PERSONNEL PLACEMENT

POSITIONS WANTED

Biophysicist. Interested in structural and molecular aspects of protein-protein and protein-DNA interactions. Experience in cellular light scattering, analytical ultracentrifuge, FPLC/HPLC and conventional chromatography (protein chemistry) and plasmid manipulation, with new recombinant biophysics. Seeking a position as an associate or assistant professor. Box 97, SCIENCE.

Molecular Biologist, Ph.D./Epidemiologist, M.S. Doctorate and 2 years of postdoctoral experience in molecular oncology as well as master's degree and 7 years of experience as a chronic disease epidemiologist. Good publication record in both fields. Seeking challenging work with both fields of expertise, in public health and private sector. Washington, D.C./Baltimore area. Box 106, SCIENCE.


Novel Studies on DNA Superstructure. Recent Ph.D. desires to follow up on results of dissertation research in DNA superstructure. Preliminary evidence suggests that DNA covalently bonded to DNA may be involved in establishing developmentally regulated, independently supercoiled, DNA domain attachment sites. Box 109, SCIENCE.

Ph.D. (Physiology) 1988. Seeks immediate postdoctoral position to study carbohydrate metabolism in cultured preadipocyte 3T3 cell lines or hypothalamic-obese animals. Experienced in cell and tissue culture techniques, SDS gel electrophoresis, and Western blot. Knowledgeable in PC-based programming environments. Area of interest. Box 110, SCIENCE.

Retrovirologist, Ph.D., 1984. Extensive experience in molecular virology (DNA and RNA tumor viruses), molecular biology, and recombinant DNA technology. Current interest in structure-function studies of retroviral envelope glycoproteins using eukaryotic expression systems. Experience is excellent. Good interpersonal and communication skills. Good publication record. Seeking responsible research industrial position in midwest. Box 111, SCIENCE.

ANATOMY–PHYSIOLOGY–MICROBIOLOGY: TEMPORARY POSITION beginning fall 1988—Instructor or assistant professor to teach human anatomy, physiology and microbiology for health professions. Experience in other health sciences and general biology valuable. Ph.D. or experienced M.S. summer employment may be possible. Send curriculum vitae and three letters of recommendation to: Dr. Francis M. Thorne, Acting Head, Biology Department, Armstrong State College, 11935 Abercorn, Savannah, GA 31419–1997. Screening will begin 27 June 1988 and continue until position is filled. Armstrong State College is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PHYSICIST—Ph.D. in materials science/physics. Two years experience. Education and training should include undulator error analysis, nuclear resonance scattering and small angle scattering. Will play a major role in experimental research in materials science with emphasis on synchrotron radiation as applied to the study of electronic and structural properties of materials. Publish results in refereed journals and present them at meetings. Assist in design effort of X-ray optics, insertion device source for the 7-GeV Advanced Photon Source. Salary: $3700 per month. To: Dr. Ronald L. Hume, Vice President, Research, University of Colorado, Boulder, CO 80309. Applications for one or possibly two positions will be accepted up to 1 October 1988 or until a suitable candidate is identified. The University of Colorado is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

ANALYTICAL CHEMIST

We're looking for an analytical chemist with a strong background in soil and environmental sciences. If we hire you, you'll have experience with gas and liquid chromatography. You'll also be able to develop analytical methods to support the resolution of multi-element samples, including: microbiology, plant sciences, aquaculture, air and water quality and nutrition.

Applications include: Ph.D. in analytical chemistry or related area with 3 or more years of work experience. Some supervisory/administrative experience and an ability to carry out independent research would be of real value.

You'll be working for Planetary Design Corporation, a technology transfer company developing food and environmental projects around the world. While you'll be living in Tucson one of the nicest places you'd ever want to hang your hat. If you're interested, please send a résumé and salary requirements to:

Howard Weiss
Vice President
Planetary Design Corporation
2601 East Airport Drive
Tucson, AZ 85706

AQUATIC PATHOLOGY/TOXICOLOGY LABORATORY ASSISTANT (STAFF RESEARCH ASSISTANT) $2050 to $2200. Dr. Robert A. Scherago, Vice President and Executive Director, The Research Institute, has developed a demonstrational experience (publications or letters of reference) in preparation of embryonic and adult fish tissues for enzyme and immuno-histochemistry, cryopreservation, and electron microscopy. Experience includes freshwater and marine environmental evaluation of tissue lesions in chronic toxicity. Knowledge of topography, gross and microscopic features of liver, kidney, spleen and gut of fishes; experience in care and maintenance of fish for chronic experimentation; experience in proper handling of toxic chemicals and production of publication quality photomicrographs is essential. Knowledge of chemistry, biology, or medical technology is preferred in addition to the above morphologic training. A laboratory skills sheet is required. Apply to: The Research Institute, 243 East Fifth Avenue, Office, BT 122, Davis, CA 95616 for job number 0681 by 15 July 1988. For required application materials call: 916-752-0831. Monday to Friday, between 10 a.m. and 2 p.m. Equal Opportunity Employer.

ASSISTANT/POSTGRADUATE RESEARCH PHYSIOLOGIST, Ph.D. in biochemistry, physiology, or biology required. Experience in phospholipid biochemistry or C-kinase to study their roles in the G1 secretory process in cultured cells. Salary set within University of California, San Diego (UCSD) research series salary scale. Apply by 1 August 1988 to: Dr. Kiertan Dhabhar, Graduate Pathologists, Department of Medicine, Division of Gastroenterology, H-811-D, UCSD Medical Center, 225 Dickinson Street, San Diego, CA 92103. Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR DEPARTMENT OF BIOCHEMISTRY UNIVERSITY OF LOUISVILLE SCHOOL OF MEDICINE

Candidates for assistant professor (tenure-track) must hold a Ph.D. or equivalent and have several years of postdoctoral training, and have demonstrated high quality research and teaching abilities. Preference will be given to individuals using contemporary methods of biochemistry, molecular endocrinology and molecular biology, including techniques utilizing recombinant DNA, site-directed mutagenesis, or monoclonal antibodies. The department has core facilities for nucleic acid and protein sequencing and synthesis. The successful applicant will be expected to develop and maintain an independent, funded research program, participate in the training of graduate students, medical students, and dental students. Interested individuals should submit curriculum vitae, a list of current and past research references, and a brief statement of research interests to: Search Committee, Department of Biochemistry, University of Louisville School of Medicine, Health Sciences Center, Louisville, KY 40292. Applications for one or possibly two positions will be accepted up to 1 October 1988 or until a suitable candidate is identified. The University of Louisville is an Affirmative Action/Equal Opportunity Employer.

POSITIONS WANTED

Electron Microscopist M.S. Cell biology. Experience in protistological and neuroscience applications; recent diagnostic EM experience. All EM process elements, immunocytochemistry, image analysis, autoradiography. U.S. west, sunbelt, or English-speaking laboratory situation worldwide. Box 105, SCIENCE.

Immunologist, Ph.D. Principal investigator with 14 years of broad background in inflammatory mediators and platelet and leukocyte function. Some vaccine development. Experience as a coinvestigator in clinical research and drug development, laboratory, etc. Assist in instructional and research roles. Seeking industrial research and development position as group leader or senior scientist. Box 107, SCIENCE.

Simultaneous Interpreter and Translator from Japanese publications, patents, and technical reports. P.O. B. 211063, Columbus, OH 43221.

SCIENCE, Vol. 244
**Group Leader: NUCLEIC ACIDS**

**Group Leader: ENZYMES**

GIBCO/BRL, a division of Life Technologies, Inc., and leading supplier of research products to the cell and molecular research industry, currently has two positions available in our production department.

**Group Leader: NUCLEIC ACIDS**

This position will be responsible for production of Nucleic Acid products including DNA's, RNA's and competent cells. Position requires a Ph.D. or M.S. in biochemistry or molecular biology with management experience.

**Group Leader: ENZYMES**

This position will be responsible for the production of modifying and restriction enzymes. Position requires a Ph.D. or M.S. in biochemistry with experience in enzyme purification and some management experience.

We offer a competitive salary with an excellent benefit package.

Please send resume or C.V. including salary requirements to:

Richard L. Hotaling, Jr.
**Personnel Manager**
GIBCO/BRL
8717 Grovemont Circle
Gaithersburg, Maryland 20877

Equal Opportunity Employer, M/F/V/H

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**Virogenetics Corporation**

**Albany, NY**

The Virogenetics Corporation has been formed as a joint venture between the Institut Merieux and Health Research Incorporated (the non-profit research subsidiary of the NYS Department of Health). Virogenetics is involved in the development of therapeutical and diagnostic products for the human health care and veterinary markets.

Product development is currently under way within the context of strong basic research initiatives in cell biology, virology, immunology, and protein chemistry. Immediate openings are available at the PhD level in all of these disciplines. A major focus is research and development of human animal vaccines utilizing viral vectors, with an emphasis on genetically engineered pox virus.

Compensation will be commensurate with qualifications. A comprehensive benefit package is included.

Please send a resume and references, along with salary history to:

**Director of Research**
Virogenetics Corporation
Room 1683, Corning Tower,
Empire State Plaza
Albany, NY 12237

An affirmative action/equal opportunity employer.

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**Research Scientist Neuroanatomist**

G.D. Searle, a worldwide leader in pharmaceutical research and development, is seeking a qualified neuroanatomist to join a multi-disciplinary drug discovery team in the Department of Central Nervous System Diseases Research. The current research programs emphasize novel and innovative approaches to drug development for the treatment of nervous system disorders. The responsibilities will include:

- Establishing and supervising a neuroanatomy laboratory for the evaluation of tissues
- At the light and electron microscopic levels
- Developing, evaluating and utilizing animal models of nerve injury and neurodegenerative diseases
- Collaborating with other investigators and participating as an integral member of project teams in the determination of research direction

The position requires a PhD with 3-5 years' postdoctoral experience in neuroanatomy. The qualified candidate will demonstrate mastery of neuroanatomy, will have experience in neurochemistry, neuropharmacology or neurotoxicology and have utilized state-of-the-art methodologies in receptor autoradiography, neurotransmitter pathway tracing or morphometry. Candidates must have record of publication demonstrating ability to undertake independent and creative research.

This position represents an opportunity to join during the growth phase of a dynamic company. The successful candidate will be offered an excellent salary and benefits package. The position is available at the St. Louis site of G.D. Searle R&D and is housed in a newly built, modern Life Sciences facility. The location offers access to a variety of cultural and recreational facilities, three major universities and a leading neuroscience community. To apply in strict confidence, please forward your resume to: Joan Lineberry (W1092), G.D. SEARLE & CO. R&D, c/o Monsanto, 700 Chesterfield Village Parkway, St. Louis, Missouri, 63198. An Equal Opportunity Employer.
DEPARTMENT OF PHYSIOLOGY AND BIOPHYSICS
ANNOUNCEMENT OF OPEN POSITION

The Department of Physiology and Biophysics at the University of Oklahoma Health Sciences Center at Oklahoma City invites applications for a tenure-track position at the Associate Professor level. Applicants should have training in neurochemistry or neuropharmacology with experience in using molecular biology techniques. The successful candidate will develop an independent research program, teach in the undergraduate and graduate programs, and participate in graduate and college governance. Preference will be given to individuals whose research interests are in the neurosciences, muscle, or drug development approaches to understanding cell-matrix interactions. The selected candidate will be expected to develop a strong research program and participate in teaching both junior and senior course work. Applicants must submit a curriculum vitae, list of current positions, three letters of reference, and a three-year research plan. All materials must be received by 31 August 1988.

ASSOCIATE PROFESSOR NEUROPHARMACOLOGY: Faculty position available to teach functional and CNS pharmacology, biostatistics, research design, and advanced undergraduate courses. Opportunities to participate in graduate and postdoctoral neuropharmacology research available. The University of Oklahoma, 800 Morgan, Tulsa, Oklahoma 74104.

ASSOCIATE PROFESSOR CLINICAL PATHOLOGY: The Department of Pathology of the University of Oklahoma Health Sciences Center invites applications from medical doctors who are certified by the American Board of Pathology in Clinical Pathology. Candidates should have a strong commitment to clinical and laboratory aspects of Cyto genetics and/or HLA typing. The position requires current medical licensure and the attainment of a Michigan State Medical license. This appointment will be in the tenure-track at the level of instructor or assistant/associate professor. The candidate will share in teaching, research and administrative responsibilities for the HLA and/or Cyogenetics laboratories. Candidates must have a demonstrated record of effective professional interactions with clinical colleagues and a record of scholarly productivity. Applicants should submit their curriculum vitae and names of three references to: Kenneth D. McClatchey, M.D., D.D.S., Associate Professor and Chairman, Department of Pathology, 52332/0054, University Hospitals, 1500 East Medical Center Drive, Ann Arbor, MI 48109-0054. The University of Michigan is an Equal Opportunity Employer and specifically encourages applications from women and members of minority groups.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR OF MICROBIOLOGY AND IMMUNOLOGY

The Department of Microbiology and Immunology at Temple University, School of Medicine, Philadelphia, Pennsylvania, is seeking a qualified candidate for this position. The successful candidate will have training and research interest in the biological and/or molecular aspects of microbiology. Special consideration will be given to individuals with an interest in the study of RNA viruses, microbial pathogenesis. The individual is expected to participate in teaching medical and graduate students. Please send curriculum vitae, statement of research and teaching plans, and the names and addresses of three references by 15 September 1988 to: Dr. Fred Rapp, Department of Microbiology and Immunology, Temple University School of Medicine, P.O. Box 850, Department 22, Hershey, PA 17033. The Pennsylvania State University is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT/ASSOCIATE PROFESSOR, ORGANIC CHEMISTRY: The Department of Chemistry, Concordia University, invites applications for a full-time, tenure-track appointment at the rank of ASSISTANT PROFESSOR IN BIOCHEMISTRY to begin in January 1989. The department is involved in research in enzyme kinetics, structural determination, and biophysical applications of physical chemistry, plant biochemistry and ecotoxicology. The successful candidate will show promise as an independent research scientist and will participate actively in the undergraduate and graduate levels. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. The current salary for assistant professor is $32,003 per year. A candidate should supply curriculum vitae with an outline of proposed research areas, and should arrange for three letters of reference to be received by 30 September 1988.

ASSISTANT/ASSOCIATE PROFESSOR, NEUROLOGY: Oklahoma State University, Colleges of Medicine and Dentistry, 4455 De Maisonneuve Boulevard West, Montreal, Quebec, H3G 1M8.

ASSISTANT/ASSOCIATE PROFESSOR, ANATOMY/HISTOLOGY: A tenure-track position will be available at the Washington University School of Dental Medicine, 1 January 1989. Preference will be given to individuals whose research interests are in the neurosciences, muscle or drug development approaches to understanding cell-matrix interactions. The selected candidate will be expected to develop a strong research program and participate in teaching both junior and senior course work. Applicants must submit a curriculum vitae, list of current positions, three letters of reference, and a three-year research plan. All materials must be received by 1 September 1988.

ASSISTANT/ASSOCIATE PROFESSOR, CLINICAL PATHOLOGY: The Department of Pathology of the University of Michigan Medical School invites applications from physicians who are certified by the American Board of Pathology in Clinical Pathology. Candidates should have a strong commitment to clinical and laboratory aspects of Cyogenetics and/or HLA Typing. The position requires current medical licensure and the attainment of a Michigan State Medical license. This appointment will be in the tenure-track at the level of instructor or assistant/associate professor. The candidate will share in teaching, research and administrative responsibilities for the HLA and/or Cyogenetics laboratories. Candidates must have a demonstrated record of effective professional interactions with clinical colleagues and a record of scholarly productivity. Applicants should submit their curriculum vitae and names of three references to: Kenneth D. McClatchey, M.D., D.D.S., Associate Professor and Chairman, Department of Pathology, 2232/0054, University Hospitals, 1500 East Medical Center Drive, Ann Arbor, MI 48109-0054. The University of Michigan is an Equal Opportunity Employer and specifically encourages applications from women and members of minority groups.

ASSISTANT/ASSOCIATE PROFESSOR, LABORATORY ANIMAL MEDICINE: The Laboratory of Laboratory Animal Medicine (LAM) at the University of Cincinnati seeks a laboratory animal medicine veterinarian with primary service responsibilities in small animal medicine. Candidates must have a D.V.M./M.M.D. degree, be ACLAM board certified or have completed a residency program in laboratory animal medicine and have advanced training in pathology. In addition to clinical care responsibilities and interactions with investigators in the College of Medicine, position includes participation in all aspects of the LAM program. This can be a tenure-track position at the assistant/associate professor level and active collaborative or independent research activity is encouraged. Salary and appointment will depend upon qualifications and experience. Reference search will commence in mid-February 1989.

ASSISTANT/ASSOCIATE PROFESSOR, AUROBIOLOGY: The Department of Biological Sciences at Bowling Green State University invites applications for a tenure-track appointment at the rank of ASSISTANT PROFESSOR IN AUROBIOLOGY to begin in September 1989. Preference will be given to candidates with a Ph.D. in environmental biology or any closely related discipline. Candidates must have a record of teaching and research experience in aquatic ecosystems or related areas.

ASSISTANT/ASSOCIATE PROFESSOR, BIOCHEMISTRY: The Department of Chemistry at the University of Arkansas for Medical Sciences invites applications for a faculty position at the assistant or associate professor level. The successful candidate must have a Ph.D. and a record of research excellence. Preference will be given to candidates who have experience in teaching in undergraduate and graduate programs. Please send curriculum vitae and names of three references to: Dr. Donald C. May, Department of Chemistry, University of Arkansas for Medical Sciences, Little Rock, AR 72205-0416. Applications are invited from candidates who wish to participate in the University’s commitment to the principle of diversity. Applications are invited from qualified persons, regardless of race, color, religion, sex, or national origin.

ASSISTANT/ASSOCIATE PROFESSOR, MICROBIOLOGY: The Microbiology Department at the University of California at Los Angeles invites applications for a faculty position at the assistant or associate professor level. The successful candidate must have a Ph.D. and a record of research excellence. Preference will be given to candidates who have experience in teaching in undergraduate and graduate programs. Please send curriculum vitae and names of three references to: Dr. Donald C. May, Department of Chemistry, University of Arkansas for Medical Sciences, Little Rock, AR 72205-0416.
ICRISAT needs a Pigeonpea Agronomist (Eastern & Southern Africa) at Katumani, Kenya

To provide leadership to pigeonpea improvement research in the region with regard to constraint analysis, varietal adaptation, agronomic management, and crop protection for existing and new production systems. The selected candidate will work in close collaboration with pigeonpea/grain legume scientists and liaise with ICRISAT scientists in India and elsewhere to develop and transfer technology for catalyzing the commercial production of pigeonpea in eastern and southern Africa. Specific duties and responsibilities include, in addition, establishing a regional network of varietal adaptation trials, and when required, assist in agronomic aspects of ICRISAT-related research on groundnut and chickpea in the region.

**Essential Qualifications:**
- Should be a Ph.D. in any branch of Crop Science with relevant field research experience and willing to travel frequently in eastern and southern Africa, as well as regularly to ICRISAT in India and elsewhere as required. Should have good command of the English language.
- A demonstrated ability to understand the interaction of biological, physical and socioeconomic factors to determine crop productivity and production, and experience with grain legumes, are desirable.
- This is a contract position with an initial 2-year appointment at Katumani, approximately 13 km from Machakos town and 60 km from Nairobi, with excellent research facilities for dryland farming systems and dryland crops research improvement programs. Machakos is a small town with adequate medical and housing facilities. In addition, Nairobi enjoys a pleasant climate and is easily accessible to international airline connections.
- Salary at principal staff level, according to qualifications and experience.
- Send resume, including present salary level and names of three references immediately to: The Director General, ICRISAT, Patancheru, A.P., 502 324, India.

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**STAFF POSITION**

**Synthetic Bio/Organic Chemist**

The National Stable Isotope Resource at Los Alamos is seeking a dynamic Chemist/Biochemist to design and carry out bio/chemical syntheses of $^{13}$C, $^{15}$N and $^{18}$O labeled nucleic acids, carbohydrates and amino acids. The successful applicant will also be expected to develop a nationally recognized research program in their own area of interest. In addition to a demonstrably excellent scientific background, the successful applicant must have the necessary verbal and writing skills, along with initiative and leadership qualities necessary to obtain research funding from external agencies. Applicants must have a PhD or equivalent training in chemistry, biochemistry or a related field and have experience in synthetic organic chemistry and/or microbial fermentations. Areas of required technical knowledge include LC/HPLC, g.l.c., $^1$H and $^{13}$C NMR spectroscopy. For additional information, contact James A. Fee, INC-4, C-345, Los Alamos National Laboratory, Los Alamos, NM 87545, 505-667-0774.

To formally apply, submit a detailed resume to Richard Garcia (MS P280), Personnel Services 80313-AM, Los Alamos National Laboratory, Los Alamos, NM 87545.

Affirmative Action/Equal Opportunity Employer

U.S. Citizenship Required

University of California

Los Alamos
ASSOCIATE VICE PRESIDENT FOR RESEARCH
UNIVERSITY OF MARYLAND GRADUATE SCHOOL, BALTIMORE

The Associate Vice President for Research provides important leadership for research development at the University of Maryland Graduate School for the Baltimore city and county campuses. This individual will report directly to the Vice President for Graduate Studies and Research and will be responsible for managing and coordinating the research programs and activities of the university.

This full-time 12-month position is responsible for the development of policies and procedures to encourage research and creative work, and to protect and advance the interests of the University in this area; representing the University to external funding agencies; promoting and arranging research arrangements that benefit the University; and promoting cooperative research arrangements with government agencies.

Candidates for this position should have evidence of successful administrative/leadership abilities relevant to a university setting and research experience. Applicants should have earned a doctoral degree and have experience in research administration.

The Search and Screening Committee will begin its review of applications 18 July 1988. Appointment date and salary are negotiable. Applications should include a letter of interest, curriculum vitae and names of three to five references. Applications or nominations should be submitted to Dr. Barbara L. H. Hansen, Vice President for Graduate Studies and Research, University of Maryland at Baltimore, 600 West Redwood Street, Suite 257, Baltimore, MD 21201. An Equal Opportunity/Affirmative Action Employer.

Middlebury College—BIOCHEMIST. The Department of Chemistry and Biochemistry of Middlebury College invites applications for a 2-year renewable appointment as visiting assistant professor in biochemistry beginning September 1988. Responsibilities will include teaching undergraduate biochemistry courses and supervision of advanced research in biochemistry. A Ph.D. in chemistry or biochemistry is required, and preference will be given to candidates with some prior teaching or research experience. Send curriculum vitae, statement of research plans, publications, and 3 letters of recommendation to: Richard W. Pippen, Chair, Department of Biology and Biochemistry, Middlebury College, Middlebury, VT 05753. Middlebury College is an Equal Opportunity/Affirmative Action Employer.

BIOLOGY AND BIOMEDICAL SCIENCES, ASSISTANT PROFESSOR. Tenure-track. Fall 1988. Ph.D. required, postdoctoral experience preferred. Experience in vertebrate physiology with abilities in immunology. Teach physiology (animal/human) and immunology (undergraduate and graduate); develop active research program with external funding. Send curriculum vitae, statement of research plans, publications, and 3 letters of recommendation to: J. J. Larrabee, Chair, Department of Chemistry and Biochemistry, Middlebury College, Middlebury, VT 05753. Middlebury College is an Equal Opportunity/Affirmative Action Employer.

CLINICAL ASSISTANT/ASSOCIATE PROFESSOR CYTOGENETICIST Applications are invited for assistant director of cytotecnogenetics at the University of Michigan. A non-tenure-track clinical faculty position in the Department of Pathology, a cyto遗传ology center, is available. Eligible for certification by the American Board of Genetics. Academically oriented individuals with a minimum of 2 years experience in a diagnostic cytogenetics laboratory will be considered for this position. Send curriculum vitae with names of three references to: Thomas W. Golvers, Ph.D., Director of the Cytogenetics Laboratory, D1215, Box 0718, Ann Arbor, MI 48109-0010 or Kenneth D. McClatchey, M.D., D.D.S., Director of Clinical Laboratories, University Hospital, Center Campus, Box 0054, Ann Arbor, MI 48109-0054.

The Children’s Mercy Hospital in Kansas City, Missouri, is searching for a PHARMACOLOGIST. Our hospital is a 167-bed pediatric acute care center and is affiliated with the University of Missouri. This faculty position would be at an assistant or associate professor level. Responsibilities include monitoring chemotherapy levels in order to determine optimum treatment and perform research in cancer pharmacology. Laboratory and technical support provided. Qualified applicants will need to prove research accomplishments and evidence of independent research. Submit curriculum vitae to: Dr. Peter Chirayath, Section of Hematology/Oncology, The Children's Mercy Hospital, 24th at Gillham Road, Kansas City, MO 64108.

CHAIRPERSON, DEPARTMENT OF ANIMAL SCIENCE University of Florida. A Ph.D. in animal science or a related field, experience in research, teaching or extension, and potential to provide administrative leadership are required. Salary is open. Application deadline is 15 September 1988. Applicants should contact: Dr. J. E. Moore, Department of Animal Science, University of Florida, Gainesville, FL 32611–0681. An Affirmative Action/Equal Opportunity Employer.

DEAN WASHINGTON UNIVERSITY SCHOOL OF DENTAL MEDICINE WASHINGTON UNIVERSITY

The Washington University School of Dental Medicine has initiated a search for a Dean. The School of Dental Medicine has been a leader in private dental education over the last 116 years. The School by tradition and design, the dental school consists of approximately 50 full-time faculty covering all the sub-disciplines and several graduate programs. We are seeking an individual whose background includes administration and research and previous leadership experience in academic dentistry. We are particularly interested in an individual who will assist develop and implement a concept of development and quality of an established dental school. Please send curriculum vitae and names of three references to:

Dr. Philip D. Stahl
Chairman, Search Committee for
Dean of Dental School
Washington University Medical School
660 South Euclid Avenue, Box 8101
St. Louis, MO 63110

DIRECTOR, OFFICE OF PROGRAMS. Environmental Research Laboratories (ERL): The National Oceanic and Atmospheric Administration (NOAA). U.S. Department of Commerce in Boulder, Colorado is seeking a director with responsibility for the Office of Programs, ERL. ERL conducts an integrated program of research, fundamental technology development, and selected services with regard to the solar-terrestrial environment, upper and lower atmosphere, oceans, U.S. coastal area, and the Great Lakes. The Director, Office of Programs heads the staff office which provides policy and management advice on ERL's research programs on all aspects of program content, timing, coordination, resource needs; the analysis of program effectiveness and program alternatives. Send curriculum vitae, letter of interest, bibliography, three references, and a 500-word statement of career goals to: B. J. Peterson, NOAA/ERL, Personnel Officer, National Oceanic and Atmospheric Administration, Boulder, CO 80303. Deadline: 15 September 1988. An Equal Opportunity Employer.

DIRECTOR, DIVISION OF BASIC PHARMACOLOGICAL SCIENCES COLLEGE OF PHARMACY XAVIER UNIVERSITY OF LOUISIANA

Full-time, tenure-track 12-month appointment at the associate professor or assistant professor level. Research and teaching responsibilities include faculty from the disciplines of medicinal chemistry, pharmacology and pharmaceuticals. Applicants must have Ph.D. in basic pharmaceutical sciences with an excellent track record in teaching and research. The individual is expected to participate vigorously in research, provide leadership in developing research, and contribute to graduate education and undergraduate teaching. Submit curriculum vitae, a list of three references and salary expectations by 31 August 1988 to: Dr. Virgil Kidd, Chairman, of the Search Committee, College of Pharmacy, Xavier University of Louisiana, New Orleans, LA 70125. Xavier University, a predominantly Black Catholic-affiliated University, is an Affirmative Action/Equal Opportunity Employer.

DEAN COLLEGE OF MEDICINE UNIVERSITY OF OKLAHOMA

Applications are invited for the position of Dean of the College of Medicine. The College is located in Oklahoma City, with a clinical campus in Tulsa, and is one of seven University of Oklahoma Colleges of Health Sciences. Applications with demonstrated administrative skills and strong broad academic background should submit curriculum vitae by 31 August 1988 to:

Dean's Search Committee
Office of the Provost
University of Oklahoma
Post Office Box 26900
Oklahoma City, OK 73190

An Equal Opportunity/Affirmative Action Employer.

DIRECTOR OF CARDIOVASCULAR RESEARCH UNIVERSITY OF KENTUCKY

The Division of Cardiovascular and Thoracic Surgery seeks candidates for a new position as Director of Cardiovascular Research. Applications will be considered from qualified cardiovascular physiologists, biomedical engineers, or biochemists with either a Ph.D. or M.D. degree. Postdoctoral training is a prerequisite with computer knowledge preferred. The development of a high quality basic science research program will be expected. Laboratory interests should relate either to ventricular function, myocardial blood flow, electrophysiology, and/or cellular metabolism. The successful candidate will be expected to develop funding for the program. Senior applicants, therefore, should show a good record of grant support. Considerable opportunities for interaction with basic science departments exist.

Applications should be accompanied by a letter of interest, curriculum vitae, and three letters of recommendation to: W. Randolph Chirwood, Jr., M.D., Division of Cardiovascular and Thoracic Surgery, College of Medicine, University of Kentucky, Lexington, KY 40536.

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

The University of Michigan Medical School, Department of Internal Medicine, has a position available for Division Chief, Section of Nephrology. This individual should be Board Certified in Internal Medicine and Nephrology and have a strong record of research accomplishments. Send curriculum vitae to: William N. Kelley, M.D., Professor and Chairman, Department of Internal Medicine, TC-3110, Box 0368, Ann Arbor, MI 48109. The University of Michigan is an equal opportunity/affirmative action employer.

EDITOR, SCIENTIFIC. Chapman and Hall seeks a highly motivated individual to join our growing publishing program. Current opening is for an editor to build an established publishing program in any of the following fields: chemistry, earth sciences, mathematics. Applicant should have 2 years of publishing experience or an advanced degree in a field and an interest in pursuing a career in publishing. Competitive salary, travel, benefits. Cover letter, curriculum vitae, and references to: William P. Germano, Editorial Director, Chapman and Hall, 29 West 35 Street, New York, NY 10001.
• Group Leader
• Research Scientist

Formulation Technology

The Research and Development Division of Johnson & Johnson Baby Products Company has the following immediate openings in Skillman, NJ in its Formulation Technology Department. Innovation and creativity in solving technical problems through joint efforts with scientists from other departments are expected. Both positions require excellent skills in interpretation of scientific data and communications. Some background in analytical instrumentation is desirable.

Group Leader

The position will lead a group of 3-4 scientists. Responsibilities include physico-chemical characterization of new drug substances, e.g., isolation and evaluation of degradation products, kinetics and mechanisms of chemical degradation, skin permeation and diffusion, and dissolution studies. It also includes the development of prototype topical dosage forms to provide basic pharmaceutical research support to the clinical, preclinical and applied technology departments.

The successful candidate must have a PhD in Pharmaceutics, Physical Pharmacy, Physical Organic Chemistry or related area with minimum 3 years of experience in industrial or academic pharmaceuticals research. Experience in carrying out physico-chemical studies of pharmaceutical materials in solutions and semi-solid dosage forms is essential. The position requires decision making and management skills as well as supervisory experience.

Research Scientist

Responsibilities include physico-chemical characterization of new drug substances, e.g., isolation and evaluation of degradation products, kinetics and mechanisms of chemical degradation, skin permeation and diffusion, and dissolution studies. The development of prototype topical dosage forms to provide basic pharmaceutical research support to the clinical, preclinical and applied technology departments is included. The position is also responsible for in vitro studies in support of IND, INA and Phase IV projects.

The successful candidate must have a PhD in Pharmaceutics, Physical Pharmacy, Physical Organic Chemistry or related area with 0-3 years’ experience in industrial or academic pharmaceuticals research. Experience in carrying out physico-chemical studies of pharmaceutical materials in solutions and semi-solid dosage forms is essential.

We offer competitive salaries, a comprehensive benefits package, and great potential growth opportunities.

For consideration, please submit current resume with salary requirements and indicating position of your interest to: Human Resources Department FT, Johnson & Johnson Baby Products Company, Grandview Road, Skillman, NJ 08558

Johnson & Johnson
BABY PRODUCTS COMPANY
An Equal Opportunity Employer, M/F/H/V
“Leadership Beyond Compliance”

RESEARCH SCIENTISTS
SAN FRANCISCO BAY AREA

BIO-RAD LABORATORIES is a world leader in the fields of chemical analysis, chemical separation, and immunoassay. To continue the development of new products and technologies, we’re seeking highly motivated, goal-oriented research scientists with expertise in the following fields:

R & D Chemists

These positions require two or more years experience in development of hybridomas and monoclonal antibodies. Knowledge of synthetic peptide and/or recombinant antigens useful. MS/PhD in Cell Biology, Immunology or related field. Dept. #281-S0701.

Microbiology

Both Group Leader and Senior Scientist positions require experience in infectious disease, antigen analysis and microbiological assay development. Project management or supervisory experience in the leadership of a research group is desirable. An MS/PhD in Microbiology or related field plus at least three years’ experience needed. Dept. #271-S0701.

Immunoassay Development

These positions require a strong background in the development of RIA, EIA and novel nonisotopic immunoassay for commercial development. Experience in novel assay systems and/or development of new assay formats desirable. An MS/PhD in Chemistry, Biochemistry or related fields plus two or more years of experience needed. Dept. #292-S0701.

Biochemist

Both Group Leader and Senior Scientist positions require experience in organic, peptide and protein chemistry. Strong record of accomplishments with background in diagnostic application desirable. MS/PhD in Organic Chemistry or related field plus at least three years’ experience in industry is essential. Dept. #288-S0701.

For consideration, please submit resume, indicating appropriate department, to Bio-Rad Laboratories, Human Resources, 1000 Alfred Nobel Drive, Hercules, CA 94547. EOE.

BIO-RAD Bio-Rad Laboratories
OPEN POSITIONS

FACULTY POSITION IN TUMOR IMMUNOLOGY

The Ohio State University College of Medicine invites applications for a tenure-track appointment for individuals with expertise in immune responses to cancer cells. The candidate's interests and background must allow for creative thinking and active participation in a multidisciplinary research program of antigen identification, protein engineering, and human vaccine development. Special consideration will be given to candidates with expertise in tumor antigen identification and mechanism for modulating in vivo and in vitro responses to active immunization. The candidate must have a Ph.D. or M.D. with at least 3 years of postdoctoral experience. The candidate should have demonstrated strong accomplishments and ability to obtain grant support. Appointments will be commensurate with background. Salaries are competitive with excellent benefits. New laboratory facilities and start-up funds are available. Preceptorship and teaching responsibilities are available for graduate and postdoctoral training. Departmental affiliation will be determined by the applicant's credentials. Facilities are located on the Ohio State University campus. Reasonable housing, excellent schools, and a growing community complement the challenging academic environment. Qualified candidates should send their curriculum vitae to: Vernon C. Stevens, Ph.D., Ohio State University Hospital, 1654 Upham Drive, Columbus, OH 43210. The Ohio State University is an Equal Opportunity Employer. Applications from women and minority candidates are especially encouraged. Deadline for applications is 1 September 1988.

IMMUNOLOGIST

The Department of Pathology of the Emory University School of Medicine is interviewing for a tenure-track position (assistant or associate professor) with appointment as associate director, Histocompatibility and Immunogenetics Laboratory. Emory University has developed major clinical transplantation programs and seeks to expand the level of research activities related to transplantation immunology. Qualified candidates may be an M.D. or Ph.D. with expertise in either cellular immunology and lymphocyte cloning, or in molecular genetics. The individual should be competent in standard laboratory immunological procedures. A major research goal of the Transplantation Immunology Laboratory, directed by Glenn E. Rodey, M.D., is to identify immune mechanisms that regulate alloimmunization. Applicants are expected to undertake a program of research in transplantation immunology and to interact with and support other scientists working with projects related to immunomodulation. Please send a description of research interests, curriculum vitae, and the names of three references to: Dr. Kenneth W. Sell Chairman Department of Pathology and Laboratory Medicine Emory University School of Medicine 715 WMB Atlanta, GA 30322 Emory University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

IMMUNOLOGIST

The Clinical Research Center for Periodontal Diseases and the Dental Research Institute of the University of Minnesota invite applications for a tenure-track faculty position to pursue independent research and collaboration with CRCPD and DRI investigators. Applicants with outstanding programs or promise in any area of modern immunology are encouraged to apply. Candidate must have a D.D.S. degree with 5 years of research experience or a Ph.D. and postdoctoral experience. Excellent laboratory facilities and start-up funds are available. Applicants should submit curriculum vitae, a statement of professional goals and possible collaboration with CRCPD, and the names of three references by 15 July 1988 (deadline extended) to: Dr. Mark C. Herzberg, Chairperson, Immunologist Search Committee, School of Dentistry, 17-164 Moore Tower, University of Minnesota, Minneapolis, MN 55455. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

SCIENTISTS

Genencor, Inc. is a dynamic and growing biotechnology company located in South San Francisco, California. We specialize in the research and development of enzymes and enzyme products as well as the production of industrial enzymes. We are actively recruiting for two positions in our Research and Development Departments.

SCIENTIST: Design and conduct research of the genetic and physiological factors which enhance strain performance. Utilize classical and molecular genetic approaches to optimize strain performance. Working with our fungal molecular genetics staff, scale up eukaryotic production processes to laboratory fermenters. Requires 1) Ph.D. in Genetics, Microbiology, Biochemistry or a related field; 2) up to three years of related post-doctoral experience with emphasis on the genetic factors controlling gene expression in yeast or fungi; 3) demonstrated expertise in strain development by classical genetics and mutagenesis; and 4) commitment to product-oriented research within a strong team environment. Experience with the regulation of complex multi-enzyme systems is preferred. Current working knowledge of fungal molecular biology or experience with naturally secreted proteins is desired. Refer to Dept. DC-48.

POST DOCTORAL RESEARCHER: Identify and isolate enzymes which have agricultural applications in herbicides and fungicides. Conduct experiments with plants and pathogenic fungi. Requires 1) Ph.D. in Biochemistry with a background in plant pathology or physiology; or 2) Ph.D. in Plant Pathology/Physiology with a biochemistry background. Experience working with plants and pathogenic fungi is essential. Refer to Dept. AJ-31.

We offer a generous compensation and benefits package combined with the challenge and opportunity to make a significant contribution to our outstanding organization. To apply, please send your curriculum vitae to GENENCOR, INC., 180 Kimball Way, South San Francisco, CA 94080. Attn: Human Resources. Please note appropriate Dept. Genencor is an equal opportunity employer.

GENENCOR

Microbial Genetics

Molecular Genetics

The Department of Biological Process Sciences at Smith Kline & French Laboratories in suburban Philadelphia, PA, is seeking an outstanding individual to fill a challenging Ph.D. level position in the Fermentation Genetics Section.

The successful candidate will:
- Use classical and molecular genetics techniques to design, develop, characterize and evaluate new recombinant microorganisms which will be used to maximize production of novel gene products.
- Conduct research in areas such as the study of host growth characteristics, high level gene expression at high cell density, product stability and solubility, extracellular products, and novel gene expression induction systems.
- Gain recognition throughout the scientific community by publishing scientific results and participating in national and international meetings.

Candidates are required to have:
- A Ph.D. in Molecular Biology/Microbiology or related area and 1-6 years relevant post-doctoral experience.
- Excellent laboratory skills in molecular and classical genetics techniques with experience in heterologous gene expression in microbial systems highly desirable.
- A sound record of publication in major scientific journals.
- Excellent communication and interpersonal skills and a strong desire to work as an innovator, leader, and member of a research group and collaborative teams.

We offer an excellent compensation, benefits and relocation package as well as opportunities for personal and professional growth. It is SmithKline Beckman's policy not to employ individuals who use any illegal drugs or prescription drugs without a medical prescription. Therefore, candidates should be prepared to take a drug screening test. For confidential review, please forward your C.V. and names of three references to: Robert F. Obst, Manager, Personnel Relations, R0131, Smith Kline & French Laboratories, Research & Development, P.O. Box 1339, King of Prussia, PA 19406-0339. We are an Equal Opportunity Employer. M/F/H/V. NO PHONE CALLS, PLEASE.

SK&F

A SmithKline Beckman Company
POSTDOCTORAL RESEARCH ASSOCIATE
(Temporary, up to two years)
The Medical and Health Sciences Division of Oak Ridge Associated Universities is seeking a postdoctoral research associate to provide research support in the areas of protein chemistry and immunochemistry for a DOE funded project. "Radiolabeled Monoclonal Antibodies to Tamarin Colon Cancer." Candidates should possess a Ph.D. in biochemistry, chemistry, pharmacology, or a related field.
In addition to a salary competitive with the private sector, ORAU provides assistance with moving expenses.
Please forward your curriculum vitae to:

Employment Office
Oak Ridge Associated Universities
P.O. Box 117
Oak Ridge, TN 37831-0117

EEO

RESEARCH SCIENTISTS
ICRF Clinical Oncology Unit
Institute of Molecular Medicine
John Radcliffe Hospital, Oxford

Applications are invited for two posts of Research Scientist, a six year tenured position, in the new ICRF Clinical Oncology Unit, Oxford. Successful applicants will lead a small team of research workers within a group comprising approximately 17 scientific and technical staff. The group will work in laboratories situated within the Institute of Molecular Medicine. The honorary Director of the Unit is Professor Adrian Harris and the Senior Scientist in the Laboratory is Dr I. D. Hickson. Existing research interests in the Unit include cloning human DNA repair genes, drug resistance mechanisms, and growth factors and their receptors.
Applicants should ideally have research interests in a related field, although this is not essential. Applicants should be able to take up the position in 1989.
Salary will be dependent on age and experience and in the range of £14,000—£18,000.
Applications should be made by sending a full CV and the names and addresses of three referees to Mrs. P. Harwood, Recruitment Officer, Imperial Cancer Research Fund, Lincoln's Inn Fields, London WC2A 5PX by 22nd July 1988.
Informal enquiries can be made either to Professor Harris or Dr. Hickson on (091) 2325131 ext 24363.
Smoking is strongly discouraged on the fund's premises.

IMPERIAL CANCER RESEARCH FUND

Chairperson
Department of Pharmacology
Duke University Medical Center

Duke University is seeking candidates for the position of Professor and Chairperson of the Department of Pharmacology. Responsibilities include providing leadership for research and teaching activities in the School of Medicine. Minimal qualifications include an earned doctorate in a related discipline, a distinguished record of scholarship, administrative experience in an academic environment and a demonstrated ability to work collaboratively in a university and academic medical center and with external constituencies.
This position will be available in Fall 1988.
Applicants should send a copy of their curriculum vitae with references and other credentials to: Pharmacology Search Committee, DUKE UNIVERSITY MEDICAL CENTER, Box 3701, Durham, NC, 27710.

Plant Physiologist

Chevron Chemical Company is one of the nation's leading producers of fungicides, herbicides and other agricultural and garden chemicals sold under the Ortho name. Currently, our Agricultural Chemicals Division is seeking a Plant Physiologist, who has a PhD and working knowledge of pesticides, to join our new and stimulating research environment located in Richmond, CA.

As a vital member of our Inventive Research Group, you'll concentrate on pesticide penetration and transport and mode of action studies, as well as maintain close interaction with other biologists, biochemists and synthesis chemists. You'll have the creative latitude to design and direct laboratory and greenhouse research programs, as well as provide guidance for field evaluation programs.

In addition to a multidisciplinary environment, we provide an attractive salary and benefits package. For immediate consideration, candidates should send resumes to: Chevron Chemical Company, Human Resources, P.O. Box 4010, Richmond, CA 94804-0010. An equal opportunity employer.
FACULTY POSITION IN MOLECULAR BIOLOGY/REPRODUCTIVE BIOLOGY UNIVERSITY OF MISSOURI

The University of Missouri is seeking a tenure-track assistant/associate/full professor (80% research, 20% teaching) in the University's Food for the 21st Century Program. The university is conducting a basic research in a project that applies advanced biotechnol-

gy procedures to an area of reproductive biology pertaining
to the use of molecular biological/probiotic physiologists in the
Animal Sciences Research Center. An applicant should have
a Ph.D. and 2 years of postdoctoral experience in one of
the following areas: immunobiology, development.
biology, molecular endocrinology, gene transfer,
protein chemistry. Applications will be accepted until 1
September 1988 or until the position is filled.

FACULTY POSITION IN SOIL CHEMISTRY

Applications are invited for a tenure-track soil chemis-
try position at the assistant professor or professor level.
Successful candidate must have demonstrated strengths in
research and teaching interest to this position as well. 
Applicant should be Ph.D. in soil physical chemistry or
soil chemistry of soils and waters. The successful can-
didate is expected to submit a curriculum vitae, a state-
manship of research interests to: Dr. R. M. Roberts, De-
partment of Animal Science, University of Missouri, Columbia, MO 65211. The University of Missouri is an Affero/Ac-

eactive Action/Equal Opportunity Employer.

FACULTY POSITIONS

The University of North Carolina at Chapel Hill invites applications for two junior or senior faculty positions in the Department of Cell Biology and Anato-
my. The successful candidate will be a funded
research program in any modern area of biomedical
research at the cellular or molecular level and to teach in
our medical history course. Women and minorities are
encouraged to voluntarily identify themselves. Send curriculum
vitae, a brief statement of research plan, and the names of
three references to: Dr. Charles R. Hackney, Department of Cell
Biology and Anatomy, School of Medicine, 108 Swing Build-
ing, CB#7090, University of North Carolina at Cha-
pel Hill, Chapel Hill, NC 27599-7090. An Equal Oppor-
tunity/Affirmative Action Employer.

HEAD DEPARTMENT OF OBSTETRICS AND GYNECOLOGY UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE AT CHICAGO

The University of Illinois College of Medicine at Chicago invites applications and nominations for the position of Head of its Department of Obstetrics and Gynecology and Chief of the Obstetrics and Gynecology Service at the University of Illinois Hospital. Located in the Northwest Medical Center in Chicago, the college has over 800 medical students and is immediately adjacent to the University Hospital. The College is affiliated with four community hospitals in the greater Chicago area.

Candidates should have a minimum of three years of experi-
ence in obstetrics and gynecology and at least three references to:
L. J. Lund, Chairman, Department of Obstetrics and Envi-
ronmental Sciences, University of California (UC), Riverside, CA 92507. Applications will be accepted until 15 September 1988 or until the position is filled.

MOLLEULAR BIOLOGIST FACULTY POSITION

The University of Connecticut Health Center. The
Department of Microbiology is seeking to fill a
tenure-track position, preferably at the rank of assistant
or associate professor, tenable September 1989. Can-
didates with expertise in genetics, developmental biology
or protein structure-function are encouraged to apply.
Applicants are expected to have at least three years of
postdoctoral experience in molecular biology. Send complete curriculum vitae, a brief statement of research interests, and three letters of recommendation to: Bruce M. Boman, M.D., Ph.D., Department of Microbiology, School of Medicine, California at 24th Street, Omaha, NE 68178.

MOLECULAR BIOLOGIST FACULTY POSITION

The University of Connecticut Health Center. The
Department of Microbiology is seeking to fill a
tenure-track position, preferably at the rank of assistant
or associate professor, tenable September 1989. Can-
didates with expertise in genetics, developmental biology
or protein structure-function are encouraged to apply.
Applicants are expected to have at least three years of
postdoctoral experience in molecular biology. Send complete curriculum vitae, a brief statement of research interests, and three letters of recommendation to: Bruce M. Boman, M.D., Ph.D., Department of Microbiology, School of Medicine, California at 24th Street, Omaha, NE 68178.

MEMBRANE BIOPHYSICS/PATHOBIOLOGY POSTDOCTORAL ASSOCIATE

Two-year support available immediately to study ion
channels, by patch-clamp and biary reconstitution,
from cystic fibrosis cultured human cells.

Ph.D. in membrane or systems biology.

The candidate will work on an NIH-funded project
involving the study of ion channels in cultured human
epithelial cells. The postdoctoral appointee will work
either independently or as a part of a collaborative
group of scientists. Starting date is negotiable.

Closing date: 1 May 1988. Refer to: Dr. Richard H. Guarnieri, 602-626-6519; Physiology Department, University of Arizona, College of Medi-
cine, Tucson, AZ 85724. An Equal Opportunity/Affirmi-
tive Action Employer.

NUTRITION—ASSISTANT PROFESSOR UNIVERSITY OF NEW HAMPSHIRE

Assistant professor of nutrition with special interest in
exercise science and/or endocrine metabolism (50%
research, 50% teaching). Teaching duties: Each year,
teach upper level course in either normal or clinical
nutrition and graduate level course in area of expertise.

Research: Develop program in nutrition and exercise

NMR SCIENTIST

The Pittsburgh NMR Center for Biomedical Research (under the auspices of Carnegie Mellon University (CMU) and the University of Pittsburgh (Pitt)) has an opening for an NMR Scientist. The center has a Bruker Biospec II 4.7-tesla NMR system with a 40-cm bore superconducting magnet for magnetic resonance imaging and in vivo spectroscopic studies using animal models.

The position requires a Ph.D. or equivalent, and exten-
sive experience in NMR techniques. The successful candidate will participate in a multidisciplinary research program in-
volving departments of biology, chemistry, computer
science, engineering, and physics. This is an excellent opportunity to carry out collaborative research. This is a
staff appointment and salary depends on experience and
qualifications. Interested persons should send curriculum
vitae and names of three references to: Dr. Chen Lin, Pittsburgh NMR Center for Biomedical Research, Carnegie Mellon University, 4400 Fifth Avenue, Pittsburgh, PA 15213. You and Phd Are Active/Affirmative Action/Equal Opportunity Employers.
XOMA'S straight forward, well-defined business strategies offer a variety of challenges, and therefore, opportunities to results-oriented individuals.

XOMA Corporation is a world leader in the development and clinical testing of therapeutic targeted pharmaceuticals for human use. We currently have monoclonal antibody-based products in FDA-authorized clinical trials for the treatment of gram negative sepsis, bone marrow transplantation, melanoma and colorectal cancers, and detection of melanoma.

This has created another challenge for XOMA, to find high-energy, highly-motivated professionals to join our team!

**IMMUNE RELATED DISORDERS**

**• Director of Molecular Genetics**

Reporting to the V.P. Preclinical, will direct a newly-created department responsible for developing and implementing research programs to genetically alter monoclonal antibodies and to clone and express ribosomal inhibitory proteins, growth factors and other targeted therapeutic proteins.

Requires a Ph.D. in Molecular Biology, Molecular Genetics or other related discipline, and 3-5 years industrial experience preferred in cloning, sequencing, and expression of recombinant DNA. Experience/interest in mammalian/yeast expression, protein structure/function relationships, molecular modelling and molecular immunology desirable.

**• Research Scientist**

Will be a key member of the newly formed team altering antibodies using recombinant DNA techniques. In addition, will participate in cloning and expression of other proteins such as ribosomal inhibitory proteins, growth factors and other targeted therapeutic proteins.

Requires BS or MS degree, and 2-4 years industrial experience in cloning and sequencing of DNA. Knowledge and experience in site-directed mutagenesis and antibody screening procedures such as ELISA is desirable. Position may include a temporary assignment to the United Kingdom for up to 6 months.

**TECHNICAL DEVELOPMENT**

**• Sr. Process Engineer/Scientist**

Reporting to the Director, Pilot Plant, will be responsible for development and scale-up of production processes for monoclonal antibodies from pilot plant through manufacturing scale. Will develop cost effective process technology, and be responsible for optimization, validation and continuing operation of purification processes.

Requires Ph.D. in Chemistry, Biochemistry, Chemical Engineering or related field, and 3-5 years industrial experience in large scale protein isolation, especially chromatography and membrane separation. Familiarity with cGMP's desirable.

**REGULATORY AFFAIRS**

**• Director of Regulatory Affairs**

Reporting to the V.P. Medical & Regulatory Affairs, will be responsible for directing all regulatory activities, including development and implementation of strategies for FDA and other Board of Health approvals. Directs regulatory team to coordinate IND and PLA submissions and ensure optimal interaction with FDA and other Boards of Health.

Requires BS/MS in scientific discipline, and 5-8 years pharmaceutical/biotechnology industry experience in regulatory affairs. Must have filed IND's and PLA's/INDA's.

XOMA offers competitive salaries and comprehensive benefits in an outstanding work environment. For consideration, please forward your C.V. and salary history to: Director of Human Resources, XOMA Corporation, 2910 Seventh Street, Berkeley, CA 94710. EEO.
American Association for the Advancement of Science
Program on Science, Arms Control, and National Security

VACANCY

The American Association for the Advancement of Science is seeking a Senior Program Associate for its Program on Science, Arms Control, and National Security.

The staff responsibilities of the successful candidate will include activities in the following areas: assisting with the Program’s publications series; planning and execution of major conferences, seminars, and symposia; fund-raising efforts; and assisting with the Program’s long-range planning, to include identifying substantive areas in this field that can be addressed effectively by the AAAS.

Qualifications of the successful candidate will include the following: (1) an understanding of technical and policy related arms control and national security issues, as demonstrated in previous work experience; (2) a M.A. (or equivalent combination of education and experience) in the physical sciences or engineering; (3) excellent written and oral communication skills; (4) experience working with the Congress, federal agencies, industry, universities and/or foundations; (5) administrative experience; and (6) ability to interact effectively with other Program staff and advisory committee members.

Salary to $30,000 contingent upon qualifications.

Please send letter of interest, resume and salary requirements to: Debra Wright, AAAS, 1333 H St., N.W., Washington, D.C. 20005, EOE.

Biogen specializes in the application of Biotechnology to the development of Human Therapeutics. Located in Kendall Square, Cambridge, MA, we have the following immediate opening in the Process Development Group:

PROTEIN BIOCHEMIST

This position reports to the Director of Process Development; responsibilities include:

- developing methods for large scale production of proteins intended for clinical trials
- investigate performance of production processes with regards to purity, yield, reproducibility
- assist in developing stable pharmaceutical formulations for bulk drug and dosage form

A PhD in protein purification, protein chemistry, or biophysical chemistry is required. Postdoctoral/industrial experience in practical aspects of protein purification, refolding, or characterization is preferred.

Biogen offers an excellent benefits and compensation package, including health and dental insurance, tuition reimbursement, and relocation assistance. Please send your resume to Department PDG-Sci-6/88, Human Resources.

Biogen, 14 Cambridge Center, Cambridge, MA 02142
An Equal Opportunity Employer.

Research Associate
Experimental Pathology

Amgen is a dynamic and growing organization producing products for human health care through applied biotechnology. Our continued growth and development has created an immediate opportunity for a Research Associate in our Experimental Pathology Group.

Responsibilities for this position will include cell culture, immunoassays and some animal handling.

Qualified applicants must have a BS or MS in Biochemistry, Cell Biology or Immunology with a minimum of 2 years' research experience. An interest in IN VITRO and IN VIVO models of growth factor mediated tissue repair and inflammation is desirable. Specific knowledge of cell based assay systems and some knowledge of protein chemistry are desirable.

Amgen offers a stimulating and challenging research environment as well as an excellent compensation and benefits package. Our location, about an hour northwest of Los Angeles, offers the best in Southern California living.

Interested candidates with the required background should send a resume, including references, in confidence to:

Recruitment, Dept. #320
AMGEN
1900 Oak Terrace Lane
Thousand Oaks
CA 91320

Equal Opportunity Employer.

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Let the Science Free Product Information Service put you in touch with the vendors whose products you will need.

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New Lab Service Dept.
1515 Broadway
New York, N.Y. 10036
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explore
the
following opportunities. Join us and bring your skills to Life Sciences technology.

Within our Technology Group the Sensor Research and Development Department is responsible for planning and developing the next generation of biosensors for the clinical diagnostics market. We have the following opportunities:

- **Sr. R&D Scientist — Reagent Systems**
  
  This individual will provide technical leadership in developing new reagents to be used in association with new sensors and clinical chemistry instrumentation. The successful candidate will have a Ph.D. in biochemistry/clinical chemistry with a strong emphasis on enzyme surface chemistry and the ability to develop enzyme-based biosensors and calibrators. 3-5 years industrial experience is required. Experience in electrochemistry is desirable.

- **Sr. R&D Scientist — Materials Science/Separation Polymers**
  
  This individual will provide technical leadership in the area of membrane technology including evaluating methodology to ensure a marketable product. The successful candidate will have a Ph.D. in polymer chemistry/membrane-based separation technology/materials science with 5-7 years of work experience in membrane casting, extrusion and materials separation. Prior experience in the actual synthesis of polymers and organic synthetic chemistry are required.

- **Sr. Research Scientist — Polymer Chemistry/Electrochemistry**
  
  This individual will provide technical leadership in the area of membrane-based electrochemical sensors and will be involved in creating sensor methodologies to ensure a marketable product. The successful candidate will have an M.S. with 5-7 years of work experience. Prior experience in chemical modification and physiochemical characterization of polymers and in electrochemical analytical techniques are required.

- **R&D Scientist — Electrochemistry**
  
  This individual will provide technical expertise in research and development of novel electrochemical sensors. The successful candidate will have an M.S. with 5-7 years of work experience. Prior experience with electrochemical and analytical techniques in particular with ion-selective electrodes are required.

We are located about 20 miles southwest of Boston in an attractive New England location. We offer excellent salaries and benefits and encourage qualified individuals to respond to Carol Sander, Ciba Corning Diagnostics Corp., 63 North Street, Medfield, MA 02052.

Ciba Corning is an equal opportunity employer. m/f/h/v.

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Research Scientists

Genentech, Inc., a leader in the field of biotechnology, has the following opportunities available.

**Biological Assay Scientist**

An individual with a strong background in cell biology, biochemistry and assay development is needed to develop cell-based assays for the bioactivity of recombinant proteins. The successful candidate should possess a PhD in a relevant discipline, and a minimum of 2 years’ postgraduate and hands-on experience with cell culture and receptor binding assays. Experience with the development of immunnoassays is also desirable.

**Hybridoma Scientist**

An individual with experience generating hybridomas and characterizing monoclonal antibodies is needed to provide monoclonal antibodies to recombinant proteins for assay development and in order to identify key regions of molecules. Requirements include a PhD in a relevant discipline, and a minimum of 2 years’ postgraduate and hands-on experience with new hybridoma techniques, antibody generation, assay development and immunochemical techniques.

**Immunoochemistry Scientist**

An individual with a background in protein purification and characterization is needed to develop sensitive immunochemical assay methods for detection and quantitation of host cell impurities in recombinant DNA derived proteins. Requirements include a PhD in Immunoochemistry or Biochemistry and a minimum of 2 years’ relevant postdoctoral experience.

Genentech, Inc. offers an excellent salary and benefits package coupled with the opportunity to make a significant contribution to our organization. For consideration, please send your resume to Victor Smallberg, Human Resources Department E.P., Genentech, Inc., 460 Point San Bruno Blvd., South San Francisco, CA 94080. An equal opportunity employer.

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Genentech, Inc.
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Genentech, Inc.
The basic science and clinical components of the Fox Chase Cancer Center are collaborating in the expansion of a multidisciplinary program that will include participation in a spectrum of interests from basic to applied cancer research. The Search Committee now invites applications from senior investigators to lead this effort and promote young investigators to participate in it. All positions are tenure or tenure-track position. Please send curriculum vitae and a letter describing current scientific interest to: Dr. George H. O. Al-Sabbagh, Chairman, Molecular Oncology Search Committee, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. The Center is an Equal Opportunity Employer.

THE UNIVERSITY OF CALGARY
NEUROPHYSIOLOGY—
THERMOREGULATION AND CARDIORESPIRATORY CONTROL

Applications are invited for an experienced neurophysiologist to work within the Reproductive Medicine Research Group in the Department of Medical Physiology at The University of Calgary. Applicants will be required to join a multidisciplinary group carrying out fundamental and applied research on the thermoregulation and cardiorespiratory control in the fetus and newborn. The applicant should have expertise in several of the following areas: neurophysiology of sleep, thermoregulation and thermonegative control. In addition, the applicant should have expertise in microperfusion techniques, including push-pull perfusion and microdialysis perfusion. The successful applicant will be expected to perform basic research on the mechanisms of thermoregulation and cardiorespiratory control in the fetus and newborn. The successful applicant will be expected to perform basic research on the mechanisms of thermoregulation and cardiorespiratory control in the fetus and newborn.

Salary and rank will be in accordance with qualifications and experience and will be commensurate with that applying within The University of Calgary. This position will be funded by a successful application for a scholarship from the Alberta Heritage Foundation for Medical Research. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. Requests for further information, and applications including curriculum vitae and the names of three references should be submitted by 1 August 1988 to:

Dr. R. W. M. Leblond
Chairman
Reproductive Medicine Research Group
The University of Calgary
2500 University Drive N.W.
Calgary, Alberta T2N 4N1

PATHOLOGY AND MICROBIOLOGY: The University of Nebraska Medical Center is seeking a CLINICAL CHEMIST, assistant-associate professor, with M.D. degree and board certification in anatomic and clinical pathology with special interest in clinical chemistry and demonstrated academic productivity by publications. Curriculum vitae and three letters of recommendation to: Dr. David T. Prout, M.D., Chairman, Pathology and Microbiology, UNMC, 422d and Dewey Avenue, Omaha, NE 68105. Applications accepted to 1 November 1988. An Equal Opportunity/Affirmative Action Employer.

PLANT MOLECULAR BIOLOGIST: The Forest Biotechnology Centre at B.C. Research is seeking a plant molecular biologist to work on genetic transformation of coniferous and forest molecular genetics. This is a senior research scientist position with good opportunities for career advancement. The centre has established expertise in tissue culture of these species and has initiated Agrobacterium-based transformation systems. The successful candidate will hold a Ph.D. and should have at least 2 years of experience in the area of plant molecular biology or plant-microbe interactions. A working knowledge of routine recombinant DNA techniques is essential. The position will involve working with a dynamic group of scientists from a variety of disciplines including molecular and biochemical areas. Send curriculum vitae and names of three references to: Dr. Ben Setton, Forest Biotechnology Centre, 3650 West Broadway, Vancouver, B.C., Canada V6S 2L2.

NUTRITION ASSISTANT PROFESSOR AND POSTDOCTORAL POSITION: The University of Medicine and Dentistry of New Jersey School of Medicine and Dentistry is seeking: (1) Tenure-track assistant professor in the area of nutrition and/or metabolism. The position requires a Ph.D. or M.D. degree and should have at least 1 year of postdoctoral training and show promise of a vigorous research program. (2) A postdoctoral position for research using stable isotope techniques. The position will be funded through a NIH-funded training program in clinical nutrition at University of Pennsylvania. Applicants must be willing to relocate to Philadelphia. Applicants should submit a statement of research experience and future plans, and the names of three references. This information should be forwarded to: Dr. Paul M. Fitzgerald, Postdoctoral Training Program in Clinical Nutrition, 2600 Arch Street, Philadelphia, PA 19104. An Equal Opportunity/Affirmative Action Employer.

ORGANIC / MEDICAL / PHARMACEUTICAL CHEMIST with a Ph.D. and 0 to 3 years of postdoctoral experience in chemical synthesis is needed to prepare new anticancer compounds. Knowledge of basic synthetic reactions and experience with spectroscopic and chromatographic techniques is required. Experience in instrumentation starting around 1 September 1988. Please send resume and names of references to: Dr. Andre Rozowsky, Division of Cancer Pharmacology, National Cancer Institute, Building 10, Room 11B, Bethesda, MD 20892. An Equal Opportunity/Affirmative Action Employer.

PHYSICAL OCEANOGRAPHER/University of Maryland (UM)/Horn Point Environmental Laboratories. Applications are invited for a tenure-track position at the assistant or associate professor level. Areas of interest include shelf processes, and the physical basis of ocean acidification. The successful candidate will be expected to perform fundamental research on the physical oceanography of the Chesapeake Bay, preferably in the field, but not limited to, theoretical and observational research on ocean dynamics, continental shelf processes, and climate circulation. The successful candidate is expected to develop a strong and independent research program. Opportunities exist for teaching physics and for developing graduate programs. Salary commensurate with experience.

Please send curriculum vitae, summary of research interests, names, addresses, and telephone numbers of four references by 15 September 1988 to: Dr. Shuen-Yu Chao, Box 775, Horn Point Environmental Laboratories, Cambridge, MD 21613. Telephone: 301-228-9200. UM is an Affirmative Action/Equal Opportunity Employer.

The University of Minnesota Department of Radiology, Division of Neuroradiology, is offering a non-tenure-track, postdoctoral position. Applications are solicited for a postdoctoral position. The position will be available 30 July 1988. The duties will be to study the regional blood flow and metabolism of the brain using autoradiography, HPLC, image analysis and small animal handling. Salary is negotiable and competitive, and is dependent upon past scholarly activity and post-Ph.D. experience. Send resume and references to: S. M. N. Ffrench, Ph.D., Department of Radiology, University of Minnesota Medical School, Box 325 UMHC, 420 Delaware Street, SE, Minneapolis, MN 55455. The University of Minnesota is an Equal Opportunity/Affirmative Action Educator and Employer and specifically encourages applications from women and minorities.

POSTDOCTORAL POSITION available 30 July 1988 for studies on the formation, stability, and function of central nervous system synapses. The successful candidate will conduct research using molecular and cytological techniques in the rat brain at the ultrastructural level. Experience in autoradiography, immunocytochemistry, and cell culture techniques are essential. Send resume and references to: Dr. Robert H. Settles, Department of Neurology, University of Wisconsin, Medical Center, 600 Highland Avenue, Madison, WI 53792. The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW: Position available 1 September 1988, to study evolution and cell-to-cell transport of plant viruses. Send a vita, research publications, transcripts, references, and three letters of reference to: Ulrich Melcher, Department of Biochemistry, Oklahoma State University, Stillwater, OK 74074-6076. Telephone: 405-624-6210. An Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF OTAGO
DUNEDIN, NEW ZEALAND
POSTDOCTORAL FELLOW IN NEUROSCIENCE

Applications are invited for a 2-year postdoctoral fellowship in marine science. In making an appointment priority will be given to applicants whose research projects would take advantage of the University’s redeveloped Paddy's Bay Laboratory. Science departments with special interests in marine fields include botany, chemistry, geology, mathematics and statistics, microbiology, surveying, and zoology. Applicants should have completed the requirements for the award of the degree of Doctor of Philosophy. Salary: NZ$35,000 per annum.

Intending applicants should write for further information, available from the undersigned, P.O. Box 56, Dunedin, New Zealand.


POSTDOCTORAL position available 1 September 1988 to participate in NIH-funded study of autoimmune disease. Research involves techniques in immunology and cellular biology. Applicants must have completed all Ph.D. requirements and have experience with T-cell clones. Send curriculum vitae, statement of experience and interests, and addresses of three references by 1 August 1988 to: Dr. Marc Monestier, Center for Molecular Medicine and Immunology, 1 Bruce Street, Newark, NJ 07103.

POSTDOCTORAL POSITION to use non-linear dynamics (fractals, chaos) to study cell membrane ion channels. Patch-clamp experiments, new methods of analyzing single-channel data, and model simulations of channel kinetics. [Ref: Liebowitz et al., Math. Biosc. 84, 37 (1987); Biophy. J. 52, 979 (1987)]. Knowledge of mathematical numerical methods and familiarity with electronics and electronics equipment helpful. Available 1 July 1988. Send resume and names of three references to: Dr. Larry S. Liebowitz, Eye Research Unit, 630 163th Street, New York, NY 10032.

POSTDOCTORAL position available to study gene regulation in higher plants. Study involves both photosynthetic and stable isotope ratio measurements. If interested, please send a resume and letters of reference to: Dr. James Ehleringer, Department of Biology, University of Utah, Salt Lake City, UT 84112. Telephone: 801-581-7623.

The University of Utah is an Equal Opportunity Employer.

POSTDOCTORAL POSITION: APPLIED SUPERCONDUCTIVITY, Brookhaven National Laboratory. Applications are invited for a postdoctoral position for a term of 2 years in the area of the Accelerator Development Department. Position requires recent doctorate in physics or electrical engineering. The successful candidate would be involved in the design, construction, and operation of the 300-MeV, low-field superconductor ac loss measurements at variable temperatures up to 150 K, with some assistance from BNL cryogenics and electronics experts. The equipment would include the cryostat proper, with variable temperature control and a 60-Hz magnetic field source, such as a Morgan-Frost, with a variable current source. The field source would be operated in pulsed mode. Electronics for source control and for ac loss measurements, including low phase-shift, audio-frequency preamplifiers, etc. are also available. The position will also be open to foreign candidates. Applications will also be accepted from foreign candidates. The successful candidate will be sent to Brookhaven National Laboratory. Applications, including the name, address, and telephone number of three qualified referees, should be sent to: Dr. George G. Tierney, Department of Biology, SUNY, Health Science Center at Brooklyn, 450 Clarkson Avenue, Box #5, Brooklyn, NY 11203. The State University of New York is an Affirmative Action/Equal Opportunity Employer.
Agricultural Economist

VACANCY INT/005/88

**GENERAL**

The International Livestock Centre for Africa (ILCA), with headquarters in Addis Ababa, Ethiopia, is one of the 13 international agricultural research organizations supported by the Consultative Group on International Agricultural Research (CGIAR).

The Centre has research activities in some 14 sub-Saharan African countries and has administrative offices in Kenya, Mali and Nigeria.

**POSITION**

Stationed at Ibadan/Nigeria, the main duties of the incumbent will be to carry out economic analysis connected with ILCA’s research in the Humid Zone and in particular to work on:

- Alley farming and the economics of incorporating livestock production into this.
- Small scale milk production by cattle.
- Analysis of demand for dairy products and analysis of dairy products marketing systems.
- Access to land and its effect on the uptake of technology especially alley farming and milk production.

**QUALIFICATIONS**

Applicants should have MSc in Agricultural Economics with at least six years research experience and good publication record or PhD plus at least three years post PhD experience. The candidate must have some formal training or substantial experience of collaboration in research in rural sociology or anthropology. Additionally, two years experience with small holder farming in a developing country and bilingualism (English and French) will be preferred.

Salary and related benefits are paid in US $ and will be in line with comparable international organizations. Initial salary will be determined by qualifications and experience.

Applicants should send current curriculum vitae, recent salary history, names and addresses of three professional referees and photocopies of supporting documents (not returnable) before July 15, 1988 in confidence to:

The Personnel Manager
ILCA
P.O. Box 5689
Addis Ababa
Ethiopia

**American Maize Products Company**, known for its complete line of specialty products, has openings available for Chemists in the following areas.

**Analytical**

This position involves improving/developing wet and instrumental methods of analysis to support production of user-specific specialty starches. Will also devise methods to predict starch performance in customer applications. B.S. with minimum 3-4 years experience or M.S. with minimum 1 year experience required.

**Ag & Food**

Responsibilities involve identifying the chemistry for improving existing products, developing product extensions, and new product concepts. An M.S. with minimum 3 years starch experience is required. A recent Ph.D. will be accepted.

**Biochemistry/Microbiology**

Involves identifying and developing new/improved enzyme producing strains, as well as optimizing conditions for producing product with the enzyme and purification methods. A Ph.D. in Biochemistry with organic and microbiology background is required, as is 0-3 years experience.

**Polymers**

Includes working with and developing modified and/or polymerized forms of molecular inclusion compounds to create products having desired inclusion properties and solubility. A Ph.D. in Polymer, Organic, and Physical Chemistry is required, along with minimum 5-8 years experience in chemical and functional characterizations and laboratory bench scale-up.

If you’re ready to take your talents and imagination further than ever before, we invite you to find out more about American Maize. We offer an excellent salary, generous benefits and full growth. Send your resume with salary history in confidence to: Marjorie Martin, Manager Salary & Benefits Administration, American Maize Products Company, 1100 Indianapolis Blvd., Hammond, IN 46320. An Equal Opportunity Employer.

**DIRECTOR ORGANIC CHEMISTRY**

Exciting career opportunity for you to lead a major research division in a rapidly expanding research-based pharmaceutical company with a world-renowned record of innovative drug discovery. Your top quality staff will provide you with rapid feedback concerning biological and potential clinical activity allowing rapid transformation of chemical compounds into innovative drugs for diseases which are currently poorly treated or untreatable. You will receive a very competitive total compensation plan, stock options, the top pension plan in the industry, a flexible benefits program, plus, plus, plus. If you are interested in being a full member of our research team and want an exciting career that makes a difference, contact us by **July 29**.

Your background must include a Ph.D., eight years experience in drug discovery research as an active, senior-level medicinal chemist, five years successful experience in managing senior-level scientists in drug discovery research, and a history of successful research accomplishment, including patents/publications that demonstrate creativity, innovation, and insight in drug discovery.

Qualified minority, female, veteran, and handicapped individuals are encouraged to apply. Interested candidates should submit curriculum vitae, citing patents held, to Recruiting and Staffing Administrator, Pos. #60418, BURROUGHS WELLCOME CO., 3030 Cornwallis Rd., Research Triangle Park, NC 27709. Deadline for applications is July 29, 1988. No Agencies.

**BURROUGHS WELLCOME CO.**

An Equal Opportunity Employer
EDUCATION COORDINATOR

The American Association for the Advancement of Science, a prestigious science association located in downtown Washington, D.C. has an immediate need for an Education Coordinator.

Qualified candidate will have a doctorate in science, science education, or a related discipline, and experience as a teacher, supervisor, or administrator in the elementary or secondary schools. Must understand the social and political structure of the education system in the United States. Experience in coordinating education projects that involve states, school districts, and universities and familiar with all aspects of curriculum development. Collegiality, inventiveness, energy, commitment to educational reform, and the ability to facilitate the work of others will be major considerations for the position.

For immediate consideration, please submit your resume and salary history in confidence to:

Debra Wright
American Association for the Advancement of Science
Personnel Office
1333 H Street, N.W.
Washington, D.C. 20005

SENIOR
SCIENTISTS

Enzo Biochem, Inc., a dynamic healthcare company is actively seeking highly motivated professionals to fill the following positions:

Ph.D. Chemist

Experienced senior level Synthetic Organic Chemist with expertise in nucleotide and nucleic acid chemistry to develop procedures for modifying DNA. Solid experience in oligonucleotide chemistry is required. Experience with molecular biology is preferred.

Ph.D. Biochemistry or Immunology

2-3 years experience in the development and scale-up of monoclonal antibodies. Experience with ascites and antibody purification is a must. Experience in the development of monoclonals for use in immunopathology or immunohistochemistry a definite plus. Industrial experience or experience in non-isotopic labeling of monoclonals highly desirable.

We offer excellent compensation and benefits packages. Please send CV with salary history to:

ENZOBIOCHEM, INC.
Personnel Department-86
325 Hudson Street, New York, N.Y. 10013

CHEMIST

PH.D. CLINICAL CHEMIST

Drug Safety Division
Wyeth-Ayerst Pharmaceuticals

Wyeth-Ayerst Pharmaceuticals has an immediate opening for a Ph.D. level clinical chemist to supervise a modern, well equipped clinical laboratory at our drug safety testing facility in upstate New York.

The candidate for this position should have previous experience with the Hematology clinical chemistry and biochemistry of the common laboratory species and with the adaptation of human testing procedures to the same. Equal emphasis is a strong background in the use of computers in software packages within the lab for automation of procedures and as tools for the rapid interpretation of clinical results. The successful candidate will work on a cooperative basis with Ph.D level Toxicologists, Pathologists and Pharmacologists providing input regarding the significance of the clinical results and developing strategies to further elucidate the possible mechanism of drug toxicity.

Our drug safety testing facility is located between the foothills of the Adirondack Mountains and the shores of Lake Champlain. The area offers the benefits of a relaxed rural lifestyle and a wide range of outdoor recreational activities while being within easy driving distance of such cultural centers as Lake Placid, Burlington, Vermont and Montreal, Canada. Wyeth Ayerst is an equal opportunity employer offering the successful candidate an attractive benefit package and a salary commensurate with experience. Send resume in confidence to:

Gary D. Wagener, Personnel, WYETH AYERST RESEARCH INC., Rouses Point, New York 12979.

An Equal Opportunity Employer M/F/H/V.
**POSITION AVAILABLE**

**DIRECTOR, DIVISION OF EXTRAMURAL ACTIVITIES**
**NATIONAL INSTITUTE OF MENTAL HEALTH**
**ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION**
**PUBLIC HEALTH SERVICE**
**DEPARTMENT OF HEALTH AND HUMAN SERVICES**

The Alcohol, Drug Abuse, and Mental Health Administration invites nominations and applications for the position of Director, Division of Extramural Activities, National Institute of Mental Health (NIMH). This is a Senior Executive Service position in the career civil service, with an annual salary range of $65,994 to $73,400. Physicians may also be eligible for a Physicians' Comparability Allowance of up to $20,000 per year. The position is located in Rockville, Maryland.

The Division of Extramural Activities provides advice to the Director, NIMH, in developing extramural programs and policies and leadership in their coordination and implementation: represents the Institute on extramural program and policy issues within the Department of Health and Human Services, Public Health Service, the Institute, as well as outside organizations; is responsible for initial scientific and technical peer review of applications for grants, cooperative agreements, and contracts; and is responsible for final review of grant and cooperative agreement applications by the National Advisory Mental Health Council and for planning and coordinating all Council activities. The Director is responsible for the program and administrative management of the Division of Extramural Activities.

Minimum qualifications requirements include a degree of Doctor of Medicine, Doctor of Osteopathy, or a bachelor's degree or higher degree in an academic field related to the health sciences pertinent to the work of the position; and progressively responsible experience in the scientific administration of mental health research funded through grants and contracts which demonstrates a familiarity with the extramural review function. Candidates must also have experience in the management of programs; demonstrating competence to assume leadership in planning, staffing, directing, coordinating and allocating resources, and other responsibilities associated with executive leadership of a major national program.

Further information about the position and qualifications requirements may be obtained by contacting Ms. Carmen Garcia at (301) 443-5030. An SF 171 (Application for Federal Employment) accompanied by a current curriculum vitae and bibliography should be submitted to Ms. Garcia at the Division of Personnel Management, Alcohol, Drug Abuse, and Mental Health Administration, 5600 Fishers Lane, Room 15C-26, Rockville, Maryland 20857. Complete application material (including the SF 171) must be postmarked by the closing date of August 15, 1988. Resumes are not acceptable for entrance into the Senior Executive Service.

Applications from women and minority group members are especially solicited.

**THE ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION IS AN EQUAL OPPORTUNITY EMPLOYER**

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**DIRECTOR, OCEAN ENGINEERING DIVISION**

The Office of Naval Research (ONR) is seeking an outstanding individual to serve in this Civil Service position in the Senior Executive Service. Salary range is $64,700 to $73,400, depending on qualifications. In addition to salary, career SES appointees are eligible to compete for performance awards and bonuses.

The Director, Ocean Engineering Division is responsible for providing leadership, coordination and direction for ONR's $16M fundamental research programs in ocean technology, coastal sciences, research facilities and remote sensing. The goal of the Division is to understand the interactions of ocean processes with man-made structures, and sensors and systems. The Division Director is the scientific administrator of ONR R&D activity in the described fields with full responsibility for staffing his/her program, establishing overall priorities and procedures, and recommending change in program objectives and policies to the Director, Ocean Sciences Directorate. The Division Director serves as the principal consultant to the Navy on developing naval applications in ocean engineering and related fields.

Candidates should possess a Ph.D. or equivalent in engineering, oceanography or physics and have significant experience in ocean engineering or a related field. Considerable experience in the administration and management of research and its application to development is also required.

Interested persons should submit a Standard Form 171, Application for Federal Employment (available at Federal Job Information Centers or from the address below) and a resume including a list of publications, to:

**OFFICE OF THE CHIEF OF NAVAL RESEARCH**
Civilian Personnel Division, Code 01242P, Attn: Announcement 88-45 (S)
800 North Quincy Street, Arlington, VA 22217-5000

Applications will be accepted through 19 August 1988 and must be received by that date. Applicants are requested to complete the appropriate supplemental forms. For further information and supplement forms, please call (202) 696-4705.

U.S. CITIZENSHIP REQUIRED • AN EQUAL OPPORTUNITY EMPLOYER
Marine Research Scientists

The Maurice Lamontagne Institute is seeking to fill a number of research scientist positions in physical oceanography, chemical oceanography, marine parasitology and marine fish population modelling. The Institute, which was established in 1987, is located on the south shore of the Gulf of St. Lawrence, 300 km east of Quebec. With its modern facilities and equipment it offers excellent opportunities for research on practical and fundamental problems of the marine environment. When fully developed in 1992, the Institute will have a staff of 250. At the present it seeks candidates for positions in the following fields.

1. Physical and Chemical Sciences

Head, Division of Physical Oceanography

Head, Division of Chemical Oceanography S-88-31-7101-47JG-G35

We require senior scientists to develop and lead the physical and chemical oceanography divisions. These divisions will carry out applied and fundamental research in the water under the jurisdiction of the Quebec region of the Department, including the Gulf and Estuary of St. Lawrence, Hudson Bay, Hudson Strait, and Fox Basin.

Research Scientists in Physical Oceanography S-88-31-9999-47JG-G35

We require experienced research scientists to develop and carry out research programs on the circulation and mixing of coastal waters subject to tides, winds, and influx of fresh water, sediment-water interaction, and the modelling of these processes.

Research Scientists in Chemical Oceanography and Contaminants

Research S-88-31-7102-47JG-G35

We require research scientists with experience in organic or inorganic geochemistry, marine microbiology, and/or transport phenomena in the benthic boundary layer to develop and carry out research programs on the distribution of natural and man-made organic and inorganic contaminants and tracers, and the processes that control these distributions.

2. Biological Sciences

Head, Parasitology Section S-88-31-7094-47JG-G35

We require a senior scientist to establish a section in parasitology. You will plan, direct and control the section’s activities and define its objectives. You will also be expected to develop a research program and coordinate the research activity with other laboratories.

Research Scientist, Parasitology S-88-31-7100-47JG-G35

We require a research scientist to develop and carry out applied research into parasite dynamics and ecology, and the impact of parasites on marine mammals and species of fish and invertebrates used in commercial applications.

Research Scientist, Modelling of Marine Fish Populations

S-88-31-7103-47JG-G35

We require a research scientist to develop and carry out research into analytical and statistical models of populations of marine fish, including populations of fish used for commercial purpose.

You require for all these positions graduation with a doctoral degree from a recognized university in a scientific field related to the above specialities. You must have postdoctoral experience, be able to carry out independent and original research, and have published original articles that serve to confirm your scientific reputation. The positions of Division and Section Head require in addition that you have published in top ranking scientific journals, have an established credibility within the national and international scientific communities, and have experience in managing research groups. The working language of the Institute is French and although you are not required to know French upon entry, you are expected to be able to function in French within a reasonable time. When necessary, language training will be offered. For all the above positions, a willingness to work in the field for extended periods is necessary.

We offer a salary ranging from $30,521 to $65,744 commensurate with your qualifications and experience.

For more information about these positions contact: Dr. Bjorn Sundby, (418) 775-6703 (Physical and Chemical Sciences) or Ms. Lynn Cleary (418) 775-6637 (Biological Sciences).

Please forward your résumé and/or application form, quoting the appropriate reference number, to:

Joan Girling (613) 996-8054
Public Service Commission Of Canada
Ottawa, Ontario K1A 0M7

Closing date: August 30, 1988

Personal information you provide is protected under the Privacy Act. It will be held in Personal Information Bank PSC/P-PU-040, Personnel Selection Files.

Vous pouvez obtenir ces renseignements en français en communiquant avec la personne susmentionnée.
POSTDOCTORAL FELLOWSHIPS IN MOLECULAR BIOLOGY

For a period of two to three years:
Applicants should hold a PhD in biochemistry, genetics or molecular biology. The persons appointed will conduct basic research in small, competitive research groups. Publication of basic research results is encouraged.

LACTIC ACID BACTERIA Basic research will be conducted in the following areas:
- gene transfer
- gene expression
- vector development

YEAST The chosen scientists will carry out basic research in the areas of:
- gene expression
- secretion and targeting
- vector development

Please send your Curriculum Vitae and three names for reference purposes to Mrs. M. Germanier Audrin, Personnel Services, NESTEC LTD., P.O. Box 353, CH-1800 VEVEY, Switzerland.

NIH STAFF FELLOWSHIP OR NIH VISITING FELLOWSHIP
MOLECULAR BIOLOGY/GENE TRANSFER

The Developmental and Metabolic Neurology Branch, National Institute of Neurological and Communicative Disorders and Stroke. National Institutes of Health, Public Health Service, invites applications for NIH Staff Fellowship or NIH Visiting Fellowship position. This postdoctoral position is available to study a) regulation of genes following transfer into cultured cells and whole organisms using retroviral vectors or b) gene targeting by homologous recombination in embryonic stem cells. Experience in one of the following areas is highly desirable: eukaryotic molecular biology, hemopoiesis or mouse embryology. For the NIH Staff Fellowship Program, candidates must be U.S. citizens or resident aliens and must either have been awarded their doctoral degree in biology or a related science, or have been certified by a university as meeting all of the requirements leading to such a doctorate. The initial appointment is for two years with additional extensions up to five years possible. For the NIH Visiting Fellow program, candidates may be resident or nonresident aliens, and must have a doctoral degree, or its equivalent, in a health science field whose relevant post-graduate experience does not exceed 3 years of experience at the time of their entrance on duty. The original appointment is for one year with renewals up to a maximum of two additional years possible. The starting salary is commensurate with experience and is at least $20,000 per year but more can be offered to experienced individuals.

The position is located in Bethesda, Maryland. For position information and qualification requirements, candidates may call Mrs. Christine Steyer, Personnel Management Specialist, NINCDS, on (301) 496-6334. Interested candidates should send a curriculum vitae, a brief statement of research interest and the names of three (3) references to:
Dr. Stefan Karlsson
DMNB, DIR, NINCDS
National Institutes of Health
9000 Rockville Pike
Bldg. 10, Rm. 3D04
Bethesda, MD 20892
(301) 496-6236

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

CANCER GENETICIST

METPATH, a leader in the clinical laboratory field is currently seeking a CANCER GENETICIST.

The qualified candidate will be board certified or board eligible. Clinical Cytogeneticist with experience in molecular techniques of cancer genetics is sought to head Cancer Genetics Section, and participate in the activities of a large Cytogenetics Reference laboratory. M.D. with primary training in Hematology / Oncology preferred. Ph.D. will be considered.

We offer excellent benefits, salary commensurate with experience. To express interest, please forward resume to: Mr. Harry Thompson, Human Resources Specialist, METPATH, One Malcolm Avenue, Teterboro, N.J. 07608. An Equal Opportunity Employer M / F / H / V.

NESTLE

We are looking for Geneticists and Molecular Biologists for our expanding microbial genetics and molecular biology program at the new Nestle Research Centre near Lausanne, Switzerland (on the lake of Geneva) and are offering

CABM

CENTER FOR ADVANCED BIOTECHNOLOGY AND MEDICINE

POSTDOCTORAL POSITION IN STRUCTURE/FUNCTION STUDIES OF VIRUSES AND VIRAL PROTEINS

X-RAY CRYSTALLOGRAPHY/ MOLECULAR BIOLOGY/ MOLECULAR MODELING

Projects include structural studies of retroviral reverse transcriptases, human rhinoviruses, and other viral and cellular products; molecular surgery of viral surfaces using genetic engineering techniques; rational drug design targeting viral polymerases, receptor recognition, viral assembly and disassembly. State-of-the-art facilities available for crystallography, computer graphics and molecular modeling, and molecular and cellular biology. Send CV and arrange to have three letters of reference sent to:

Edward Arnold
CABM
675 Hoecs Lane
Princeton, NJ 08540.
Phone: (201) 932-5182.
Bitnet: arnold@biowax.
Affirmative Action/Equal Opportunity Employer

CABM

RUTGERS
Request for Applications

OPPORTUNITIES IN CYSTIC FIBROSIS RESEARCH

CYSTIC FIBROSIS AND RELATED AREAS
Research Grants Program

The Cystic Fibrosis Foundation announces competitive research awards for studies related to cystic fibrosis (CF):

RESEARCH GRANTS AND NEW INVESTIGATOR GRANTS
Application Deadline: September 1, 1988
Awards are broadly oriented to support pilot and feasibility type studies for developing and initially testing new hypotheses and/or new methods. Support of up to $30,000 in annual direct costs for two years may be requested.

RESEARCH SCHOLAR AWARDS
Application Deadline: September 1, 1988, January 2, 1989
Research Career Development type award to encourage a sustained commitment to CF from scientists engaged in outstanding independent research career. Support of up to $100,000 per year for three years may be requested.

RESEARCH FELLOWSHIPS
Application Deadline: September 1, 1988
Awards for postdoctoral training in basic or clinical research. Stipends are available for $30,000 (1st year), $31,000 (2nd year) and $33,000 (optional 3rd year).

CLINICAL RESEARCH GRANTS
Application Deadline: October 1
To support clinical research focusing on the pathophysiology, diagnosis and/or therapeutic management of CF. Funding request and duration of the award should reflect the nature of the study.

HARRY SHWACHMAN CLINICAL INVESTIGATOR AWARD
Application Deadline: January 2
Special award for promising physicians entering academic appointment with commitment to establishing career in research related to CF. Total of $60,000 in annual direct costs, for three years may be requested.

For further information contact Robert J. Beall, Ph.D., Executive Vice President for Medical Affairs:

Cystic Fibrosis Foundation
6931 Arlington Road
Bethesda, Maryland 20814
(301) 951-4422

REGULATION OF ION TRANSPORT IN EPITHELIAL CELLS
Special Request For Proposals

The Cystic Fibrosis Foundation invites investigator-initiated research grant applications to define and characterize the biochemical and molecular aspects of post-receptor regulatory mechanisms involved in epithelial ion transport related to cystic fibrosis (CF).

This special request is intended to encourage innovative, meritorious studies focusing on areas including, but not limited to:

- Mechanisms involved in phosphorylation/dephosphorylation of ion channels.
- Molecular and biochemical identification of ion transport proteins and associated regulatory elements.
- Genetic manipulation of transport models to provide better understanding of ion transport and its regulation.
- Identification and definition of second messenger pathways for regulation of ion transport.

Applications must demonstrate potential relevance to cystic fibrosis and the defect in CF epithelial cells.

Awards will be made as grants-in-aid. Applicants may request up to $100,000 in total annual costs for up to two years.

Interested individuals are encouraged to contact the Foundation to discuss the potential relevance of their work. The deadline for submission of applications is September 1, 1988.
POSTDOCTORAL RESEARCH ASSOCIATE/POSTDOCTORAL FELLOW MOLECULAR GENETICS

POSITION OPEN

RESEARCH ASSOCIATE/POSTDOCTORAL FELLOW MOLECULAR GENETICS

Position available immediately in the Division of Medical Oncology of a major New York medical center. Molecular biologists and biochemists with strong background in RNA and DNA technology interested in studying the mechanisms of tumor cell differentiation are invited to send their curriculum vitae with the names of three references to: Dr. Samuel Waxman, Box 1178, The Mount Sinai Medical Center, One Gustave L. Levy Place, New York, N.Y. 10029-6574. An Equal Opportunity Employer.

RESEARCH ASSOCIATE/POSTDOCTORAL FELLOW MOLECULAR GENETICS

Position available immediately in reverse genetics project to study changes in genes involved in the brain developmental defect lissencephaly (smooth brain) associated with the Miller-Diker syndrome (microdysostosis of human chromosomes 17). Successful experience in molecular genetics techniques is required. Send resume to: Dr. David H. Ledbetter, Institute for Molecular Genetics, Baylor College of Medicine, Houston, TX 77030.

RESEARCH ASSOCIATE

Molecular Genetics

U.S. DEPARTMENT OF AGRICULTURE (USDA) AGRICULTURAL RESEARCH SERVICE (ARS)

RESEARCH ASSOCIATE—CHEMISTRY

ARS is seeking an innovative scientist for a postdoctoral research associate appointment in plant protein research at the Northern Regional Research Center, Peoria, Ill. The person selected will conduct research on vital wheat gluten to better understand how processing affects protein composition, conformation, and interactions. Information will help optimize gluten performance and quality of vital wheat gluten. Professional knowledge of protein isolation and characterization and of instrumental procedures is essential. A working knowledge of cereals is desirable. The position will be a research associate with initial appointment of 2 years. A recent Ph.D. in biochemistry or related field is required. Salary: $27,716 (GS-11). The Northern Regional Research Center is a well-equipped, major research center with over 350 scientists on staff. For additional information, contact: Jerold A. Bietz, USDA/ARS/NRRC, 1815 North University Street, Peoria, Ill. 61604. Applicants should send curriculum vitae and names and addresses of three references to: Helen Sweeney, Personnel Assistant, at the same address (telephone: 309-685-4011). Applications in response to this announcement should be marked RNA027.

USDA is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

RESEARCH ASSISTANT PROFESSOR

Collaborate with NIH-funded studies of humoral factors affecting cell ion transport and growth in hypertension (see JFP 251, H894 (1986); Circ. Res. 62, 1001 (1988)). Applicant should have M.D. in biochemistry, pharmacology, or cell biology with postdoctoral training. Experience with cell culture and with chromatographic procedures, including HPLC, necessary. Beginning salary: $26,000. Send curriculum vitae to: Dr. Mark H. Ginsberg, Department of Pharmacology, SUNY Stony Brook, Stony Brook, N.Y. 11794. An Affirmative Action/Equal Opportunity Educator and Employer. AK #172.

POSTGRADUATE RESEARCH ASSOCIATE

POSITION OPEN

RESEARCH ASSOCIATE

California Institute of Biological Research

California Institute of Biological Research

POSTDOCTORAL RESEARCH PROGRAM DIRECTORS

California Institute of Biological Research (CIBR), a non-profit institute, has recently been established with financial support from Stratagene in La Jolla, Cal. The Institute is focused on the development of new strategies in cell biology and molecular genetics and will have major impact on the development of approaches to biological research. The Institute is currently seeking applicants for the position of Research Program Director. CIBR will consist of laboratories with research interests in eukaryotic gene regulation, oncogenes, cellular and molecular transformation, control of immune responses, subcellular organization, and development and mammalian development. CIBR Research Program Directors should demonstrate the ability to obtain funding from multiple sources. Research Program Directors will also be aided by significant core supplement and may also be consultants to Stratagene with the opportunity to form collaborative efforts. Investigators with appropriate research interests are encouraged to apply.

Send curriculum vitae to: Personnel, California Institute of Biological Research, 11099 North Torrey Pines Road, La Jolla, Calif. 92037.

STAFF SCIENTIST, EXPERIMENTAL NUCLEAR PHYSICS: Participate in the research program in experimental nuclear physics at the Continuous Electron Beam Accelerator Facility. Take part in the design and construction of the high resolution magnetic spectrometers in End Station A. Lead design efforts for a new fiber polarimeter for the proton spectrometer. Coordinate user activities for the experiments to be performed with the high resolution spectrometers. This position is for a five-year period with a renewable term, if the user requests maintenance of this position. Applicants should have expertise in proton focal plane polarimetry theory. Be able to utilize small and large scale computers (VAX, CRAY), and have experience in digital computer or its analogues such as TOSCA, publication in experimental nuclear physics. Mail or hand carry resume with copy of advertisement attached to: J. H. Hotchkiss, YEC, 5145 North Virginia Beach Service Drive, Norfolk, VA 23502. J.O. #VA7606541.
Positions Open

Staff Positions

Molecular Vaccines, Inc., a dynamic biotechnology company located in the suburbs of Washington D.C., is committed to developing novel subunit vaccines and immunotherapeutics for AIDS and other infectious diseases. We have senior research scientists, research scientists, and research associate level positions available in protein biochemistry and purification, peptide chemistry, virology, and immunology. Ideal candidates should have strong research experience and publication record. Please submit your curriculum vitae and statement of research interests to: Human Resources, Molecular Vaccines, Inc., 19 Firstfield Road, Gaithersburg, MD 20878.

The Biomembrane Institute and University of Washington

Staff Scientist Position, Postdoctoral Position—Molecular Biology Section, to be filled immediately. Individuals chosen will participate in an ongoing research program aimed at understanding the expression and regulation of proteins involved in glycosylation. Applicants should have a Ph.D. degree or equivalent with extensive experience in molecular biology techniques, including gene cloning using both nucleotide probes and antibodies, DNA sequence analysis, transfection, and microinjection. Salaries are competitive and commensurate with experience. There is an excellent benefits package. Interested applicants should send a brief statement of professional interests, curriculum vitae, and names of three references to: Personnel, The Biomembrane Institute, 201 Elliott Avenue, West Seattle, WA 98119.

The Computation and Neural Systems (CNS) option at the California Institute of Technology is conducting a search for the Neuroscience Faculty. CNS is an academic program offering curriculum leading to a Ph.D. degree. It was established in 1986 as an interdisciplinary program primarily between the Biology and Engineering and Applied Science divisions in order to bring together neurobiologists that are investigating how computation is done in the nervous system and engineers and scientists that are applying ideas from neurobiology to the development of new computational devices and algorithms. Appointments can be either in the biology or engineering divisions, or joint, depending on the interests of the successful applicant.

The primary interest of the search is for appointments of either a theorist or an experimentalist at the assistant professor level, however, exceptionally qualified senior candidates may also be considered. The areas for which the search is conducted include: Learning Theory and Algorithms, Biophysics of Computation and Learning, Neural Approaches to Pattern Recognition, Control, Problem Representations and Network Architectures, Sensory Systems, Network Dynamics, Speech and Audition. The successful applicant will be expected to develop a strong research activity and to teach courses in his or her specialty.

Applicants should send a resume, including list of publications, a brief summary of research accomplishments and goals, and names of at least three references to: Prof. S. Pfaff, 101 Eibhlin Hall, California Institute of Technology, Pasadena, CA 91125.

Caltech is an Equal Opportunity Employer and it specifically encourages minority and women to apply.

The National University of Singapore

Department of Botany

Applications are invited for teaching appointments in the Department of Botany. Candidates should have a Ph.D. degree and who are trained in one or more of the following areas in plant sciences: molecular biology, biotechnology, recombinant DNA-technology, gene transfer systems, molecular genetics, biochemistry, developmental botany, morphology and tropical ecology. Gross annual emoluments range as follows:

- Lecturer: $43,850-57,350
- Senior Lecturer: $55,190-91,070
- Associate Professor: $67,785-109,880

($US1.00 = $52.01 approximately)

The commencing salary will depend on the candidate’s qualifications, experience and the level of appointment offered.

Leave and medical benefits will be provided. Depending on the type of contract offered, other benefits may include: provident fund benefits or an end-of-contract gratuity, a setting-in allowance of $31,000 or $52,000, subsidised housing at nominal rentals ranging from $500 to $216 p.m., education allowance for up to three children subject to a maximum of $10,000 per annum per child, passage assistance and baggage allowance for the transportation of personal effects to Singapore. Staff members may undertake consultation work, subject to the approval of the University, and retain consultation fees up to a maximum of 60% of their gross annual emoluments in a calendar year.

The Department of Botany is a department in the Faculty of Science. There are 8 faculties in the National University of Singapore with a current student enrolment of some 14,000. The Department is well-equipped with a wide range of facilities to enhance the teaching and research activities of staff members. The University is linked to BITNET, an international network that interconnects almost 500 mainframe computers at 200 institutions of higher learning and research centres around the world.

Application forms and further information on terms and conditions of service may be obtained from:

The Director
National University of Singapore
10 Kent Ridge Crescent
Singapore 0511

Enquiries may also be sent through BITNET to: PERSDEPT @ NUSVM

Research Assistants

Pharmacological Sciences

Genentech, Inc., a leader in the field of biotechnology, has openings in our Biomolecular Pharmacology group for Research Assistants with an interest and experience in neurology.

One position involves the study of the pharmacology of receptors, enzymes, and neurotransmitters in the central and peripheral nervous system. Requirements include a relevant scientific BS or MS, with at least two years' experience in immunology or virology as well as experience with radioligand binding, autoradiography, and enzyme biochemistry.

An individual is also sought to study the neuronal regeneration following injury. This opportunity requires a relevant BS or MS and at least two years' experience in neuronal tissue/cell culture preparation and basic biochemical knowledge. Experience in techniques such as ELISA, RIA, HPLC, column chromatography and gel electrophoresis is also required.

Genentech, Inc. offers an excellent salary and benefits package coupled with the opportunity to make a significant contribution to our organization. For the first position, please send your resume to Carol TA. Deasy, Human Resources Department, Genentech, Inc., 460 Point San Bruno Blvd., South San Francisco, CA 94080. For the second position, please send your resume to Eric C.B. Mankuta, Human Resources Department, at the same address. An equal opportunity employer.

POSITIONS OPEN

STAFF SCIENTIST III—SRF TECHNOLOGY: Provide advice on the design of the accelerator; perform research and development to optimize cavity peripheral components; transfer superconducting radio frequency (SRF) tech to industry; supervise testing of cavities and maintain quality assurance; assist in the design and implementation of on-site chemical processing and clean assembly equipment; identify and solve unanticipated problems. Apply by 28 February 1988 to the Head (address below) to arrange an on-site interview.

FELLOWSHIPS

QUEEN'S UNIVERSITY DEPARTMENT OF BIOLOGY

RESEARCH FELLOWSHIP

The department of biology wishes to nominate a strong candidate for an NSERC University Research Fellowship beginning in 1989. The research involves the biochemistry of fish physiology. The program is fully funded for three years. A resume and three letters of reference should be sent to: Prof. Dr. T. Dennis, Head Department of Biology Queen’s University Kingston, Ontario K7L 3N6.

TRAINING PROGRAM

UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES POSTDOCTORAL TRAINING PROGRAM IN DRUG AND ALCOHOL ABUSE

The University of Arkansas for Medical Sciences anticipates filling several postdoctoral positions in the drug and alcohol abuse training program. Fellows entering the program will receive a starting salary of $23,000 per year with a 1% annual increase. These positions will be available as of 1 July 1988. The current faculty and their research interests are: T. Badger (ethanol and opiate effects on neuroendocrine function and tissue growth and development); D. Davies (ethanol effects on reproductive tissue repair); K. Light (developmental aspects of ethanol administration); C. Lumpkin (ethanol effects on tissue regeneration and growth); D. E. McCullar (behavioral pharmacology of drugs of abuse, drug discrimination, drug interactions); R. E. Mrak (ethanol effects on cholinergic transmission); S. M. Owens (immunological models of drug receptors, experimental toxicology, pharmacokinetics); G. R. Wenger (behavioral pharmacology of drugs of abuse, memory and learning, drug interactions); W. D. Weissinger (behavioral pharmacology of drugs of abuse, receptor binding, drug withdrawal). In addition, collaborative arrangements with personnel from the neighboring National Center for Toxicological Research (developmental effects, chronic effects of drugs of abuse) can be arranged. Candidates should address initial inquiries to: Dr. Galen R. Wenger, Department of Pharmacology and Toxicology/Mall Slot 611, University of Arkansas for Medical Sciences, 4301 West Markham Street, Little Rock, AR 72205.

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IMMUNEX CORPORATION, a Seattle based biotechnology company on the forefront of research and development in immune regulation, has a number of positions open as a result of an expansion in our research activities. We are recruiting:

STAFF SCIENTISTS OR POSTDOCTORAL FELLOWS

with experience in the following areas:

**Cytokine Biology**
A scientist is needed to develop small animal models of human diseases. Particular emphasis will be placed on in vivo assessment of recombinant cytokines in models of hematopoiesis, autoimmunity and immune deficiency.

**Biochemistry/Process Development**
A postdoctoral fellow is sought to work on the purification, characterization, and renaturation of recombinant proteins expressed in microbial and mammalian cell hosts.

**Proteolytic Enzymes**
A scientist is needed to purify and characterize therapeutically important mammalian and microbial proteases in conjunction with a team providing recombinant proteases and protein engineering for structure and function studies. Preference will be given to candidates with experience in the design of protease substrates and inhibitors coupled with a strong background in determining enzyme kinetic and thermodynamic constants.

**Protease/Cytokine Biomimetics: Organic Chemistry**
An organic chemist is needed to participate in a multidisciplinary approach to rational drug design. The successful candidate will synthesize protease substrates and inhibitors, as well as, small organic biomimetics of cytokines and their receptors. Preference will be given to candidates with experience in designing and synthesizing protease chromogenic substrates and/or small organic protease inhibitors.

**Cytokine Structure/Function: Crystallography**
A protein crystallographer is needed to interact with a multidisciplinary team of scientists to explore cytokine structure and function using high resolution x-ray diffraction analysis coupled with modern genetic engineering techniques and molecular modeling. Previous experience in crystallizing proteins and using molecular modeling software is required.

**Cell Biology**
A researcher is needed with experience in cell biology, particularly in the area of inflammation, to develop assays, determine biological relevance, and assist in the cloning/expression of therapeutically important mammalian and microbial proteases. The successful applicant must hold a PhD in Immunology or a related field.

**Molecular Biology**
A scientist is sought with interest and expertise in one or more of the following areas: design and use of viral expression vectors in mammalian cells, screening cDNA libraries by direct expression, mechanisms of control of mammalian gene expression, gene transfer and expression in hematopoietic cells, production of recombinant proteins in mammalian cells.

Staff Scientist candidates should hold a PhD or MD degree and possess significant postdoctoral experience demonstrating independent research skill and creativity and will have demonstrated an ability to work in a collaborative environment. Successful candidates for postdoctoral fellowships should have completed a PhD or MD degree and no more than two years’ postdoctoral training.

Immunex Corporation offers excellent opportunity for career development as well as competitive salaries and an excellent benefits package. For consideration, please submit C.V., names of three references, and a list of publications to: **Immunex Corporation, Human Resources Director, 51 University Street, Seattle, WA 98101.** Immunex is an equal opportunity employer m/f/h.
Bioanalysis you can always trust. Always.

You’re working with biomolecules and biomaterials. From proteins, peptides and amino acids, to pharmaceutical compounds in body fluids. You’re probably using a standard HPLC system for your analytical separations. Yet you still want more reliable results, better use of your time and higher performance all-round. That’s why we’ve designed HPLC System One. To give you better performance. System One includes the ability to handle small amounts of sample, reproducible gradient formation, higher separation efficiency and higher detector sensitivity. Based on the newest instrumentation and the very latest technology, System One has been engineered to meet the demanding requirements in bioanalytical HPLC.

And that’s why System One takes you into a new age of bioanalysis. Giving you greater power in your laboratory. Equipping it with superior detection capability, increased reproducibility and maximum throughput. With results you’ve always wanted. And bioanalysis you can always trust. Always.

System One delivers accurate and reproducible gradients with the smoothest flow rate. Automated sample handling needs just 3 μl of sample to inject 1 μl precisely. Convenient SuperPac™ cartridge column optimized for speed and resolution. A programmable variable wavelength UV monitor detects at the most extreme limits. Advanced computing integrator presents data in user defined formats.