone marrow agar culture and continuous bone marrow culture, tissue culture. Patentable high yield immunoglobulin secreting cell lines-process development. Industrial experience in IgG and albumin fractionation from placenta. Seeking position, preferably in industry. Box 220, SCIENCE. X

POSITIONS WANTED

Immunochemist/Biochemist. M.S., 3 years of experience in tumor immunology. Extensive work in affinity chromatography, protein separations, immunological and electrophoretic procedures. Desires challenging position in industry, government, or academic areas. Prefers northeastern United States. Reply: Box 219, SCIENCE. X

Science Editor/Writer. Free-lance editing; technical journals or texts. Chemistry Ph.D., with many years of college teaching and industrial R & D experience. Box 204, SCIENCE 6/16, 23

Science Writer. M.S. molecular biology, B.S. English. Solid technical background (physiology, microbiology, biomedicine), plus excellent writing/editing skills. A. Maurer, 2517-G Toll Gate Road, Huntsville, Alabama 35801. X

POSITIONS OPEN

ANATOMIST—PHYSIOLOGIST. Assistant professor of life sciences to coordinate and instruct courses in human anatomy and physiology and establish a research program in physiology. Ph.D. required. Application deadline: 15 July 1978. Qualified applicants should send curriculum vitae, transcripts, and three letters of recommendation to: Richard L. Myers, Ph.D., Chairman, Recruitment Committee, Southwest Missouri State University, Springfield, Mo. 65802. An Equal Opportunity/Affirmative Action Employer, F/M.

ASSISTANT CURATOR—ORNITHOLOGY

Applications are invited for the position of assistant curator in the Department of Ornithology, American Museum of Natural History. Appointment to be effective in 1979.

Qualifications include a Ph.D., a demonstrated ability to conduct collection-based research in avian biology, and the ability and interest to assist in curating one of the world's finest research collections of birds.

Deadline for receipt of applications is 15 September 1978. Send résumé, complete bibliography, and names and addresses of three references to: Dr. Wesley E. Lanyon, Chairman, Department of Ornithology, American Museum of Natural History, Central Park West at 79th Street, New York, New York 10024.

An Equal Opportunity/Affirmative Action Employer, M/F.

ASSISTANT PROFESSOR. Ph.D. with training in immunology and biochemistry or molecular biology is required for a permanent faculty position. Postdoctoral experience is desirable. Candidate should have a strong commitment to research and to teaching excellence. Send application, including three references, to: Dr. G. C. Webster, Department of Biological Sciences, Florida Institute of Technology, Melbourne, Florida 32901. An Equal Opportunity/Affirmative Action Employer.

ASSISTANT, ASSOCIATE OR FULL PROFESSOR. The Department of Earth Resources is seeking a Ph.D. in forest hydrology, watershed science, or related field for a teaching/research position in snow hydrology. The position is a full-time academic faculty. Duties include undergraduate/graduate teaching, advising, and research. Rank and salary commensurate with training and experience. Send complete résumé, three letters of reference, and other supporting materials by 1 August 1978 to: Dr. S. L. Ponce, Department of Earth Resources, Colorado State University, Fort Collins, Colorado 80523. Anticipated appointment date: 20 August 1978.

Colorado State University is an Equal Opportunity Employer and complies with Title IX requirements. Complaints should be filed with the Office of Equal Opportunity, Student Services Building.

UNIVERSITY OF MINNESOTA

ASSISTANT PROFESSOR, ANTHROPOLOGY. 1978-1979 academic year. Temporary 1-year position; Ph.D. required. Interest in social-structural-symbolic theory and/or economic organization. Salary: \$14,000 to \$17,500, depending on qualifications. Send letter, curriculum vitae, reprints, graduate transcripts, and names of three references to: William Rowe, Chairperson, Search Committee, 215 Ford Hall, University of Minnesota, Minneapolis, Minn. 55455. Deadline for applications is 15 July 1978. The University of Minnesota is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR—BIOPHARMACEUTICS

The University of Colorado School of Pharmacy has a tenure-track position in biopharmaceutics-pharmacokinetics starting 1 September 1978. Applicants must have an undergraduate degree in pharmacy, a Ph.D. degree in one of the pharmaceutical sciences, and demonstrable experience and research interests in biopharmaceutics. The successful candidate will be expected to develop a vigorous research program and to teach on both the undergraduate and graduate levels. The school is expanding and can offer excellent research facilities and a salary commensurate with the qualifications of the candidate.

Application, including curriculum vitae and names of three references, should be sent by 20 July to:

Dean V. Gene Erwin
School of Pharmacy
University of Colorado
Boulder, Colo. 80309

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

ASSISTANT PROFESSOR—CELLULAR IMMUNOLOGY

Applications are invited from candidates with a strong background in cellular immunology to study the virus-host and tumor-host relationship in bovine leukemia virus infected cattle. Minimum qualifications are a Ph.D. or D.V.M. degree. Applicants should submit curriculum vitae, copies of representative publications, and the names of three referees to:

Dr. J. F. Ferrer
Chief, Section of Viral Oncology
University of Pennsylvania
School of Veterinary Medicine
New Bolton Center
R.D. 1
Kennett Square, Pa. 19348

The University of Pennsylvania is an Equal Opportunity Employer.

ASSISTANT PROFESSOR OF HEALTH SCIENCES. Available September 1978. Qualifications: Ph.D. in pathology with an interest and background in clinical microbiology or another clinically oriented specialty in health sciences; teaching experience desirable. This is a teaching position with opportunity to teach and advise at the graduate and undergraduate levels. Primary courses may include pathology, pathophysiology, clinical microbiology, parasitology. Salary range (9-month appointment): \$12,000 to \$19,000. Grand Valley State Colleges (GVSC) is located 10 miles west of Grand Rapids, Michigan. A master of health sciences program has recently started, and other health related graduate programs are anticipated. Send résumé and three letters of reference to: Dr. Quentin L. Hartwig, Director, School of Health Sciences, Grand Valley State Colleges, Allendale, Michigan 49401. GVSC is an Equal Opportunity/Affirmative Action Institution.

The University of Pennsylvania, An Equal Opportunity/Affirmative Action Employer, seeks qualified person for ASSISTANT PROFESSOR position in Department of Oral Medicine, School of Dental Medicine. Position available 1 July 1978. Candidate must have professional degree with postdoctoral education in oral medicine, including hospital experience and/or in oral diagnosis, clinical oral pathology. American Board of Oral Medicine, or equivalency, desirable. Send curriculum vitae to: Dr. H. M. Berry, Chairman, Oral Medicine Search Committee, School of Dental Medicine, University of Pennsylvania, 4001 Spruce Street, Philadelphia, Pa. 19104.

ASSISTANT PROFESSOR OF PHARMACEUTICS

The Department of Pharmaceutics, College of Pharmacy, University of Houston, invites applications for a full-time faculty position as assistant professor of pharmaceutics. The position requires training and a Ph.D. in the biopharmaceutics-pharmacokinetics area. A B.S. in pharmacy is desirable. The duties would include participation in the department's undergraduate and graduate courses as well as initiation of a vigorous research program, with particular emphasis on clinical investigations.

Send inquiries and résumés to: Dr. Stuart Feldman, Chairman, Department of Pharmaceutics, College of Pharmacy, University of Houston, Houston, Texas 77004. The University of Houston is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR OF PHYSIOLOGY

The Department of Physiology is seeking a candidate holding an M.D. or a Ph.D. degree with experience and interest in membrane transport processes. Field of interest can include theoretical, artificial model, cellular, or epithelial membrane transport systems.

Opportunities are available for both collaborative and independent research and for graduate and medical student teaching.

Please send complete curriculum vitae, including publications and the names and addresses of three references, to:

Chairman, Membrane Transport Search Committee
Department of Physiology
Yale University School of Medicine
333 Cedar Street, SHM B-109
New Haven, Conn. 06510

Applications from women and members of minority groups are encouraged. An Equal Opportunity/Affirmative Action Employer.

ASSISTANT RESEARCH NMR SPECTROSCOPIST to supervise new Biological Magnetic Resonance Laboratory consisting of 200 MHz and 360 MHz multinuclear FTNMR spectrometers. Candidates must show strong evidence for productive research, as position involves advising and collaborating with biological science faculty as well as pursuing independent research. Responsibilities also include spectrometer maintenance and development and supervising one or more technicians, as well as training and scheduling users. Ph.D. in chemistry or equivalent degree; thorough background in FTNMR and hardware/software experience essential; some experience in biological FTNMR application highly desirable. Salary will be \$17,500 to \$20,500 dependent upon qualifications and experience. Send curriculum vitae, bibliography, and three letters of reference to: **Professor G. N. La Mar, Department of Chemistry, University of California, Davis, Calif. 95616.** The final filing date of application for the position will be 17 July 1978. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT RESEARCH PHYSIOLOGIST

Ph.D. physiologist with training and experience in cardiovascular physiology to join research team as lab coordinator and assistant investigator. Major laboratory interest is maternal-fetal hemodynamics and their relationships. Contact: **Charles R. Brinkman, M.D., University of California, Los Angeles, Medical School, Department of Obstetrics-Gynecology, Los Angeles, Calif. 90024.** *UCLA is an Equal Opportunity/Affirmative Action Employer.*

ASSOCIATE DIRECTOR OF CLINICAL MICROBIOLOGY. Department of Pathology, University of California, Los Angeles (UCLA), School of Medicine and Hospital and Clinics. Applications are invited from well-qualified persons with a doctorate degree who possess adequate experience in clinical microbiology. The applicant will share the responsibilities of supervising a large, academic- and service-oriented clinical microbiology laboratory; teaching medical, graduate, postgraduate, and medical technology students; and will be required to develop own program of microbiological research. Salary range commensurate with an academic appointment at the junior level. Applicants should send curriculum vitae, bibliography, and the names and addresses of three references to: **Dr. William J. Martin, Professor and Head, Microbiology Section, Department of Pathology, UCLA School of Medicine, Los Angeles, California 90024.** Applications will be considered early in August 1978. *UCLA is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply.*

CHAIRMAN DEPARTMENT OF BIOCHEMISTRY AND BIOPHYSICS

The Loyola University Stritch School of Medicine seeks a distinguished individual to serve as professor and chairman of the Department of Biochemistry and Biophysics. Candidates should have an outstanding record of scholarly research and a clear commitment to medical and graduate education. Applications, including curriculum vitae, bibliography, and three to five references, should be sent to:

Dr. Clarence N. Peiss, Associate Dean
Biochemistry Search Committee
Stritch School of Medicine
2160 South First Avenue
Maywood, Ill. 60153

Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

DEPARTMENT OF LAND RESOURCE SCIENCE ONTARIO AGRICULTURAL COLLEGE UNIVERSITY OF GUELPH

ASSISTANT PROFESSOR IN CLAY MINERALOGY/INORGANIC CHEMISTRY

Date available: 1 December 1978 (subject to final budgetary approval).

Specialization in clay mineralogy with strong background in inorganic chemistry required. Experience in agricultural research desirable. Proficiency in oral and written English essential. Ph.D. required.

Teaching responsibilities will include undergraduate and graduate courses and supervision of graduate students. Responsible for undergraduate course in clay mineralogy and shared responsibilities for other courses.

Research responsibilities: the successful candidate will be expected to develop a research program which is compatible with research interests of fellow faculty and which would focus primarily on the role of clay mineralogy and inorganic chemistry in soils. The research should relate to one or more of the following: use of soils for crop production and waste utilization; soil genesis and classification; geology and geochemistry.

The salary is competitive and the level of appointment will depend on qualifications of the applicant.

Those interested in applying for this position should forward personal data, transcripts of college records, names of three professional referees, and a list of publications to: **Dr. K. M. King, Chairman, Department of Land Resource Science, University of Guelph, Guelph, Ontario, Canada N1G 2W1.**

Deadline for applications: 30 September 1978.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE (HEW) FOOD AND DRUG ADMINISTRATION (FDA) BUREAU OF FOODS WASHINGTON, D.C.

Position open—**ASSOCIATE DIRECTOR FOR VETERINARY PATHOLOGY AND RESEARCH**, Division of Pathology, Bureau of Foods, Food and Drug Administration, Washington, D.C. The responsibilities of the position include: (i) supervision of in-house pathology studies including leadership of the gross necropsy team; (ii) direction and development of the electron microscopy research projects; (iii) consulting expert pathologist 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) leader of the in-house professional meetings and journal club. Qualifications for the position require a tissue pathologist with a D.V.M. or M.D. degree who is Board-certified or -eligible and has had substantial postgraduate training and experience in diagnostic tissue pathology, electron microscopy, and oncogenesis. Salary range is \$30,750 to \$47,025 (GS-14 or -15), depending upon applicant's qualifications.

U.S. CITIZENSHIP REQUIRED

Submit curriculum vitae or Standard Form 171 to: **Stephen Bennett, HEW/FDA, Personnel Office (HFA-410), 200 C Street, SW, Washington, D.C. 20204.**

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

BIOLOGY DEPARTMENT. A 1-year leave replacement position will be available 1 September 1978. Teaching duties will include general biology lectures and a course in the individual's specialty. Ph.D. required. Salary will be commensurate with experience. Send curriculum vitae and three letters of recommendation to: **Dr. John R. Bristol, Chairman, Department of Biological Sciences, The University of Texas at El Paso, El Paso, Texas 79968.**

Basic nonprofit research institute, located in Connecticut 60 miles from New York City, has laboratory space for **BIOMEDICAL RESEARCH.** Animal facilities available. If you are an established biomedical scientist with full or partial financial support which is transferable, please submit in confidence curriculum vitae and details of project and support. **Box 215, SCIENCE.**

THE PIKE CHAIR IN ALCOHOL STUDIES

Neuropsychiatric Institute, University of California, Los Angeles (UCLA), School of Medicine, seeks appropriate candidates for the Thomas P. and Katherine K. Pike Chair in Alcohol Studies, a newly endowed professorship for a distinguished investigator committed to research and teaching in the field of alcoholism. *Equal Opportunity/Affirmative Action Employer.* Send curriculum vitae, bibliography, and five references to:

Dr. Carmine D. Clemente, Chairman
Pike Search Committee
Brain Research Institute
UCLA School of Medicine
Los Angeles, California 90024

POSITIONS OPEN

BIOCHEMISTRY RESEARCH ASSOCIATES

Two positions available for Ph.D. or M.D. for project on enzyme therapy and introduction of foreign enzymes and drugs into cells. Experience with red cells, membranes, lipids, or cell culture helpful. Position may lead to faculty appointment. Send curriculum vitae and names of references to:

Dr. Garret Ihler
Professor and Head
Department of Medical Biochemistry
Texas A & M College of Medicine
College Station, Texas 77843
Equal Employment Opportunity through Affirmative Action

BIOCHEMISTRY—DNA/RNA/PROTEIN

Rapidly growing company seeks talented individuals to expand leadership position in products and services for molecular biology.

TECHNICAL SERVICES MANAGER—Ph.D.; broad experience and publications in enzymology/molecular biology; and ability to communicate technical information.

STAFF SCIENTIST—M.S.; product support/technical services. Experience in DNA/RNA enzymology.

ASSISTANT PRODUCT DEVELOPMENT MANAGER—M.S./Ph.D., recent laboratory experience with emphasis on product development and sales.

Send résumé, references, and salary requirements to:

Bethesda Research Laboratories, Inc.
Attention: Personnel Department
411 North Stonestreet Avenue
Rockville, Md. 20850

BOTANY — HORTICULTURE — ENVIRONMENTAL SCIENCE. Tenure-track position to teach undergraduate courses in biology-environmental science curriculum. Broad background and desire to teach important. Ph.D. preferred. Contact:

James A. Rollins
Biology Department
Nasson College,
Springvale, Maine 04083.
An Equal Opportunity Employer

ONE-YEAR POSITION IN DEVELOPMENTAL BIOLOGY

The Department of Biology at the University of California, Los Angeles (UCLA) has one temporary teaching position available beginning September 1978. Applicants must have a Ph.D. degree and the qualifications to teach a large undergraduate upper division course in developmental biology, a separate laboratory course in developmental biology, and to participate in the introductory biology course. Applicants should send curriculum vitae, including names and addresses of three referees, to: **Search Committee, Biology Department, UCLA, Los Angeles, Calif. 90024, before 23 June 1978.**

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

CHAIRMAN, DEPARTMENT OF ANATOMY. Applications are invited for this position, available June 1978. The department has a staff of 15 full-time and one part-time faculty, and six graduate students in its Ph.D. program. It has a strong commitment to both teaching and research. Applications, with a complete curriculum vitae, bibliography, and three references, should be sent to: **Alan D. Conger, Chairman, Anatomy Search Committee, Radiobiology Section, Temple University School of Medicine, 3420 North Broad Street, Philadelphia, Pa. 19140.** An Equal Opportunity/Affirmative Action Employer.

CHEMISTRY: Cottey College, a 2-year college for women in Nevada, Missouri, has a new position in chemistry open for fall 1978. Ph.D. required. Prefer someone with a strong background in inorganic or physical chemistry. Need someone also able to teach mathematics and physical science courses. Send application and résumé to: **Dr. Earl M. Tinsley, Dean of the College, Cottey College, Nevada, Missouri 64772.** Cottey College is an Equal Opportunity Employer.

COMPARATIVE PATHOLOGIST—M.D., or D.V.M. with Ph.D. Pathology Board or ACVP eligibility or certification desirable. Experience in rodent pathology, carcinogenesis, clinical pathology, immunology, histochemistry, autoradiography, or electron microscopy helpful. Duties include: (i) development and review of experimental research protocols, (ii) involvement in multidisciplinary projects with some research time available, (iii) participation in histopathologic examination of tissues from rodents involved in carcinogenic, mutagenic, and teratogenic studies, (iv) teaching, (v) involvement in graduate and undergraduate education, (vi) involvement in interdisciplinary graduate toxicology program, and (vii) ability to relate, consult, and work with nine other veterinary and medical pathologists. Excellent clinical pathology and electron microscopy support. Salary commensurate with qualifications/experience. Send résumé to: **Director, University of Arkansas, Pathology Services Project, National Center for Toxicological Research, Jefferson, Ark. 72079.** Equal Opportunity Employer.

DIRECTOR OF RESEARCH UNIVERSITY OF KANSAS MEDICAL CENTER COLLEGE OF HEALTH SCIENCES AND HOSPITAL KANSAS CITY, KANSAS

The director of research coordinates the development, administration, and support of faculty and student research in the Schools of Medicine, Nursing, and Allied Health. Candidates should demonstrate evidence of research productivity and administrative ability and have experience in dealing with agencies which support research.

Strong preference will be given to individuals who have experience in dealing with the grant support program of the National Institutes of Health. Candidates should have a broad interest in health-related research and be committed to supporting the research activities of the faculty.

Salary open. Nominations and applications (including complete résumé) should be sent by 1 August 1978, to:

**Dr. Alan Poisner, Chairman
Search Committee for Director of Research
c/o Executive Vice Chancellor's Office
University of Kansas Medical Center
College of Health Sciences and Hospital
Kansas City, Kansas 66103**

Equal Opportunity/Affirmative Action Employer

ENTOMOLOGIST-VEGETABLE PEST MANAGEMENT. Assistant or associate professor with responsibilities for research and teaching. Responsibilities include research in the area of management of insect pests of major vegetable crops of Oregon with special emphasis on development of host-plant resistance studies; and direction of a comprehensive program including insect population sampling and monitoring, and other techniques leading to the more efficient use of pesticides. Ph.D. required, with training/experience in insect pest management utilizing tactics consistent with modern pest management principles. Deadline for receipt of applications is 31 July 1978. For complete details, contact: **Dr. Ralph Berry, Chairman, Search Committee, Department of Entomology, Oregon State University, Corvallis, Oregon 97331.** Oregon State University is an Equal Opportunity/Affirmative Action Employer and complies with Section 504 of the Rehabilitation Act of 1973. Applications from females and minorities are encouraged.

POSITIONS OPEN

Applications are invited for the position of **DIRECTOR OF THE HOOPER FOUNDATION** at the University of California, San Francisco (UCSF). Candidates should have a record of sustained accomplishment in fundamental research relating to infectious disease including such fields as cellular immunology, cell surface biology, and host defense mechanisms. Candidates should also have the capacity to promote the development of interdisciplinary programs of research and research training involving preclinical and clinical departments of the professional schools at UCSF. Send résumé to: **R. J. Havel, M.D., M-1317, University of California, San Francisco, Calif. 94143.** An Affirmative Action/Equal Opportunity Employer.

EPIDEMIOLOGIST

The National Institute of Environmental Health Sciences (NIEHS) has a career Civil Service position for an epidemiologist to participate in studies of environmentally induced chronic disease states including congenital defects, mutation, cancer, and other chronic diseases. Excellent opportunity for multidisciplinary field and lab studies in a research setting as well as opportunity to develop and test theoretical models used in study of such phenomena.

The position requires a Ph.D. or equivalent in epidemiology or an M.D. Strong background in biometrics is desirable. Salary ranges from \$18,258 to \$47,000 per annum, depending on qualifications. Curriculum vitae, bibliography, and two references should be sent by 8 July 1978 to: **Samuel G. Jones, NIEHS Personnel Office, National Institutes of Health, Public Health Service, P.O. Box 12233, Department S, Research Triangle Park, N.C. 27709.** Equal Opportunity Employer.

NATIONAL INSTITUTES OF HEALTH

EXECUTIVE OFFICER AMERICAN ASTRONOMICAL SOCIETY

The American Astronomical Society will move its executive office to Washington, D.C., effective 1 March 1979. In connection with the move, and the retirement of the present executive officer, H. M. Gurin, we invite applications for the post of executive officer starting 1 February 1979. The individual chosen will have the responsibility to carry out the business of the society following the general directions of the elected officers of the society. We expect that the executive officer will represent the society in various capacities in Washington. The job will entail considerable interaction with the federal agencies, the Congress, and other groups and persons who are important to astronomy. He or she will also be responsible, under the direction of the officers and council, for maintaining a contact point with members, both personally and through correspondence, updating the membership list, preparing a Washington Newsletter, and so forth.

Applicants should have a strong scientific background. A Ph.D. in astronomy or a closely related science is desirable but not an absolute requirement. Some administrative experience is also desirable, together with knowledge of and willingness to learn about the operations of the legislative and executive branches of the federal government. Salary is negotiable, and commensurate with experience.

Applications containing curriculum vitae, work experience, and names of three references should be sent to: **Search Committee, American Astronomical Society, 211 FitzRandolph Road, Princeton, N.J. 08540** before 1 September 1978.

FACULTY POSITION IN BIOLOGY. Available for Ph.D. to teach lower division courses in general biology, zoology, and botany, and upper division courses as needed in ecology, physiology, histology, parasitology, or others. Coeducational institution, growing, on 4-1-4 calendar, in city of 100,000 population. Send curriculum vitae and three letters of recommendation to: **Chairman, Department of Biology, Mount Mercy College, Cedar Rapids, Iowa 52402,** by 15 July 1978.

POSTDOCTORAL ASSOCIATE POSITION available starting September 1978 at Boyce Thompson Institute at Cornell University. Required training: Ph.D. in biochemistry-molecular biology or molecular genetics and research experience in recombinant DNA technology. Send curriculum vitae and two references to: **Dr. A. A. Szalay, Department of Biochemistry, Molecular and Cell Biology, Wing Hall, Cornell University, Ithaca, N.Y. 14853.** Boyce Thompson Institute is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

The Department of Biology at the University of South Florida anticipates five 9-month temporary **FACULTY APPOINTMENTS** at the rank of **assistant professor** commencing September 1978. A Ph.D. degree is required. Persons with professional qualifications in the areas of:

- 1) **vertebrate biology,**
- 2) **microbiology,**
- 3) **human biology (anatomy and physiology),**
- 4) **teaching of introductory biology,** and
- 5) **advising (undergraduate majors),**

should submit a curriculum vitae and three letters of recommendation to: **Chairman, Search Committee, Department of Biology, University of South Florida, Tampa, Fla. 33620.** Closing date for applications is 15 July 1978.

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

UNIVERSITY OF CALIFORNIA, IRVINE

The University of California, Irvine, Department of Psychiatry and Human Behavior, invites applications for full-time **FACULTY POSITIONS, M.D.** degree, 3 years of accredited psychiatric residency, California licensure, and evidence of scholarly productivity required. (i) Professor level, Chief of Psychiatric Services, to administer inpatient, outpatient, and liaison program; (ii) Assistant or associate professor level, family therapy and liaison with family medicine; (iii) Two positions at assistant or associate professor level to direct hospital programs and coordinate medical student teaching; and (iv) Four positions at assistant to professor level, to direct clinical teaching, and research programs in consultation/liaison psychiatry. One consultation/liaison position requires training in child psychiatry, and one requires experience in alcoholism programs. *Applications from all qualified candidates are welcome; minorities and women are encouraged to reply.* Send curriculum vitae and names of three references to: **Dr. E. Mansell Pattison, University of California, Irvine, Medical Center, 101 City Drive South, Orange, Calif. 92668.**

FACULTY POSITION

Undergraduate teaching position in physiology and anatomy available beginning 1 September 1978. Ph.D. required, preferably in physiology or related area. Must have high motivation for teaching; experience desirable. Responsibilities include instructing students of health sciences in human anatomy and physiology, and upper division course in vertebrate physiology; possible involvement in general biology program. *Women and minorities especially encouraged to apply.* Application deadline: 30 June 1978. Send résumés to: **Dr. Halit M. Kosar, Dean, Science and Engineering Division, Gannon College, Erie, Pa. 16501.** Gannon College is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS available at Louisiana State University (LSU) in Shreveport.

The Department of Physiology and Biophysics invites applications for tenure-track positions at the assistant or associate professor level. The following areas of training are of special interest: neurophysiology (central control mechanisms and axonology), respiratory and gastrointestinal physiology. Applicants will be expected to teach in the medical physiology course and to develop an active research program. Candidates must have either the M.D. or Ph.D. degree and should submit curriculum vitae and names of three references to: **Dr. John N. Diana, Chairman, Department of Physiology and Biophysics, LSU School of Medicine in Shreveport, 1501 Kings Highway, Shreveport, Louisiana 71130.**

An Equal Opportunity Employer

FACULTY POSITION

The Department of Biology at Indiana University, Bloomington, is seeking the services of a **PLANT SCIENTIST** interested in experimental approaches to developmental or cellular biology. The appointee will be expected to develop a strong independent research program and be willing to take part in graduate and undergraduate teaching. Though it is likely that the position will be for an assistant professor, individuals at any academic level will be considered. Applicants should provide curriculum vitae, including a list of publications, and should ask three individuals familiar with their background and research to write letters of reference to: **Dr. John R. Preer, Jr., Department of Biology, Indiana University, Bloomington, Indiana 47401.** Applications should be received by 1 October 1978. *Indiana University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FACULTY AND RESEARCH POSITIONS

The College of Mineral and Energy Resources (COMER) of West Virginia University, Morgantown, West Virginia, anticipates approximately 15 openings starting 1 July 1978, for faculty and faculty equivalent research positions in the following fields:

Mining Engineering
Health and Safety Engineering
Petroleum Engineering
Mineral Processing Engineering
Extractive Metallurgy
Environmental Engineering
Rock Mechanics
Explosive Engineering
Mineral Resource Science
Mineral Economics
Geophysical Engineering

Candidates should possess an earned doctorate or equivalent in industrial/research experience. Openings exist in all ranks at salaries ranging between \$15,000 and \$40,000 per annum. *Equal Opportunity Employer*. Send résumé to: Syd S. Peng, Chairman, Faculty Search Committee, COMER, West Virginia University, White Hall, Morgantown, W.Va. 26506.

FISHERIES BIOLOGY

Assistant professor, research and extension, 12-month tenure-track appointment. Ph.D. degree with experience in warm water fisheries research and aquatic habitat management. Extension activities will include development of fisheries education and landowner assistance programs. Closing date: 31 July 1978. Qualified applicants should send résumé, reprints, three letters of recommendation, transcripts, and statement of career plans and research interests to: Dr. Jay D. Hair, Coordinator, Fisheries and Wildlife Sciences, Department of Zoology, North Carolina State University, Raleigh, N.C. 27650.

FOOD MICROBIOLOGIST

Applications are invited for a joint faculty position (assistant or associate professor) in the Departments of Biochemistry/Biology, available 1 January 1979, or as soon as possible thereafter, with teaching responsibilities in food microbiology and introductory microbiology. Applications will be especially welcome from individuals with experience or interest in marine foods. Candidates should submit full curriculum vitae and the names of three referees to: Chairman, Food Microbiologist Search Committee, Department of Biochemistry, Memorial University of Newfoundland, St. John's, Newfoundland, Canada A1B 3X9. (Position subject to availability of funds.)

PHARMACOLOGY. The University of Arizona, College of Medicine, is actively recruiting to fill two new faculty positions in the Department of Pharmacology in the summer or fall of 1978. Applications are invited from well-qualified basic or clinical pharmacologists. Candidates should possess the Ph.D. or M.D. degree, relevant postdoctoral experience, and a commitment to teaching and quality research in pharmacology. Appointments will be made at the rank of assistant professor or, in the case of an exceptionally qualified candidate, associate professor. The area of research is open and may include cardiovascular, gastrointestinal, renal, or neuropharmacology. Send curriculum vitae, list of publications, and names of at least three references to: Dr. Thomas F. Burks, Head, Department of Pharmacology, The University of Arizona, College of Medicine, Tucson, Arizona 85724. The University of Arizona is an Equal Opportunity/Affirmative Action/Title IX/Section 504 Employer.

Bright, energetic recent Ph.D. OR M.D. to set up a private fully computerized Minimum Brain Dysfunction Center in Westchester County, New York. Send résumé and salary requirements to: P.O. Box 1, Rosedale, N.Y. 11422.

PHYSIOLOGIST: Ph.D. or M.D. needed to fill tenurable position in active medical school department. Proven research/teaching ability and steady funding record is more important than field of interest. Apply with curriculum vitae and brief outline of future research plans to: Dr. Martin D. Rayner, Department of Physiology, University of Hawaii, 1960 East West Road, Honolulu, Hawaii 96822. An Equal Opportunity Employer.

CHIEF, CARIES PREVENTION AND RESEARCH BRANCH

The National Institute of Dental Research is seeking candidates for the position of Chief, Caries Prevention and Research Branch within the National Caries Program. The incumbent will be responsible for directing a research program, basic as well as clinical, aimed at achieving a better understanding of caries processes with emphasis on the research and development of new or improved preventive agents and techniques.

Applicants must have a D.D.S. or D.M.D. degree (or equivalent) and five years of experience of which at least one year must have been at a level of difficulty comparable to the GS-15 level in the Federal service; demonstrated research achievements directly related to caries prevention and research as evidenced by extensive publications in leading scientific journals; evidence of managerial experience in developing a research program and directing and evaluating the work of dentists, research investigators and supporting staff; and demonstrated ability to implement equal opportunity objectives. It is desirable that applicants have: an established national or international scientific reputation; training and/or experience in a related basic science (i.e. microbiology, immunology), beyond the D.D.S. or D.M.D. degree; demonstrated research leadership of a combined basic and clinical research program; and received honors and awards for outstanding contributions to the field of dental caries research.

Position will be filled by appointment to a career U.S. Civil Service supergrade position. Salary range (\$42,423-\$47,500). A review panel will evaluate all qualified applicants on the degree to which they possess the desirable qualification requirements of the position. Final selection and classification for this position are subject to the approval of the U.S. Civil Service Commission.

Letters of interest, Personal Qualifications Statement (SF-171), curriculum vitae, and bibliography should be sent by July 14, 1978 to the Chairman of the Search Committee: Dr. John Goggins, c/o Dr. James Carlos, National Institutes of Health, Public Health Service, Westwood Building, 5333 Westbard Avenue, Room 528, Bethesda, Maryland 20014. An Equal Opportunity Employer.

NATIONAL INSTITUTES OF HEALTH

ROTATORS

Temporary Scientific Positions with the Division of Atmospheric Sciences, National Science Foundation (NSF)

The National Science Foundation, in performing its function of support of scientific research, seeks high quality professional staff selected from a broad range of disciplines to carry out the review and evaluation of proposals and to recommend for support those proposals which are most meritorious from the scientific point of view.

Proposed "rotational" assignments, which are excepted from competitive Civil Service, will be of 1- or 2-year duration and are located in Washington, D.C. Candidates should be at the Ph.D. or equivalent level. Salaries, negotiable based on qualifications and experience, range from \$21,883 to \$47,025 per annum for assignment as assistant or associate program managers (GS-12/GS-14 equivalent) or as program managers (GS-13/GS-15 equivalent). Health, life insurance, and leave benefits are available for appointments for longer than 1 year.

In addition to broadening the perspective of their own field, scientists working for the foundation gain an understanding of the processing of federally sponsored research programs, including the setting of priorities and the procedures by which the foundation obtains funds. Since considerable benefit may be derived by communication of this experience to others upon return to their original post, candidates on leave of absence with definite plans to return to their original place of employment are preferred.

Vacancies to be filled in the Division of Atmospheric Sciences in the next 2 years will occur in the following areas of interest:

Meteorology	Oceanography
Atmospheric Chemistry	Paleoclimatology
Solar-Terrestrial Physics	Fluid Dynamics
Solar Physics	Aeronomy

Candidates interested in being considered for positions in these areas as vacancies occur either now or in later years, should forward résumés, indicating that interest, to the attention of: National Science Foundation, Division of Personnel and Management, Attention: Section B, Washington, D.C. 20550. NSF is an Equal Employment Opportunity Employer.

Cardiovascular Pharmacologist

Our Pharmaceutical Division, located in the peaceful countryside of upstate New York, is seeking an innovative professional possessing versatility and interest in drug discovery and development.

The successful candidate will hold a Ph.D. in pharmacology or physiology with at least 2 years post doctoral training in hypertension research. A strong background in CNS control of blood pressure with commensurate technical experience is required. In addition, familiarity with the role of vasoactive substances in brain function is desirable.

Forward resume in confidence to

Ms. Jane E. Belansky,
Personnel Representative
Norwich-Eaton
Pharmaceuticals
Division of Morton-Norwich
P.O. Box 191
Norwich, N.Y. 13815

An equal opportunity employer, M/F

POSITIONS OPEN

POLICY ANALYST NEEDED FOR NSF STAFF SUPPORT POSITION (IPA)

The National Science Foundation (NSF) is considering Intergovernmental Personnel Act (IPA) nominations from universities and state and local governments for a policy analyst with a background in technology and public policy to a position with the technology assessment program in the Division of Policy Research and Analysis. Directorate for Scientific, Technological, and International Affairs. The assignment is for 1 or 2 years, commencing as soon as practicable. Applicants should have a Ph.D. with a broad range of research experience with issues such as the societal impact of technological change, the institutional response to technological change, and the process of decision-making in technological environments. Nominations should be forwarded by the applicant's institution (not by individual applicant) to: **Joshua Menkes, Division of Policy Research and Analysis, National Science Foundation, Washington, D.C. 20550; telephone 202-632-7420.** Some cost sharing of assignment expenses by the applicant's institution is expected. *The National Science Foundation is an Equal Employment Opportunity Employer.*

TWO POSTDOCTORAL POSITIONS available in September.

- 1) Experience or interest in renal physiology and membrane transport. Requires ability to perform analytical techniques and to work with animals in vivo.
- 2) Experience in cardiovascular-renal physiology with ability to perform analytical techniques and to apply cardiovascular measurements in vivo.

Send curriculum vitae and request that letters of recommendation be sent by two persons familiar with your recent activities to: **Dr. Barbara Rennick, Department of Pharmacology, State University of New York Medical School, 127 Farber Hall, Buffalo, N.Y. 14214.**

An Equal Opportunity/Affirmative Action Employer

TWO POSTDOCTORAL POSITIONS available summer 1978 requiring background in organic/medicinal chemistry or biochemistry for studies of pharmacology and metabolism of anticancer agents in animals and man. Send curriculum vitae and references to: **Dr. Matthew M. Ames (organic/medicinal) or Dr. Garth Powis (biochemistry), Division of Developmental Oncology Research, Department of Oncology, Mayo Clinic, Rochester, Minnesota 55901.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION IN CLINICAL CHEMISTRY AND RADIOIMMUNOASSAY: available immediately to become director of Core Laboratory of General Clinical Research Center. Strong background in biochemistry and radioimmunoassay required to supervise laboratory engaged in clinical research studies. Research background also important since position involves participation in assay development and research protocols. Curriculum vitae and references should be sent to: **Dr. Robert E. Canfield, Program Director, General Clinical Research Center, Columbia University, Physicians and Surgeons 8-402, 630 West 168 Street, New York, N.Y. 11032.** *Columbia University is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS—BIOCHEMIST/MICROBIOLOGIST. Two positions available immediately for 2 years to study: (i) mitochondrial ion transport, biological mineralization; interest in electron microscopy, optional; and (ii) enzymes regulation: adenylate cyclase, guanylate cyclase, phosphodiesterase in cells. Research experience required. Salary: \$11,880 to \$14,244. Send curriculum vitae, reprints, and three letters of recommendation to: **Dr. B. E. Volcani, Scripps Institution of Oceanography, University of California, San Diego, La Jolla, Calif. 92093.** *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL/RESEARCH ASSOCIATE POSITION available for investigations of enzyme mechanisms. Experience in organic and/or biochemistry desirable. One-year position with the possibility of renewal for a second year. Stipend based on qualifications. Available summer or fall 1978. Send résumé and two letters of reference to: **Dr. Ralph Pollack, Department of Chemistry, University of Maryland Baltimore County, Catonsville, Md. 21228.**

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POSITIONS OPEN

PHYSIOLOGY—FACULTY POSITION

Tenure-track position available 1 January 1979. Individual should have Ph.D. or M.D. and two or more years of postdoctoral experience. Subspecialty interests sought are muscle, gastrointestinal, or transport mechanisms. Strong research and teaching interests are essential. Send résumé and names, addresses, and telephone numbers of three references to: **Norman Briggs, Chairman, Department of Physiology, Medical College of Virginia, Box 608 MCV Station, Richmond, Va. 23298.** *An Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION. Available 1 September 1978 for research on higher order chromosome structures. Experience with methods for extraction and characterization of histones and non-histone chromatin proteins required. Send résumé, thesis summary, and three references to: **Hans Ris, Zoology Research, University of Wisconsin, Madison, Wis. 53706.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION—Immediately available for study on the potential mechanisms and consequences of interactions between microorganisms and inflammatory cells, with special emphasis on periodontal disease as a model of the inflammatory process. Strong background in microbiology required. Work involves experiments designed to characterize the molecular basis for interactions between host cells (PMN's, macrophages and lymphocytes) and microbial-derived stimuli (whole cells, cell walls, toxins, enzymes, and so forth). Starting salary: \$12,500 per annum. Send curriculum vitae to:

**Dr. N. S. Taichman
Department of Pathology
University of Pennsylvania
School of Dental Medicine
Philadelphia, Pa. 19104**

An Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL POSITION— AUDITORY RESEARCH

Participate in on-going research projects concerned with the effects of noise on hearing, human and animal psychophysics, and brain-stem electrical responses from humans and animals. Experience in one or several of these areas is desirable. Appointment is for 1 year commencing 1 June 1978 or shortly thereafter, but could be extended for a second year. Salary: \$12,000, pending final approval of funding. Interested and qualified candidates should send curriculum vitae and names of three references to:

**J. H. Mills, Ph.D.
Department of Otolaryngology
Medical University of South Carolina
Charleston, S.C. 29403**

Applications from women, minority group members, and the handicapped are encouraged. The Medical University of South Carolina is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION IN VISUAL PHYSIOLOGY. Available spring 1979. Research area: mechanisms of adaptation in photoreceptors of the vertebrate retina. Experience in biochemistry and electrophysiology of retinal neurons, and/or techniques of tissue culture desirable. Address inquiries to: **Dr. David R. Pepperberg, Department of Biological Sciences, Purdue University, West Lafayette, Indiana 47907.**

Equal Access/Opportunity Employer

POSTDOCTORAL POSITION immediately available for work on structure and function of ribosomes using high resolution scanning transmission electron microscopy, conventional EM, and biochemistry. Some experience with ribosomes preferred. Send curriculum vitae and recommendations to:

**Professor Michael Beer
Department of Biophysics
Johns Hopkins University
Baltimore, Md. 21218**

POSTDOCTORAL RESEARCH FELLOW IN BACTERIAL GENETICS AND PHYSIOLOGY. Position available from September 1978 on. For background see: *BioScience* 26:548, 1976, and *J. Bacteriol.* 130:832, 1977. Stipend according to NIH guidelines. Address specifics to: **E. C. C. Lin, Department of Microbiology and Molecular Genetics, Harvard Medical School, 25 Shattuck Street, Boston, Mass. 02115.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS available 1 July 1978, for Ph.D. with training in anatomy, pathology, biochemistry, or cell or molecular biology to join ongoing research in atherosclerosis dealing with biochemical and molecular events of arterial wall in various stages of the disease and study of factors affecting cholesterol balance. Applicant should have a strong background either in enzyme histochemistry at both light and electron microscopic levels, or in biochemical determination of enzyme activity at the subcellular level. Annual stipend: \$10,000 to \$13,200. Hospitalization coverage. One or 2 years. Send résumé to: **Dr. K. T. Lee, Professor of Pathology, Albany Medical College, Albany, N.Y. 12208.** *An Equal Opportunity/Affirmative Action Employer*

POSTDOCTORAL RESEARCH POSITION in the DYNAMICS OF COMBUSTION to study the process of fire growth under radiation and air vitiation. Both experimental and theoretical work are involved. Must be able to use advanced mathematical methods on problems of multicomponent fluid dynamics, and heat transfer in analyzing experimental results.

Contact: **Professor H. W. Emmons, Division of Applied Sciences, Harvard University, Cambridge, Mass. 02138.** *An Equal Opportunity Employer.*

POSTDOCTORAL SCHOLAR IN HUMAN GENETICS. Ph.D. or M.D. to study genetic control of biosynthesis and ontogeny of human hemoglobin. Must have experience in molecular biology, including nucleic acid biochemistry and hybridization techniques.

Send résumé and references to: **Dr. Donald L. Rucknagel, Department of Human Genetics, University of Michigan Medical School, Ann Arbor, Mich. 48109.**

An Equal Opportunity Employer

POSTDOCTORAL TEACHING—RESEARCH POSITION IN BIOPSYCHOLOGY. The Department of Psychology anticipates an opening for fall 1978 of a one-year temporary appointment. The position may be renewed for a second year. The individual filling this position will teach two undergraduate courses per quarter in physiological and experimental psychology with the opportunity to continue research in area of specialty. Preference will be given to applicants with interests in the neurophysiology and neurochemistry of motivational processes. Salary range is \$11,000 to \$12,000. Send curriculum vitae, graduate transcripts, reprints, and three letters of recommendation to: **Dr. J. Panksepp, Department of Psychology, Bowling Green State University, Bowling Green, Ohio 43403.** *An Affirmative Action/Equal Opportunity Employer.* Applications should be received by 31 July 1978.

PROTEIN SEQUENCER. Full-time, research position in a new and growing laboratory in a newly established department. Rank and salary (to \$16,000) dependent on experience. Contact: **Dr. John Collins, Department of Pharmacology and Cell Biophysics, University of Cincinnati, College of Medicine, 231 Bethesda Avenue, Cincinnati, Ohio 45267.** *An Equal Opportunity/Affirmative Action Employer.*

RESEARCH ASSOCIATE PHYSIOLOGY AND BIOPHYSICS

Position available starting 1 September 1978 concerning integrative studies of vascular smooth muscle and hypertension. Candidate must have Ph.D. and record of accomplishments in muscle structure or function, or hypertension. Expertise desirable in methods associated with one or more of the following: pharmacologic control of smooth muscle; electrophysiology; microcirculatory hemodynamics. Send résumé and names of three references to: **Box 57Y, Waterman Building, University of Vermont, Burlington, Vermont 05401.**

An Affirmative Action Employer

RESEARCH ASSOCIATE position available immediately to work on soil physical and chemical parameters which affect the transport of adsorbing chemicals through soil. Candidate should have a Ph.D. in soil physics or soil physical chemistry, with experience in solute transport phenomena and radioisotopes. Salary will be commensurate with experience. Send curriculum vitae and names of three references to: **Dr. Peter J. Wierenga, Department of Agronomy, New Mexico State University, Box 3 Q, Las Cruces, N.M. 88003.** Deadline for applications: 30 June 1978. *An Equal Opportunity/Affirmative Action Employer.*

Pulmonary Pharmacologist, Ph.D Ann Arbor

As group leader in our Pharmacology Department, your primary function will be to supervise the research and development of pulmonary drugs and their testing. You will also provide pulmonary evaluation of non-pulmonary drugs which are in development.

You will continuously draw upon your broad background in pulmonary pharmacology/physiology and knowledge of pulmonary mechanics and control. (Drug industry experience and work in biochemistry/immunology would be helpful.)

Join us in our modern Ann Arbor labs. You'll enjoy contact with outstanding professionals, an attractive total compensation plan, and opportunities for further advancement. Send your resume and salary history/requirements in confidence to:

Mr. Dave Misner
Personnel Supervisor
WARNER-LAMBERT/PARKE-DAVIS
Research Laboratories
2800 Plymouth Road
Ann Arbor, Michigan 48106

An Equal Opportunity Employer M/F

PARKE-DAVIS

Renal Pharmacologist/ Physiologist-PhD

SmithKline Corporation, a diversified multi-national pharmaceutical firm located in Philadelphia, Pa., is seeking an experienced Pharmacologist or Physiologist to supervise a Renal Pharmacology laboratory. The successful candidate should be interested in research directed towards the discovery and pharmacological characterization of new diuretic drugs.

Preference will be given to individuals with the following qualifications:

- PhD in Pharmacology or Physiology with broad training in renal pharmacology or physiology.
- 1 to 5 years of direct lab experience beyond the Doctorate in renal Pharmacology/Physiology.
- Demonstrated capability in initiating and conducting independent research.
- Specific interest in hypertension and supervisory experience highly desirable.

SmithKline offers an excellent compensation program and opportunity for professional growth. Please send resume with salary history to: Mr. W.B. Flagg, SMITHKLINE CORPORATION, 1544 Spring Garden Street, P.O. Box 7929, Phila., Pa., 19101. An equal opportunity employer, Male/Female/Handicapped/Veteran.

SmithKline
Smith Kline & French
Laboratories

PHARMACOLOGIST ANTI- INFLAMMATORY

MERRELL RESEARCH CENTER in Cincinnati has an immediate opening for a qualified individual to lead a group effort in identifying new therapeutic compounds for the treatment of rheumatoid arthritis. Must be oriented toward the development of new animal models which would define new mechanisms of action.

Requirements would include ideally:

- At least 3 to 5 years of experience, preferably industrial,
- Immunological background applicable to this area, and
- Keen interest in identifying and developing new compounds.

Reply in confidence, including curriculum vitae, to:

Dr. Richard C. Ursillo
Department of Pharmacology

MERRELL RESEARCH CENTER

A Division of Richardson-Merrell, Inc.

110 East Amity Road

Cincinnati, Ohio 45215

An Equal Opportunity Employer M/F

Merrell

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 - \$95 Air-surface delivery via Holland

- Payment enclosed □ Bill me later

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POSITIONS OPEN

RESEARCH POSITIONS

Postdoctoral positions are available at the California College of Medicine, in the Departments of Medicine and Psychiatry and Human Behavior; at the School of Biological Sciences, in the Departments of Molecular Biology and Biochemistry and Psychology; and at the School of Social Sciences in the recently funded Alcohol Research Center at the University of California, Irvine. The faculty involved and areas of research are as follows. S. Tewari, Ph.D., and P. F. Hall, M.D., Ph.D.—effects of ethanol on cerebral protein synthesis with experience in neurochemistry/neuroanatomy/neurophysiology/and biochemistry; effects of alcohol on testicular function; biochemistry and neuroanatomy background required with electron microscopy experience. K. K. Tewari, Ph.D.—on the transcription of cerebral DNA with a background in biochemistry of nucleic acids and neurophysiology. R. F. Thompson, Ph.D.—brain mechanisms of learning; neurophysiology/neuroanatomy/behavioral background desired. N. M. Weinberger, Ph.D.—neurophysiology of learning and ethanol action; electrophysiology or behavioral conditioning background preferred. C. S. McLaughlin, Ph.D.—RNA and protein synthesis in eukaryotes; a background in biochemistry and molecular biology. E. K. Wagner, Ph.D.—course of HSV infection in vivo and in vitro with a background in animal cell culture, animal virus techniques, and biochemistry. E. M. Pattison, M.D.—social systems and alcoholism; social science and psychological science background with expertise in social network theory and analysis.

All qualified candidates welcome; minorities and women encouraged to apply.

For further information contact individual faculty members in their areas of expertise through: **Dr. S. Tewari, Science Director, Alcohol Research Center, Department of Psychiatry and Human Behavior, University of California, Irvine, California 92717.**

TECHNICAL ASSOCIATE—The Massachusetts Institute of Technology (MIT) Biology Department has an opening for an individual to do research on hybridization of cell lines producing antibodies, physical analysis of DNA preparations and analysis of murine plasmacytoma proteins; breeding of laboratory animals, maintenance and growth of mouse tumors. Will act as director of tissue culture laboratory, maintain cell cultures, and perform biochemical and immunological assays. Techniques include enzyme assays, protein determination, food analysis, and tissue culture. Position requires bachelor's degree in biology or chemistry and at least 5 years of experience as a technical assistant, or equivalent. Position involves use of gas chromatograph, gas-liquid chromatograph, NMRMS, IR scintillation counter, atomic absorption spectrophotometer. Salary range: \$10,000 to \$13,000, 35-hour week. Please submit résumé to: **Dr. Malcolm L. Gefter, MIT Biology Department, Building 56-703, 77 Massachusetts Avenue, Cambridge, Mass. 02139. An Equal Opportunity/Affirmative Action Employer.**

VERTEBRATE HISTOLOGIST OR EMBRYOLOGIST: visiting assistant professor. One-year appointment; to teach histology and one other biology course in the fall, and embryology and one other biology course in the spring. Ph.D. required. Salary competitive. Closing date for applications is 7 July 1978. Send curriculum vitae and three letters of reference to: **Dr. Hayden N. Pritchard, Department of Biology, Williams Hall #31, Lehigh University, Bethlehem, Pa. 18015. An Equal Opportunity/Affirmative Action Employer.**

VISITING ASSISTANT PROFESSOR OF BIOLOGY

Biochemist/microbiologist for 1-year appointment to replace a faculty member on leave. Position open 1 September 1978 for qualified Ph.D. Teaching responsibilities include biochemistry, microbiology, and biology course for nonmajors. Candidate should send letter detailing experience in teaching, curriculum vitae, copies of transcripts, and names of three references to: **Dr. James W. Small, Department of Biology, Rollins College, Winter Park, Florida 32789. An Equal Opportunity/Affirmative Action/Title IX Employer.**

VISITING FACULTY POSITION available in the Department of Physics at Kansas State University starting September 1978. A Ph.D. required, postdoctoral experience preferred in either experimental or theoretical physics. Send curriculum vitae and names of three references prior to 15 July 1978 to: **C. E. Hathaway, Department of Physics, Kansas State University, Manhattan, Kansas 66506.**

COURSES

SYMPOSIUM ON CELL SUBSTRATES AND THEIR USE

The Second Annual W. Alton Jones Cell Science Center Symposium will be concerned with cell substrates and their use in the production of vaccines and other biologicals and will be held 23 to 26 October 1978, at the W. Alton Jones Cell Science Center, Lake Placid, New York.

Over 20 eminent scientists will lead the symposium with a review of past experience and the future directions for the use of cells in the production of various types of biologicals. The scope of the conference will include presentations and discussions of cell substrates as used in the production of virus vaccines and biochemicals such as interferon as well as more experimental or potential uses of cells such as in cell transplantation. A session on benefit/risk considerations is also scheduled. Each evening there will be one major presentation by a leading authority.

The cost of \$250 includes registration fee, hotel accommodation, and meals for the duration of the workshop. For application forms and details contact:

Course Secretary, SW78-2S
W. Alton Jones Cell Science Center
Old Barn Road
Lake Placid, New York 12946

SYMPOSIUM

SOUTHWEST FOUNDATION FORUM SYMPOSIUM

The Southwest Foundation Forum of the Southwest Foundation for Research and Education in San Antonio, Texas, is proud to announce the first in a prospective series of symposia on nonhuman primates in biomedical research. This symposium on "The Use of Nonhuman Primates in Cardiovascular Diseases" will be followed by others: infectious diseases, behavior, pharmacology, cancer, environment, dentistry, reproductive biology and fertility, experimental surgery, congenital malformations, neurophysiology, immunology, cell culture and vaccine development, and so forth.

The 3-day symposium will be held 18 to 21 February 1979, at the Hilton Palacio del Rio, San Antonio, Texas. Participation will be limited to 150, and speakers will be by invitation. Informal discussions will be provided time at the end of each session. Invited speakers will not be charged the \$50 registration fee. Individuals interested in participating in this first symposium are invited to submit a title and short abstract for review by the program committee (Doctors T. B. Clarkson, P. J. Gerone, J. R. Held, B. M. Levy, W. Montagna, C. W. McPherson, O. A. Smith, Jr., and S. Washburn). Further information and correspondence may be addressed to: **Dr. S. S. Kalter, Organizing Secretary, Southwest Foundation Forum Symposium, P. O. Box 28147, San Antonio, Texas 78284.**

ASSISTANTSHIPS

PREDOCTORAL RESEARCH ASSISTANTSHIPS. The Department of Biology at Memphis State University has several research assistantships available for students seeking the Ph.D. degree. The stipend is \$5,000 for 9 months and waiver of out-of-state tuition. The department offers research opportunities in vertebrate and invertebrate zoology, botany, cell biology, and microbiology. Applicants must hold the master's degree, have an overall GPA of 3.25, and combined GRE scores of 1100 for the aptitude section and 650 for the advanced section. Applications must include transcripts of all academic work, GRE scores, a brief statement of research interests, and three letters of recommendation to: **Dr. Carl Dee Brown, Chairman, Department of Biology, Memphis State University, Memphis, Tennessee 38152.**

TRAINEESHIPS

TWO POSTDOCTORAL TRAINEESHIPS are available in biochemistry at the University of California, Los Angeles (UCLA), Mental Retardation Research Center through an award from USPHS. Studies focus on various aspects of inborn errors of metabolism and metabolism of ketone bodies. Apply to: **Dr. G. Popjak, Mental Retardation Research Center, 760 Westwood Plaza, UCLA School of Medicine, Los Angeles, California 90024. An Equal Opportunity Employer.**

GRADUATE STUDY

GRADUATE STUDIES IN PATHOLOGY AND MOLECULAR BIOLOGY

A diversified program of study leading to the Ph.D. degree in experimental pathology and molecular biology is being offered. The disease-oriented research areas, which include lipid metabolism, nucleic acid control mechanisms, cell kinetics and metabolism, encompass such varied research techniques as enzyme histochemistry, electron microscopy, tissue culture, subcellular fractionation, and a variety of standard biochemical analytical procedures. A limited number of scholarships, including tuition and stipend, are available for the 1978-1979 academic year. For more information contact: **Dr. K. T. Lee, Department of Pathology, Albany Medical College of Union University, Albany, N.Y. 12280.**

FELLOWSHIPS

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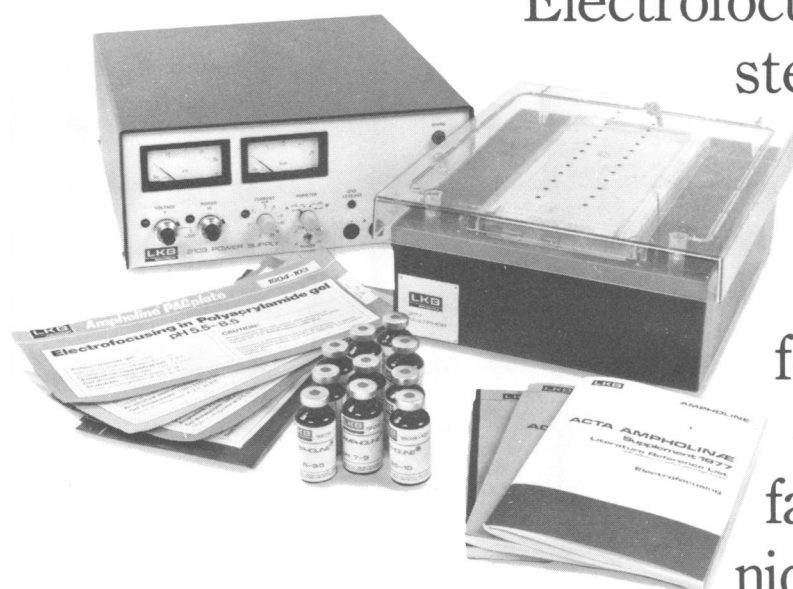
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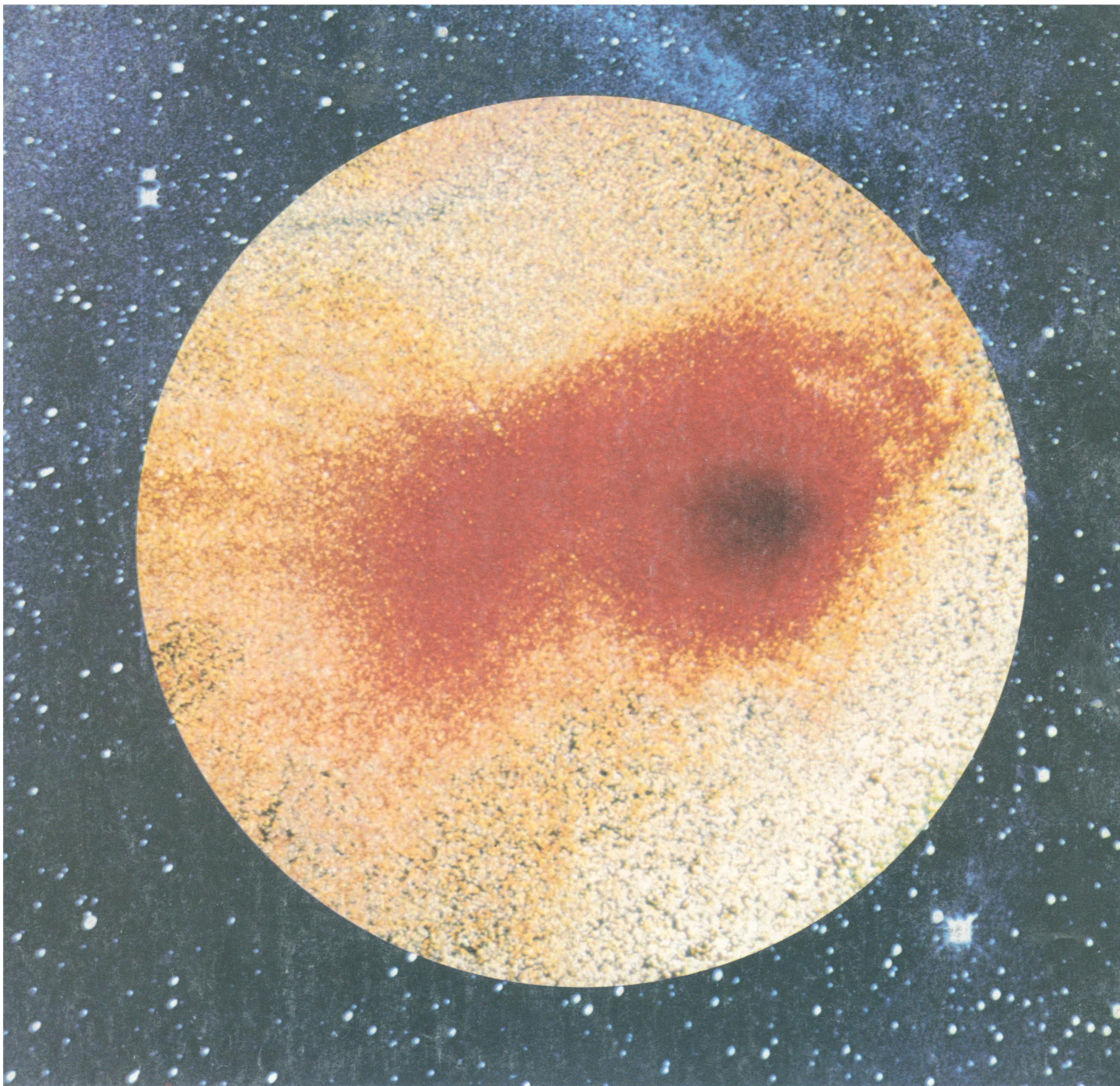


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