

Personnel Placement

SCIENCE publishes each Friday, except the last Friday of the year. Advertising is accepted only in writing; no abbreviations. Any deadline in ad must be at least 2 weeks after date of issue in which ad appears. Also, personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap, or sexual preference.

LINE CLASSIFIED ADVERTISING DEADLINES:

27 July issue (mailed 20 July): **6 July**
3 August issue (mailed 27 July): **13 July**
10 August issue (mailed 3 August): **20 July**
17 August issue (mailed 10 August): **27 July**

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

LINE DISPLAY (POSITIONS OPEN, COURSES, FELLOWSHIPS, MARKETPLACE, and so forth): \$10.40 per millimeter; \$260 minimum, per week (minimum charge covers 25 millimeters on a single column; 25 millimeters equals 10 lines of 50 spaces per line). No charge for use of box number. No agency commission for ads less than 103 millimeters (4 inches). No cash discount. Prepayment required for all foreign ads. Purchase orders and billing address required for all other advertising.

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

SCIENCE, Room 107
1515 Massachusetts Avenue, NW
Washington, D.C. 20005
Telephone: 202-467-4456

Send copy for **Fractional Display** ads, 1/6 page and larger, and all **Marketplace** ads to:

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

Blind ad replies should be addressed as follows:

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

POSITIONS WANTED

Biologist. B.A. Experience in monoclonal antibody production and screening including in vitro and in vivo techniques, ELISA, immunohisto- and cytochemistry, western blots, and TLC. Experience in lipid and protein characterization of male reproductive tract. Good techniques in animal surgery, tissue and cell isolation, including primary tissue and cell culture. Moving for family reasons to Ithaca, Syracuse, Binghamton area of central New York. Box 164, SCIENCE. X

Biomedical Engineer. M.S. Experience in computer modeling of transport phenomena in physiological systems, data coordination and analysis, technical writing. Desires biomedical research position in academia/hospital/industry. Box 167, SCIENCE. 7/6, 13

Biopsychologist (Ph.D. Rutgers), experimental, statistics bias. Knows anatomy, endocrinology, computer languages, including Assembly. Publications: feeding, obesity, exercise, aggression. Experienced teacher. Seeks teaching or postdoctorate, above or sensory research. Box 21047, Athens 11410, Greece. Telephone: 011 301 4134789. 7/6, 13

Marine Biologist. Ph.D. Fish physiology/larval ecology, marine invertebrate/zooplankton biology, with strong background in hydrocarbon chemistry, CGC, pollution fate and effects. Seeks entry level research and/or teaching position. Box 157, SCIENCE. X

Protein Chemist. Ph.D. physical/organic. Ten years of experience in protein isolation/purification/characterization. Seeks research position with university or industry. Box 169, SCIENCE. X

Quantitative Ecologist—Ph.D. wildlife, 1984; M.S. statistics. Publications, teaching, research experience. Interests: avian populations, wildlife ecology, and biometry. Teaching and/or research desired. Box 168, SCIENCE. 7/6, 13

POSITIONS WANTED

Geneticist/Statistician/Programmer. Ph.D. 1981 (evolutionary biology); 3 years of postdoctoral research; 9-plus publications; 5-plus computer languages. Knowledge of evolutionary biology, genetics, ecology, *Drosophila*, statistics and applied mathematics, microcomputer usage. Seeking research, statistical and/or programming position. Box 165, SCIENCE. X

Scientist desires position in field of astronomy. Interests in mathematics, natural science, computers, astrology. Technician, apprentice, laboratory worker, field worker, assistant, clerk, and researcher positions or other desired. U.S. citizen. No military. No convictions. Good health. Box 170, SCIENCE. X

POSITIONS OPEN

ADJUNCT ASSISTANT PROFESSOR OF RADIATION ONCOLOGY AND BIostatISTICS. Biostatistician wanted with background in applied mathematics, physics, and specialty in mathematical statistics, to collaborate with clinicians and basic scientists in University of California, Los Angeles (UCLA) Medical School. Ph.D. in statistics required. University teaching experience (minimum 4 years) required. Demonstrated competence in statistical research by publication as prime author of papers in reputable journals. Starting salary: approximately \$32,000. Send résumé and three letters of reference to:

Professor Robert M. Elashoff
UCLA Jonsson Comprehensive Cancer Center
BASE Unit
1100 Glendon Avenue, Suite 851
Los Angeles, Calif. 90024

An Affirmative Action/Equal Opportunity Employer

ASSISTANT PROFESSOR. College of Arts and Sciences. Ph.D. in biology, chemistry, or other biomedical science, proven teaching ability, postgraduate research experience. Duties: Teach fundamentals of biology, elementary biochemistry, and preferably immunology and parasitology. Other duties to support MARC-Honors undergraduate research program. Application deadline: 30 July 1984, or until filled. Send curriculum vitae and three references to: John French, Personnel Department, University of Alaska, Anchorage, 3211 Providence Drive, Anchorage, Alaska 99508. An Equal Opportunity/Affirmative Action Employer and Educational Institution.

UNIVERSITY OF TORONTO Department of Immunology and Department of Medical Genetics

Applications are invited for three tenure-track appointments as **ASSISTANT PROFESSOR**. In conjunction with the formation of a new Department of Immunology and in collaboration with the Department of Medical Genetics, the University of Toronto is creating a new research group to combine the technologies of molecular genetics and cell biology for the study of the immune system, emphasizing developmental genetics, autoimmunity, and immune deficiency in both mouse and man. We are seeking applicants with a Ph.D. or equivalent, and postdoctoral experience with an established record of success in research applying one or more of the following technologies: Recombinant DNA technology of eukaryotes, flow cytometry, cell sorting, DNA transfection, cell cloning, and hybridomas.

Although in accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada, all qualified people are invited to apply.

Applicants should send complete curriculum vitae and names of three referees by 1 September 1984 to: Dr. Brian J. Underdown, Associate Dean, Research, University of Toronto, Medical Sciences Building, Toronto, Ontario, Canada M5S 1A8.

ASSISTANT PROFESSOR CELL BIOLOGIST—GENETICIST

Tenure-track position available September 1984. Responsibilities include undergraduate and graduate courses in genetics, participation in general biology course, research development. Application deadline: 1 August 1984. Submit letter of application, curriculum vitae, and three references to: R. G. Albright, S.J., Department of Biology and Health Sciences, University of Detroit, 4001 West McNichols, Detroit, Mich. 48221. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

PANLABS FERMTECH— ASSISTANT DIRECTOR

A position is open in the fermentation division of Panlabs Taiwan Ltd. in Taiwan. The candidate should have a Ph.D. and be experienced in using recombinant DNA techniques. Fermentation experience in industry would be desirable. A fluent knowledge of Chinese is essential.

Send résumé and the names of three references to: Dr. Joseph Lein, Panlabs, P.O. Box 190, Deer Harbor, Wash. 98243.

The Department of Microbiology, School of Medicine, University of South Dakota, invites applications from qualified individuals for a position at the level of **ASSISTANT PROFESSOR**. The position will be filled by an individual who is capable of teaching **bacterial pathogenesis**. Research interests can be in any area. Candidates must possess a Ph.D. degree, have completed postdoctoral training, and possess an interest in teaching medical, graduate, and allied health students. Development of an independent research program is imperative. Interested individuals should submit curriculum vitae and names of three references to: Paul F. Smith, Ph.D., Chairman, Department of Microbiology, School of Medicine, University of South Dakota, Vermillion, S.D. 57069. The search will continue until the position is filled. An Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSORSHIP: Organic chemistry. Applicants for this tenure-track position must be committed to excellence in research and teaching. Areas of research which complement those presently represented in the department, especially bioorganic chemistry, would be most desirable. Candidates should send complete curriculum vitae which includes a description of future research plans, a documented summary of past accomplishments, and arrange to have at least three letters of recommendation sent to: Chairman, Search Committee, Department of Chemistry, State University of New York at Buffalo, Buffalo, New York 14214. The deadline for applications is 15 October 1984, although early submission is encouraged. *The Department of Chemistry is particularly interested in considering applications of women, ethnic minorities, or handicapped persons.* State University of New York at Buffalo is an Affirmative Action/Equal Opportunity Employer.

ASSOCIATE CLINICAL DIRECTOR Ph.D. in Pharmacology or Biochemistry

Clinical scientist for testing facility in the south. Industry experience preferred but not necessary. Strong communication skills, both oral and written, are a prerequisite.

You will be responsible for managing studies, developing protocols and be afforded direct client contact. Position also allows you opportunity to share in profits.

To apply send your résumé or curriculum vitae with salary history to: Box 163, SCIENCE.

ASSOCIATE DEAN FOR ACADEMIC AFFAIRS

The Uniformed Services University of the Health Sciences (USUHS) invites applications for the position of **Associate Dean for Academic Affairs** in the F. Edward Hebert School of Medicine. The associate dean for academic affairs has responsibility for overseeing all aspects of the clinical and basic science departments of the medical school, including curriculum planning, teaching programs, research development, and financial and personnel planning.

Candidates must possess the M.D. or the Ph.D. degree, with the M.D. preferred. Applicants with the Ph.D. degree will be considered only if their degree is in one of the biomedical sciences. Candidates must have had substantial experience as a dean, or as chairperson of a major department, of a medical school. Candidates must have academic credentials which meet the requirements for appointment as professor with tenure in an academic department at USUHS. Demonstrated leadership abilities are required as is the ability to develop consensus decisions. Prior service in a branch of the uniformed services of the United States is highly desirable.

The University offers excellent facilities and a salary commensurate with experience. Address applications with complete curriculum vitae and bibliography to: The Civilian Personnel Office, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, Maryland 20814. To be considered, applications must be in the personnel office by 31 July 1984. *The USUHS is an Equal Opportunity/Affirmative Action Employer.*

**University of California
Lawrence Berkeley Laboratory
Announces an opening
1 January 1985 for
Associate Laboratory Director and
Head of Nuclear Science Division**

The Lawrence Berkeley Laboratory is a multi-purpose research laboratory funded by the Department of Energy. Its Nuclear Science Division conducts a multimillion dollar research program in low, medium and high-energy nuclear physics. The Head of the Division has primary responsibility for the leadership and management of this program under the general direction of the Deputy Director for General Sciences and the Laboratory Director. As an Associate Director of the Laboratory, the incumbent will also participate in formulating the research policy and long-term direction of the Laboratory as a whole. Candidates must have had significant experience as practicing nuclear physicists and be of the general calibre of persons holding senior tenure positions in major research institutions. The successful applicant would be expected to serve as Associate Director and Division Head for an initial term of 3 to 5 years, subject to renewal for further terms by mutual agreement.

The Laboratory is seeking a respected and energetic nuclear physicist willing to play a strong leadership role at a challenging time. Qualifications must be such that it will be natural to consider him or her for a tenured appointment in the Department of Physics on the Berkeley campus of the University of California, as well as at the Laboratory. Interested applicants should submit a curriculum vitae, together with the names of three references to: Dr. J.D. Jackson, Chairman, Nuclear Science Search Committee, c/o Employment Office, LAWRENCE BERKELEY LABORATORY, 1 Cyclotron Road, Berkeley, CA 94720. Refer to Job A/2947. An Equal Opportunity Employer M/F/H. Deadline for applications: August 31, 1984.



POSITIONS OPEN

ASSISTANT PROFESSOR—PLANT MOLECULAR GENETICIST. A 12-month, tenure-track faculty position located at the University of Kentucky with research on application of molecular genetics to crop improvement. Research on Ti plasmid vector construction, gene regulation, and cellular transformation would complement existing programs. Twenty percent effort will be in teaching and directing graduate students. Applicants should send curriculum vitae, transcripts, a brief summary of research interests, and three letters of reference to: **Dr. A. J. Hiatt, Department of Agronomy, University of Kentucky, Lexington, Ky. 40546-0091.** *The University of Kentucky is an Equal Opportunity/Affirmative Action Employer.*

**BIOLOGICAL OCEANOGRAPHER
ASSISTANT OR ASSOCIATE BIOLOGICAL
OCEANOGRAPHER**

The Marine Life Research Group of the Scripps Institution of Oceanography invites biological oceanographers to apply for the position of assistant or associate biological oceanographer, the research equivalent of the professional series (Ph.D. or equivalent required). This group is concerned with the physical oceanography and pelagic ecology of the Eastern North Pacific with emphasis on the California Current. Applicant should have training and experience in physical oceanography and its relation to problems of marine ecology, with field experience at sea and interest in the larger time/space scale of oceanographic phenomena. Support is provided for 2 years, after which the candidate may be expected to provide all or part of own support.

Salary range: \$25,100 to \$38,200, depending upon qualifications. Please send résumé and at least three references to: **Director, Marine Life Research Group, A-030, Scripps Institution of Oceanography, La Jolla, California 92093,** by 1 August 1984. *The University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer.*

BIOTECHNOLOGY

Flow Laboratories, a leader in biological specialties, is expanding its R&D group and has immediate positions available in cell biology and immunology.

CELL BIOLOGY SECTION HEAD

The successful applicant will lead a group responsible for the development of high-technology products and processes for the cell biology area. A Ph.D. with 3-plus years of experience handling mammalian cells is needed; experience with viruses and biofermentation is a plus.

IMMUNOLOGY SECTION HEAD

The successful applicant will lead a group responsible for the development of immunologically and biochemically based diagnostic tests. A Ph.D. with 3-plus years of experience developing immunological assays, a strong background in biochemistry, and experience with mammalian viruses is needed.

STAFF SCIENTISTS

Positions are also available for highly qualified scientists with a Ph.D. or M.S. in cell biology, immunology, biochemistry, or related areas to work as part of Flow's R&D team.

We offer an attractive salary/benefits package. Qualified applicants send résumé, including salary history, in confidence to:

**Personnel
Flow Laboratories, Inc.
7655 Old Springhouse Road
McLean, Virginia 22102**

Equal Opportunity/Affirmative Action Employer

**CHAIRMANSHIP—DEPARTMENT OF
CHEMISTRY**

Applications are invited for the position of chairman of the Department of Chemistry at Washington University, St. Louis, Missouri. Applicants should have a strong research program, and proven teaching and administrative experience. Interested scientists should submit complete curriculum vitae and a list of at least three individuals who can be contacted for references to:

**Chairman, Chemistry Search Committee
Box 8094
Washington University School of Medicine
660 South Euclid Avenue
St. Louis, Mo. 63110**

Washington University is an Equal Opportunity Employer, M/F/N/V.

POSITIONS OPEN

CELL BIOLOGIST, DEPARTMENT OF UROLOGY. Position available for Ph.D. to develop, direct, and coordinate a flow cytometric facility. Appointment level commensurate with experience and qualifications. Must have experience in tissue culture techniques; 5 years of experience in flow cytometric studies, 2 years of experience in flow cytometric studies of urologic tumors, including analysis of bladder washings. Responsibilities include development of basic research program for study of urologic tumors. Send curriculum vitae and three references to: **Ralph deVere White, M.D., Department of Urology, University of California, Davis, School of Medicine, 4301 X Street, Suite 249, Sacramento, Calif. 95817.** Position open until filled; applications not accepted after 30 September 1984. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

CELL BIOLOGIST—NEUROBIOLOGIST

The Department of Biological Sciences at State University of New York (SUNY) Albany is establishing a **CENTER FOR CELLULAR DIFFERENTIATION**. Two tenure-track positions will be filled at the assistant professor level as part of the growth of the Center. Preference will be given to candidates with expertise in contemporary investigative techniques of immunology, molecular biology and biochemistry.

We are searching for: (i) candidates utilizing cell, tissue, or organ systems to study the regulation of eukaryotic cell differentiation, especially in areas related to molecular interactions at the cell surface, the plasma membrane, or the cytoskeleton and associated components; and (ii) candidates working on neural differentiation; for example, utilizing genetic approaches to neural interactions in *Drosophila* or molecular approaches to gene expression in nerve cells.

The successful applicants will be part of the research group of the Center for Cellular Differentiation. The group currently includes six principal investigators with interests ranging from the extracellular matrix in differentiation to neuronal pattern development. Applicants will be expected to participate in undergraduate and graduate teaching. One position will be filled in fall 1985, and we expect the second to be filled in 1986. Salary is negotiable.

Please send curriculum vitae, names and addresses of three references, and a summary of proposed research to: **Dr. Albert Millis, Chair of the Search Committee, Department of Biological Sciences, State University of New York at Albany, 1400 Washington Avenue, Albany, N.Y. 12222.**

SUNY, Albany, is an Affirmative Action/Equal Opportunity Employer. Applications from minority persons, women, handicapped persons, and Vietnam era veterans are especially welcomed.

**CHAIRMAN
DEPARTMENT OF ANIMAL SCIENCE**

The University of Florida is seeking a chairman, Department of Animal Science. A Ph.D. in animal science or a related discipline is required. Experience in research, teaching, or extension is desired. Applicants must have potential administrative leadership to assist in development of animal science programs and faculty. Salary is open. Application deadline is 15 August 1984. Applicants should contact: **A. Z. Palmer, Search Committee Chairman, Department of Animal Science, 224 Animal Science Building, University of Florida, Gainesville, Fla. 32611.** *An Affirmative Action/Equal Opportunity Employer.*

COGNITIVE PSYCHOLOGIST

Research scientist position in Department of Anesthesia to join multidisciplinary team studying cognitive effects of psychoactive drugs and anesthetic agents in humans. Must have a Ph.D. in psychology. Experience in behavioral psychopharmacology, statistics, and experimental design is desirable. Job future provides flexibility and full responsibility for the complete program of investigation. Send résumé and three letters of reference to:

**M. M. Ghoneim, M.D.
Department of Anesthesia
University of Iowa Hospitals
Iowa City, Iowa 52242**

or
**J. V. Hinrichs, Ph.D.
Department of Psychology
University of Iowa
Iowa City, Iowa 52240**

Salary negotiable, depending on qualifications and experience. *The University of Iowa is an Equal Opportunity/Affirmative Action Employer.*

Cerebrovascular Physiologist or Pharmacologist

Ph.D. Level

Continued expansion at the Warner-Lambert/Parke-Davis Pharmaceutical Research Division has generated an immediate opportunity within the Neurological Diseases Group in the Pharmacology Department.

The successful candidate will have:

Ph.D. or equivalent in physiology or pharmacology and up to five years postdoctoral experience with a documented record of research excellence.

Research experience in cerebral circulation and metabolism. Specialized training in cerebrovascular pain physiology and/or pharmacology desirable.

Excellent communication skills and the capacity to assume leadership roles in a team approach to drug discovery.

Our research facilities adjacent to the University of Michigan campus in Ann Arbor, Michigan are among the finest and best equipped in the world and are devoted exclusively to the discovery and development of new drugs. We offer excellent compensation, benefits and work environment. Send resume with salary requirements and references in confidence to: Ms. D Love, Human Resources Supervisor, WARNER-LAMBERT/PARKE-DAVIS PHARMACEUTICAL RESEARCH DIVISION, 2800 Plymouth Road, Ann Arbor, Michigan 48105.

An Equal Opportunity Employer M/F/H

**WARNER
LAMBERT**

MOLECULAR BIOLOGIST

Pharmacia P-L Biochemicals has an immediate opening for a Ph.D Molecular Biologist in the Biochemicals Research and Development Department. The position involves development of new products in the areas of specialized cloning and expression vectors for Prokaryotic Eukaryotic organisms, gene cartridges and DNA cloning and sequencing systems as well as improvements of current products and processes.

The successful candidate will have post-doctoral experience and experience with gene expression, plasmid construction and M13 DNA sequencing. A background in microbiology is desirable.

This is a permanent position with an international biotechnology company offering a competitive salary and a complete benefits program. Please send letter, resume and 3 references with phone numbers to: DR. ROBERT NAYLOR, PHARMACIA P-L BIOCHEMICALS, INC., 2202 NORTH BARTLETT AVENUE, MILWAUKEE, WISCONSIN 53202. We are an equal opportunity employer m/f.



Pharmacia

METALLURGIST/ MATERIALS SCIENTIST

The Office of Naval Research is seeking a highly qualified metallurgist/materials scientist to plan and manage a contract research program in corrosion and corrosion phenomena. The sponsored research is conducted principally at universities, government and industrial laboratories by leading scientists in the field. This is a Civil Service position at the GM-13 (\$36,152-\$46,997), GM-14 (\$42,722-\$55,538 or GM-15 (\$50,252-\$65,327) level, depending on individual qualifications.

The responsibilities of the incumbent will include formulating, implementing and monitoring research and development programs in unexplored aspects

of corrosion phenomena, environment/material degradation interactions, and corrosion detection, prevention and control. The incumbent will define new research opportunities, communicate ONR interest to the technical community, evaluate research proposals, manage available resources, and represent the program to Navy management. An inherent job satisfaction in the position is obtained through the opportunity to have a creative and significant impact on the quality of research conducted at the national level.

Applicants must have a Ph.D. or equivalent in metallurgy, materials science and engineering, chemistry or a

related discipline and at least one year of professional experience, or acquired a minimum of three years of progressively responsible professional experience. All applicants must have at least one year of experience comparable in difficulty and responsibility to the next lower level in the Federal Service. Equivalent combinations of professional experience and graduate education may be acceptable.

Interested persons should submit a resume or Standard Form 171, Personal Qualifications Statement (available at Federal Job Information Centers or from the address below), to:

OFFICE OF NAVAL RESEARCH

Civilian Personnel Division, Code 791SC Attn: Announcement #84-29 (S)
800 North Quincy Street • Arlington, VA 22217

Applications will be accepted through 31 August 1984 and must be received by that date. Applicants are requested to complete the appropriate supplemental forms. For further information and supplemental forms, please call (202) 696-4705.

AN EQUAL OPPORTUNITY EMPLOYER • U.S. CITIZENSHIP REQUIRED

**KING SAUD UNIVERSITY
COLLEGE OF AGRICULTURE
AND VETERINARY MEDICINE
Qaseem Branch, Saudi Arabia**

The college has vacant faculty positions for the following posts:

- 1. Assistant Professor (Research) in Pharmacology, Ph.D.**
holder, experience in isolation, characterization, and studies on therapeutic effects of isolated compound of plant origin.
- 2. Assistant Professor (Research) in Pharmacognosy, Ph.D.**
holder, experience in isolation and characterization of medicinal principles in plants.
Applicants are expected to develop strong research program in the field of medicinal plants. Isolate principles, characterize and study the mode of action in experimental animals.
- 3. Technicians in Pharmacology and Pharmacognosy, hold F.I.M.L.A. or equivalent qualifications, long experience in advanced methods of chemical analyses with modern laboratory equipments and experience in plant material extractions, chromatographies and methods of Bioassay.**

Interested academicians are kindly requested to send non-returnable photocopies of their academic diplomas and specialized experience certificates together with their resumes (including lists of their publications and references) as soon as possible to the following address:

**King Saud University Office
2425 West Loop South, Suite 450
Houston, Texas 77027
Attention: Miss Aida Ganim**



POSITIONS OPEN

**SOUTHWESTERN UNIVERSITY
Biology Department**

Southwestern University seeks candidates for the **DISHMAN CHAIR IN SCIENCE** in the Department of Biology. This is a tenure-track position, to be filled at the professor or associate professor level, beginning with the 1985-1986 academic year. The successful applicant will exhibit a strong commitment to undergraduate education and teaching, maintain an active scholarly and professional life within the discipline, and be interested in establishing a research program which can involve undergraduate students. Preference will be given to candidates with broad teaching interests in an undergraduate program and with special competence in one or more of the following areas: Cell physiology, animal physiology, or molecular genetics.

Southwestern University is an undergraduate, liberal arts institution with an enrollment of over 1000 students, SAT scores well above the national mean for college-bound students, and a current market value endowment of over \$51,000,000. Applications and nominations should be sent to:

**G. Benjamin Oliver, Dean
The Brown College of Arts and Sciences
Southwestern University
Georgetown, Texas 78626**

An Affirmative Action/Equal Opportunity Employer

CHAIR, DEPARTMENT OF PSYCHIATRY. The Ohio State University College of Medicine. The successful candidate for the position of chairperson, Department of Psychiatry, should be an established investigator in some aspect of neuropsychiatric science and offer leadership in the development of outstanding program for patient care, research and education. *The Ohio State University is an Affirmative Action/Equal Opportunity Employer.* Applicants please send curriculum vitae and three references by 30 August 1984 to: **Dr. Edwin C. Shuttleworth, Chairman, Search Committee, Ohio State University Hospitals, Room 448 Means Hall, 1655 Upham Drive, Columbus, Ohio 43210.**

CHEMIST (Bio-organic). Postdoctoral position in bio-organic or medicinal chemistry available with a multidisciplinary cancer research institute located in northern suburb of New York City (Westchester County). Research involves synthesis of compounds as biological markers for detection of human exposure to tobacco-specific nitrosamines through smoking. Send résumé to: **Dr. F.-L. Chung, Division of Chemical Carcinogenesis, American Health Foundation, Valhalla, N.Y. 10595.**

DEVELOPMENTAL BIOLOGIST. The Biology Department, University of Santa Clara, seeks a one-quarter replacement to teach a course in animal development (with laboratory) for winter quarter of the 1984-1985 academic year. Send a résumé and names of three references to: **Dr. William Eisinger, Department of Biology, University of Santa Clara, Santa Clara, Calif. 95053** by 14 September 1984. *The University of Santa Clara is a Jesuit University and an Equal Opportunity/Affirmative Action/Title IX Employer, M/F/H.*

DIRECTOR—Undergraduate Molecular Biology Program. Recent Ph.D. Responsible for overseeing students, teaching, and recruitment. Salary commensurate with experience and qualifications. Excellent benefits. Deadline for response: 15 July. Résumé to: **Dean of Administration, Long Island University, Brooklyn Campus, University Plaza, Brooklyn, N.Y. 11201.** *An Equal Opportunity/Affirmative Action Employer.*

The California Space Institute at Scripps Institution of Oceanography is seeking an **ENGINEER OR SCIENTIST** for an academic research position to participate in studies of advanced space technologies, in particular those related to the design of a space station and steps beyond. Areas of our interest include automation and robotics, propulsion, power, modular and adaptive design. Candidate must be capable of developing, over a period of approximately 1 year, own externally funded research program. Candidate must have related experience, and academic qualifications including publication record. Advanced degree preferred (Ph.D. or equivalent). Salary range: \$25,000 to \$33,200 (commensurate with qualifications). Send résumé and three or more references to: **Elaine Cox (a), California Space Institute A030, Scripps Institution of Oceanography, La Jolla, Calif. 92093**, by 20 July 1984. *The University of California at San Diego is an Equal Opportunity/Affirmative Action Employer.*

Senior Scientist GENETIC ENGINEERING

Bristol-Myers Company, a leader in industrial biotechnology and a major international manufacturer of pharmaceutical products, has a challenging genetic research opportunity in its Genetic Engineering Department.

We are seeking a scientist who will be responsible for the development of host/vector systems for the efficient expression of cloned gene products. The successful candidate will be expected to work closely with scientists in both the Genetic Engineering and Fermentation Development Departments.

To qualify, your published research must document past experience in the cloning and

expression of heterologous genes. In addition, you should be experienced in DNA sequencing techniques. A Doctorate in Molecular Biology/Biochemistry must be supported by 2 or more years of postdoctoral research.

Bristol-Myers offers a salary fully commensurate with your experience and qualifications, a comprehensive benefits package, and a professional environment where high visibility will propel you farther faster. For prompt, confidential consideration, please forward your resume indicating current compensation, to: Department Head, Genetic Engineering



BRISTOL-MYERS COMPANY INDUSTRIAL DIVISION

P.O. Box 4755, Syracuse, New York 13221
An equal opportunity employer M/F

Biochemist

Hynson, Westcott & Dunning, the division that spearheads a major commitment in immunodiagnostics for Becton Dickinson and Company, is looking for a biochemist with an interest and experience in immunoassay method development.

You will collaborate with a multidisciplinary team made up of biochemists, immunologists, and microbiologists to develop novel non-isotopic immunoassay products applicable to microbial antigen and/or antigen detection.

To qualify you should have the following combination of experience and skills: PhD in Biochemistry with 2 or more years of post-doctoral or industrial experience; experience in the use of immunoassay methodology; and expertise in purification, modification, and characterization of proteins.

Connect your career with our solid commitment. Send your resume with salary history to: Ms. Joy Meini, Hynson, Westcott & Dunning, Charles and Chase Streets, Baltimore, MD 21201. An equal opportunity/affirmative action employer.

Caring for people is our business

**BECTON
DICKINSON**

NATIONAL INSTITUTES OF HEALTH
NATIONAL INSTITUTE
OF GENERAL MEDICAL SCIENCES
PHARMACOLOGICAL SCIENCES
PROGRAM BRANCH

Director, Pharmacological Sciences Program Branch

This is a civil service position in the
Senior Executive Service (SES)
with a salary range from \$58,938 to \$66,000
(Physicians may be eligible for a Physicians'
Comparability Allowance up to \$10,000 per year)

Has overall responsibility for planning, organizing and administering a large (about \$59 million/year) program of grants, contracts, and both individual and institutional fellowship awards, designed to foster and support biomedical research and research training in the fields of pharmacological sciences and biorelated chemistry.

Position information and qualifications requirements may be obtained by contacting:
Howard R. Chernoff, Personnel Officer
National Institute of General Medical Sciences
Westwood Building, Room 9A-13
Bethesda, MD 20205, (301) 496-7161

Applications (SF-171, CV and Bibliography) must be submitted to above address and postmarked not later than July 31, 1984.

AN EQUAL OPPORTUNITY EMPLOYER

NATIONAL INSTITUTES OF HEALTH
NATIONAL INSTITUTE
OF GENERAL MEDICAL SCIENCES
BIOPHYSICS AND PHYSIOLOGICAL
SCIENCES PROGRAM BRANCH

Director Biophysics and Physiological Sciences Program Branch

This is a civil service position in the
Senior Executive Service (SES)
with a salary range from \$58,938 to \$66,000
(Physicians may be eligible for a Physicians'
Comparability Allowance up to \$10,000 per year)

Has overall responsibility for planning, organizing and administering a large (about \$78 million/year) program of grants, contracts, and both individual and institutional fellowship awards, designed to foster and support biomedical research and research training in the fields of biophysics and the physiological sciences.

Position information and qualifications requirements may be obtained by contacting:
Howard R. Chernoff, Personnel Officer
National Institute of General Medical Sciences
Westwood Building, Room 9A-13
Bethesda, MD 20205, (301) 496-7161

Applications (SF-171, CV and Bibliography) must be submitted to above address and postmarked not later than July 31, 1984.

AN EQUAL OPPORTUNITY EMPLOYER

METABOLISM CHEMIST/ CHROMATOGRAPHER

PPG Industries, Chemicals Group, has an excellent position available at its Research Center in Barberton, Ohio, due to expansion in its Biochemical business for a Metabolism Chemist/Chromatographer.

Qualifications for this position include a Ph.D. (or M.S. with experience) in analytical, organic or biochemistry. Because the individual will be involved in the isolation, purification and identification of plant metabolites of new herbicides and agricultural chemicals, it is essential that the successful candidate possess background and training in the use of HPLC and TLC and skill in the interpretation of NMR and MS data. In addition, this position requires proven experimental skills in developing chromatographic separations and the ability to maintain state-of-the-art research skills in these areas.

For immediate consideration, please send your resume with salary requirements to:



Barbara T. Germaux
PPG Industries, Inc.

One PPG Place
Pittsburgh, PA 15272

All resumes received will be kept in strict confidence.
Equal Opportunity Employer M/F

POSITIONS OPEN

COLLEGE SCIENCE LABORATORY TECHNICIAN

Qualifications: must have a B.S. degree, at least 2 years of experience in a college physics laboratory, and some experience in the design and repair of electronic apparatus. Main duties: set up laboratory equipment, prepare lecture demonstrations, maintain laboratories, repair equipment, and other related activities. Position available 1 September. Salary dependent upon experience. Send résumé by 20 July to:

Professor Margaret K. Geehern
Department of Physics and Astronomy
Herbert H. Lehman College
The City University of New York
Bronx, New York 10468

An Equal Opportunity/Affirmative Action Employer

DIRECTOR, Maxwell Museum of Anthropology, University of New Mexico, beginning January 1985, pending budgetary approval. Director develops exhibits, public programs, and manages collections; supervises 16 staff, student employees, and volunteers; and works with Department of Anthropology, other departments, and a friends organization. This senior (associate professor or above), tenure-line, 12-month position, with some teaching, requires Ph.D. in anthropology, proven research/publication record, commitment to undergraduate and public education, and 3 to 5 years of museum administrative or curatorial experience. Send letters, curriculum vitae, and names of references to: **Chairman, Search Committee, Maxwell Museum of Anthropology, University of New Mexico, Albuquerque, New Mexico 87131.**

BOTANICAL GARDEN DIRECTOR—Applications and nominations are invited for the position of director of a new botanical garden currently under development. A strong record of research, expertise in obtaining grants, proven administrative experience, and experience in managing botanical gardens or arboreta is required. This position will require collaboration with the governing board in defining policies, development of a master plan, and establishment of collections, as well as routine administration of the garden. Salary commensurate with experience. Send curriculum vitae, three letters of recommendation, and recent photograph to: **Staff Search Committee, Lewis Ginter Botanical Garden, Inc., Bloemendaal, 7000 Lakeside Avenue, Richmond, Virginia 23228.**

ECOLOGIST TO HEAD EDUCATION PROGRAM

The Institute of Ecosystem Studies seeks an ecologist to develop a new education program drawing on an expanding research program. We want a self-starter with imagination, energy, and a commitment to public education. Ph.D. preferred. Send letter, curriculum vitae, and names of three references to:

Dr. Gene E. Likens, Director
Institute of Ecosystem Studies
Mary Flagler Cary Arboretum
Box AB
Millbrook, N.Y. 12545

An Equal Opportunity Employer

ANTICIPATED EM TECHNICIAN (ASSOCIATE IV) beginning 1 September 1984. Minimum of master's degree plus additional experience. Experience must include use and maintenance of SEM and TEM and related techniques. Additional photographic experience will be given positive consideration. Applications received by 1 August 1984 will be given preference. Apply to:

EM Technician Committee
Department of Botany
Louisiana State University
Baton Rouge, La. 70803

An Equal Opportunity/Affirmative Action Employer

FACULTY POSITION in biochemistry at **LAKE SUPERIOR STATE COLLEGE**; tenure-track position; to teach biochemistry and health chemistry at undergraduate level. Ph.D. required with demonstrated ability to teach in undergraduate environment; master's possible for temporary appointment. Rank and salary commensurate with qualifications and experience. Excellent fringe benefits; position available for fall 1984. Submit curriculum vitae and three letters of recommendation to: **Office of Employee Relations, LAKE SUPERIOR STATE COLLEGE, Sault Ste. Marie, Michigan 49783**, by 27 July 1984, or until position is filled. *An Equal Opportunity Employer.*

POSITIONS OPEN

DROSOPHILA GENETICIST, able to participate in a graduate level course in eukaryotic genetics, to run a genetic journal club, and to collaborate in research in genetics, oogenesis and early development. This will be a 2-year equivalent of a doctorate degree with some postdoctoral experience. Starting date: 1 August 1984. Send application and three letters of reference to: **A. P. Mahowald, Department of Developmental Genetics and Anatomy, Case Western Reserve University, Cleveland, Ohio 44106.** *Case Western Reserve University is an Equal Opportunity Employer. Applications are especially desired from women and minority groups.*

Agricultural Extension Service, University of Minnesota. **ENTOMOLOGIST. ASSISTANT EXTENSION SPECIALIST.** Annually renewable, dependent on available funds; 70 percent in interdisciplinary project with Horticulture and Plant Pathology Departments assisting in supervising and answering home, yard, and garden questions; 30 in extension entomology, including taxonomic support and educational programming in urban pest management with emphasis on structural pests. M.S. in entomology or B.S. with 4 years of related experience. Strong taxonomic experience with urban insects. To apply, send letter of intent, résumé, transcripts, and three letters of reference to: **Kathy Dalggaard, Extension Personnel, 260 Coffey Hall, University of Minnesota, St. Paul, Minn. 55108. Telephone: 612-373-1865.** Application deadline: 31 July 1984.

The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

FACULTY POSITION IN ENVIRONMENTAL SCIENCE

Applications are invited for a tenure-track research/teaching position for fall 1984. A Ph.D. is required. The successful candidate is expected to teach one graduate environmental science course per semester while serving as principal investigator on a 2-year research grant performing water quality analyses for a river/estuarine complex environmental assessment study. Following completion of the research phase, the individual will become a full-time member of the faculty. Appointment rank and salary are negotiable and commensurate with experience and qualifications. Available 1 August 1984. Send résumé and letters of recommendation to: **Dr. L. Harold Stevenson, Department of Biological and Environmental Sciences, McNeese State University, Lake Charles, Louisiana 70609.** *McNeese is an Affirmative Action/Equal Opportunity Employer.*

FACULTY POSITION available at the assistant to full professor level for research and teaching for candidates with an M.D. or Ph.D. who have research interests in one of the following areas: DNA virology, molecular genetics, medically related microbiology, neurobiology, or cytoskeletal structure and function. Submit curriculum vitae and three letters of reference to: **Dr. Bruce Kline, Chairman, Search Committee, Department of Cell Biology, Mayo Clinic, Rochester, Minnesota 55905.** *An Equal Opportunity/Affirmative Action Institution.*

International Affairs

PRINCIPAL STAFF OFFICER SOVIET UNION AND EAST EUROPE

The National Academy of Sciences and the National Research Council (NAS/NRC) seeks an individual to assume directorship of its exchange and study programs with the Academies of Sciences of the U.S.S.R. and Eastern Europe. The candidate must have knowledge of the area and of its scientific and technological developments. An advanced degree (Ph.D. in science preferred) and a minimum of 10 years of relevant experience are required, as is competency in the Russian language. The candidate must have excellent oral and written communication skills and demonstrated organizational/managerial ability. U.S. citizenship is required.

Individuals in academic positions who could consider a 2-year sabbatical association with the NAS/NRC will be considered. Candidates interested in applying for this position should submit their résumé and salary requirements in confidence to:

National Academy of Sciences
Office of International Affairs
Room JH 204
2101 Constitution Avenue, NW
Washington, D.C. 20418

An Equal Opportunity Employer

POSITIONS OPEN

FACULTY POSITIONS IN MOLECULAR GENETICS

The Children's Hospital Research Foundation and the Department of Pediatrics, University of Cincinnati, invite applications for tenure-track faculty positions in mammalian, particularly human, molecular genetics. The foundation is committed to a major expansion of its existing research program in molecular genetics. Major emphasis will include the structure and function of normal and mutant human genes, gene transfer, and the regulation of expression of genes during mammalian development. Substantial funds are available for start-up, major equipment, innovative pilot projects, and postdoctoral fellows. Faculty are expected to obtain extramural support for the majority of their ongoing research. Facilities are adequate to handle the transfer of an established investigator's large, well-funded, ongoing program. There is ample opportunity to interact with other molecular biology groups at both the Foundation and the University of Cincinnati Medical School. A joint academic appointment in a basic science department at the University of Cincinnati is also possible.

Send curriculum vitae, a brief description of research plans, selected reprints, and the names of three references to: **Dr. John Hutton, President's Office, Children's Hospital Research Foundation, Cincinnati, Ohio 45229.**

CHEMICAL ENGINEERING DEPARTMENT HEAD. Strong academic, research, and administrative skills desired. Direct inquiries to: **Dr. Carl O. Thomas, Search Committee Chairman, Department of Chemical Engineering, University of Tennessee, Knoxville, Tenn. 37996-2200. Telephone: 615-974-5329.** Application deadline: 15 September 1984. *University of Tennessee, Knoxville, is an Equal Opportunity/Title IX/Section 504 Employer.*

TRUDEAU INSTITUTE

Applications are invited for an **IMMUNOBIOLOGIST** to develop an independent research program. Consideration will be given to applicants with training and interest in antiviral immunity or transplantation immunology. Appointment may be made at either junior or senior faculty rank. Applicants should have at least 3 years of postdoctoral experience and provide visible evidence that they already have been scientifically productive. Funds are available to support the successful applicant for a minimum of 3 years.

The Trudeau Institute is a not-for-profit pure research institute situated on the shore of Saranac Lake, N.Y., 8 miles from Lake Placid, N.Y.

Send curriculum vitae and names of three references to:

Dr. Robert J. North, Director
Trudeau Institute, Inc.
P.O. Box 59
Saranac Lake, N.Y. 12983

An Equal Opportunity Employer

LABORATORY DIRECTOR IN VITRO FERTILIZATION PROGRAM GEORGE WASHINGTON MEDICAL SCHOOL

Ph.D. with experience in reproductive and gamete physiology, including detailed knowledge of embryo culture and manipulation, semenology, andrology, and RIAs, needed as laboratory director in ongoing in vitro fertilization program. Appointment and salary based on credentials; fringe benefits including tuition. Contact: **Robert J. Stillman, M.D., Director, Division of Reproductive Endocrinology and Fertility, 2150 Pennsylvania Avenue, NW, Washington, DC 20037. Telephone: 202-676-5060.** *George Washington University is an Equal Opportunity Employer.*

NMR PHYSIOLOGIST: The Department of Physiology and Biophysics at State University of New York (SUNY), Stony Brook, has an opening for a well trained physiologist who will join our teaching program, do independent research, and also establish a facility of NMR studies on isolated tissues and intact animals. The appointment could be as an assistant or associate professor. Please submit a letter of interest, curriculum vitae, and the names of five referees before 20 July 1984 to: **Chairman, Department of Physiology, SUNY, Stony Brook, Stony Brook, N.Y. 11794.** *SUNY, Stony Brook, is an Equal Opportunity/Affirmative Action Educator and Employer.* AK 123.

**NATIONAL INSTITUTE OF ARTHRITIS, DIABETES,
AND DIGESTIVE AND KIDNEY DISEASES
OFFICE OF THE DIRECTOR**

**DIRECTOR
DIVISION OF
DIGESTIVE DISEASES**

(and Associate Director for
Digestive Diseases)—Dual Position

Incumbent must be a recognized and respected leader in the field of digestive diseases related research, with experience and expertise in the development of new knowledge and new technology in digestive diseases. Responsibilities include identifying research needs and opportunities; planning, developing and implementing a high quality extramural research and research training program in the field; and conducting laboratory investigations in digestive diseases related research.

Salary Range—\$58,938 to \$66,400 per annum

Position information, SF-171 (application), and qualifications requirements may be obtained by contacting:

**Mr. Clifford Moss, Executive Secretary
Search Committee for Director,
Division of Digestive Diseases
Building 31, Room 9A34
National Institutes of Health
Bethesda, Maryland 20205
(301) 496-4231**

Applications must be postmarked no later than July 31, 1984.
AN EQUAL OPPORTUNITY EMPLOYER



**Murdoch
University**

PERTH
WESTERN AUSTRALIA

**PROFESSOR OF CLINICAL PATHOLOGY
SCHOOL OF VETERINARY STUDIES**

Applications are invited for the Chair in Clinical Pathology in the Division of Applied Veterinary Medicine. The holder of the Chair will be expected to have a sound knowledge of and experience in interpretive laboratory medicine, to facilitate the interface between Pathologists and Clinicians, to provide leadership in the teaching and service work of Clinical Pathology and in research activities in the Clinical areas of the School.

A statement about the University, the School and the responsibilities of this post, together with a copy of the conditions of appointment, are available on request.

SALARY

\$A51,006 per annum.

Conditions of appointment include superannuation, long service leave, access to outside studies programmes, payment of fares to Perth for appointee and dependent family, removal and settling-in allowances.

PROCEDURE FOR APPLICATION

There is no prescribed application form. Applicants are invited to submit a full curriculum vitae supported by an appropriate letter including the names and addresses of three referees. Applications and requests for information should be sent to:

**The Personnel Officer,
Murdoch University,
Murdoch, Western Australia, 6150**

Applications will close on 31st August 1984.

BEHAVIORAL SCIENCES

The Behavioral Sciences Department of the Armed Forces Radiobiology Research Institute (AFRRI) is seeking two behavioral scientists and one psychology technician to conduct animal research on the behavioral effects of ionizing radiation. The AFRRI is the principal radiobiology research laboratory for the Department of Defense. The Behavioral Sciences Department is responsible for research on the effects of ionizing radiation on behavior and on the interaction between chemical or pharmacological factors and the psychobiological response to radiation. The scientists are responsible for a research program utilizing experimental animal models, operant and classical conditioning, and physiological/biochemical measurement. Candidates will be expected to plan, initiate, and direct a research program and supervise scientific and technical staff comprised of military and/or civilian personnel. Desirable qualifications include a Ph.D. in experimental psychology or a related biological science, a strong publication record, and independent research experience. These permanent positions are available immediately. Salary ranges from \$30,000 to \$40,000. The technician position is to assist the principal investigator. Principal duties include animal handling, daily conduct of experiments, and data processing. Salary ranges from \$14,000 to \$22,000. To apply for either of these Civil Service positions, send application, including SF-171, curriculum vitae, and reprints of published research to: The Armed Forces Radiobiology Research Institute, Civilian Personnel Office, Bethesda, Md. 20814. Reference Announcement Number 26/84 for the scientist positions, Number 28/84 for the technician position. Direct inquiries to: Dr. Alan H. Harris, Department Chairman, or Vince Ackermann, Personnel, telephone: 202-295-1426. An Equal Opportunity Employer.

**MANAGER
BIOTECHNOLOGY RESEARCH**

Stauffer Chemical Company, a Fortune 500 diversified chemical company, seeks a Scientist/Manager to direct the efforts of 70 scientific and support personnel in Biotechnology and Food Ingredients research.

The successful candidate will have:

- **Ph.D in Molecular Biology, Biochemistry, or Biotechnology**
- **A record of significant accomplishments**
- **Ability to lead technical staff and programs**
- **5-10 years relevant managerial experience**
- **Technical and managerial creativeness**
- **A working knowledge of some of the following:
Recombinant DNA/Molecular Biology, Food Technology,
Fermentation and Applied Microbiology, Crop Protection
Chemicals and Seeds**

This position is located at the de Guigne Technical Center in Richmond, California and reports to the Vice President-Research. It offers a competitive salary level, visibility and the opportunity for growth and recognition.

Write in confidence to:



**Dr. R.I. Mateles
Vice President-Research
Stauffer Chemical Company
Westport, Conn. 06881**

An Equal Opportunity Employer M/F

POSITIONS OPEN

IMMUNOLOGIST

A newly formed Department of Immunology invites applications for a tenure-track faculty position at the assistant or associate professor level. Candidates must possess a doctorate degree and have at least 2 years of postdoctoral training.

Applicants should be able to establish an independent, funded research program directed toward cellular and/or molecular immunology and be willing to participate in graduate-level teaching. Please send curriculum vitae, summary of current research interests, and the names of three persons who can be contacted for reference to: Margaret L. Kripke, Ph.D., Department of Immunology, University of Texas System Cancer Center, M. D. Anderson Hospital and Tumor Institute, Box 178, 6723 Bertner Avenue, Houston, Texas 77030. An Affirmative Action/Equal Opportunity Employer.

MANAGER OF TECHNICAL SERVICES

We have an immediate opening for a manager of technical services. The JPA Company is an importer and distributor of horticultural products throughout North America. This position will support our marketing through implementing product testing and quality control. Prefer a master's degree in technical area.

If you enjoy working with growers and researchers, then this is the job for you. We offer a competitive salary and benefit package. Please send your résumé, to include salary history, to:

Dennis Johnson
Personnel Director
JPA Company
P.O. Box 335
West Chicago, Ill. 60185

Equal Opportunity Employer, M/F

MEDICAL DIRECTOR ALCOHOL TREATMENT PROGRAM

Duke University Medical Center, Department of Psychiatry, and Durham County Mental Health Center (DCMHC) offer a joint position for an experienced psychiatrist. The successful applicant will be appointed medical director of the DCMHC Alcoholism Treatment Center (half-time) and director of the Duke Department of Psychiatry alcoholism program. DCMHC facility is located close to Duke Hospital and provides an excellent base for clinical and academic activity. Core departmental resources at Duke are available for data management, clinical research admissions, and research laboratory support. Applicant must have clinical skills in alcohol treatment and must be able to provide planning and supervision to a comprehensive alcohol treatment program. Qualified candidates with a strong academic and research orientation will be preferred. Address inquiries to: Daniel Blazer, M.D., Head, Division of Community and Social Psychiatry, Duke University Medical Center Box, P.O. Box 3173, Durham, North Carolina 27710. Duke University and Durham County Mental Health Center are Equal Opportunity/Affirmative Action Employers.

PHYSICAL OCEANOGRAPHERS

The Marine Life Research Group of the Scripps Institution of Oceanography invites physical oceanographers to apply for a research position, the research equivalent of the professorial series (Ph.D. or equivalent required). To study the circulation of the California Current and Eastern North Pacific. Support is offered for 2 years, after which the candidate may be expected to generate all or part of continuing support.

Salary range: \$25,100 to \$46,900. Level of appointment to be based on qualifications. Position start date: from 1 September 1984.

Please send résumé and at least three references to: Director, Marine Life Research Group, A-030, Scripps Institution of Oceanography, La Jolla, California 92093, by 1 August 1984.

The University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer.

PHYSIOLOGICAL OPTICS—Research associate. Ph.D. in physiological optics, psychology with emphasis in vision, or visual science with experience in psychophysical testing desired. Salary: \$17,400 to \$25,080. Send curriculum vitae, undergraduate transcripts, and three reference names to: Dr. Ewen King-Smith, The Ohio State University, College of Optometry, 338 West 10 Avenue, Columbus, Ohio 43210. Ohio State University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

MOLECULAR BIOLOGIST with the Biological Control of Insects Laboratory of the Agricultural Research Service (ARS), U.S. Department of Agriculture (USDA), Columbia, Missouri. Career Federal Service. Candidate will develop independent research program on the molecular biology and genetics of pathogenic microorganisms (for example, insect viruses: baculoviruses) of insect pests. Postdoctoral experience desirable. Salary: GS/M-11/12/13 (\$25,489 to \$47,226), based on qualifications and experience. For applications, contact: Jerrie Brooks, USDA-ARS-B91, Personnel Operations Branch, Building 003, Room 318H, BARC-West, Beltsville, Maryland 20705. Telephone: 301-344-4567. Candidates must be U.S. citizens. An Equal Opportunity Employer.

NEUROBIOLOGY RESEARCH ASSOCIATE

An opening for a postdoctoral research associate is immediately available in the laboratory of Dr. Robert J. O'Connell to study olfactory physiology in vertebrates. The planned research involves a multidisciplinary approach to the anatomical, behavioral, chemical, electrophysiological, and hormonal substrates of olfactory communication in several species. Experience in one or more of these areas is a requisite. Send résumé, statement of research interests, and names of three references to: Dr. Robert J. O'Connell, c/o Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, Mass. 01545.

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

STOCKTON STATE COLLEGE

OCEANOGRAPHY—Stockton State College seeks a temporary instructor or assistant professor of oceanography for fall 1984, with possible second term extension. Qualifications include a Ph.D., or almost completed Ph.D., in physical or chemical oceanography. Duties include teaching introductory and advanced oceanography courses. Location is on a Barrier Island coast; active faculty. Women and minorities are encouraged. Rank: instructor, M.S., \$18,765; assistant professor, Ph.D., \$20,737 to \$22,811 for 10 months. Screening now. Please send résumé and letter of application to: Chairperson, Natural Sciences and Mathematics, Stockton State College, Pomona, N.J. 08240. An Equal Opportunity/Affirmative Action Employer.

The Medical University of South Carolina is searching for a **PARASITOLOGIST/MICROBIOLOGIST/IMMUNOLOGIST** with primary interest in invertebrate hosts at the assistant or associate professor level. The successful candidate will be assigned to the Marine Biomedical Research Program and will serve as the assistant director. This is primarily a research position although there are some administrative duties. Persons with successful extramural support experience will be given preference. Send curriculum vitae and arrange to have three letters of recommendation sent to: Dr. Thomas C. Cheng, Director, Marine Biomedical Research Program, Medical University of South Carolina, P.O. Box 12559 (Fort Johnson), Charleston, S.C. 29412. Telephone: 803-795-7490. The Medical University is an Equal Opportunity Employer.

POSITRON EMISSION TOMOGRAPHY (PET). Unusual career opportunity for academically oriented physicist with research interest in PET instrumentation and image reconstruction/quantitation. Excellent computing and image processing facilities, full-time hardware and software support. Background in medical physics helpful but not essential. Competitive salary, excellent benefits. For more information, write to: D. A. Rottenberg, M.D., Department of Neurology, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, N.Y. 10021, or telephone: 212-794-7045. Equal Opportunity Employer.

POSTDOCTORAL POSITION in symbiotic nitrogen fixation available immediately. Research project involves the identification of proteins and enzymes that may be synthesized in the development of ineffective legume root nodules. Ph.D. in plant physiology, biochemistry, microbiology, or related field is required. Research experience in nitrogen fixation preferred but not required. The appointment can be for 2 years with mutual consent. Send curriculum vitae and three letters of reference to: Dr. Peter P. Wong, Division of Biology, Kansas State University, Manhattan, Kans. 66506; telephone: 913-532-6651. Kansas State University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

PLANT OR TREE PHYSIOLOGIST. The Botany Department at the University of Vermont will have a nontenure-track position of research assistant or associate professor available in September 1984. Candidates must have the Ph.D. degree in plant or tree physiology or a subdiscipline of botany applicable to maple research; must have demonstrated a successful pattern of funding in order to sustain the position; and must have had experience and ability to deal with people and coordinate activities. The successful candidate will maintain and support ongoing basic and applied sugar maple research in areas of physiology, microbiology, biochemistry, and maple sap and syrup production, and will coordinate an extension education effort. The facilities consist of an on-campus laboratory and a field station. Send curriculum vitae and have transcripts and three letters of recommendation sent to: Dr. Hubert W. Vogelmann, Chairman, Botany Department, Marsh Life Science Building, University of Vermont, Burlington, Vermont 05405. Applications will be accepted until 15 September 1984, or extended until the position is filled. The University of Vermont is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL BIOCHEMIST OR PLANT PHYSIOLOGIST. To study the basic properties of glutathione S-transferase enzymes in higher plants. Candidates with a background in enzymology are preferred. The position is at the Metabolism and Radiation Research Laboratory, U.S. Department of Agriculture, ARS, Fargo, North Dakota. The laboratory employs 40 scientists and is on the campus of North Dakota State University. The position is for 1 year with probability of renewal for a second year. Salary is \$25,366 per year. Ph.D. or equivalent training and U.S. citizenship required. Send curriculum vitae to: Dr. Gerald L. Lamoureux, Metabolism and Radiation Research Laboratory, State University Station, Fargo, N.D. 58102. Telephone: 701-237-5771, extension 5438. Announcement number: ARS-PD-NCR-0384-005; closing date: 1 August 1984. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW

Merck, Sharp and Dohme Research Laboratories is seeking a postdoctoral fellow to study cell surface-extracellular matrix interactions with immunoelectron microscopy, starting 1 September 1984. This position will be in the Department of Experimental Pathology under the direction of Dr. Irwin Singer.

The successful candidate must have a Ph.D. in electron microscopy and scientists with additional experience in the biochemistry of extracellular matrix, cytoskeleton, or cell membrane will be given preference.

Salary range is \$22,000 to \$23,500 per year. Send résumé to:

S. R. Jenkins
Merck & Company, Inc.
P.O. Box 2000
Rahway, N.J. 07065

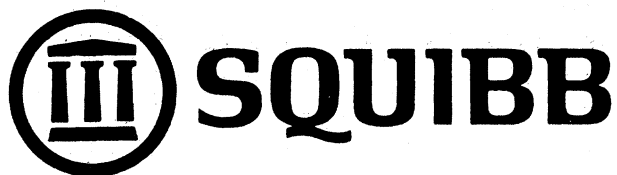
An Equal Opportunity Employer

POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE. Position immediately available in a group interested in the molecular basis of X chromosome inactivation. Studies utilize protein chemistry, somatic cell genetics, immunologic and recombinant DNA methods. Biochemistry and/or molecular biology experience essential. Reply to: T. Mohandas or L. J. Shapiro, Departments of Pediatrics and Biological Chemistry, Harbor-UCLA Medical Center, 1124 West Carson, Torrance, Calif. 90502.

POSTDOCTORAL FELLOW

Research position available immediately to study the elimination of tumor cells from bone marrow using immunomagnetic methods. Recent Ph.D. in immunology, cell biology, or related areas. Please send résumé and the names and telephone numbers of three references by 1 August 1984 to: Dr. Samuel Gross, Department of Pediatrics, University of Florida, Box J-296 JHMHC, Gainesville, Florida 32610; telephone: 904-392-4470.

POSTDOCTORAL POSITION in insect physiology and biochemistry to study the hormonal regulation and function of proteins in insect diapause. Experience with techniques used to characterize proteins is desirable. Available immediately for 21 months; \$17,000 per annum. Send résumé and two letters of reference to: Dr. G. M. Chippendale, Department of Entomology, 1-87 Agriculture Building, University of Missouri, Columbia, Mo. 65211; telephone: 314-882-8346. An Equal Opportunity/Affirmative Action Employer.



R&D DIRECTOR Japan

Squibb, a major international pharmaceutical company, currently is seeking candidates for the position of R&D Director in its Japanese affiliate with offices in Tokyo. The Director must provide strong intellectual and administrative leadership to a staff of about 50 scientists who have responsibility for the registration in Japan of new human ethical and animal health products. In meeting these responsibilities, the department monitors Japanese regulatory requirements, oversees preclinical and clinical studies conducted in Japan, and prepare the necessary registration documents. Throughout this process, close liaison is maintained with the central research laboratories in the United States.

The successful candidate will have at least 15 years experience in the health care field after receiving an MD or PhD degree (or equivalent) and must be fluent in both Japanese and English.

Interested candidates should send their current resume directly to: **Mrs. Anne V. Corey, International Personnel Director, Squibb Corporation, P.O. Box 4000, Princeton, NJ 08540.** An equal opportunity employer.

Atherosclerosis Pharmacology

Senior Research Scientist

Continued expansion at the Warner-Lambert/Parke-Davis Pharmaceutical Research Division has generated an immediate opportunity for an experienced lipoprotein biochemist with expertise at the arterial wall level. This position is located in the Atherosclerosis Section of Cardiovascular Pharmacology.

The successful candidate will have:

- Ph.D. or equivalent with up to three years postdoctoral experience or highly competent/productive M.S. with publications to prove successful independent research.
- Expertise is desired in lipoprotein uptake and degradation studies, evaluation of atherosclerosis in animal models and in methodology for cultured arterial cells.
- Excellent communication skills.

Our research facilities adjacent to the University of Michigan campus in Ann Arbor are among the finest and best equipped in the world and are devoted exclusively to the discovery and development of new drugs. We offer excellent compensation, benefits and work environment. Send resume with salary requirements and references in confidence to: Ms. D. Love, Human Resources Supervisor, Dept. 2184, WARNER-LAMBERT/PARKE-DAVIS, Pharmaceutical Research Division, 2800 Plymouth Road, Ann Arbor, Michigan 48105.

An Equal Opportunity Employer M/F/H

**WARNER
LAMBERT**

Associate Commissioner for Science

Office of the Commissioner

FOOD AND DRUG ADMINISTRATION

Salary \$58,938 to \$66,000

Applications are invited for the position of Associate Commissioner for Science, Food and Drug Administration, Rockville, Maryland. The Associate Commissioner for Science serves as the principal advisor and consultant to the Commissioner on matters relating to science policy and research operations. This includes the kinds and levels of scientific research projects to be undertaken by the Agency; the establishment and maintenance of support with the outside scientific community, and the evaluation of research plans and accomplishments of the Agency's scientific units.

This position is a Senior Executive Service general position with a salary of \$58,938 to \$66,000 per annum (physicians may be eligible for a comparability allowance up to \$10,000). Candidates must have a Ph.D., M.D. or equivalent level degree in the field of natural sciences or medicine; administrative experience which includes participation in the development of organizational goals and in the planning, development, management, and evaluation of policies and programs implementing these goals; supervisory or administrative experience which demonstrates strong leadership and managerial abilities in a scientific environment; experience which indicates the ability to communicate and interact effectively with high level governmental officials, the scientific and academic communities, and national/international medical and health-related organizations; and ability to implement equal employment opportunity programs. It is desirable that candidates have national recognition as an authority in toxicology, or related biological/toxicological fields; expertise/experience in scientific research and evaluation with particular emphasis on risk assessment; and demonstrated experience which indicates the ability to direct and manage scientific and professional personnel engaged in research and testing activities.

Commissioned Officers interested in performing the duties within the Commissioned Corps may submit a resume. Commissioned Officers wishing to enter SES and all other applicants must submit an SF-171, Personal Qualifications Statement (available at all Federal Job Information Offices). All applicants should submit a supplemental statement detailing the extent to which they possess the qualifications outlined above. Failure to submit the supplemental statement may result in an applicant being given less than due credit in the rating process. **Applications should be sent to: Jeylene Wood, DIVISION OF PERSONNEL MANAGEMENT (HFA-440), Food and Drug Administration, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857. For further information contact Ms. Wood on (301) 443-3634. Applications should be received by August 14, 1984.**

The Public Health Service is an Equal Opportunity Employer.

Scientific Planner/Analyst

Lawrence Berkeley Laboratory seeks a scientific planner/analyst to develop and implement a strategic planning process that addresses the mission and research direction of the Laboratory. Responsibilities include organizing and supervising a small planning and analysis staff, performing policy analysis pertinent to the Laboratory's research mission for the Department of Energy, providing administrative and analytical support for advisory and review committees which report to the Director of the Laboratory, and assisting Laboratory senior staff in proposing and developing new, interdisciplinary research programs. The successful candidate will have broad scientific knowledge, experience in scientific research, demonstrated skill in applying the tools and techniques of strategic analysis to planning in a research organization, excellent oral and written communication skills, and a demonstrated ability to work well with scientists, engineers, and managers at all levels. Graduate degree in science or engineering required.

To apply, send two copies of resume to Lawrence Berkeley Laboratory, Employment Office 90-1042, One Cyclotron Road, Berkeley, CA 94720 by August 3, 1984. Please specify Job #A/2942. An Equal Opportunity Employer M/F/H.



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We are the U.S. arm of Imperial Chemicals Industries, PLC (London). Our Research Center in Wilmington is ICI's largest effort outside the U.K. ICI's achievements include propranolol, atenolol, clobefrate, halothane, tamoxifen, and chlorhexidine.

Ph.D. with post doctoral training and 2-4 years experience in a clinical chemistry laboratory approved by Commission on Accreditation in Clinical Chemistry. Industrial experience in a pre-clinical setting evaluating the safety of potential therapeutic agents in animals is highly desirable.

Must have bench-level experience with automated instruments such as random access, centrifugal fast and electrolyte analyzers. Will monitor the work of B.S. level biochemists, perform assays, develop new/improved diagnostic procedures and make clinical chemistry interpretations. Candidate must have supervisory experience and be able to communicate ideas; as well as write reports clearly and concisely.

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Division of ICI Americas Inc.
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POSITIONS OPEN

POSTDOCTORAL FELLOW

Two postdoctoral positions are available for research on the structure, immunology, and biological activity of protein toxins. Preference will be given to candidates with experience in one or more of the following areas: (i) the use of traditional techniques (for example, column chromatography and HPLC) for protein purification, (ii) the preparation and biological testing of antibodies, (iii) the synthesis and testing of chimeric toxins, or (iv) ligand binding studies on receptors for proteins. Applicants interested in the position should send curriculum vitae, a list of publications, and the names of three references to: **Dr. Lance L. Simpson, Department of Pharmacology, College of Physicians and Surgeons, Columbia University, 630 West 168 Street, New York, N.Y. 10032.** *Columbia University is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL FELLOW OR RESEARCH ASSOCIATE: The Research Laboratory of Saint Francis Hospital and Medical Center, a 700-bed, University of Connecticut-affiliated hospital in Hartford, Connecticut, is seeking a candidate to work on the regulation of bone formation in vitro and the purification and development of assays for bone-derived growth factors. Experience in molecular biology, biochemistry, and monoclonal antibodies preferable. Forward résumé to:

**Department of Human Resources
SAINT FRANCIS HOSPITAL
AND MEDICAL CENTER
114 Woodland Street
Hartford, Connecticut 06105**

An Equal Opportunity/Affirmative Action Employer. We hire qualified handicapped individuals.

POSTDOCTORAL FELLOWS IMAGE ANALYSIS UNIVERSITY OF GEORGIA

The Department of Botany is seeking applications for at least two postdoctoral fellowships in the area of image analysis. Starting 1 September or thereafter. Successful candidates with experience in image processing will be expected to take a leading role in identifying and developing the necessary hardware and software for the analysis of polyacrylamide gels, electron microscope images, and other materials. Collaborative arrangements with faculty interested in specific applications are also expected. The department already has considerable computer equipment and the university is embarking on a program to acquire additional biotechnology-oriented capabilities. Candidates should submit curriculum vitae, a summary of experience with image analysis technology, and a brief statement of future plans, and arrange to have three letters of recommendation sent to: **Dr. Gary Kochert, Department of Botany, University of Georgia, Athens, Georgia 30602.** *The University of Georgia is an Equal Opportunity Employer.*

POSTDOCTORAL POSITION available to study the structure, transcriptional control, and biological activity of oncogenes in normal and malignant human hematopoietic cells. Candidate should have experience in modern molecular biology techniques. Send curriculum vitae and names of three references to: **Dr. Allan Tereba, Department of Virology and Molecular Biology, St. Jude Children's Research Hospital, P.O. Box 318, Memphis, Tenn. 38101.**

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITION available immediately to examine the neural control of blood pressure in the conscious primate. Interested individual should have some experience in working with chronic animals and have an interest in primate research. NIH salary. Send curriculum vitae to: **Dr. Kurtis G. Cornish, Department of Physiology and Biophysics, University of Nebraska College of Medicine, Omaha, Neb. 68105.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION IN REPRODUCTIVE PHYSIOLOGY

Available immediately for recent Ph.D. to pursue funded studies on the regulation of steroid hormone secretion during mammalian pregnancy. Applicant should have training in isolation, purification, and quantitation of steroids in blood and other tissues and should be facile with radioimmunoassay. Salary competitive. Send curriculum vitae and names of three references to: **Dr. Gerald J. Pepe, Department of Physiology, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, Va. 23501.**

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

POSTDOCTORAL POSITION. Biochemistry and crystallization of fibrous proteins, including muscle, cell surface proteins, and fibrinogen/fibrin, in collaboration with structural group. Experience in protein biochemistry essential. Send résumé and references to: **Dr. Carolyn Cohen, Rosenstiel Basic Medical Sciences Research Center, Brandeis University, Waltham, Mass. 02254.** *An Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION AVAILABLE IMMEDIATELY to study regulation of human nerve growth factor gene expression. Background in molecular biology desirable. Send curriculum vitae and names and addresses of three references to: **Dr. Michael Young, Box J-245, JHMHC, Department of Biochemistry and Molecular Biology, University of Florida, Gainesville, Florida 32610.** *An Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION available immediately to study catecholamine regulation of endocrine functions. A strong background in either one or more of the following areas is required: catecholamine/enzyme determinations, adrenergic/dopaminergic receptors and pituitary/ovarian cell culture. Salary commensurate with experience. Submit letter of interest with curriculum vitae and names of three references to: **Dr. Nira Ben-Jonathan, Department of Physiology and Biophysics, Indiana University School of Medicine, 635 Barnhill Drive, Indianapolis, Indiana 46223.** *An Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION IN DNA REPLICATION

The project involves mammalian DNA replication in vitro using a high molecular weight calf DNA alpha polymerase purified by immunoaffinity [*Biochemistry* 23, 1895 (1984)]. Viral DNA's are being used as substrates to investigate the synthetic mechanism of the enzyme. Products are analyzed using EM and DNA sequencing. Other DNA replication proteins are being identified by their stimulation of viral DNA synthesis. New monoclonal antibodies are being made to inactivate specific polymerase subunits so that the function of each subunit can be established. Résumé to: **Dr. Robert Bambara, Department of Biochemistry, University of Rochester, Rochester, N.Y. 14642.**

POSTDOCTORAL POSITION for research on mammalian cell surface proteins involved in cell-extracellular matrix interactions. This position is in an active laboratory with interests in the biology of cell interactions, somatic cell genetics, and glycoprotein chemistry which is part of a large, dynamic medical center environment. A background of protein chemistry or molecular biology is preferred. Please submit curriculum vitae and names of two references to: **Dr. R. L. Juliano, Department of Pharmacology, University of Texas Medical School, P.O. Box 20708, Houston, Texas 77025.**

An Equal Opportunity Employer. Women and Minorities are encouraged to apply.

POSTDOCTORAL POSITION in the area of molecular biology to study the regulation of mammalian liver cytochrome P-450 heme metabolism. Experience in purification, enzymology, biochemistry, or related biological science desired. Salary range: \$18,000 to \$20,000 depending on capability and past experience; 1-year appointment available now with possibility of 2- to 3-year extensions. Send curriculum vitae, brief description of research interest, and names of two references to: **N. G. Ibrahim, Ph.D., Department of Medicine, New York Medical College, Valhalla, N.Y. 10595.**

POSTDOCTORAL POSITIONS available in molecular biology. Projects center on the mechanisms of mutagenesis and DNA repair in bacterial and mammalian cells. Approaches utilize mutational spectra and involve the cloning and sequencing of mammalian and bacterial genes. Interests also include how mutations alter gene expression and molecular evolution. Send résumé and the names of three references to: **Dr. B. W. Glickman, Biology Department, York University, Toronto, Ontario, Canada M3J 1P3.**

POSTDOCTORAL POSITIONS available immediately to investigate (i) the immunobiology of metastasis or (ii) the biochemistry of UV-light-induced tumor antigens. Applicants should have experience in protein chemistry and familiarity with techniques in cellular immunology. Send curriculum vitae and two references to: **Stephen LeGrue, Ph.D., Department of Immunology, M. D. Anderson Hospital, HMB Box 178, Houston, Texas 77030.** *An Affirmative Action/Equal Opportunity Employer.*



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Health and Welfare Canada
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Ottawa, Ontario

We require experienced senior toxicologists to fill several positions in the Toxicological Evaluation Division. We will expect you to validate, review and evaluate reports on a range of toxicity studies on chemicals in the food supply, such as pesticides, food additives and chemical contaminants. You will become involved in the assessment of potential hazards and risks to public health. Employment in the division offers unique opportunities to gain diversified toxicological advisory experience in a government setting and to have input in the extensive research program.

You require a university degree with specialization in a biological science such as toxicology, pharmacology, biochemistry, with experience in laboratory animal toxicity studies and bioassays. In addition, you need experience in reviewing and evaluating reports on toxicity studies and in conducting health hazard and risk assessments. Some positions also require additional experience in preparing recommendations based on toxicological evaluations and health hazard assessments. Language requirements vary according to the position being filled.

We offer a salary ranging from \$31,791 to \$48,935 commensurate with your qualifications and experience.

Forward your résumé and/or application form, quoting reference number S-84-31-0293-47JG-(G35), to:
J. Girling (613) 993-5331
Public Service Commission of Canada
Ottawa, Ontario K1A 0M7

Closing Date: 20 July 1984

Tout renseignement est disponible en français en s'adressant à la personne susmentionnée.

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Canada

Research Scientists

TechAmerica, a leader in the Animal Health Industry, is seeking applicants for a variety of research positions at our biological research facilities in Omaha, Nebraska and Fort Collins, Colorado.

Biologics Corporation, Omaha, Nebraska

Project Leader — Viral Vaccine Development

The successful applicant will join our interdisciplinary group working on the design of vaccines for use in the Animal Health Industry. Responsibilities will include directing the development of large-scale cell culture techniques for vaccine production and product formulation. Ph.D. degree is required.

Project Leader — Bacteriology

Individuals with a broadly based background in bacteriology are being recruited for positions in our bacterin research section. Experience in fermentation, veterinary microbiology, immunology is desirable. Ph.D. or equivalent experience required.

Project Leader — Animal Virology

Staff scientist for a position in the virology section of our research department. Demonstrated knowledge in all areas of animal virology as well as tissue culture and immunology required. Ph.D. level, relevant industrial experience is beneficial.

Research Assistant

Experienced technician with skills in cell culture, virology, and immunology is desired. B.S. or M.S. is required. Industrial experience helpful.

Syngene Products and Research, Fort Collins, Colorado

Staff Scientists — Molecular Biology

Innovative and creative individuals are sought with Ph.D. degrees and experience in recombinant DNA techniques with emphasis on expression of biologically active molecules, and/or experience with synthetic peptide chemistry.

Staff Scientists — Hybridoma Technology

Ph.D. level with experience in the development and use of monoclonal antibodies for diagnostics and immunotherapeutics. Additional background in virology and biochemistry is important and previous industrial experience is helpful.

Cell Culture Technician

B.S. or M.S. level with at least two years experience in hybridoma technology. Additional experience with ELISA or other diagnostic systems is a plus.

Diagnostics — Product Development Technicians

B.S. or M.S. level with background in immunology. Hands on capabilities with ELISA essential and industrial experience is desirable.

We are seeking self-motivated and creative people who are interested in applying their scientific skills to the development of innovative and quality products for both the Animal and Human Health Industry. Applicants should identify the position in which they are interested and include curriculum vitae, preprints or reprints, and names of three (3) references to either:

Research Director
Biologics Corporation OR
2720 N. 84th Street
Omaha, NE 68134

Research Director
Syngene Products
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**CHIEF, TOXICOLOGY BRANCH
CHEMICAL RESEARCH AND DEVELOPMENT
CENTER**

Research Division of the Chemical Research and Development Center, Aberdeen Proving Ground, Maryland, has an opening for chief of its Toxicology Branch. Duties include formulating, guiding, and managing extensive basic and applied research efforts that interface with major areas of the Center's mission. This mission involves a variety of chemical toxicological evaluations and also developmental support through a Chemical/Physiological Toxicology Section, and an Environmental Toxicology Section consisting of approximately 45 professional scientists, technicians, and administrative personnel. This position requires extensive knowledge of pharmacological and toxicological research with emphasis on evaluation of chemicals for hazard evaluation, protection, detection, and decontamination. Experience in management of research and development support, contract administration, and dealing with governmental, educational, and industrial agencies is important. Candidate applications are welcome from a variety of sources to include academia, industry, and government. Individuals with credentials that include a national scientific reputation in toxicological research or testing, membership in appropriate societies, and participation on scientific or regulatory committees are encouraged to apply. This is a Civil Service Career Conditional Appointment under the Merit Pay System at the GM-15 level with a salary range of \$50,252 to 63,652, depending upon the qualifications of the selected applicant. U.S. citizenship and the ability to obtain a security clearance are required. *All qualified applicants will receive consideration for position vacancies without regard to age, race, color, religion, sex, national origin, lawful political or other affiliations, marital status, membership or nonmembership in an employee organization, or for any handicap which does not interfere with accomplishment of position requirements.* Inquiries are to be directed to: Commander, U.S. Army Aberdeen Proving Ground, attention: STEAP-CP-R/Mrs. McClung, Aberdeen Proving Ground, Md. 21005. Telephone: 301-278-4254/5247.

**ST. JOHN'S
UNIVERSITY**

New York

Postdoctoral Fellowship available September 1, 1984 to study the effect of phorbol ester tumor promoters on transcription of vital and eukaryotic genes. Applicants should have experience in one or more of the following areas: enzyme purification and/or RNA polymerase biochemistry; *in vitro* transcription in reconstituted systems; analysis of gene structure-function relationships. Annual stipend plus fringe benefits. **Write:** Dr. T. Carter, Department of Biological Sciences, St. John's University, Jamaica, N.Y. 11439.

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Employer--M/F

POSITIONS OPEN

POSTDOCTORAL POSITION available to study *in vitro* and *in vivo* polymerization of actin. *In vitro* work would include the effect of actin binding proteins on gel structure and kinetics of polymerization. *In vivo* work will relate to actin polymerization and cytoskeletal structure in response to stimuli. Send curriculum vitae and names of references to: **Dr. Carl Frieden, Department of Biochemistry, Washington University School of Medicine, St. Louis, Mo. 63110.**

An Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL POSITION available in dynamic fetal pharmacology group studying effects of prenatal drug exposure on development of sleep-wake behavior using the fetal lamb model. Candidates with a strong background in pharmacology, physiology, or biomedical engineering preferred. Position available 1 September 1984. Send curriculum vitae, abstract of thesis, and names of three references to: **Hazel H. Szeto, M.D., Ph.D., Department of Pharmacology, Cornell University Medical College, 1300 York Avenue, New York, N.Y. 10021.**

POSTDOCTORAL POSITIONS available immediately with:

1) **Dr. Ross S. Feldberg.** The fellow will study the biochemistry and expression of a damage-specific DNA binding protein from human cells. This work will involve the use of recombinant DNA techniques to clone the gene for this protein.

2) **Dr. David E. Cochrane.** The fellow will use biochemical, pharmacological, and physiological techniques to examine the effect of vasoactive peptides on mast cell function.

Send curriculum vitae and names of two references to the above faculty members at: **The Department of Biology, Tufts University, Medford, Mass. 02155.**

POSTDOCTORAL POSITIONS IN HUMAN MOLECULAR GENETICS. Available 1 July 1984 to study the evaluation and regulation of expression of globin and actin gene families in human and primate cells. Strong background in recombinant DNA technology, DNA transfection, and somatic cell cultures desired. Send curriculum vitae and three letters of recommendation to: **Dr. James Shen, Department of Genetics, University of California, Davis, California 95616.**

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POSTDOCTORAL POSITION

Structural studies of scrapie prion proteins. Purified prion proteins in aggregates are available for high resolution electron microscopic analysis as well as for conventional x-ray diffraction analysis of ordered assays. Candidates should be U.S. citizens or permanent residents, committed to a research career and hold a Ph.D. degree. Experience in ultrastructure techniques and x-ray diffraction is required. Work will be under the joint direction of Dr. Stanley Prusiner and Dr. Robert Fletterick. Appointments, beginning immediately, are for 3 years with a salary ranging from \$14,040 to \$17,892. Send curriculum vitae and three letters of reference to: **Dr. Stanley Prusiner, Department of Neurology, HSE 781, University of California, San Francisco, Calif. 94143. The University of California is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE. Synthesis and study of competitive inhibitors of phospholipase A₂ by both biochemical and crystallographic methods. Salary: \$18,000 to \$22,000, depending on qualifications. Write or telephone: **Paul B. Sigler, Department of Biochemistry and Molecular Biology, The University of Chicago, 920 East 58 Street, Chicago, Ill. 60637. Telephone 312-962-1087.**

POSTDOCTORAL RESEARCH ASSOCIATE. Crystallographic and biochemical study of protein/nucleic acid interactions including *trp* repressor and transfer RNA synthetase complexes. Salary: \$18,000 to \$20,000, depending on qualifications. Write or telephone: **Paul B. Sigler, Department of Biochemistry and Molecular Biology, The University of Chicago, 920 East 58 Street, Chicago, Ill. 60637. Telephone 312-962-1087.**

POSTDOCTORAL RESEARCH ASSOCIATE. Crystallographic study of phospholipase A₂ and presynaptic neurotoxins and related complexes. Salary: \$18,000 to \$22,000, depending on qualifications. Write or telephone: **Paul B. Sigler, Department of Biochemistry and Molecular Biology, The University of Chicago, 920 East 58 Street, Chicago, Ill. 60637. Telephone: 312-962-1087.**

**CSIRO
AUSTRALIA**

**RESEARCH SCIENTIST/SENIOR RESEARCH SCIENTIST
\$A25,342 TO \$A37,274
DIVISION OF GROUNDWATER RESEARCH
FLOREAT PARK, W.A.**

CSIRO conducts scientific and technological research in laboratories located throughout Australia and employs about 7500 staff, of whom some 2900 are professional scientists. The organization's research activities are grouped into five Institutes: Animal and Food Sciences, Biological Resources, Energy and Earth Resources, Industrial Technology, and Physical Sciences. The CSIRO Division of Groundwater Research is a member of the Institute of Energy and Earth Resources.

FIELD: Remote Sensing.

GENERAL: The CSIRO Division of Groundwater Research is located in Perth and has a staff of about 70, including 20 research scientists. The objective of the division is to investigate physical and chemical processes affecting the quality and quantity of groundwater, including natural interactions between groundwater, surface water, soils, and rocks and the effects of man-made stresses such as agriculture, mining, waste disposal, pumpage, artificial recharge, and so forth.

The remote sensing group is involved in research into the spectral, thermal, and microwave properties of terrain materials relevant to groundwater resources and salinity, and in applying an understanding of these properties to the design and development of techniques and instruments for mapping and monitoring. The group has an HP-1000 minicomputer, with image processing and film writing equipment, digitising and plotting facilities, and a suite of software for image processing, enhancement, and merging of images and ancillary data and equipment for measuring reflectance spectra of soils, rocks and vegetation.

DUTIES: To undertake research and development in remote sensing techniques and instruments with particular reference to applications relevant to groundwater and salinity.

QUALIFICATIONS: A Ph.D. degree or equivalent qualifications in a physical science with expertise in spectroscopy. Applicants should have experience with image processing and be able to design and develop relevant software. Several years of postdoctoral research experience is desirable.

TENURE: Indefinite. However, applications will be considered from scientists interested in a term appointment. Australian Government superannuation benefits are available.

APPLICATIONS: Stating full personal and professional details, the names of at least two referees, and quoting reference number A3334, should be directed to:

**The Chief
CSIRO Division of Groundwater Research
Private Bag PO
Wembley, W.A. 6015
Australia**

By 3 August 1984.

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THE UNIVERSITY OF ASTON IN BIRMINGHAM FACULTY OF LIFE AND HEALTH SCIENCES

Applications are invited for the following appointments which have been awarded by the University Grants Committee as part of its "new blood" initiative.

DEPARTMENT OF OPHTHALMIC OPTICS "NEW BLOOD" LECTURESHIP (REFERENCE: 605/95)

A vision scientist is required to join a multidisciplinary team of researchers in the Clinical Neurophysiology Unit. The appointee will work on theoretical, physiological, and pathological aspects of eye movements and will also contribute to the Undergraduate Honours Degree Course in Ophthalmic Optics.

The department is seeking a person of exceptional promise. The ideal candidate will have a record of significant publications and the ability to work in a creative group of colleagues on research, teaching, and the development of new techniques for clinical investigation.

DEPARTMENT OF PHARMACY "NEW BLOOD" LECTURESHIP IN ADVANCED DRUG-DELIVERY SYSTEM DESIGN (REFERENCE: 606/95)

We seek to attract a person of exceptional promise at present working in any of the basic or pharmaceutical sciences and motivated to make an original contribution within the area of advanced drug-delivery system design.

The successful candidate will be expected to collaborate with members of the Drug Development Research Group and to initiate new research projects on the design of drug-delivery systems appropriate for the novel molecules and therapeutic strategies engendered by recent advances in molecular biology and genetic technology.

The department proposes to coordinate its research activities within a Research Institute framework and concentrate its efforts in innovative and commercially relevant projects. The annual recurrent research budget of the department from external sources is in excess of £600,000 and considerable resources will be mobilised to support the new post.

The appointments will be for a period of 3 years initially, with the possibility of renewal or subsequent transfer to a continuing appointment. Initial salary will be within and up to the maximum of the range £7,190 to £14,125 per annum.

Application forms and further particulars may be obtained from: The Staff Officer (quoting the appropriate reference number), University of Aston, Birmingham, Gosta Green, Birmingham B4 7ET England. Telephone: 021 359 3611, extension 4564. Closing date for the receipt of applications is 27 July 1984.

CSIRO

AUSTRALIA

RESEARCH FELLOW

\$A25,342 TO \$A37,274

DIVISION OF PLANT INDUSTRY
CANBERRA, ACT

CSIRO conducts scientific and technological research in laboratories located throughout Australia and employs about 7500 staff, of whom some 2900 are professional scientists. The organization's research activities are grouped into five Institutes: Animal and Food Sciences, Biological Resources, Energy and Earth Resources, Industrial Technology, and Physical Sciences. The CSIRO Division of Plant Industry is a member of the Institute of Biological Resources.

FIELD: Plant Transformation.

GENERAL: The Division of Plant Industry conducts research on problems fundamental to plant biology and agricultural production. Prominent among this research are programs in plant molecular biology. A research fellow is sought to join the group working on plant transformation which is using maize and the alcohol dehydrogenase genes as a model system. In addition transposable elements are being tested as vectors. The appointee would be expected to participate in this work.

DUTIES: Undertake collaborative research in a program aimed at optimizing DNA uptake by plants, initially concentrating on uptake via pollen.

QUALIFICATIONS: A Ph.D. degree or equivalent qualifications. Preference will be given to applicants with previous research experience or training in pollen biology.

TENURE: A term of 3 years. Australian Government superannuation benefits are available.

APPLICATIONS: Stating full personal and professional details, the names of at least two referees, and quoting reference number M9039, should be directed to:

The Chief
CSIRO Division of Plant Industry
G.P.O. Box 1600
Canberra, ACT 2601
Australia

By 3 August 1984.

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HERE

POSITIONS OPEN

POSTDOCTORAL POSITION—STARVATION PROTEINS

Available immediately to study proteins that bacteria synthesize at the onset of starvation and that seem to prolong longevity of the starvation state. Background in physiology and genetics desirable. Send curriculum vitae and names of three references to: **Dr. A. Matin, Department of Medical Microbiology, Sherman Fairchild Science Building, Stanford University School of Medicine, Stanford, California 94305.**

POSTDOCTORAL OR RESEARCH ASSOCIATE POSITION available for an individual to join a group pursuing molecular aspects of bovine rotavirus, coronavirus, and herpesviruses. Experience in some of the following areas is necessary: monoclonal antibodies, biochemistry, molecular virology, gene mapping, sequencing, cloning, or gene expression in eukaryotic or prokaryotic systems. Opportunity for industrial, academic, and government interaction with a possibility of permanent employment. Salary: \$21,000.

Send résumé and list of three references to:

Dr. L. A. Bahiuk
Department of Veterinary Microbiology
University of Saskatchewan
Saskatoon, Saskatchewan, Canada S7N 0W0
Telephone: 306-343-5536

POSTDOCTORAL RESEARCH ASSOCIATES

Applications are invited for two positions, available immediately with the U.S. Department of Agriculture. Both positions are 1-year appointments with possible extension for a second year. Salaries are \$25,366 a year. Candidates must have a Ph.D. and must be U.S. citizens.

1) **Molecular Biologist—Microbiologist:** The proposed research involves the study of viral gene expression and identification of immunogenic viral proteins for the purpose of developing recombinant DNA vaccines for poultry diseases. Prior experience with molecular biology and recombinant DNA technology is desirable. (Announcement: ARS-PD-NCR-384-003.)

2) **Immunologist:** To conduct research on isolation characterization and role of avian lymphokines. Also collaborate in a team research effort on immunology of neoplastic diseases of chickens. Prior experience in cellular immunology is desirable. (Announcement: ARS-PD-NCR-384-004.)

The host laboratory has well-established molecular biology and avian immunology units. Send curriculum vitae and the names of three references to: **Dr. Robert Silva (microbiologist) or Dr. J. M. Sharma (immunologist), U.S. Department of Agriculture, Agricultural Research Service, Regional Poultry Research Laboratory, 3606 East Mount Hope Road, East Lansing, Mich. 48823.** Application deadline: 1 August 1984. *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL RESEARCH POSITIONS: Associate positions are available to work on various aspects of the biochemistry and molecular biology of adrenergic receptors, their mechanisms of action and regulation. Candidates with a strong background in biochemistry, molecular biology, or biochemical pharmacology are preferred. Send résumé and three letters of recommendation to:

Dr. Marc G. Caron and
Dr. Robert J. Lefkowitz
Box 3287, Department of Medicine
Duke University Medical Center
Durham, N.C. 27710

PROFESSOR AND HEAD. Department of Plant Pathology, Oklahoma State University. Candidates must have an earned doctorate, scientific experience beyond doctorate, evidence of leadership and administrative ability in plant pathology or a related discipline. This individual will assume the administrative and leadership responsibilities in directing departmental research, teaching, and extension programs. Closing date for applications is 15 September 1984. Send application, current curriculum vitae, and three letters of reference to:

Dr. L. L. Singleton
Chair, Search Committee
Department of Plant Pathology
Oklahoma State University
Stillwater, Okla. 74078

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

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE.

Available immediately to participate in established program involved in development of monoclonal antibodies to plant viruses. Research will include studies of plant virus antigenic structures and utility of monoclonal antibodies in virus identification. Salary support available maximum of 2 years. Send curriculum vitae, transcripts, and names of three references to: **Dr. John H. Hill, Department of Plant Pathology, Iowa State University, Ames, Iowa 50011.** *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL RESEARCH ASSOCIATE/RESEARCH SCIENTIST POSITION to join molecular virology research program. Current studies concern development of genetic methods to study regulation of immunity and assembly of enveloped viruses. Experience with recombinant DNA and sequencing technology preferred. Send curriculum vitae and names and addresses of three references to: **Dr. Jack Maniloff, Department of Microbiology, University of Rochester, Medical Center, Rochester, N.Y. 14642.**

UNIVERSITY OF QUEENSLAND

PROFESSOR OF ORGANIC CHEMISTRY. Applications are invited for the chair of organic chemistry. Applicants should be able to present evidence of substantial research achievement in the field of organic chemistry. The successful applicant will be expected to demonstrate and encourage excellence in research, and will be given responsibilities by the head of the Chemistry Department for undergraduate and postgraduate teaching in the organic section of the department.

Salary per annum: A\$51,006. Closing date: 31 July 1984.

Please supply names of three referees. Reference 22084.

LECTURER/SENIOR LECTURER IN ZOOLOGY (tenurable). Higher degree in biology and demonstrated expertise and teaching experience in biostatistics required. Teaching and research experience in ecology or animal behaviour desirable.

Closing date: 31 August 1984. Reference 20384.

Salaries per annum: senior lecturer: A\$32,677 to A\$38,085; lecturer: A\$24,353 to A\$31,994.

Additional information and application forms are available from the staff officer. Applications to: **The Staff Officer, University of Queensland, St. Lucia, 4067, Queensland, Australia.**

PROFESSOR OF BIOSTATISTICS HARVARD SCHOOL OF PUBLIC HEALTH

This position is to lead and enlarge the Department of Biostatistics current research and teaching program in statistics and the environment. Candidates should have an outstanding research record in biostatistics and an interest in problems of the environment and health. Candidates should have made significant contributions to statistical methodology. Strong teaching credentials are essential.

Applications from qualified minority and female candidates are particularly encouraged.

Candidates should send curriculum vitae, statement of current and future interests, and the names of at least three individuals who would be willing to respond to a request for evaluation to:

Professor Donald F. Hornig
Chairman, Search Committee
Harvard School of Public Health
665 Huntington Avenue, Room 1308
Boston, Massachusetts 02115

PROGRAM MANAGER ENVIRONMENTAL TOXICS PROGRAM

The Connecticut Department of Health Services seeks an individual with experience in environmental epidemiology and toxicology, preferably with an M.D. or Ph.D., to head a program of risk assessment for toxic substances. Supervisory experience is required. Affiliations with major universities and medical centers can be arranged. Salary is competitive and negotiable. Send résumé to:

Personnel Administrator
Connecticut State Department of Health Services
150 Washington Street
Hartford, Connecticut 06106
An Affirmative Action Employer

POSITIONS OPEN

PROTEIN CHEMIST

The W. Alton Jones Cell Science Center invites applications for the position of head of the protein chemistry laboratory. The candidates should be willing to collaborate closely with the recombinant DNA laboratory and with several tissue culture laboratories that are engaged in the isolation, characterization, and modification of bioeffectors produced by various differentiated cell types. Expertise in modern microtechniques of protein sequencing is expected. Particular consideration will be given to candidates with background in conformational studies of proteins and experience in synthetic peptide chemistry. Synthetic peptides will be used for structure-function studies in cell cultures and for raising antibodies. Salary negotiable. Applicants should send curriculum vitae and references to: **Dr. Gordon Sato, W. Alton Jones Cell Science Center, 10 Old Barn Road, Lake Placid, New York 12946.**

RESEARCH ASSOCIATE POSITION

The University of Kentucky College of Medicine has a research associate position available within the Department of Medical Microbiology and Immunology for an individual interested in the study of the interaction of macrophages and T lymphocytes. Requirements for this position are a Ph.D. and 2 years of postdoctoral experience in the field of immunology to include extensive experience in branches of viral immunology, transplantation immunology, immunotoxicology, and reproductive immunology as evidenced by publications in these areas of research. Salary is \$18,000 per year. Position available immediately. Send curriculum vitae and list of three references to: **Ms. Tillie Moore, Commonwealth of Kentucky Bureau for Manpower Services, Kentucky Department for Human Resources, 300 South Upper, Lexington, Kentucky 40503.**

The University of Kentucky is an Equal Opportunity Employer, F/M.

RESEARCH ASSOCIATE

The Academy of Natural Sciences of Philadelphia has a position for a person interested in researching literature and discussing the issues with knowledgeable people for a major new environmental study. Qualifications: Ph.D. or equivalent through experience. Must have basic training in biology and chemistry; training and/or experience in dealing with policy issues. Good oral and written communication skills required. Salary commensurate with experience. Please submit inquiries and curriculum vitae to: **Ruth Patrick, Ph.D., Senior Curator of Limnology, Academy of Natural Science, 19th and Parkway, Philadelphia, Pa. 19103.** *An Equal Opportunity Employer.*

RESEARCH COORDINATOR. Ph.D. in biochemistry or related areas to provide day-to-day guidance to a research group composed of postdoctoral fellows, graduate students, and technicians working on enzymology and molecular biology related to lipids and other natural products, under the direction of P. E. Kolattukudy. Send, by 15 August 1984, complete curriculum vitae and references to: **Director, Institute of Biological Chemistry, Washington State University, Pullman, Wash. 99164-6340.** *An Affirmative Action/Equal Opportunity Employer.*

SUPERVISOR/BIOMEDICAL PHOTOGRAPHY AND ILLUSTRATION West Virginia University Medical Center

Position is responsible for developing and implementing goals and operational procedures for the Biomedical Photography and Illustration Unit in order to provide photographic and illustrative materials for educational, research, training, scientific, informational, or related purposes. Supervises a six-person unit of photography and graphic arts specialists. Applicants should have approximately 8 years of work experience in biomedical photography, some of which must have included supervisory responsibilities. Bachelor's degree in photography, fine arts, a biological science, or related field is preferred. Must be a certified biomedical photographer or be eligible for and enrolled in the certification exam.

Send résumé and salary history by 31 July 1984 to:

Victoria Adams
Personnel Officer
Medical Center
1207 University Hospital
Morgantown, W. Va. 26506
An Equal Opportunity/Affirmative Action Employer, M/F

IMMUNOLOGIST

The Southern Illinois University School of Medicine and Memorial Medical Center are seeking a well qualified immunologist to direct a renal transplant cellular-immunology hospital based laboratory. The successful candidate will have in addition to laboratory direction, ample opportunities for collaboration and research, medical and graduate student teaching and clinical service. A joint appointment as Director of The Renal Transplant Laboratory and an academic appointment in the School of Medicine at the appropriate rank is anticipated. This position requires a Ph.D. or equivalent with at least 4 years post-doctoral experience in cellular immunology and histocompatibility, and previous laboratory management experience. Attractive salary and benefits are offered. Reply with curriculum vitae and the names of three references to: **A.G. Birtch, M.D., Section of Transplantation, Department of Surgery, Southern Illinois University School of Medicine, P.O. Box 3926, Springfield, Illinois, 62708.**

We are an equal opportunity employer m/f.

MOLECULAR BIOLOGISTS

Bethesda Research Laboratories is initiating a program to develop new diagnostic tests for infectious diseases. Staff scientists and technical support positions are now available to BS, MS, and Ph.D. applicants with the following skills:

- Molecular cloning methods in bacteria and/or eukaryotic cells
- Molecular characterization of DNA and RNA
- Immunochemistry, immunodiagnostics and cell culture methods

BRL offers competitive salaries and benefits. Scientists seeking to apply their research and development experience to the diagnosis of clinical disorders should address their resume to:

BRL

Mr. Wayne E. Fowler
Personnel Director
Bethesda Research Laboratories, Inc.
Box 6009, 8717 Grovemont Circle
Gaithersburg, MD 20877
(A suburb of Washington, D.C.)

An Equal Opportunity Employer, M/F/H

RESEARCH HEAD

Cardiovascular Diseases Research

The Upjohn Company, recognized as a worldwide leader in pharmaceutical research, is seeking applicants for the position of Cardiac Research Head in the Cardiovascular Diseases Research Unit within the Pharmaceutical Research and Development Division.

The successful candidate will lead an interdisciplinary team of scientists dedicated to the design and evaluation of novel therapeutic agents useful in treating the pathologic disorders that accompany ischemic cardiac disease. An initial responsibility will be to recruit additional doctoral scientific personnel to complement an established program in cardiac cellular electrophysiology, ionic fluxes, and arrhythmogenesis. The research head will interact with various members of the research community including senior management in the development of strategies for cardiac drug development and associated research activities. The successful candidate will have the opportunity to maintain a personal research laboratory. Collaborative research with academic institutions or other appropriate sources will be encouraged.

In addition to a Ph.D., or the equivalent in the biological sciences, applicants must possess an outstanding publication record, have demonstrated research management potential, and be well recognized as a contributor in this research field. Good leadership and communication skills, and the ability to relate to people at various organizational levels is essential.

Upjohn offers a stimulating research environment and an attractive compensation, benefits, and relocation package. **For confidential consideration, send a current c.v., list of publications, salary history, and names and addresses of references to: Gerald Potratz, Corporate Employment, The Upjohn Company, 7000 Portage Road, Kalamazoo, MI 49001.**

Upjohn

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An Equal Opportunity Employer M/F/H/V

POSITIONS OPEN

RESEARCH ASSOCIATE/POSTDOCTORAL FELLOW sought for 1 August 1984 to participate in studies on the role of insulin receptor tyrosine kinase and regulatory protein phosphorylation in insulin action. Experience preferred in the area of reconstitution of membrane proteins, cell fusion, protein chemistry, or immunologic techniques. Curriculum vitae and three references required. Salary: \$17,000 to \$20,000 per year, depending on experience. Contact: J. Avruch, Howard Hughes Medical Institute Laboratory, Diabetes Unit, Massachusetts General Hospital, Boston, Mass. 02114, or telephone: 617-726-2874.

RESEARCH PLANT GENETICIST with Cereal and Soybean Improvement Research, Agricultural Research Service (ARS) of the United States Department of Agriculture (USDA). Position located on the Iowa State University campus, Ames, Iowa. Career Federal Service. Incumbent will conduct basic research on the genetics of soybeans by utilizing techniques of molecular biology and/or plant tissue culture. Postdoctorate experience desirable. Salary: GS/M-11/12/13 (\$25,489 to \$47,226), based on qualifications and experience. Closing date for receipt of required federal application forms is 15 August 1984. For applications, contact: Jerrie Brooks, USDA-ARS-B89, Personnel Operations Branch, Building 003, Room 318-H, BARC-West, Beltsville, Maryland 20705; telephone: 301-344-4567. Candidates must be U.S. citizens. *An Equal Opportunity Employer.*

SPECTROSCOPIST

The California Institute of Technology (Caltech) is seeking an NMR spectroscopist for the NSF Southern California Regional NMR facility, beginning in August. The position involves aiding the manager in daily operation, NMR methods core research and instrumentation development, and collaborative projects with users. The facility has a Bruker WM-500 and a home built 200-MHz solids spectrometer and is staffed with student operators and electronics technicians. Ph.D. in chemistry or related discipline and research experience in NMR spectroscopy required. Must have command of theory and applications of modern NMR spectroscopy, including 2-D. Qualified applicants are encouraged to send a résumé with salary history to: **Supervisor of Employment, Position Number 229, CALTECH, Pasadena, Calif. 91125.**

STOCKROOM SUPERVISOR AND LABORATORY COORDINATOR, 10-month continuing position. Requires strong college background in chemistry and biology and ability to do some laboratory instruction, supervise undergraduate assistants, and operate joint stockroom. Send letter and résumé to: **Kenneth P. Goodrich, Dean of Faculty, Linfield College, McMinnville, Oregon 97128**, by 20 July 1984. *An Equal Opportunity/Affirmative Action Employer.*

TOXICOLOGIST

Responsibilities to include management of chronic and partial life cycle and reproductive toxicology studies of pure compounds and compound mixtures, design and construction of diluter system for pure compound test of freshwater and marine studies, conducting risk assessments of chemicals including hazardous wastes and requires M.S. in aquatic toxicology or related field and 3 years of experience or the equivalent, and knowledge of FDA, TSCA, and CPSC regulations.

ESE Environmental Science and Engineering, Inc.
P.O. Box ESE Department S84
Gainesville, Fla. 32602

An Equal Opportunity Employer

VETERINARY MEDICINE. The University of Pennsylvania is inviting applications and nominations for the **chair** of the Department of Clinical Studies (Philadelphia) in the School of Veterinary Medicine. Duties are the fostering of creative scholarship, teaching and clinical training, and leadership of the faculty not only in traditional university pursuits but also in the operation of a major urban teaching hospital. This chair offers an unexcelled opportunity for academic leadership in clinical veterinary medicine. Nominations may be informal. Applications should include a curriculum vitae and the names of three referees. Communications should be addressed by 31 August 1984 to: **Dr. D. S. Kronfeld, School of Veterinary Medicine, University of Pennsylvania, 382 West Street Road, Kennett Square, Pa. 19348.**

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

POSITIONS OPEN

SENIOR RESEARCH SCIENTIST

Merck Sharp & Dohme Research Laboratories has an immediate opening for a senior research scientist in the Recombinant DNA Laboratory Department of Synthetic Chemical Research. Candidates with experience in molecular biology are desired. Position involves recombinant DNA experiments utilizing synthetic oligonucleotides as well as other molecular biology techniques to clone and characterize genes of interest. Development of novel recombinant DNA techniques for expression of cloned genes in *Escherichia coli* and eukaryotic cells. Salary, benefits, and growth potential are excellent.

Send curriculum vitae to:

S. R. Jenkins
Merck & Company, Inc.
Rahway, N.J. 07065

An Equal Opportunity Employer

VICE PRESIDENT FOR RESEARCH AND DEAN, SCHOOL OF GRADUATE STUDIES. The Medical College of Georgia, an Equal Opportunity, Affirmative Action Employer and Educational Institution, seeks nominations and applications for the unified position of vice president for research and dean, School of Graduate Studies. Applicants must possess an earned doctorate (Ph.D. in biomedical sciences, M.D., D.D.S., or equivalent) and demonstrate ability to provide administrative leadership; accomplishments of research excellence; creativity in promotion of interdisciplinary basic and clinic research and training; ability to obtain extramural research funding; and recruitment of graduate students and research-oriented faculty.

Applications should include curriculum vitae and names of three references. Search procedures will not be closed before 1 September 1984 with the position available on or before 1 July 1985.

Applications, nominations, and information requests should be directed to: **Dr. Thomas R. Dirksen, Chairman, Search Committee, School of Dentistry, Medical College of Georgia, Augusta, Ga. 30912.**

ANNOUNCEMENT

A bank of serum specimens for women at varying risks of breast cancer has been established in the Diagnosis Branch, Division of Cancer Biology and Diagnosis, National Cancer Institute (NCI). Panels of test specimens can be secured to evaluate newly discovered biological markers for breast cancer, to verify preliminary data, and to study multiple markers for early detection of breast cancer. Sera are maintained at -70°C in 1-milliliter sealed glass vials. Requesters for test panels must document the discriminatory power of their assays. The Bank cannot support feasibility studies based on theoretical considerations, nor can it handle large population based epidemiological studies. The assays must not require more than 1 milliliter of serum for accurate determination. Requesters must agree to accept specimens under a blind code number and report the results to NCI. Some duplicates will be included in each test panel. To request a test panel, it is sufficient to write a letter addressing above points to:

Dr. I. J. Masnyk
Division of Cancer Biology and Diagnosis
National Cancer Institute
Building 31, Room 3A04
Bethesda, Md. 20205

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP IN ONCOGENE RESEARCH

Friedrich Miescher-Institut, Basel, Switzerland. Applications are invited for an internally funded position, of 3 years maximum duration, to work on the role of oncogenes in human cancer. The Institute provides outstanding facilities in a multidisciplinary basic research environment. Candidates with a background in molecular biology should write to: **Dr. Christoph Moroni, Friedrich Miescher-Institut, P.O. Box 2543, CH-4002 Basel, Switzerland.**

POSTDOCTORAL FELLOWSHIP—MOLECULAR IMMUNOLOGY. NIH training program in immunology to address mechanistic details of T cell antigen receptor mediated induction of helper T cell message generation by cloned T cells. Forward curriculum vitae plus three references to: **Dr. Thomas Edgington, Department of Immunology, Research Institute of Scripps Clinic, La Jolla, Calif. 92037.**

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP—CELLULAR IMMUNOLOGY. Analysis of cellular participants, signals, and pathways in T cell instructed monocyte/macrophage responses, using plasminogen activator biosynthesis as the index and effector. Studies will address genetic restriction, separation of T cell sets, and cloning of instructor T cells. Supported by NIH training grant in immunology. Applicants should forward curriculum vitae and three references to: **Dr. Thomas Edgington, Department of Immunology, Research Institute of Scripps Clinic, La Jolla, Calif. 92037.**

BIOMECHANICS: Postdoctoral fellowship in continuum mechanics and finite element methods to ascertain transformation between two 3D images for detection of breast cancer. Development of new and moving finite elements for changing and growing tissues. One year, CS\$17,580 to \$22,700 per year, depending on experience, with continuation possible. Send curriculum vitae and letters of reference to: **Dr. Richard Gordon and Dr. Douglas MacEwan, Radiology, University of Manitoba, 770 Bannatyne, Winnipeg, Canada R3E 0W3; telephone: 204-786-4388; or to: Dr. Harley Cohen, Acting Head, Civil Engineering, University of Manitoba, Winnipeg, Canada R3T 2N2; telephone: 204-474-9220.**

POSTDOCTORAL FELLOWSHIPS IN BIO-SOCIAL RESEARCH. The Carolina Population Center offers postdoctoral fellowships for research and training at the interface between social demography and biology. Doctoral level training in biological and/or social science aspects of population research is required. Two-year appointments are anticipated. Starting times are flexible. Applicants are invited to discuss their possible candidacy with the director of the Center. Contact: **J. Richard Udry, Director, Carolina Population Center, University of North Carolina, Chapel Hill, N.C. 27514. Telephone: 919-962-1317. An Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL FELLOWSHIPS available to study GABA transport in brain subcellular particles and the arginine pathway for glutamate and GABA formation in brain. Extensive use of standard biochemical procedures and experience in protein separation, purification, and characterization. Experience in monoclonal antibodies and in general molecular biology technology. Salary range from \$16,500 to \$20,000. Submit curriculum vitae and names of three references to: **Eugene Roberts, Ph.D., Director, Department of Neurobiochemistry, Beckman Research Institute of the City of Hope, 1450 East Duarte Road, Duarte, California 91010-0269.**

TRAINEESHIPS

POSTDOCTORAL TRAINEESHIPS IN BIOCHEMISTRY, MOLECULAR BIOLOGY, AND CELL BIOLOGY

Applications are invited for postdoctoral training in the Department of Biochemistry and Molecular Biology at The University of Texas Medical School at Houston. The primary areas of research include: Membrane transport/structure and biochemistry of cell differentiation (Julia Lever); cytochromes P450 and the enzymology of drug metabolism and carcinogen activation (Henry Strobel); structure, function, and assembly of membrane components (William Dowhan); biogenesis of membrane bound multienzyme complexes and metalloenzymes (John DeMoss); biosynthesis, structure, and function of proteins and glycoproteins (Finn Wold); development of new mass spectrometric methods for the sequence analysis of proteins (Richard Caprioli); enzymology and regulation of DNA synthesis (Charles McHenry); enzymology of DNA replication in eukaryotes (Michael Engler); control of the assembly of virus particles (Peter B. Berget); fast kinetic and nuclear magnetic resonance investigations of structure and folding of mutant proteins (Barry Nall); and molecular endocrinology and biochemistry of smooth muscle relaxation (Barbara Sanborn).

APPLICATION: Applicants can receive further information by writing to the individual with whom they are interested in working at: **The Department of Biochemistry and Molecular Biology, The University of Texas Medical School at Houston, P.O. Box 20708, Houston, Texas 77225.** Applicants should send curriculum vitae, area of research interest, and names of three references. *The University of Texas is an Equal Opportunity/Affirmative Action Employer.*

The Office of Naval Research is seeking a highly qualified individual to plan and manage a contract research program in instructional and cognitive psychology. The research sponsored is conducted principally at universities, government and industrial laboratories by leading scientists in the field. This is a Civil Service

RESEARCH PSYCHOLOGIST

position at the GM-13 (\$36,152–\$46,997), GM-14 (\$42,722–\$55,538) or GM-15 (\$50,252–\$65,327) level, depending on individual qualifications.

The responsibilities of the incumbent will include formulating, implementing and monitoring research programs in the fields of psychometrics, learning and instructional psychology, mathematical psychology, cognitive sciences, computer modeling and

simulation, and human information processing. The incumbent will define new research opportunities, communicate ONR interest to the technical community, evaluate research proposals, manage available resources, and represent the program to Navy management. An inherent job satisfaction in the position is obtained through the opportunity to have a creative and significant impact on the quality of research conducted at the national level.

Applicants must have a Ph.D. or equivalent or a minimum of four years of progressively responsible experience in research psychology with particular emphasis on human learning, information processing and cognition. All applicants must have at least one year of experience comparable in difficulty and responsibility to the next lower level in the Federal Service. Equivalent combinations of professional experience and graduate education may be acceptable.

Applications will be accepted through 8 August 1984 and must be received by that date. Applicants are requested to complete the appropriate supplemental forms. For further information and supplemental forms, please call (202) 696-4705.

Interested persons should submit a Standard Form 171, Personal Qualifications Statement (available at Federal Job Information Centers or from the address below), to:

OFFICE OF NAVAL RESEARCH Civilian Personnel Division, Code 791SC Attn: Announcement #84-31 (S)
800 North Quincy Street, Arlington, VA 22217
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U.S. PUBLIC HEALTH SERVICE EPIDEMIOLOGY TRAINING PROGRAM—1985

The U.S. Public Health Service (USPHS) invites applications for a planned extension of a training program in medical epidemiology. Up to eleven (11) persons per year, who already have an M.D., a doctorate in an allied health profession, or Ph.D. in a biomedical or behavioral science (e.g., biochemistry, psychology, etc.), or equivalent, may be accepted as Service Fellows of the USPHS (a non-tenured, junior professional classification under Civil Service) for up to a three-year period of duty. Applications received by *September 10, 1984* may be considered for service to begin between July 1, and September 1, 1985.

During the first year, each successful applicant will attend a university at government expense to study epidemiology, biostatistics, and related subjects. This course work should be creditable toward, but will not necessarily complete requirements for, a degree in public health. During the subsequent two years, individuals will work in association with senior epidemiologists in the participating USPHS agencies (Alcohol, Drug Abuse, and Mental Health Administration; Food and Drug Administration; National Center for Health Statistics; and the National Institutes of Health) primarily in research studies. A matching procedure akin to the National Internship Matching will be employed to assure that each individual is assigned to a preceptor whose area of expertise is of interest to the trainee, and consistent with his/her career plans.

Salaries will be provided according to the scale in effect for staff fellows in intramural research at ADAMHA

and NIH. The current schedule of remuneration for a physician to be recruited in 1985 is \$30,000 per annum for the first year (\$21,000 for a non-physician), with a \$2,000 increase annually for the second and third years. Educational costs for the first year and relocation expenses are provided in addition.

Basic requirements for application to the program are:

1. M.D., doctorate in an allied health profession, or Ph.D. in a biomedical or behavioral science, or equivalent, AND one year of post-doctoral training or experience (by July 1, 1985).
2. U.S. Citizenship at time of application.
3. Acceptability to an accredited university offering an M.P.H. or equivalent, or more advanced public health degree.

To obtain further program details and application forms, SEND A POSTCARD ONLY, with your PRINTED name and home mailing address to:

Robert S. Gordon, Jr., M.D., M.H.S.
Chairman, Steering Committee
NIH, Building 1, Room 238
Bethesda, Maryland 20205

PLEASE . . . DO NOT SEND letters, curriculum vitae, resumes, transcripts, reprints, etc. until you have reviewed the instructions for submission and completed the application form.

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**T-Cell
Growth
Factor**

**Pure
Active
Stable**

**Tested in
both Human
and Murine
Cell Lines**

**SDS
Polyacrylamide
Gel
Electrophoresis
(15%)**



Specific Activity:
 2×10^6 units/mg
of protein

Specifications:

Purity: 95%
(usually 99%)

Specific Activity:
 2×10^6 units/mg
of protein

Concentration:
1mg/ml

Formulation:
Aqueous solution
containing 0.2%
N-Lauroyl sarcosine

**Recommended
Media
Concentration:***

1. 20 units/ml
of RPMI 1640 for
CTLL Cells.

2. 25-100 units/ml
of culture media
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or other cell lines

The exact quantity
will need to be
determined in
each laboratory.

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optimum concen-
tration may vary.

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or human use.**

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Amgen Biologicals, 1900 Oak Terrace Lane, Thousand Oaks, California 91320-1789

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800-343-7475

In California:

805-499-5725

Detailed technical data available upon request