Books Received


PERSONNEL PLACEMENT

SCIENCE publishes each Friday, except the last Friday of the year. Advertising is accepted only in writing; no abolition ads. Fourteen days before publication is at least 2 weeks after date of issue in which ad appears. Also, personal ads accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap, or sexual preference.

LINE CLASSIFIED ADVERTISING DEADLINE: Thursday, 10 a.m., 2 weeks prior to issue date (mailed on issue date).

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

LINE CLASSIFIED (POSITIONS OPEN, COURSES, FELLOWSHIPS, MARKETPLACE, and so forth): $3.00 per line. $5.00 minimum, per week (minimum charge covers one inch on a single column, one inch equals 10 lines, 52 characters and spaces per line). No charge for use of box number. No agency commission for ads less than $4. No cash discount. Prepayment required for all foreign ads. Purchase orders and account cover letter including billing address required for all other advertising.

To ESTIMATE ad cost: Structure your copy on a separate page, on lines of 52 characters and spaces. Include any desired heading. Each line of heading, and/or extra line spaces, and all partial lines (including centered reply information) are counted as full lines. Ad titles located within the text are printed in boldface and are only 32 characters per line. In ESTIMATING the cost, multiply total lines × $3.00 = approximate cost of ad. (This is an approximate cost ONLY. Allow for variation between estimated lines and actual typeset lines and the resulting change in cost. Purchase orders must be kept for some degree of flexibility and/or adjustment.)

CANCELLATION POLICY: NO cancellation allowed after airmail Thursday. Two weeks prior to issue date incur a 10% production charge. Final cancellations are 12 days prior to mail date. ONE WEEK prior to issue date Cancellations must be in writing.

Send copy for all Positions Wanted ads and Line Classifieds less than 16 page in size (39 lines) to:

SCIENCE Classified Advertising
1333 H Street, NW, Room 940
Washington, DC 20005
Telephone: 202-326-6555

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

Schenectady Associates, Inc.
New York, NY 10036
Telephone: 212-520-8460

Blind ad replies should be addressed as follows:

Box (give number)

SCIENCE
1333 H Street, NW
Washington, DC 20005

POSITIONS WANTED


In Vitro Toxicologist/Cell Biologist, Ph.D. 1974. Experienced in in vitro assay development and many biochemical and cell culture techniques Over 30 publications. Seeks industrial or academic position in Northeast. Box 111, SCIENCE.

M.D., Ph.D., available for part-time medical consultations. Clinical or investigational projects are considered. P.O. Box 6447, Stanford, CA 94305-0136.

Microbiologist, M.S. Experience in bacteriology, extensive tissue culture, protein purification and analysis, excellent computer skills, wide variety of analytical techniques. Seeks northern New Jersey. Box 115, SCIENCE.

Ph.D. Pathogenic Microbiologist, publications, recent research and teaching experience, international science and technology policy and negotiating experience, seeks academic or industrial position in biotechnology or science policy management. Box 117, SCIENCE.

Science/Administration: have Ph.D., postdoctorate,secondary school, associateships, fellowships, worked with NAS, NASA, NATO, industry and government grants, graduate teaching in U.S., Asia, and Europe. Box 116, SCIENCE.

POSITIONS OPEN

The Delaware Museum of Natural History invites applications for an ASSISTANT CURATOR IN MALACOLOGY. Responsibilities include departmental administration, conduct of collection-oriented research on molluscan systematics, and participation in collection management, and the museum's public programs. Applicants must have a doctorate or equivalent experience. Curatorial experience desired. Position available immediately. Send resume, names of three references, and reprints by 30 September 1987 to: Dr. Barbara H. Butler, Director, Delaware Museum of Natural History, P.O. Box 3937, Wilmington, DE 19897.

ASSISTANT PROFESSOR

Tenure-track position available for membrane cell biologist. Preferred areas of research: membrane-cytoskeleton interactions, image resolution in vitro reconstitution of vesicular transport, and molecular biology of membrane components. Salary commensurate with training and experience. Candidates are expected to participate in one team taught course in the Medical College and in the training of graduate students in cell biology or genetics. To apply, send curriculum vitae and brief summary of research interests to: Dr. Donald Fischman, Chairman, Department of Cell Biology and Anatomy, Cornell University Medical College, New York, New York. Applications should be received by 15 September 1987. Equal Employment Opportunity/Affirmative Action/Minority.

ASSISTANT PROFESSOR

ENVIRONMENTAL SCIENCE

The Department of Biological and Environmental Sciences, McNese State University, invites applications for a tenure-track position in environmental science to begin January 1988. Applicants must have Ph.D. and should have expertise in solid waste/hazardous waste management. A strong commitment to research and teaching at both graduate and undergraduate levels is essential. Send resume and summary of research plans to: Dr. Robert Maples, Chairman, Environmental Science Search Committee, Department of Biological and Environmental Sciences, McNese State University, Lake Charles, LA 70609. An Equal Opportunity/Affirmative Action Employer.
Assistant and Associate Professor - Industrial Hygiene

Applications are invited for an Industrial Hygiene faculty position at the University of California, Los Angeles (UCLA) School of Public Health. A tenure ladder appointment at the associate or assistant professor level is expected. Candidates at a higher level will also be considered. The Industrial Hygiene Program at UCLA is a component of the University of California Southern California Occupational Health Center at the Southern California NIOSH Educational Resource Center. A doctoral degree in industrial hygiene or a related field is required. Individuals demonstrating high academic achievement and a commitment to research in industrial hygiene and related fields are encouraged to apply. Preference will be given to candidates with research interests in exposure characterization, dose modeling, industrial hygiene, and related fields. Send curriculum vitae and names of three references to: Susan Lam, Department of Medicine, School of Public Health, Los Angeles, CA 90024-1772. UCLA is an Equal Opportunity/Affirmative Action Employer and encourages qualified minority and women applicants.

Assistant Professor - Fish Ecology

The Department of General Science at Oregon State University invites applications for a full-time (fixed-term) appointment at the assistant professor (tenure track) level beginning as soon as October 1987. Applicants must have at least 2 years postdoctoral experience, be prepared to carry out independent research, and should have knowledge of the physics and photobiology involved in the interaction of light and the aquatic environment. This position is a joint appointment of the Oregon Biological Station and the School of Marine Affairs. Applicants should send curriculum vitae, graduate transcripts, and names, addresses, and telephone numbers of four references to: Dr. Paul G. Schuster, Department of General Science, Oregon State University, Corvallis, OR 97331. Oregon State University is an Equal Opportunity/Equal Employment Employer.

Assistant Professor - Eukaryotic Molecular Genetics

Applications are invited for a tenure-track faculty position, available 1 July 1988, from individuals with demonstrated research excellence in an area of plant or fungal gene structure and function. The program will complement ongoing programs in molecular biology of host-pathogen interactions and host plant genetics. Teaching responsibilities (10%) will include a graduate level course in the area of expertise. A Ph.D. in molecular biology is required. Experience is preferred. Please send curriculum vitae and a statement of research interests, and have three letters of recommendation sent by 1 October 1987 to: Dr. Jan E. Leach, Search Committee Chairman, Department of Plant Pathology, Throckmorton Hall, Kansas State University, Manhattan, KS 66506. Telephone: 913-532-6176. An Affirmative Action/Equal Opportunity Employer.

Assistant, Associate, or Full Professor - Parasitology

- Department of Veterinary Microbiology and Immunology, University of California, Davis. The Department of Veterinary Microbiology and Immunology, University of California, Davis (1500 Q Street, Davis, CA 95616). Applications accepted through 31 October 1987 or until a suitable candidate is identified.

Chairperson - Department of Neurology

New York Medical College is recruiting a Chairperson for its Department of Neurology. The successful candidate should be a Board-Certified/Eligible neurologist with demonstrated leadership skills. The candidate should have a track record of excellence in patient care and research. Experience in an academic setting is essential. Send curriculum vitae and bibliography to: Richard D. Levee, M.D., Chairperson, Search Committee, Department of Medicine, Munger Pavilion, New York Medical College, Valhalla, NY 10595. An Equal Opportunity Employer.

BIOTECH MARKETING STRATEGIST

Knowledge of aspects of product marketing and communications in the biotech industry, background with biotech company, health care company, or marketing consulting necessary. Advanced degree in a biotech science field preferred. Excellent oral and written communication skills. Regis McKenzie Inc., the nation’s largest high technology marketing and communications consulting firm, is building its biotech consulting practice. Experience and stimulating Cambridge office. Excellent salary and growth opportunities.

Contact:

Christopher G. Edwards
General Manager, Biotech Division
Regis McKenzie Inc.
One Main Street
Cambridge, MA 02142
Telephone: 617-225-2400

BIOENGINEERING PROFESSORSHIP

Applications are invited for the position of Cullen Professor of Biomechanics at the University of Houston. The endowed professorship is intended to attract an individual of outstanding reputation in an area within the broad spectrum of biomechanics, including biomedical engineering and biotechnology. Applicants should have a documented history of research achievement, a strong ongoing research program, and an active interest in university teaching. The Cullen Professor will manage an engineering department at the Cullen College of Engineering (chemical, civil, electrical, industrial, and mechanical) and will provide leadership for all the biomechanics activities in the University. In addition, he/she will provide leadership for biomechanics in the greater Houston community by serving as a liaison to the Texas Medical Center located in Houston, to other area biomechanics programs, and to local biotechnology industries. The Cullen Professor will also be expected to further the activities of the newly formed Biomedical Research Center at the University. Interest in the directorship of the Center will be an important consideration. Applications, including curriculum vitae and names of four references, should be sent to: Dr. Periklis A. Kones, Chair, Cullen Professor of Biomechanics Search Committee, Department of Mechanical Engineering, University of Houston, Houston, TX 77004. Telephone: 713-749-2452. The University of Houston is an Affirmative Action/Equal Opportunity Employer.

CHEMICAL ENGINEER/POSTDOCTORAL RESEARCH SCIENTIST

- Perform experimental work in association with the Center for Fluid Dynamics—A major task in chemical industries. Develop imaging techniques by using gamma camera and C.T. scan (Computerized Tomography) for characterization of fluid flow and precipitation patterns of fine particles. Develop computer models with Monte Carlo methods to simulate the transport phenomena of suspended particles in liquid. Use fractal techniques to characterize shape and texture of aggregates of particles. Requirements: Ph.D. in chemical engineering; graduate level coursework must have included transport phenomena, surface and colloid chemistry, and numerical techniques. Must have published in the field of gamma camera; C.T. scan and Monte Carlo methods in computer simulations. Thirty-five thousand per year. Resume to: NYS Job Service, JO #NY8015695, 250 Schenectady Road, 3rd Floor, Brooklyn, NY 11201, D.O.T. Code 008 061 010.

CLINICAL DIRECTOR

Contract laboratory in South Florida is looking for a clinical director for over-the-counter clinical studies. M.D. with a degree in molecular biology/microbiology in O.T.C. Management, with a background in industry or contract laboratory preferred. Good oral and written communications skills required. Please send resume and salary history to:

Hazelton Laboratories
900 Osceola Drive
West Palm Beach, FL 33409
Attn: Personnel
POSITIONS OPEN

CLINICAL CHEMIST/ASSISTANT PROFESSOR

Position based at the Veterans Administration Medical Center in Louisville, Kentucky, affiliated with the Department of Pathology, University of Louisville School of Medicine, is available. Candidates must have Ph.D. in chemistry, a strong commitment to service and teaching pathology residents, and also have a documented interest in clinical and/or basic research. The chemistry section performs over one million weighted tests per year. Women and members of minority groups are strongly encouraged to apply. Applicants accompanied by four letters of recommendation should be addressed to: Bogdan Nekuloff, M.D., Department of Pathology, University of Louisville School of Medicine, Louisville, KY 40292.

An Equal Employment/Affirmative Action Employer.

LIFECODES CORPORATION

CLINICAL DNA SCIENTIST

Lifecodes Corporation is one of the pioneering companies applying DNA technology to human genetics.

We seek an individual with a recent Ph.D. to join our rapidly growing Forensic and Paternity Reference Laboratory. The premier such organization in the world. This person should have a strong background and interest in the practical applications of recombinant DNA technology and the ability to supervise laboratory personnel. Lifecodes is located in Westchester, New York, only 30 minutes from midtown Manhattan.

To apply, send curriculum vitae and the names of three references to:

Personnel Department
Lifecodes Corporation
4 Westchester Plaza
Elmsford, NY 10523

CURATORIAL POSITION IN CRUSTACEA

Applications are solicited for a curatorial position in Crustacea at the Natural History Museum of Los Angeles County. Responsibilities include conducting collection-oriented research on the systematics of marine crustaceans, active participation in a major collection (including full responsibility for supervising an ongoing NSF collection management grant and the orderly transfer of the Allan Hancock Foundation Crustacea collection), and participation in public programs of the Museum. Doctorate required. Position will be filled at the level of the best-qualified candidate. Starting curatorial salaries: Assistant $24,759, Associate $29,196, Full $36,963. Job will remain open until filled. Applications including names of three references should be sent immediately to: Dr. Daniel M. Cohen, Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007. Telephone: 213-744-3367. An Equal Opportunity Employer.

CORNELL UNIVERSITY

ELECTROPHYSIOLOGIST

The Section of Neurobiology and Behavior, Cornell University, seeks a full-time (12-month appointment) senior lecturer beginning January 1988 for a 5-year renewable contract. The individual will teach a 20-student undergraduate laboratory/lecture course in neurophysiology and one additional advanced course, such as electrophysiology for neurobiologists. Duties include course organization, lecturing, and teaching laboratory sections. A Ph.D. in neurophysiology or related fields, and prior teaching experience, are requirements.

Applicants should send curriculum vitae (including evaluation of teaching), and three letters of reference requested by the candidate to: Search Committee, Neurobiology and Behavior, W363 Seeley Mudd Hall, Ithaca, NY 14853. Screening of applicants begins September 1987. Cornell University is an Affirmative Action/Equal Opportunity Employer.

SR. DEVELOPMENT SCIENTIST

MS or New Ph.D. To Advance In Plasma Fractionation.

A world leader in the field of plasma fractionation biotechnology recognized for our superior products, this position provides an exceptional opportunity to enhance your scientific expertise through plasma product and process development. A new Ph.D. in Biochemistry or an MS in Biochemistry with related experience may qualify you for this position. A background in plasma fractionation and/or protein fractionation, coagulation fibrinolysis and protein chemistry is helpful, as is research and industrial experience in handling human therapeutic fractions.

Responsibilities involve planning and carrying out experiments in new product development, product improvements and cost reductions at the bench and pilot plant level. This includes working with R&D and Operations personnel in bringing new products to market.

Find out how you can advance your career in a sophisticated scientific technology with a unit of The Rorer Group. Our advanced manufacturing facility is located within easy access to Downtown Chicago and less than 30 minutes from some of Chicago’s finest suburbs. In addition to an excellent salary and benefits package, we offer a fast-growth, yet relaxed non-smoking environment. For consideration, send resume with salary history in confidence to: John S. Daliani, Manager, Personnel Administration, Dept. SM/8-14.

Armour Pharmaceutical Co.
P.O. Box 511, Kankakee, IL 60901
Equal Opportunity Employer.

Armour hires only United States citizens and lawfully authorized alien workers.

DIAGNOSTIC (MOLECULAR) MICROBIOLOGIST

Opportunity to develop a research-oriented program in Diagnostic Microbiology with intent to expand and improve the use of modern techniques of Molecular Biology in the diagnosis of infectious diseases. The successful applicant will establish and direct a laboratory focusing on viral and/or bacterial agents, and will develop independent and collaborative research projects. He or she will interact with both the basic science Department of Microbiology and with the clinical Infectious Diseases Division at this major teaching hospital.

Applicant (M.D. and/or Ph.D.) should have experience using nucleic acid probes and hybridization, Northern and Southern techniques, as well as experience with the use of molecular immunological probes for Diagnostic Microbiology purposes.

The position may be filled at an Assistant or an Associate Professor level. Application including curriculum vitae and names of references should be sent to: Dr. Peter Palese, Department of Microbiology, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029. We are an equal opportunity/affirmative action employer.

MOUNT SINAI
POSTDOCTORAL TRAINING PROGRAM IN THE MOLECULAR AND CELLULAR BIOLOGY OF LIPIDS AND LIPOPROTEINS

Applications are invited for advanced research training in the molecular and cellular biology of lipids and lipoproteins. Candidates will participate in basic and clinical research projects with emphasis on problems relevant to atherosclerosis and heart disease. Seven research areas are available: (1) regulation of lipid synthesis and intracellular trafficking, (2) structure of lipoproteins, (3) lipolytic enzymes and lipid transfer catalysts, (4) the interaction of lipoproteins with cells and with the arterial wall, (5) the genetics of dyslipoproteinemias, (6) bile acid transport, and (7) the molecular biology of lung surfactant. The approach is a multidisciplinary one, drawing from biochemistry, molecular biology, developmental biology, physiology, biostatistics and epidemiology. Preceptors are: Judith A.K. Harmony, James E. Heubi, John J. Hutton, Richard L. Jackson, Kenneth D.R. Setchell, Richard G. Siegenthaler, Dennis L. Sprecher, M.T. Ravi Subbiah and Jeffrey A. Whitsett. Candidates should be U.S. citizens or permanent residents committed to a research career, hold a Ph.D. or M.D. degree, and have experience in biochemistry, molecular genetics, cell biology, medicine, or immunology. APPOINTMENTS TO BEGIN AS EARLY AS SEPTEMBER 1, 1987. ARE FOR A MAXIMUM OF 3 YEARS WITH ANNUAL SALARY RANGING FROM $16,000 TO $30,000. Applications should include a CV, a short summary of research experience and background, and two letters of reference. Address to:

J.A.K. Harmony
Department of Pharmacology and Cell Biophysics
University of Cincinnati College of Medicine
231 Bethesda Avenue
Cincinnati, Ohio 45267-0575.

The University of Cincinnati is an affirmative action/equal opportunity employer.

MOLECULAR BIOLOGIST

Pioneer of new scientific breakthrough using gene probe technology to provide DNA fingerprinting for paternity and forensic genetic markers. Small company environment with support of Corporate giant — ICI.

1-2 years postdoctoral experience. Candidates should have a strong background in DNA hybridizations and have a comprehensive training in recombinant DNA techniques. Training in labeling, isolation and detection of radio labeled DNA as well as DNA sequencing methods, oligonucleotide synthesis and gene assembly would be an advantage.

Salary commensurate with ability and experience. Excellent benefits package.

Send resume with salary history to Personnel Director

CELLMARK DIAGNOSTICS
P.O. Box 1000
Germantown, MD 20874

Equal opportunity employer, M/F

The Uncommon Company

Marion Laboratories, Inc., headquartered in Kansas City, Missouri, is involved in the development, manufacturing and sales of pharmaceutical, hospital and laboratory products. For the fourth consecutive year, net earnings for Marion Laboratories, Inc. increased more than 50% with net sales of $500 million. Our continued growth and expansion allows us to seek experienced individuals for the following positions in Kansas City.

SENIOR SCIENTIST, IMMUNOLOGIST

Marion is looking for an individual to develop a total research program in the area of autoimmune diseases. The successful candidate will have a Ph.D. in Pharmacology, Immunology or Biochemistry with at least three years of research experience in autoimmune diseases. The associate will participate in identifying new research areas, in establishing both an internal and external research program, and in developing immunomodulating agents for clinical testing. Strong interpersonal and communication skills are essential.

PHARMACOLOGIST

Marion is seeking an associate with a background in biochemistry to participate in a drug development team. The associate will assist in the preclinical evaluation of various agents which includes specific enzyme inhibitors. The successful candidate will have a Ph.D. in Pharmacology or Biochemistry and 0-3 years of experience in enzyme reactions and kinetics.

We offer a complete compensation and benefit package to include bonus, stock options, profit sharing, comprehensive group health, dental, and life insurance benefits. Qualified candidates should submit a detailed resume including salary history to: Marion Laboratories, Recruiting & Placement, Dept. C-JL, P.O. Box 9627, Kansas City, MO 64134.

Marion Laboratories, Inc.

Equal Opportunity Employer
DIRECTOR, ENVIRONMENTAL CRITERIA AND ASSESSMENT OFFICE, FREDERICK, MD (ECAO-CINC.) $64,700 to $70,500

U.S. Environmental Protection Agency (EPA) is seeking highly qualified candidates for the position of Director, ECAO-CINC. Applicants must have a Ph.D. in a science area, and extensive experience in environmental research, evaluation, and/or regulatory actions. This position is located at the EPA’s National Laboratory in Cincinnati, Ohio.

POSITIONS OPEN

DIRECTOR OF RADIOPHARMACY

MAYO CLINIC, ROCHESTER, MINNESOTA

Mayo Clinic, a large multi-specialty group practice in Rochester, Minnesota, is currently seeking candidates to be the Director of the Radiopharmacy. Individuals should have a Ph.D. in a science area and experience in a broad range of radiopharmaceuticals. Applicants should have an advanced degree and extensive clinical experience. Candidates should apply to:

Manuel L. Brown, M.D.
C-66 Hilton Building
Mayo Clinic
200 First St. NW
Rochester, MN 55905

Mayo Clinic is an Equal Opportunity Employer

ELECTRON MICROSCOPIST

YALE UNIVERSITY

 Ideally with experience in routine EM, pre- and postembedding immunocytochemistry, ultracytomicrotomy; will work in neurobiology research laboratory with histological sections and neuronal tissue culture. This is a grant funded position. Send resume to: J. M. Coutts, Yale University, Department of Human Resources, 155 Whitney Avenue, P.O. Box 1404, Yale Station, New Haven, CT 06520. Yale University is an Affirmative Action/Equal Opportunity Employer.

ENVIRONMENTAL CHEMIST

The Chesapeake Biological Laboratory seeks a marine environmental chemist with emphasis on the behavior of organic contaminants in coastal and estuarine ecosystems to fill a tenure-track faculty position within the University of Maryland’s Center for Environmental and Estuarine Studies. While applications at the assistant professor level are encouraged, rank is open and salary competitive. Previous postdoctoral experience is desired. Interested individuals should send curriculum vitae, a statement of research interests, and three letters of reference to:

Dr. Rodney Dawson, Chairman
Search Committee
Chesapeake Biological Laboratory
Solomons, MD 20688–0038

The University of Maryland is an Affirmative Action/Equal Opportunity Employer. Applications from women and minorities are particularly sought.

ENVIRONMENTAL MONITORING SYSTEMS LABORATORY–RESEARCH TRIANGLE PARK, NORTH CAROLINA (TPRTP) $64,700 to $70,500

U.S. Environmental Protection Agency is seeking highly qualified candidates for the position of DIRECTOR, ECAO-CINC. Applicants must have a Ph.D. in a science area, and extensive experience in environmental research, evaluation, and/or regulatory actions. The Office is a focal point for collecting and evaluating literature on health hazards to support Agency offices in making decisions on control of environmental hazards in the United States.

To qualify, applicants must have a degree or equivalent experience in a science area, e.g., biochemistry, toxicology, pharmacology, physiology; managerial experience in health risk assessment, environmental research, or other health study programs; and meet the technical and executive qualifications described in the Vacancy Announcement. Call/write: Edna Morse, EPA, SES and Executive Resources Unit, FM-224, 401 M Street, SW, Washington, DC 20460. Telephone: 202-382-3328, for the vacancy announcement. Applications must be postmarked by 31 August 1987. EPA is an Equal Employment Opportunity Employer.

POSITIONS OPEN

FACULTY POSITIONS

KING ABDULLAZIZ UNIVERSITY

FACULTY OF METEOROLOGY, ENVIRONMENT AND ARID LAND AGRICULTURE

JEDDAH, SAUDI ARABIA

Applications are being accepted by the Faculty of Meteorology, Environment and Arid Land Agriculture, King Abdulaziz University for the following three faculty positions:

1. HORTICULTURAL SCIENTIST
2. FLORICULTURE SCIENTIST
3. ANIMAL BREEDING SCIENTIST

Applicants should hold a Ph.D. in horticulture, floriculture, animal breeding, or a closely related field, and have a proven record in teaching and research. Candidates should submit curriculum vitae, including a list of publications, statements of research interests and teaching experience, and three letters of reference to:

Dr. Dawyane A. Suter
Associate Dean
College of Agriculture
Texas A&M University
College Station, TX 77843

In addition to an attractive salary, King Abdulaziz University offers a generous housing and furniture allowance, end of contract gratuity, 60 days of paid summer leave each year, baggage allowance, educational allowance for school-age children's transportation allowance, and annual round-trip air fares.

Term of employment is for 1 year with opportunity for renewal.

Wayne State University

FACULTY POSITIONS

WAYNE STATE UNIVERSITY

The Department of Molecular Biology and Genetics, with the support of the Molecular Biology Center at Wayne State University, invites applications for multiple tenure-track faculty positions for fall 1988 or earlier hire dates, at the level of assistant, associate, or full professor, depending upon qualifications and experience. Generous start-up funds will be available. These positions are part of a major University-wide expansion in molecular biology. While emphasis is on health research, candidates with demonstrated research excellence in any area of molecular biology or molecular genetics will be considered. Send applications (deadline: 1 November 1987), including curriculum vitae, the names of at least three references, and a statement of future research plans, to:

Orlando J. Miller, M.D., Chairman
Department of Molecular Biology and Genetics
Wayne State University School of Medicine
540 East Canfield
Room 3216 Scott Hall
Detroit, MI 48201

Wayne State University is an Equal Opportunity/Affirmative Action Employer. It actively seeks applications from women and minority groups.

SCIENCE, VOL. 237
QUALITY ASSURANCE TOXICOLOGIST
(TWO POSITIONS)
GS-11/12/13
$27,172–$50,346
RESEARCH TRIANGLE PARK, NORTH CAROLINA

The Division of Toxicology Research and Testing (DTRT) of the National Institute of Environmental Health Sciences, National Toxicology Program, Research Triangle Park, North Carolina, is seeking applicants for the position of Quality Assurance Toxicologist within the Quality Assurance Group, DTRT. Primary duties involve developing and managing quality assurance activities related to nonclinical toxicology studies. The incumbent of this position must have a Ph.D., D.V.M., Sc.D. degree or equivalent experience (including research) in toxicology or a directly related field of interest. In addition, this position requires knowledge of quality assurance principles and good laboratory practice regulations, management skill and the ability to assess the progress and adequacy of projects through periodic site visits and review of reports. U.S. citizenship required.

If interested, submit curriculum vitae and the names of three references by September 8, 1987, to:
Johnny L. McLean
Personnel Office, 8 NV-5
National Institute of Environmental Health Sciences
P.O. Box 12233
Research Triangle Park, NC 27709
(919) 541-7813

AN EQUAL OPPORTUNITY EMPLOYER

Postdoctoral Scientist
Receptor Biology

As part of our expanding R&D activities in biotechnology, the Department of Experimental Pathology at Smith Kline & French Laboratories, located in the suburban Philadelphia area, is seeking a Postdoctoral Scientist to join a collaborative group investigating hepatic metabolism of tissue-type plasminogen activator (tPA). The successful candidate will determine if hepatic uptake of tPA is receptor mediated and will study the mechanism and specificity of uptake and catabolism. It is expected that this work will lead to significant scientific publications. Collaborations with scientists at SK&F and in the scientific community at large will be encouraged. The appointment is for one year, renewable for a second year on mutual agreement. Candidate having experience with radiolabelled ligand binding techniques, affinity chromatography, or immunocytochemistry using colloidal gold labelled ligands are strongly urged to apply.

Candidates are required to have:
- A doctoral degree in Cell Biology, Biochemistry or a related discipline
- 0-3 years postdoctoral experience with receptor assays
- Strong oral and written communication skills
- Experience in handling and maintaining cultured cells and laboratory rodents

Job specifications:
- A doctoral degree in Cell Biology, Biochemistry, or related discipline
- 0-3 years postdoctoral experience with receptor assays
- Strong oral and written communication skills in English
- Experience with cell culture and using radioactive labelled materials
- No known allergies and be willing to work with rodents

We offer an excellent compensation, benefits and relocation package as well as opportunities for personal and professional growth. For confidential consideration, please forward your C.V. and the names of three references to: Mary Ann McCary-CD042, Senior Employment Consultant-R&D, Smith Kline & French Laboratories, Research & Development, P.O. Box 1539, King of Prussia, PA 19406-0539. We are an Equal Opportunity Employer, M/F/H/V.

National Institutes of Health
National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)
Division of Kidney, Urologic, and Hematologic Diseases

Academic Physician or Ph.D.—BC/BE with interest in developing the basic scientific aspects of the renal, lower urinary tract, and hematopoietic systems. Full-time position. Time available to pursue research interests. Salary is negotiable, commensurate with qualifications and experience. How to apply: Submit an Application for Federal Employment (SF-171), curriculum vitae, bibliography, and names of three references to:

Mr. Clifford Moss
Personnel Officer, NIDDK
Building 31, Room 9A34
9000 Rockville Pike
Bethesda, MD 20892
Telephone (301) 496-4231

NIH is an equal opportunity employer; women and minorities are encouraged to apply. U.S. citizenship required.
AFFIRMATIVE A'action

The Murray Minimum experience in Philadelphia, Pa., is seeking a candidate for the position of IMMUNOLOGIST/CHIEF OF LABORATORY OPERATIONS. The clinical oncology laboratory of Allegheny General Hospital is seeking a laboratory director in Pittsburgh, Pennsylvania, for the position of IMMUNOLOGIST—EXPERIMENTAL PATHOLOGIST. A tenure-track position exists at the assistant professor level in the department of Immunology. The successful candidate will provide the opportunity to develop an independent research program and to interact with other researchers engaged in studying immunity to infectious agents, tumors, and allergens. The successful candidate will be provided the opportunity to develop his/her own independent research program and to interact with other researchers engaged in studying immunity to infectious agents, tumors, and allergens. The successful candidate will provide the opportunity to develop his/her own independent research program and to interact with other researchers engaged in studying immunity to infectious agents, tumors, and allergens.

TRUDEAU INSTITUTE IS LOOKING FOR AN EXPERIMENTAL PATHOLOGIST. A tenure-track position exists at the assistant professor level. The successful candidate will develop an independent research program and to interact with other researchers engaged in studying immunity to infectious agents, tumors, and allergens. The successful candidate will provide the opportunity to develop his/her own independent research program and to interact with other researchers engaged in studying immunity to infectious agents, tumors, and allergens.

IN VIVO NMR SPECTROSCOPY. The Department of Radiology at the University of Iowa invites applications for a position in NMR spectroscopy. The University Hospitals is obtaining a 1.5T whole-body MRI system with spectroscopic capabilities, and we are initiating research aimed towards eventual clinical application of in vivo MRI spectroscopy. The successful candidate will provide the opportunity to develop his/her own independent research program and to interact with other researchers engaged in studying immunity to infectious agents, tumors, and allergens. The successful candidate will provide the opportunity to develop his/her own independent research program and to interact with other researchers engaged in studying immunity to infectious agents, tumors, and allergens. The successful candidate will provide the opportunity to develop his/her own independent research program and to interact with other researchers engaged in studying immunity to infectious agents, tumors, and allergens.

Contact: E. A. Franken, Jr., M.D., Chairman, Department of Radiology, University of Iowa, Iowa City, IA 52242. The University of Iowa is an Equal Opportunity/Affirmative Action Employer.
Research Opportunities in Biotechnology

Department of Biotechnology Research at Pioneer Hi-Bred International, Inc. is seeking applicants for our ongoing program of crop improvement. Pioneer offers competitive salaries, excellent facilities and a highly cooperative research environment. Successful candidates will be expected to interact extensively with ongoing programs in transformation, regeneration and gene isolation programs.

Cell Biologist...

To develop further the cell biology program for transformation and in vitro selection of corn and sunflower. The position is well supported with technical assistance. A Ph.D. or equivalent in biology, botany or plant physiology with relevant research experience in cell biology/tissue culture is required.

Post Doctoral Position in Molecular Biology...

To participate in projects involved in identification, isolation and characterization of genes from corn. Research will be directed to understanding the role of different DNA sequences in gene expression. The applicant should have a Ph.D. Degree or equivalent in biology or related disciplines with experience in molecular biology.

Molecular Biologist...

To participate in original research projects on the molecular biology of plant viruses and disease resistance and perform standard molecular procedures including cDNA cloning and nucleic acid sequencing. A BS/MS or equivalent in molecular biology or related biological subject with at least two years of laboratory experience.

Biochemist...

To support our ongoing biotechnology research programs in plant transformation and gene isolation. Successful applicants will have a BS/MS in biochemistry or equivalent with at least five years of laboratory experience. In addition, preference will be given to candidates who have expertise in the following areas: enzyme kinetics, protein purification, plant metabolism, immunochemistry, radioisotopes and chromatography methods.

Send resume and indicate which job you are applying for with at least three references to:

Lisa Wilson
Pioneer Hi-Bred International, Inc.
7300 N.W. 62nd Avenue, P.O. Box 38
Johnston, Iowa 50131

SIBIA

SCIENTISTS AND RESEARCH ASSOCIATES

SIBIA is an established biotechnology company involved in a wide spectrum of innovative research programs. SIBIA, with a staff comprised of leading scientific staff members, provides an exceptional scientific research environment in which to work, plus a modern laboratory located near the ocean on Coast Boulevard in La Jolla. A broad range of research programs encourage multidisciplinary interaction.

Applications are requested for Scientists and Research Associates in:

MOLECULAR CELL BIOLOGY

BS/MS in molecular biology, microbiology or biochemistry. Experience with recombinant DNA techniques such as cloning, nucleic acid sequencing, and nucleic acid hybridization analysis desirable. Yeast systems also desirable.

Postdoctoral position for Ph.D. in Biochemistry/Molecular Biology with experience in recombinant DNA and gene cloning.

MOLECULAR VIROLOGY

To develop gene transfer systems. Experience with animal virus systems (especially retroviruses) and tissue culture techniques required. Requires background in recombinant DNA and immunological techniques.

Positions available for Research Associates with two or more years applicable experience, and Postdoctorates and Staff Scientists with appropriate background.

CHEMISTRY


MICROBIOLOGY

ANAEROBE MICROBIOLOGIST - Microbiology and Physiology of anaerobic and aerobic bacteria. Isolation, characterization, identification, and physiology of diverse environmental bacteria. Prefer experience in microbial physiology, GC, HPLC, anaerobe microbiology, fluorescent microscopy, computers. M.S. or equivalent.

We offer a comprehensive benefits package and competitive salaries. For confidential consideration, please submit your curriculum vitae, a statement of research interests and goals, and the names of three professional references to SIBIA, Department 4080, 505 Coast Boulevard South, La Jolla, CA 92037. Equal Opportunity Employer.
PHARMACOLOGIST
MOLECULAR

Ayerst Laboratories, a subsidiary of Fortune 100 American Home Products Corporation, anticipates an opening at their state-of-the-art research facility located in the Princeton, New Jersey area, for a Molecular Pharmacologist to work within the department of Pharmacology and participate in the establishment of novel approaches to drug discovery and elucidation of the mechanisms of drug action. Involvement with various ongoing research areas within the department will be emphasized.

The appropriate candidate would have a PhD degree with a minimum of 3 years of postdoctoral and/or industrial experience in the area of second messenger regulation of cellular activity. Experience in cyclic nucleotide biochemistry, and in the purification and characterization of phosphodiesterases and/or cyclic nucleotide-dependent protein kinases is strongly desired. Candidates should possess highly developed oral and written communication skills and a strong publication record.

Ayerst offers an excellent salary and benefits package with opportunities for career advancement. Interested candidates should submit a resume with salary requirements to:

Personnel Manager, Dept. DG

AYERST LABORATORIES RESEARCH, INC.
CN 8000
Princeton, NJ 08543-8000

Equal Opportunity Employer M/F/H/V

Research Opportunities

Monsanto Corporate Research has two immediate openings available in the Biological Sciences Department in St. Louis, Missouri.

The positions will involve the isolation and characterization of genes involved in the control of the immune or nervous systems.

The requirements for these positions are a BS or MS in Chemistry, Biochemistry or Molecular Biology and at least 1-3 years experience in molecular genetics. Experience in animal cell culture is preferred. Send your resume to: John Bussem, MONSANTO COMPANY, 700 Chesterfield Village Parkway; Chesterfield, MO 63017. An Equal Opportunity Employer M/F/H/V.

Post Doctoral Associate

A position is open immediately in the Department of Animal Research for a recent Ph.D to investigate aspects of drug targeting. The candidate should have experience with small animal techniques, biodistribution/pharmacokinetic assessments and liver perfusion methods. Experience with tumor xenograft models would be desirable. Send curriculum vitae and the names of three references to: Employee Relations Manager, XOMA Corporation, 2910 Seventh Street, Berkeley, CA 94710. An Equal Opportunity Employer.
Biotechnology Research and Development

Pandex, a division of Baxter Healthcare Corporation, is developing state of the art products for medical diagnostics.

We are expanding our R&D group and offer unique opportunities for creative Ph.D. level Scientists interested in positions that offer challenging opportunities for professional career growth.

We are seeking the following key individuals:

**Nucleic Acid Chemist** - Ph.D. with 0-3 years postdoctoral experience in DNA/RNA synthesis.

**Molecular Biologist** - Ph.D. with 2-3 years postdoctoral experience in DNA cloning and synthesis of DNA probes.

**Assay Development Scientists** - Ph.D. with 3-5 years postdoctoral or industrial experience in immunology, virology or microbiology with knowledge of immunoassay techniques.

**Virologist** - Ph.D. with 0-3 years postdoctoral experience or equivalent in retrovirology.

**Microbiologist** - Ph.D. with 0-3 years postdoctoral experience in the area of STD's.

As a division of a multi-billion dollar leader in the healthcare industry with research facilities located 30 miles north of Chicago, we offer a competitive starting salary and an excellent benefits program.

If you would like to be considered, please send your resume in confidence to: Anne McNicholl, Personnel Director, Baxter Healthcare Corporation, Pandex Division, 909 Orchard Street, Mundelein, IL 60060. We are an equal opportunity employer.

Pandex Division
Baxter

**NASA**
National Aeronautics and Space Administration

**PHYSIOLOGISTS**

**CARDIOVASCULAR PHYSIOLOGISTS** (2 POSITIONS)
Conduct research on the effects of space flight on the cardiovascular system. Focus on cardiac and cardiovascular changes in long-term microgravity, partial gravity, artificial gravity, hypergravity, and on return to normal gravity. Carry out ground-based simulations (e.g., bedrest, water immersion) and flight experiments with appropriate instrumentation for determining the fundamental mechanisms of change. Develop and test concepts for countermeasures against the deconditioning of space flight. Two positions are available.

The first involves research on the human cardiovascular system and includes the planning, coordination, and direction of an intra- and extra-mural cardiovascular research program. Applicants must have an advanced degree in physiology or medicine with a minimum of three years of independent research experience in cardiovascular physiology. Salary: $45,763 - $69,976. (Announcement 14-87).

The second position is for research on the cardiovascular system of mammals, especially primates. Applicants must have an advanced degree as above with demonstrated research expertise in mammalian cardiovascular physiology. Salary: $32,562 - $50,346. (Announcement 15-87).

**MUSCLE PHYSIOLOGIST** (1 POSITION)
Performs original research on the mechanisms and environmental factors which regulate skeletal muscle mass and function. Investigates the specific skeletal muscle changes which occur in microgravity-induced muscle atrophy in animal models and human beings, evaluates various countermeasures, and develops or evaluates procedures for monitoring muscle mass and function during spaceflight. Applicants must have an advanced degree in physiology or allied sciences with a minimum of three years of independent research experience in skeletal muscle structure and function, and a record of contributions to the field. Salary: $45,763 - $59,488. (Announcement 10-87).

For further information write to Jack Cormode or Sharon Scharmen, at the address below or phone (415) 694-5605. Technical inquiries should be directed to Dr. John H. Billingham, Chief, Life Science Division, at (415) 694-5181. Formal applications should be filed by September 30, 1987. Positions located at Ames Research Center near the Silicon Valley.

an equal employment opportunity/affirmative action employer

NASA-Ames Research Center
Attn: AHM 241-32
Moffett Field, CA 94035
YEALE UNIVERSITY INVERTEBRATE PALEONTOLOGIST. The Department of Geology and Geophysics is soliciting applications for an assistant professor in invertebrate paleontology to begin in the academic year 1987 to 1988. A curriculum vitae, list of publications, and the names of references should be sent by 1 October 1987 to: Karl K. Turekian, Chairman, Department of Geology and Geophysics, Yale University, Box 171, 47 Old Campus, New Haven, CT 06511. Yale University is an Equal Opportunity/Affirmative Action Employer and encourages applications from all qualified scientists.

JUNIOR FACULTY POSITION

The Department of Chemistry at the University of California, Santa Cruz, invites applications for a position at the assistant professor level, effective fall 1988. We are limited to six potential, if qualified and eligible, for future tenure-track consideration. Send applications and three letters of reference to: Dr. Robert T. Louis-Ferdinand, Department of Biological Sciences, Room 528 Shapero Hall, College of Pharmacy and Allied Health Professions, Wayne State University, Detroit, MI 48201; 313-577-1737. Affirmative Action/Equal Opportunity Employer.

MICROBIAL ECOLOGIST/ OCEANOGRAPHER

A microbial ecologist with primary interests in bacterioplankton and bacteriophage, and at least one of carbon and nitrogen flows in estuarine, coastal, and oceanic waters is being sought by the Horn Point Environmental Labora- tories, Center for Environmental and Estuarine Studies, University of Maryland. The successful applicant will work on interdisciplinary programs with other biologists, chemists, and biostatisticians to examine microbial oceanographic processes in an eco- logical and hydrodynamic context. Experience with mod- elling and advanced particle analysis instrumentation (HPLC, Biochemistry, video microscopy, and image analysis) preferred. Applicant will be expected to develop independent research programs, direct graduate stu- dents, and participate in teaching in the University's marine science graduate programs. The position is ten-ure-track in the University of Maryland system with rank and salary open at the associate professor or professor level. A letter of application accompanied by a signed, current curriculum vitae, and the names of five individuals who may be contacted for references should be sent to: Dr. Dennis L. Taylor, Horn Point Environmental Laboratories, University of Maryland, P.O. Box 775, Cambridge, MD 21613. The deadline for applications is 15 October 1987. Applications received after that date will be considered only if travel funds are available. The University of Maryland is an Equal Employment Opportunity/Affirmative Action Employer.

UNIVERSITY OF OTAGO DUNEDIN, NEW ZEALAND LECTURER IN GENETICS

Applications are invited for a lectureship in genetics which is taught as an interdisciplinary course in the Faculty of Science. Candidates should have a good record of research in some area of genetics and be able to teach "classical" genetics. Some preference may be given to applicants with particular interests in cyto- genetics, population, evolutionary, or ecological genetics. The person appointed will be attached to a department in the Faculty of Science. Experience and expertise (probably botany), and would be expected to make some contribution to the teaching of that department. Salary: Appointment will be made at an appropriate level, according to qualifications and experience, on the lecturer's scale, which range from NZ $23,000 to NZ $28,500.

Further information may be obtained from: The Registrar, University of Otago, P.O. Box 56, Dunedin, New Zealand.

Applications quoting reference number A87/32 close in Dunedin on 28 August 1987.

MEDICINAL CHEMIST

Medicinal chemist needed to participate in teaching undergraduate and graduate pharmaceutical chemistry courses. Must also be able to engage in collaborative research with department faculty. Appointment is for limited term with potential, if qualified and eligible, for future tenure-track consideration. Send applications and three letters of reference to: Dr. Robert T. Louis-Ferdinand, Department of Biological Sciences, Room 528 Shapero Hall, College of Pharmacy and Allied Health Professions, Wayne State University, Detroit, MI 48201; 313-577-1737. Affirmative Action/Equal Opportunity Employer.

MOLECULAR BILOGISTS—The Lawrence Berkeley Laboratory at the University of California, Berkeley, invites applications for positions in the Human Genome Center to be part of a program to develop a physical map of the human genome and to sequence portions of this genome. Applicants are sought at the Ph.D., as well as the A.B. or B.S. level, for appointments at the staff scientist, postdoctoral, or technical levels. Experience in DNA manipulation and knowledge of relevant molecular biological procedures is required. Experience in yeast molecular biology and genetics also will be considered, since part of this project will involve construction of artificial chromosomes containing human DNA that can be propa- gated in yeast. Salary will depend on experience and professional level. Send resume and names of three references to: Dr. Robert K. Mortimer, Biology and Medicine Division, Donner Laboratory, Lawrence Berkeley Laboratory, Berkeley, CA 94720. An Equal Opportunity Employer M/EE.

PHARMACOLOGIST, GS-403-12. Naval Health Research Center in San Diego needs pharmacologist to plan and coordinate tests requiring animal research studies of effects of pharmacological agents on health, performance, sleep, alertness, and autonomic function in humans. A Ph.D. degree with experience in pharmacology, with specialization in effects of pharmacological agents on human subjects, is required. Telephone: James Banks, 619-225-2911 for information.

PHARMACOLOGIST

The Research Division of Henry Ford Hospital is establishing a fundamental research program in molecular and cellular biology. We are planning, including that of Program Director. Areas of specific research interest have not yet been rigidly de- fined, and applications from investigators interested in gene expression, oncogenes, lymphokines, growth factors, transplantation biology, immunology, and gene identification will be considered. Applications will be available including the possibility of academic affiliations.

Applicants for Program Director are expected to be acknowledged leading scientists with an outstanding publication record and a high level of extramural support. Applicants for a staff investigator position will have completed several years of postdoctoral study and be expected to develop extramural research programs capable of attracting extramural funding.

Applicants interested in the positions should forward curriculum vitae and three letters of recommendation to: Dr. Joseph D. Shore, Director of Research, Henry Ford Hospital, 2799 West Grand Boulevard, Detroit, MI 48202.

OCEAN MODELER/DYNAMICIST

Ph.D. scientist for research and ocean prediction work with group actively engaged in research in dynamics, modeling, and real-time forecasting to attack the prob- lem of mesoscale variability in the North Pacific. Applicant must be Ph.D. qualified and have several years of experience in oceanography, meteorology, fluid dynam- ics, or applied mathematics required. Applications from qualified female and minority group members are espe- cially welcome. Please apply with resume and references to: Professor Allan R. Robinson Harvard University Division of Applied Sciences 29 Oxford Street Cambridge, MA 02138

PHARMACOLOGY

The School of Pharmacy, Campbell University, invites applications for a 12-month, tenure-track FACULTY POSITION in the Department of Pharmaceutical Sci- ences. Rank and salary are negotiable and commensurate with the applicant's qualifications and experience. Candi- dates for the position should hold a Ph.D. degree and have broad training in pharmacology. Responsibilities include the development and maintenance of an active research program, and instruction in the Pharm.D. cur- riculum. Excellence in teaching is expected. Interested applicants should send their summaries of their research interests and objectives, and three letters of reference to: Dr. Robert Greenwood, Acting Chair- man, Department of Pharmaceutical Sciences, School of Pharmacy, Campbell University, Buies Creek, NC 27506. An Equal Opportunity Employer.

PHARMACOLOGY/TOXICOLOGY FACULTY

The University of Kentucky College of Pharmacy invites applications for two tenure-track faculty positions at any rank. Postdoctoral experience and potential for development of an independent, extramurally funded research program are required. A pharmacy background is desirable. Opportunities exist for collaborations with University interdisciplinary Centers (e.g., Toxicology, Aging, Cancer, etc.). Curriculum vitae and names of three references should be sent by 30 September 1987 to: William C. Luh, Interim Dean, University of Kentucky, College of Pharmacy, Lexington, KY 40536-0082. The University of Kentucky is an Equal Opportunity Employer.

PHARMACOLOGIST

Pharmacologist participated to participate in teaching under- graduate and graduate pharmacy courses. Must also be able to engage in collaborative research with department faculty. Appointment is for limited term with potential, if qualified and eligible, for future tenure-track consideration. Send applications and three letters of reference to: Dr. Robert T. Louis-Ferdinand, Depart- ment of Pharmaceutical Sciences, Room 528 Shapero Hall, College of Pharmacy and Allied Health Profes- sions, Wayne State University, Detroit, MI 48282.

POSTDOCTORAL SCIENTIST
IMMUNODIAGNOSTICS

Becton, Dickinson and Company Research Center in dynamic Research Triangle Park, N.C. has two postdoctoral opportunities beginning in 1987. You will be involved with research in the expanding immunodiagnostics field and will be working with experienced scientists in state-of-the-art laboratories.

Candidate requirements are a Ph.D. in Biochemistry or Immunology with demonstrable capabilities in creative thought and energetic application. A working knowledge of organic synthesis is preferred. Current interests should include non-isotopic immunoassay, analytical biochemistry or protein chemistry including isolation, purification, conjugation to small and large molecules on solid surfaces.

This is a one year appointment with a second year renewal option available. We offer 4 weeks paid vacation and a salary commensurate with your experience. Persons wishing to learn more about this opportunity or wishing to make application, should direct inquiry or curriculum vitae to: Dr. Daniel Wagner, BECTON DICKINSON RESEARCH CENTER, P.O. Box 12016, Research Triangle Park, N.C. 27709. (919) 548-8841.

BECTON DICKINSON

STUDY TOXICOLOGIST

GS-11/12/13
$27,172—$50,346
RESEARCH TRIANGLE PARK, NORTH CAROLINA

The Division of Toxicology Research and Testing (DTRT) of the National Institute of Environmental Health Sciences, National Toxicology Program, Research Triangle Park, North Carolina, is seeking applicants for the position of Study Toxicologist to characterize the toxicological effects from exposure of laboratory animals to chemicals and to evaluate and publish study results. DTRT is responsible for developing, validating and evaluating methods for toxicologic characterization of chemicals and other environmental agents; short-term and long-term toxicology and carcinogenesis studies to establish toxicity of chemicals and other environmental agents; collaboration with other government agencies and dissemination of results to the scientific community and regulatory agencies. Incumbents must possess a Ph.D., D.V.M., Sc.D. degree or equivalent experience (including research) in toxicology or a directly related field of interest. U.S. citizenship required.

If interested, submit curriculum vitae and the names of three references by September 8, 1987, to:

Johnny L. McLean
Personnel Office, BNV-55
National Institute of Environmental Health Sciences
P.O. Box 12233
Research Triangle Park, NC 27709
(919) 541-7511

AN EQUAL OPPORTUNITY EMPLOYER

Civilian Employment

Department of National Defence

Canada

Applications are invited from new graduates, students graduating within the coming year or recent graduates employed as Post Doctoral Fellows to meet present and future needs for civilian Defence Scientists. You would be joining a team of over 550 Defence Scientists distributed across seven research establishments in Canada who are involved with applied research and development: social, economic, and strategic analysis; and operational research. The main locations are near Halifax, Quebec City, Ottawa, Toronto, Victoria, and Medicine Hat (Alberta).

Fields and Specialties:
Biology — microbiology, pharmacology, toxicology, physiology, biophysics, radiobiology
Chemistry
Computer Science
Economics
Engineering — except forestry and geology
History — military
Mathematics — applied mathematics and operational research
Physics
Psychology — experimental
Political Science — strategic studies, international relations
Sociology
High academic standings and a Master's or Doctorate degree in one of the above fields from a recognized university are required. These opportunities are limited to Canadian citizens only. Due to the nature of the work, all employees will require security clearance. Starting salaries range from $25,000 to $40,000 dependent on individual qualifications. Benefit levels and salary advancement patterns are fully competitive.

To apply, forward your résumé and/or application form indicating your primary fields of interest. Please enclose copies of all your academic transcripts and the names and addresses of three individuals who may be contacted in reference to your professional abilities to:
Director of Defence Scientist Personnel Programs
National Defence Headquarters
Ottawa, Canada, K1A 0K2
Attention: DDSPP-4

Personal information you provide is protected under the Privacy Act. It will be held in personal information bank DND/P-SE-902.

The Department of National Defence is an Equal Opportunity Employer.

PLANT GENETICIST: The Department of Vegetable Crops, University of California, Davis, seeks a Plant Geneticist to fill an 11-month, tenure-track position as assistant professor or geneticist in the Agricultural Experiment Station. The individual will be expected to utilize classical and molecular approaches in developing a research program which encompasses understanding and improvement of tomatoes for processing. Potential research area might include quantitative or population genetics, developmental genetics, genomic evolution, or plant/pest interactions. The appointee will have the opportunity to exploit the extensive tomato genetic resource. Research is interdiscipli- nary effort between neuroscientists (C. D. Barnes and S. J. Fung) and engineers (B. J. Van Wie). Techniques include intracellular recording, immunocytochemistry, and mathematical modeling. Send curriculum vitae and names of three references to: Dr. D. Nevis, Chairperson, Department of Vegetable Crops, University of California, Davis, CA 95616. Applications must be received by 15 September 1987. The University of Californ- ia is an Affirmative Action/EQUAL Opportunity Employer.

ENVIRONMENTAL PROTECTION AGENCY CORVALLIS, OREGON

PLANT PHYSIOLOGIST/MODELER—Determine effects of air pollutants on forest and vegetation resources; develop and quantify models to describe and predict the effects of air pollutants on woody vegetation on a regional basis. The incumbent must have a nationali- zed technical authority in the general field of plant physiological process models, preferably with experience in woody vegetation and wood product industries. Experience in bio- logical knowledge, experience, and training in the forest sciences, preferably physiology. The incumbent must have an advanced degree (Ph.D.) in quantitative physiol- ogy/biology, forest sciences, plant physiology, or a closely related discipline. U.S. citizenship required. Salary is commensurate with experience ($45,763 to $59,488). For information on this position, contact: Dr. Robert T. Lackey, telephone: 503-757-4806. To obtain an appli- cation package and instructions, contact: The Office of Personnel Management (Seattle), telephone: 206-442-4356. To apply, (closing date 30 September 1987), send completed and signed application to: U.S. Office of Personnel Management, Seattle Area Office, 915 Sec- ond Avenue, Seattle, WA 98104. An Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

Two positions are available immediately for Ph.D.'s with a strong background in biochemistry, pharmacology, xenobiotic metabolism, enzymology, biochemical toxicology, organic or medicinal chemistry. Research projects under investigation include: Chemical modifica- tion and photofinity labeling of purifying isozymes of cytochrome P-450, synthesis of mechanism-based inactiv- ators of cytochrome P-450 and the characterization of their mechanism of action, and studies on the metabo- lism of nitroaromatic compounds and other xenobiotics in vivo and in vitro (isolated hepatocytes, microsomes, and purified isozymes of cytochrome P-450). Send curricu- lum vitae, a brief statement of research experience, and the names of three references to: Dr. Paul H. Houghton, Chairman, Department of Pharmacology, School of Medicine, Wayne State University, 540 East Canfield Avenue, Detroit, MI 48201. "An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION—MOLECULAR ENZYMOLOGY. A position is available to study the mechanisms of action and structure of phosphosterylase, bacterial acetylcholinesterase, and bacterial Pseudomonas amyloliquefacient enzyme. Applicants should have an interest and/or expertise in stopped-flow kinetics, NMR, or recombinant DNA methods. Salary is $18,000 to $20,000. Send curriculum vitae and the names of three references to: Dr. Frank M. Rauscher, Department of Chemistry, Texas A&M University, College Station, TX 77843. "An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION in pulmonary bio- physiology, pharmacology and toxicology available immediately to coordinate NIH-funded research on respiratory tox- icity. Multidisciplinary research approaches combine bio- physical, biochemical, and cellular biological techniques to investigate the respiratory toxicity of inhaled irritants. Applicants must have a Ph.D. in biochemistry, physiology, or occupational health science, and a strong background in cellular, molecular, and/or biochemical toxicology or exposure research. Send curriculum vitae, a statement of research experience, and the names of two references to: Dr. Thomas R. Neill, Director, Center for Occupational Health and Safety Science, University of Virginia, Charlottesville, VA 22908. "The University of Virginia is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately for 2 years to aid in the development of neuron- based biochemical microsensors. Research is an interdisci- plinary effort between neuroscientists (C. D. Barnes and S. J. Fung) and engineers (B. J. Van Wie). Techniques include intracellular recording, immunocytochemistry, and mathematical modeling. Send curriculum vitae and names of three references to: Bernard J. Van Wie, Chairperson, Department of Pediatric Studies, University of Washington, Seattle, WA 98194. "The University of Washing- ton is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immedi- ately for the investigation of the molecular mechanism of respiratory irritation and sensitization through identification and purification of in vivo targets resulting from inhalation exposure to irritants. Methods to be employed include protein isolation and purifi- cation, protein sequence and composition analysis, immunochemical, and radiotopic techniques. Contact: William E. Beach, Department of Biological Sciences, Carnegie Mellon University, 4400 Fifth Avenue, Pittsburgh, PA 15213. "CMU is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION now available to study growth regulation and carcinogenesis in a novel system of bile ductular cells in culture and in vivo. Focus will be on defining specific growth factors and investigat- ing the properties of bile ductular cells following transfor- mation. Also, there is an excellent opportunity to participate in an exciting new program in experimental pathology. Candidates should be recent Ph.D.'s or equivalent with laboratory experience in cell and molecular biology and in cell culture techniques. Send curriculum vitae and three letters of reference to: Thomas F. McNamara, Department of Biochemistry, University of Virginia, Box 662 MCV Station, Richmond, VA 23298-0062. "MCV/WCU is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are encouraged to apply.

POSTDOCTORAL POSITION available immediately for biophysical studies of membrane-bound, ion transport proteins. Work will involve the application of fluorescent and kinetic techniques to the investigation of bacterial rhodopsin and the calcium ATPase. Send curriculum vitae and three references to: Dr. Gregg Dewey, Department of Chemistry, University of Denver, Denver, CO 80208. "The University of Denver is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION AVAILABLE

A position is available immediately to study the regulation of oncogene expression and DNA methylation in experimental systems. The research program should have experience in molecular biology and, in particular, with the techniques of plasmid preparation, bacterial transformation, restriction endonuclease digestion, and preparative electrophoresis. Salary range: $19,000 to $23,000 depending on experience. Send curriculum vitae and two references to: Dr. Thomas Price, Director, Section of Gastroenterology, University of Chicago Box 400 5841 South Maryland Avenue Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION is available for a Ph.D.-level chemist or chemical engineer with a strong background in catalysis and/or electrochemistry. The position is funded for 18 months by an EEC program on solid electrolyte fuel cells. The program involves the study of high temperature batteries and the testing and development of novel metallic oxide solid fuel cell reactors. Send curriculum vitae and three letters of recommen- dation to: Professor C. G. Yavas, Institute of Chemi- cal Engineering, P.O. Box 1239, University of Patras, GR 26110, Patras, Greece.

POSTDOCTORAL POSITION available immedi- ately for the next 2 years at the University of California, San Diego. Candidate must have Ph.D. in this field, with 2 to 3 years of postdoctoral experience, and proven record of producing high quality publications. Send curriculum vitae and three references whom you will request to write to me directly: Dr. R. V. Rao, Chairman, Medicinal Chemistry, Box 4145, JHMHC, Gainesville, FL 32610. Deadline for receipt of application is 31 August 1987.

POSTDOCTORAL POSITION to study lipid pro- tein interactions, transfer of lipids between membranes and membranes and intramolecular processes using NMR spec- troscopy of different nuclei and 2D-NMR methods. Ph.D. in biophysics, biochemistry, chemistry, or related field required. Please send curriculum vitae and three letters of recommendation to: Dr. J.C. Schmid, Biophysics Institute, Boston University School of Medicine, 80 East Concord Street, Boston, MA 02118. "Boston University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study pathogenesis of AIDS. Work includes the effect of HIV infection on membrane and macrophage function. Requires background in cellular immunology and/or virology. Send curriculum vitae and names of three references to: Dr. Eliseo Levy, Department of Microbiology, Boston University School of Medicine, 80 East Concord Street, Boston, MA 02118. "Ameri- can University is an Equal Opportunity/Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study molecular mechanisms underlying hormone signal transduc- tion via receptors linked to phospholipid metabolism. Research will include studies on receptor-G-protein interac- tions, regulation of receptor function, and purifica- tion of receptor-effector components. Experience in hor- mone receptor biochemistry desirable. Send curriculum vitae and names of three references to: Dr. L. M. Futterman, Department of Biochemis- try, The University of Texas Health Science Center, 7703 Floyd Curl Drive, San Antonio, Texas 78284. "An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immedi- ately to conduct DNA repair studies at the molecular level. Topics include (i) repair in yeast plasmids and inducible genes, (ii) DNA lesion mapping in chromatin and (iii) isolation of repair complexes using biotinylated nucleotides. Experience in molecular biology and/or elec- tron microscopy preferred. Send curriculum vitae and three letters of recommendation to: Dr. Michael J. Smidson, Biochemistry/Biophysics Program, Wash- ington State University (WSU), Pullman, WA 99164-4660. "WSU is an Equal Opportunity/Affirmative Action Employer.

DOUGLAS HOSPITAL RESEARCH CENTRE MCGILL UNIVERSITY

POSTDOCTORAL POSITION immediately opening and for up to 3 years, to study neuroendocrine, Y-CRF, and hypothalamic receptor in brain and peripheral tissues using binding assays, autoradiography, bioassays, and second messenger coupling systems. Ph.D. in pharmacology or a related field is required. Expertise in methods mentioned above is necessary. Send curriculum vitae with a letter outlining research goals and three letters of reference to: Dr. Robert Brown, Director, Research Laboratories Douglas Hospital Research Centre 3750 Rue De Maisonneuve West, Montreal, Quebec, Canada H4H 1R3
ASSOCIATE PROFESSOR, ASSISTANT PROFESSOR AND POSTDOCTORAL POSITIONS

Department of Microbiology, Mount Sinai School of Medicine

Several tenure-track faculty positions at junior and senior levels are open in the Department of Microbiology. Applicants with strong molecular and genetic backgrounds who are interested in viral and cellular gene expression in animal and plant systems are invited to apply. In particular, individuals with independent research achievements in RNA and DNA tumor viruses and oncoproteins are encouraged. These efforts are in coordination with current major recruits in the newly created Centers for Molecular Biology, Neurobiology and Immunobiology at the Mount Sinai School of Medicine.

Postdoctoral/research associate positions are also available in the laboratories of the following faculty members in the Department:

Constantin Bona: Regulation of idioype-determined immune response; molecular basis for the diversity of antibody response to foreign and autoantigens; preparation of idioype vaccines.

Selina Chen-Kiang: In vitro RNA transcription and processing; molecular mechanisms of regulation of transforming genes in human lymphoid cells.

Ming-Ta Hsu: DNA topology and gene expression; DNA tumor virology; electron microscopy of nucleic acids and nucleoprotein complexes.

Edwin D. Kilbourne: Influenza virus vaccine and immune response; genetic determination of viral virulence.

Mark Krystal: Viral replication; structure-function relationships of viral proteins through expression and mutagenesis.

Peter Palese: Genetics of animal viruses; mechanism of replication of influenza viruses; development of antivirals; molecular epidemiology of viruses.

Beatriz Pogo: Mechanisms of replication of expression of cytoidal and oncogenic viruses.

Frances Smith: Characterization of mutations in RNA and DNA molecules responsible for genetic disease.


James G. Wetmur: Physical biochemistry; nucleic acid hybridization; antisense nucleic acids; transcriptional regulation of genes in the human heme biosynthesis pathway.

Applicants for the faculty positions should send a curriculum vitae, three or more letters of reference and a one page research summary to: Dr. Peter Palese, Department of Microbiology, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029. Applications for the postdoctoral positions should be addressed to individual faculty members at the same address. We are an equal opportunity/affirmative action employer.

MOUNT SINAI
Applications are invited for the following appointments in the Faculty of Medicine:

**BIOCHEMISTRY:**
- a. Associate Professor

**COMMUNITY MEDICINE:**
- a. Professor/Associate/Assistant Professor
- b. Professor/Associate/Assistant Professor
- c. Professor/Associate/Assistant Professor
- d. Professor/Associate/Assistant Professor
- Medical Demography
- Epidemiology (Health Service)
- Epidemiology (Infectious Diseases)
- Epidemiology (Chronic Diseases)

**MICROBIOLOGY:**
- a. Professor
- b. Professor/Associate Professor
- c. Professor/Associate Professor
- d. Associate Professor/Assistant Professor
- Clinical Microbiology
- Clinical Virology
- Clinical Immunology
- Microbial Chemistry

**PATHOLOGY:**
- a. Professor/Associate Professor
- b. Professor/Associate Professor
- Histopathology/Cytology
- Histopathology

**PHARMACOLOGY:**
- a. Professor/Associate Professor
- b. Assistant Professor
- Toxicology
- Cardiovascular/Pharmacology

**PHYSIOLOGY:**
- a. Professor/Associate Professor

**MEDICINE:**
- a. Associate/Assistant Professor
- b. Associate/Assistant Professor
- c. Associate/Assistant Professor
- Infectious Diseases
- Clinical Haematology
- Clinical Immunology

**NUCLEAR MEDICINE:**
- a. Associate/Assistant Professor
- b. Assistant Professor
- Clinical Nuclear Medicine Physician
- Nuclear Medicine Physicist

**GYNAECOLOGY and OBSTETRICS:**
- a. Professor
- b. Associate Professor
- Modern Obstetrics & Obstetrical Perinatology
- Endocrinology & Andrology

**ORGAN TRANSPLANTATION:**
- a. Associate/Assistant Professor
- b. Associate/Assistant Professor
- Bone Marrow Transplantation
- Transplant Intensive Care

**PAEDIATRICS:**
- a. Professor/Associate Professor
- b. Professor/Associate Professor
- c. Associate/Assistant Professor
- d. Associate/Assistant Professor
- Paediatric Haematologist
- Paediatric Oncologist
- Paediatric Endocrinologist
- Paediatric Immunology

**PSYCHIATRY:**
- a. Associate/Assistant Professor
- b. Associate Professor
- Psychiatry

**RADIOLOGY:**
- a. Professor and Chairman
- b. Associate/Assistant Professor
- c. Associate/Assistant Professor
- d. Associate/Assistant Professor
- Orthopedic Radiology
- Uroradiology
- Angiography/Interventional Radiology, Ultrasound & CT.

**SURGERY:**
- a. Associate Professor
- Anaesthesiology

**PRIMARY CARE:**
- a. Associate/Assistant Professor
- b. Associate/Assistant Professor
- Family Medicine
- General Practice
REQUIREMENTS FOR APPOINTMENT:
Applicants should possess a Ph.D. or higher professional qualification, i.e. F.R.C.S., M.R.C.P., etc., in their respective speciality and have conducted and published research in their field. Professor should have 14 years’ experience, 4 as an Associate Professor. Associate Professor should have 9 years’ experience, 4 as an Assistant Professor.

CONDITIONS OF APPOINTMENT:
Salaries: Total monthly salaries will be within the following scales according to qualifications and experience (1 KD = £2.3, US$3.5 approximately).

- Professors with clinical appointments = KD.1210-1370 (8 increments)
- Professors medically qualified with medical science appointments = KD.1140-1300 (8 increments)
- Professors non-medically qualified = KD.1070-1230 (8 increments)
- Associate Professors with clinical appointments = KD. 989-1149 (8 increments)
- Associate Professors medically qualified with medical science appointments = KD. 932-1092 (8 increments)
- Associate Professors non-medically qualified = KD. 875-1035 (8 increments)
- Assistant Professors with clinical appointments = KD. 768-928 (8 increments)
- Assistant Professors medically qualified with medical science appointments = KD. 724-884 (8 increments)
- Assistant Professors non medically qualified = KD. 680-840 (8 increments)

Social allowance: In addition to the above salary, social allowance is paid in accordance with the rules and regulations of the University.

Clinical supplements: In addition to the above University salaries there will be monthly clinical supplement paid by the Ministry of Public Health for 10 months a year to medical school staff with clinical service commitments. These are:

<table>
<thead>
<tr>
<th>Position</th>
<th>Supplement (KD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor and Chairman</td>
<td>450</td>
</tr>
<tr>
<td>Professor</td>
<td>400</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>300</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>200</td>
</tr>
</tbody>
</table>

Conference: A member is entitled to attend one academic conference a year which would be subjected to the University rules and regulations.

Gratuity: There is a gratuity of one month basic salary for each year employed payable on termination of contract.

Housing: Suitable furnished, air-conditioned accommodation, electricity and water free of charge.

Medical Care: Free, comprehensive treatment is available in Kuwait under the State Health Service.

Travel: Air tickets are provided from the country of recruitment for the appointee, spouse and up to 3 dependent children under 20 years. Thereafter, return air tickets are issued annually to the country of citizenship or permanent residence. On termination of contract, air tickets are provided to the country of recruitment. A baggage and freight allowance is also provided.

Vacation: 60 days paid annual leave and various national holidays.

Education: This is provided free in State Schools where the instruction is in Arabic. Staff who have to send their children to non-Arabic schools in Kuwait will have tuition fees of up to a maximum of 3 children met by the University.

Taxation: There is no income tax in Kuwait. Currency is transferable without restriction.

METHOD OF APPLICATION:
Curriculum vitae in duplicate which should include the names of 3 referees, personal particulars, qualifications with dates, career history, teaching experience, research accomplishments and where appropriate clinical experience should be sent to the DIRECTOR OF PLANNING AND ACADEMIC STAFF RECRUITMENT, FACULTY OF MEDICINE, UNIVERSITY OF KUWAIT, HEALTH SCIENCE CENTRE, P.O. BOX NO. 24923 SAFAT, 13110 – SAFAT – KUWAIT, to arrive NO LATER THAN 31ST OCTOBER 1987.
THE CARLSBERG LABORATORY
COPENHAGEN, DENMARK

Head of the Department of Chemistry

Applications are invited for the post of head of the Department of Chemistry. The holder of the post must have qualifications equivalent to a University Professor and will have the title of Professor. Candidates should have a substantial record of scientific research—most likely but not necessarily within protein chemistry—as well as proven capability in stimulating and directing a research department.

The candidate is expected to continue the traditions of the Carlsberg Laboratory with its combination of basic and applied research. The applied research is to be carried out in collaboration with other departments of the Carlsberg Research Center, as well as with companies within the United Breweries Group. Besides brewing and fermentation, the Group is engaged in a number of scientifically based activities such as enzyme and peptide manufacturing.

The Head of Department is responsible to the Board of Trustees of the Carlsberg Laboratory and informal enquiries can be made to the Board in writing or by telephone (+451351788, ext. 2402) to the Chairman:

Professor Ebba Lund
Department of Veterinary Virology and Immunology
The Royal Veterinary and Agricultural University of Copenhagen
13 Bülowsvej
DK-1870 Frederiksberg C
Denmark

Applications are to be forwarded to the Board of Trustees on the same address before September 15, 1987.

Clinical Safety Coordination

Outstanding opportunities exist within the Clinical Safety Coordination Department of Smith Kline & French Laboratories as a result of increasing development activity.

Assistant Manager/Clinical Safety — Process and supervise processing of clinical trials safety data; provide scientific support for relating preclinical findings to the safety profile of agents in clinical research; provide datafile searches in support of the evaluation of the emerging safety profile of compounds in clinical research and for preparation of safety sections of study summaries, registration documents, etc.; conduct literature searches and maintain updated file of literature relating to safety of compounds in clinical research.

Assistant Manager/Safety Analysis & Clinical Data Assurance — Prepare analyses of safety data for clinical trials conducted worldwide and safety summaries for inclusion in dossiers for worldwide regulatory submissions. Conduct audits of clinical trial data.

The successful candidates must have:

- Ph.D. or equivalent in the Biomedical Sciences with a minimum of 1 year experience in clinical research.
- Experience with computer representation of clinical trial data.
- Ability to utilize computer software to set up files, store recall, and selectively display study data, desirable.

Smith Kline & French Laboratories is located near Valley Forge, PA in a new, state-of-the-art research complex. We offer an excellent compensation and benefits package as well as opportunities for personal and professional growth. Interested candidates should send resume to George P. Kissell, Jr., Manager, Personnel Relations, G0037, SK&F Laboratories, P.O. Box 1539, King of Prussia, PA 19406-0539. We are an equal opportunity employer, M/F/H/V. NO PHONE CALLS PLEASE.

ELECTRONICS TECHNICIAN/ENGINEER
(BS/MS Degree)

We seek an Electronics Technician/Engineer with a BS, plus 2 yrs. exp., or an MS in Electronics, preferably with exp. in the field of NMR (Nuclear Magnetic Resonance) or MRI (Magnetic Resonance Imaging). The position requires trouble-shooting and improving NMR spectrometers, including high resolution and in vivo NMR systems. The position will include interaction with the users of the new NIH, NMR Center and involvement in the design and development of probes and coils for spectroscopy and imaging. Exp. with rf electronics, computer hardware and software preferred. Salary range depends on qualifications and experience. Position location is Bldg. 10, National Institutes of Health, Bethesda, MD.

For further information contact: Dr. Jack S. Cohen, Clinical Pharmacology Branch, Division of Cancer Treatment, National Cancer Institute, National Institutes of Health, 9000 Rockville Pike, Bldg. 10, Rm. 6N105, Bethesda, MD 20892. Telephone: (301) 496-3390. An Equal Opportunity Employer.

SAN DIEGO SUPERCOMPUTER CENTER

GA TECHNOLOGIES, INC., a high technology research company, operates a Supercomputer Center for the National Science Foundation, serving researchers at over 100 U.S. institutions. Located at the University of California, San Diego, it features a Cray X-MP / 48 Supercomputer and an SCS-40 Mini Supercomputer with interactive access via high speed nationwide networks.

Openings exist in our User Services Department for Ph.D. level scientists in computational chemistry, molecular biology, or biophysics. User Services is responsible for selecting, converting and supporting applications software, preparing on-line documentation, and providing training. Individual and collaborative research on a part-time basis is strongly encouraged.

Applicants require extensive experience in FORTRAN, on CRAY and/or DEC computers and a working knowledge of the COS, CTSS and/or VMS operating systems. Familiarity with UNIX, C, mathematical libraries, and graphics is also desirable.

The San Diego Supercomputer Center offers professional advancement along with a comprehensive salary and benefits plan. Candidates should send their resumes to: GA TECHNOLOGIES INC., Department ADSC, P.O. Box 4048, San Diego, CA 92138. SDC is an equal opportunity employer M/F/H/V.
IGEN, Inc. turned down a major pharmaceutical firm's offer to purchase us because we believe IGEN can become one of the major biotechnology firms dedicated to the development of proprietary diagnostics systems and pharmaceuticals.

To fulfill its promise, IGEN is undergoing a major expansion in many of its key research and development areas. Currently the company is focusing on immuno and nucleic acid-based diagnostics, catalytic antibodies, biosensor research and antiviral chemotherapy. In order to complete the assembly of specialized teams of outstanding scientists for development of these projects, we are seeking candidates at all degree levels with experience in one or more of the following disciplines.

**Chemistry**
- Specialty areas include organic and/or inorganic synthesis, spectroscopy, nucleic acids and peptide synthesis and purification, protein chemistry and purification and natural products synthesis. Dept. CH

**Clinical Systems Development**
- Expertise in analytical chemistry, instrumental methods including electrochemistry, computer programming and software development, and mechanical engineering. Experience in clinical diagnostics and associated instrumentation a plus. Dept. CSD

**Assay Design and Development**
- Positions require a background in modifying proteins, peptides and nucleic acids for developing diagnostic assay systems, experience with some of the currently available assay formats and non-isotopic detection systems. Dept. AD

**Biological Chemists**
- Seeking applicants for our catalytic antibody program with experience in elucidating enzymatic reactions and antibody binding mechanisms by chemical, kinetic and spectroscopic techniques. Dept. BC

**Molecular Biology**
- Requires individuals experienced with sequencing, mutagenesis, cDNA and genomic cloning. The project involves the modification of antibody genes. Experience in the area of immunology would be an advantage. Dept. MB

**Biosensors Research**
- Candidates are sought having multidisciplinary backgrounds with experience in areas such as electrochemistry, optics, electrical engineering, microfabrication, immunodiagnostics, protein immobilization, and/or organic thin film (Langmuir-Blodgett) technologies. Dept. BR

If you are a qualified candidate, ready to join a rapidly growing biotechnology firm, while earning a salary commensurate with your experience and coverage under an attractive benefits package, you should give serious consideration to these positions.

Send your resume (with salary history) in confidence to: Personnel Department, 1530 East Jefferson Street, Rockville, MD 20852. Please indicate the department code of the position you are interested in.

**IGEN, INC.**
An Equal Opportunity Employer

---

**An Emerging Leader in Biotechnology**
POSTDOCTORAL POSITION—AQUATIC ECOLOGY

Available 15 August 1987, to assist faculty in research on large herbivore/vegetation-sustaining systems and to teach introductory biology, botany, microbiology, or zoology. Experience in conducting field studies of carbon flow or population dynamics and training in computer systems necessary. Appointments are for 12 months and may be renewable for one or two additional years. Please send letter of application and curriculum vitae with names and addresses of at least three references to: Dr. James K. Cahoon, Chair, Department of Biological Sciences, Murray State University, Murray, KY 42071.

POSTDOCTORAL POSITION IN MICROBIOLOGY/BIOCHEMISTRY available immediately to study bacterial degradation of organic pollutants found in groundwater. Emphasis is on development and study of strains able to degrade substituted aromatic compounds. Background in microbial physiology, molecular biology, or strain construction helpful. Position is at Tyndall Air Force Base in Panama City, Florida. Annual stipend range is $30,800 to $34,500. Doctoral degree received within 3 years of starting date required as is U.S. citizenship or PRA status. Contact: Postgraduate Research/Tyndall, University Programs Division, Oak Ridge National Laboratory, P.O. Box 2008, Oak Ridge, TN 37831-0117. Telephone: 615-576-3190.

POSTDOCTORAL POSITIONS IN OCULAR PRODRUG AND PEPTIDE ABSORPTION/METABOLISM

Univ. of Case W. CALIFORNIA
Recent Ph.D.'s with experience in enzyme purification, characterization, and kinetics, peptide chemistry, or receptor pharmacology are sought. Experience in HPLC and animal handling is essential. Submit curriculum vitae, and names of three references by 15 September 1987 to: Vincent Lee, Ph.D., School of Pharmacy, 1985 Zonal Avenue, Los Angeles, CA 90033-1086. Equal Opportunity Employer M/F.

POSTDOCTORAL POSITION. Funding available for up to two years to study a protein-PDIA interaction involved in activation and control of ribosomal RNA transcription in E. coli. Genetics and/or biochemistry background preferred. Send curriculum vitae including names, addresses, and phone numbers of two references to: Dr. Richard Gourse, Department of Genetics, University of Georgia, Athens, GA 30602 or telephone: 404-542-8000.

POSTDOCTORAL POSITION—THIAMIN DI-PHOSPHATE DEPENDENT ENZYMES: available immediately at $20,000 per annum to study novel enzyme-bound intermediates by a variety of techniques. Experience with fluorimetry and affinity labeling is required. Position is well-equipped. Send resume, names of three references to: Dr. Frank Jordan, Department of Pharmacology, University of Medicine and Dentistry of New Jersey, Piscataway, NJ 08854. Rutgers is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH POSITION

ELECTRON MICROSCOPI

Available immediately to candidates with skills in cell biology/electron microscopy of red cell skeletal protein biogenesis and those who are interested in effects of membrane skeletons in abnormal red cells. Successful applicants will join an active team consisting of seven M.D.'s and Ph.D.'s in a recently funded NIH Program Project. All interested candidates should forward resume to: Jiri Palek, M.D., Department of Biomedical Research, St. Elizabeth’s Hospital at the University of Medicine and Dentistry of New Jersey, 736 Cambridge Street, Boston, MA 02135. Equal Opportunity Employer.

POSTDOCTORAL RESEARCH POSITION MEMBRANE PROTEIN SYNTHESIS

A research position is available for a Ph.D. or M.D. candidate to join an established team which is actively working on mammalian skeletal protein synthesis and the effects of membrane skeletons in hereditary anemias. Candidates should have a background in protein chemistry and in cell culture techniques. Applicants should forward resume to: Jiri Palek, M.D., Department of Biomedical Research, St. Elizabeth’s Hospital of Boston, Tufts University School of Medicine, 736 Cambridge Street, Boston, MA 02135. Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

Two POSTDOCTORAL POSITIONS at University of Hawaii. (1) A study of ionic channels, biosynthetic regulation, and cell-cultured neutrophilic and cell-cultured pancreatic peptides in neuromuscular junctions: cloning, analyzing the unique advantages of cranial cortex neurosecretory system. Skill in one of the following areas: neurochemistry, pharmacology, and cloning. Ian Cooke, Ph.D. (2) A study of the genetics and regulation of peptide processing in neurosecretory systems (rat, Aplysia, and crab), utilizing quantitative techniques and nucleic acids and computer modeling. Robert Newcomb, P.I. For both: a 2-year commitment is required, with a third year possible. To: Department of Biochemistry and Molecular Biology, University of Hawaii, 2505 Dole Street, Honolulu, HI 96822. Telephone: 808-942-4845. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

Two positions are available to study the biochemistry, regulation and pathology of red blood cell membranes and membrane-skeletal proteins. Applicants with experience in protein biochemistry, biological membranes, protein kinases, and phosphatases are encouraged to apply. The opportunity to join an established group in a well-equipped and active department. One position will be available October 1987 and the other January 1988. A highly competitive salary, appropriate to experience will be offered. Send curriculum vitae and names of three references to: Carl Chief, Division of Cellular and Molecular Biology, St. Elizabeth’s Hospital, 736 Cambridge Street, Boston, MA 02135. Equal Opportunity Employer M/F.

POSTDOCTORAL OR RESEARCH ASSOCIATE POSITION

IN PRIMATE REPRODUCTIVE ENDOCRINOLOGY

Available immediately to Ph.D. to study peptide and steroid hormone production in the hypothalamus and to assays of the cellular/subcellular/molecular level by flow cytometry during baboon pregnancy. Experience with primate is not required. Basic knowledge of steroidology and U.S. citizenship essential. Send curriculum vitae to: Eugene D. Albrecht, Ph.D., Department of Obstetrics and Gynecology, University of Maryland School of Medicine, 655 West Baltimore Street, Baltimore, MD 21201.

POSTDOCTORAL OR RESEARCH ASSOCIATE POSITION

Available immediately to study the transcription of the susceptible mechanisms, in addition to regulation of the sensitivity of these receptors. The proposed studies include radioligand binding experiments and to assays of cyclic nucleotide levels and phosphoester hydrolysis. Appointment level will be commensurate with experience. Send resume and three letters of reference to: Dr. G. B. Webster, Department of Pharmacology and Toxicology, University of Maryland School of Pharmacy, 20 North Pine Street, Baltimore, MD 21201. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

Positions for NCI postdoctoral training program in molecular and cellular carcinogenesis are available at The University of Texas System Cancer Center—Science Park. Research programs focus on the following areas: somatic cell genetics, DNA repair and mutagenesis, carcinogen metabolism and adduct formation, tumor promotion, mechanisms of hormonal and chemically-induced, biological, and growth factors. Current approaches in whole animal and in vitro culture systems include: flow cytometry (BD FACS 440), HPLC, monochromatic anti-tumor activity, and DNA. Applicants should send curriculum vitae, differential DNA sequencing, isoenzyme analyses and electron microscopy. Applicants must be U.S. citizens or permanent residents and have current work permits. Send resume and three letters of reference for application forms to: Dr. Thomas J. Slaga, Director, UTSCC, Science Park—Research Division, P.O. Box 389, Smithville, TX 77872. Telephone: 809-237-2403. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

Position available for a postdoctoral research associate to conduct research on the mechanism of cytochrome P-450 isozymes by alcohol and pyrazole; the generation of active oxygen radicals by cells and subcellular organelles and their role in alcohol toxicity; the inhibition of alcohol metabolic actions in cell culture systems. Salary commensurate with experience. Appointment for 2 or 3 years. Please send resume, brief description of research experience and letters of recommendation to: Dr. Arthur I. Cederbaum, Department of Biochemistry, Box 1020, University Of Virginia Medical School, 701 Old Ivy Road, Nolfa, VA 23506.

POSTDOCTORAL RESEARCH ASSOCIATE

Applications are invited from protein chemists for the position of postdoctoral fellow. Preference will be given to candidates with previous experience in enzyme purification, microsequencing, subcellular/molecular biology, and molecular characterization of anti-gens relevant to tropical diseases including infection caused by Schistosoma mansoni, Brugia malayi, Onchocerca volvulus, and Entamoeba histolytica, which complements existing strengths in molecular parasitology. Send curriculum vitae, statement of career objectives, and letters of reference to: Martin K. Cooper, Coordinator, Division of Geographic Medicine, Department of Medicine, University Hospitals of Cleveland, 20744 Avenue Road, Cleveland, OH 44106. Equal Opportunity Employer.

PROTEIN BIOCHEMIST

MOLecular BIOLOGIST

The Department of Biochemistry and Molecular Biology, Louisiana State University Medical Center in Shreveport, invites applications for two faculty positions at the associate or full professor level to share in the leadership of an expanding department. Outstanding candidates at the assistant professor level will also be considered. The successful applicants are expected to develop an active research program in areas of protein biochemistry, molecular biology, or molecular genetics. Twelve-month salary support, generous startup funds and excellent research facilities are available. Letters of application, including curriculum vitae, a statement of future research interests, as well as three letters of reference should be sent by 1 October 1987 to: Dr. Richard J. Courterney, Chairman, Department of Biochemistry and Molecular Biology, L.S.U. Medical Center, 1501 Kings Highway, Shreveport, LA 71130. An Affirmative Action/Equal Opportunity Employer.

PROTEIN CHEMIST

A position is available for a skilled protein-peptide chemist to oversee an instrumentation facility which incorporates peptide sequencing and synthesis. The successful applicant will interact with a small group of investigators working on the structure and function of proteins and peptides involved in chemical transmission in the nervous system. This appointment will be a nonfaculty, career-level appointment. In addition to participating in the purification of peptides, this individual will be the principal operator of a gas-phase sequencer and automated synthesizer. Demonstrated experience in protein chemistry and familiarity with required equipment and techniques are highly preferred. Direct applications, including a description of relevant experiences and references, should be sent to: Dr. B. Cohen, Department of Anatomy and Neurobiology, Washington University School of Medicine, 660 South Euclid Avenue, St. Louis, MO 63110. An Equal Opportunity/Affirmative Action Employer.
ASSOCIATE EDITOR
SCIENCE MAGAZINE

Editorial position available for a Ph.D. inorganic chemist, physical chemist, or solid-state physicist with two or three years of research experience; wide general interest in science and instrumentation; and publications in the refereed literature. The successful candidate’s initial duties will include editing manuscripts for clarity and style. Progress to wide responsibilities in manuscript selection is expected. Previous editorial experience not required. This is a full-time position in our Washington editorial office. Please submit résumé with cover letter, including salary requirements, to:

Carolyn Bell
SCIENCE Magazine
1333 H Street, NW
Washington, D.C. 20005

Equal Opportunity Employer

Regional Medical Associate
Pharmaceutical Marketing

Currently we have an opening in the Mid-Atlantic Region for a Regional Medical Associate to combine both scientific expertise and marketing skills. The selected candidate will report directly to the Regional Vice President and will be headquartered in Philadelphia, PA. Responsibilities are to establish effective relationships within key medical institutions, providing scientific liaison and indepth information essential to appropriate use of SK&F’s products. Will also have training responsibility at the Representative, Medical Staff and Pharmacy levels. 25% travel.

Qualifications must include Ph.D. in Pharmacology, Biochemistry, Microbiology or other Life Sciences. Must possess initiative, strong communication skills, and interest in Marketing.

In addition to an independent work environment where personal and professional growth are a way of life, we offer an outstanding compensation/benefits package geared to today’s market. Please send resume and current earnings to:

Box 121
SCIENCE
We are an Equal Opportunity Employer, M/F/H/V

PENNSYLVANIA STATE UNIVERSITY
FACULTY POSITIONS
Molecular Evolutionary Genetics

The Department of Biology, Pennsylvania State University, seeks to fill two tenure-track positions in evolutionary genetics, at the assistant or associate professor level. Research areas of interest are the population genetics of molecular variation, the evolution of genes and genetic systems, and the application of molecular techniques to the study of breeding systems, gene flow, recombination, and other factors affecting the genetic structure and evolution of populations. Significant research accomplishments and evidence of outstanding potential to develop a strong, independent research program will be key considerations. Applicants should have postdoctoral training.

Send curriculum vitae, statement of research interests, and three letters of reference to Dr. Robert K. Selander, Department of Biology, Pennsylvania State University, University Park, PA 16802. Closing date for applications is September 30, 1987.

An Equal Opportunity/Affirmative Action Employer.
Head of the
NERC Isotope
Geology Centre

Salary up to £25,335 p.a.

The Natural Environment Research Council wishes to appoint a Head of its new Isotope Geology Centre, to be located at Keyworth, near Nottingham.

The Isotope Geology Centre is to provide a collaborative research service in all aspects of isotope geochemistry to the earth sciences community which includes universities/polytechnics and NERC institutes. Initially it is envisaged that the Centre will provide a research service utilising K/Ar; U/Pb; Rb/Sr and Sm/Nd techniques, as well as encompassing a range of stable isotopes (C, H, O and S).

It is expected that there will be a growing demand for these services, especially those involving stable isotopes, and the application of these techniques to the study of environmental problems may well include the life sciences as well as the earth sciences. The opportunity exists for the development of in-house research in addition to the Centre’s principal role as a service.

The successful applicant is likely to be an experienced and innovative earth scientist with a substantial scientific reputation and proven management ability. Besides being responsible for directing the Centre’s staff and other resources in providing the services approved by a programme management committee, the Head of the Centre will give scientific leadership to the community in the use of isotopes in geology and the introduction of novel techniques in isotope geochemistry.

The Centre is located at present in London but will move to Keyworth, near Nottingham, in approximately two years’ time when new accommodation will be available at the site of the British Geological Survey.

The post is offered at Grade 6 (salary scale £18,786 – £25,335).

The appointment is pensionable under the NERC Superannuation Scheme. Terms and conditions are similar to those in the British Civil Service.

Application forms may be obtained from Mr B Hall at the address given below or by telephoning (0793) 40101 ext 548. Completed applications, including a full CV should be sent to Mr B Hall, Natural Environment Research Council, Polaris House, North Star Avenue, Swindon, Wilts, England SN2 1EU not later than 31st August, 1987.

The Natural Environment Research Council is an Equal Opportunities Employer. All jobs in the UK are open to men and women of all ethnic groups and the Council also welcomes applications from disabled people.

KUWAIT
UNIVERSITY OF KUWAIT HEALTH SCIENCE CENTRE
FACULTY OF MEDICINE

Applications are invited for the posts of CHIEF TECHNICIAN in the following departments. Candidates should have experience as a Clinical Laboratory technician and hold the F.I.M.L.S., or equivalent qualification, with fifteen years’ experience including training. The successful candidate’s duties will be of a multidisciplinary nature and will be both in the laboratory and in the field.

- Department of Medicine : 1 post
- Department of Pathology : 1 post
- Department of Pharmacology : 1 post
- Department of Anatomy : 1 post
- Department of Electronic Microscope Unit : 1 post

Salary will be in the range KD. 450-512 per month (1 KD = 2.3 sterling pound, 3.5 US dollar approximately). There is no income tax in Kuwait and currency is transferable without restriction. Free, furnished, air-conditioned accommodation is provided, and electricity and water supplied free of charge. Sixty days paid annual leave for each completed year of employment, and annual economy class return air tickets to the country of citizenship or permanent residence are provided for the appointee, spouse and three dependent children. Free medical treatment is available under the State Health Service.

Applications should be submitted to: THE DIRECTOR OF PLANNING AND ACADEMIC STAFF RECRUITMENT, FACULTY OF MEDICINE, UNIVERSITY OF KUWAIT, HEALTH SCIENCE CENTRE, P.O. BOX NO. 24923 SAFAT, 13110 SAFAT, KUWAIT, with detailed curriculum vitae in duplicate, details of passport, and the names of three referees, to arrive NO LATER THAN 31ST OCTOBER, 1987.

BEHAVIORAL NEUROSCIENTIST

The Laboratory of Clinical Studies, National Institute on Alcohol Abuse and Alcoholism invites applications for a Fellowship position to study the effects of ethanol and other drugs on human psychomotor performance and cognition. Unique opportunity to become an active member of a multidisciplinary research team which integrates pharmacological, psychological, electrophysiological, and neuroradiologic approaches to the study of behavior. State-of-the-art equipment and experienced technical support available. Familiarity with Fortran and Macro (Digital) is desirable. The position is that of a Fellow with a salary range of $17,000 to $47,788 per annum commensurate with qualifications and is located on the National Institutes of Health campus in Bethesda, MD. Applications are invited from individuals having a Ph.D. in a neuroscience-related field. Interested candidates should submit their Curriculum Vitae and names of three references to: Michael J. Eckardt, Ph.D., Chief, Section of Clinical Brain Research, LCS, NIAAA, Building 10, Rm. 3C-218, 9000 Rockville Pike, Bethesda, MD 20892. Position is available now and is expected to be filled by September 15, 1987.

An Equal Opportunity Employer
Biosensor Breakthrough

Molecular Devices Corporation patented revolutionary silicon sensor technology last May. Our approach combines biochemistry with silicon science in unique and proprietary ways to dramatically advance measurement technology. Our analytical systems will provide to users sophisticated measurements with speed, sensitivity, and precision. We are interested in hearing from you if you have demonstrated hands-on experience in immunoassay research and development and expertise in the following:

Solid Phase Assay Chemist/Chemical Engineer
In this position, you will use your assay development background to deal with chemistry issues associated with our membrane-based enzyme immunoassay products. You need a strong understanding of plastics, membranes, membrane chemistry and process development techniques as well as a PhD or equivalent and 5 years' experience. Familiarity with packaging and plastic fabrication techniques preferred. Some knowledge of medical diagnostic instrumentation helpful.

Immunosassay Development Chemist
You will develop immunoassays for our silicon-based sensors and be responsible for antibody screening and purification, conjugation to enzymes or other labels, and assay formulation and optimizations. Additional responsibilities include analysis of biological samples, interfering substances, reagent stability and studies of assay precision and accuracy. You must have a PhD or equivalent, a background in bringing research techniques through product development to production and 5 years' experience. Membrane or paper-based assay techniques desired. Familiarity with industry related products helpful.

Research Scientist
You will be responsible for understanding and optimizing flow properties on solid supports, as well as investigating alternative concepts and configurations for various immunoassay formats. You must have a strong understanding of fluid mechanics, plastics and membranes plus a PhD or equivalent in Chemical Engineering with 3 years' hands-on experience. Some knowledge of process development techniques and medical diagnostic instrumentation helpful.

To find out more, please send your resume, indicating position of interest, to Human Resources, Molecular Devices Corporation, 3180 Porter Drive, Palo Alto, CA 94304. An equal opportunity employer.

Molecular Devices
RESEARCH ASSOCIATE

The Waksman Institute of Microbiology, Rutgers University of New Jersey

RESEARCH ASSOCIATE to support the development of improved gene transfer systems in plants. Successful candidate will be responsible for developing new gene transfer systems for several research groups interested in gene structure/function studies. Research interests include the control of gene action through hormone and host plant interactions or plant defense mechanisms. Experience in Agrobacterium/Ti plasmid mediated gene transfer systems preferred. Salary: $23,785 to $31,703, plus fringe benefits.

The Institute is rapidly expanding research facilities with a new 32,000 square foot research wing, greenhouse, walk-in growth rooms, and fieldspace that is part of a major L. W. Boyd Warwick University Campus located in the New York–Princeton–Philadelphia corridor. Institute programs of research and instruction operate in collaboration with all academic departments of the University, and an adjacent medical school and a nearby college of agriculture and environmental sciences.

Please send an overview of curriculum vitae and the names of three references to: Dr. Joseph Messing, Waksman Institute, Rutgers University, P.O. Box 759, Piscataway, NJ 08855–0759. Rutgers is an Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSOCIATE IN ENZYMEOLOGY/MOLECULAR BIOLOGY

Applications are invited for a research position available from 1 September 1987 to conduct cloning and expression experiments for the production of several enzymes to be used in NMR and x-ray diffraction studies. A Ph.D. in biochemistry with 1 to 3 years of postdoctoral experience in the production and purification of enzymes using gene cloning techniques is required. Some experience with enzyme kinetics would also be advantageous. The salary is in the range $25,000 to $40,000 depending on age and experience. Application (together with the names of three referees) should be sent to: Dr. A. I. Scott, Center for Biological NMR, Department of Chemistry, Texas A&M University, College Station, TX 77843. Texas A&M University is an Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSOCIATE, PATHOLOGY

Applications are invited for a research position in molecular biology and molecular pathology. The applicant must be interested and qualified to work on a research project where messenger RNA for intermediate filament and calcium activated neutral proteinase is the ultimate interest. Extensive experience with cloning strategies and an understanding of the implications of these strategies. Responsibilities include assisting in preparing a report on their findings, administrative and scientific duties, and preparing manuscripts. Applicants must have at least 2 years of related experience. A minimum of 2 years of related experience is required for the staff scientist position. Four years of related experience is required for the position of project director.

The National Research Council offers competitive starting salaries and an excellent benefits package that includes paid relocation. Please send confidential resume to: NRC/FRB, F. E. Peter, Positions 455.030/31, 2101 Constitution Avenue, NW, Washington, DC 20418. An Equal Opportunity Employer.
At Baxter we’ve taken the combined strengths of Baxter Travenol Laboratories and American Hospital Supply to forge a Fortune 75 world leader in the medical products industry. Now, positions are available at our Corporate Research Center in suburban Chicago with our Applied Technologies Group, which provides a wide range of scientific research support for varied corporate needs. These positions offer the opportunity to gain broad exposure to diversified medical products and meet unique scientific challenges while enjoying high corporate visibility.

**DIRECTOR OF TOXICOLOGY**

Responsibilities include the supervision of a multidisciplinary team of scientists conducting preclinical safety evaluation studies as well as requiring substantial interface with federal regulatory agencies, industrial committees, and internal project managers. The successful candidate will have a Ph.D. in Toxicology or be a Veterinary Pathologist with a minimum of 10 years progressive experience managing a toxicology facility involving the evaluation of drugs or medical devices. Board certification highly desirable.

**SR. RESEARCH ASSOCIATE—MOLECULAR BIOLOGY**

Responsibilities include the development of eukaryotic expression vector systems and gene probes, isolation and analysis of cDNA clones, and DNA sequencing. We are seeking a Ph.D. Biochemist/Molecular Biologist with 1-3 years of postdoctoral experience.

**SR. RESEARCH ASSOCIATE—PHARMACOLOGY/TOXICOLOGY**

Responsibilities include designing protocols, conducting toxicity studies, evaluating data and preparing reports for INDs and NDAs. A Ph.D. in Toxicology, Pharmacology or related Life Science is required, along with a minimum of 3 years industrial toxicology experience. A working knowledge of acute, sub-chronic, and chronic toxicity studies involving drugs or medical devices is required.

**RESEARCH ASSOCIATE—IMMUNOLOGY**

Responsibilities will entail basic immunochemical and immunobiological laboratory procedures, including protein purification and characterization, electro-phoresis, western blot analysis, column chromatography and in vitro and in vivo cell function analysis. An MS in immunology or a related field is required, plus 5-5 years of practical experience with protein/peptide isolation and characterization, and in vitro immunochemical techniques.

At Baxter we’re stronger than ever and we’re offering better opportunity than ever. We provide an excellent salary and benefits package including retirement and employee stock purchase plans. Send resume/CV with salary history in confidence to: Director-Human Resources, Applied Technologies-RLA-1N, Baxter Healthcare Corporation, P.O. Box 490, Round Lake, IL 60073. Equal Opportunity Employer.

---

**Vice President**

for Research and Graduate Studies

**MICHIGAN STATE UNIVERSITY**

Nominations and applications are invited for the position of Vice President for Research and Graduate Studies at Michigan State University, a comprehensive graduate research University. The University comprises fourteen colleges with an enrollment of 41,000 including 7,500 graduate and professional students enrolled in both masters and doctoral programs. The annual research budget is about $70 million. Michigan State University is a member of the Association of American Universities, the National Association of State Universities and Land-Grant Colleges and the American Council on Education. The Vice President for Research and Graduate Studies reports to the President and shares with the Provost oversight of The Graduate School, and of Lifelong Education Programs.

The person to fill this important position will lead the future development of research and graduate programs at Michigan State University, and should possess the following qualities:

- A background of successful administrative leadership;
- A record of outstanding research, nationally recognized leadership in his/her field;
- Demonstrated ability to negotiate and obtain funding for research and graduate education programs;
- Sensitivity toward and ability to deal with diverse groups representing faculty, students, industry, business, government and the community;
- Commitment to affirmative action in graduate education/research.

**Specific Responsibilities Include**

- Strategic planning for research and graduate studies;
- Facilitation and oversight of faculty and student research and scholarly activity;
- Oversight of graduate education (jointly with the Provost);
- Administrative oversight of the Dean of the Graduate School (jointly with the Provost) and of the Assistant Provost for Lifelong Education Programs (jointly with the Provost), two assistant vice presidents and staff;
- Supervision of special units, currently the Center for Environmental Toxicology, the Office of Radiation, Chemical and Biological Safety, the Laboratory Animal Care Service, the Industrial Development Institute, the Technology Transfer Center and the MSU Museum.

**Preferred Starting Date:** January 1, 1988

**Procedures**

Nominations and letters of application with curriculum vitae should be submitted as soon as possible and preferably by October 1, 1987. Requests for confidentiality will be honored.

Please write to: Professor Robert W. Leader, Chair Search Committee for Vice President for Research and Graduate Studies Office for Research and Graduate Studies Michigan State University 232 Administration Building East Lansing, Michigan 48824-1046

**Telephone:** 517/355-8260

*MSU is an Affirmative Action/Equal Opportunity Institution*
RESEARCH POSITION IN CARDIOVASCULAR PHARMACOLOGY AND PHYSIOLOGY available in well-equipped cardiovascular laboratory, Human, animal, and bench research in cardiovascular, pathophysiology, and pharmacology. Ph.D. or commen- surate degree and research experience in cardiovascular, pathophysiology, cell biology, hemodynamics, and related areas. Experience in mammalian cell culture required, and in hemodynamic studies desired. Qualifications include a Ph.D. and the ability to work independently. The person selected will supervise the mammalian cell culture facility, will have the opportunity to teach and to advise graduate students, and to initiate new research areas. Lecturer rank and salary dependent on qualifications. Starting date negotiable. Send curriculum vitae and names and addresses of three references to: Dr. A. Halaris, Department of Psychiatry, Case Western Reserve University, Cleveland, Ohio 44106.

RESEARCH POSITION: Biochemical Pharmacology and Psychopharmacology. Faculty position available for M.D. or Ph.D. with training and experience in measurements of bioactive amines and metabolites. Research on receptor binding, pharmacokinetics, and subcellular fractionation techniques. Faculty rank and salary commen- surate with experience. Send curriculum vitae and names of three references to: Dr. T. Rush, Department of Psychiatry, Case Western Reserve University, Cleveland, Ohio 44106.

RESEARCH POSITIONS IN BIOCHEMICAL PHARMACOLOGY AND PSYCHOPHARMACOLOGY AVAILABLE FOR PH.D. OR M.D. QUALIFIED WITH APPROPRIATE EXPERIENCE IN BIODETETIC LOCALIZATIONS, METHODS FOR THE ORIENTATION OF PHARMACOLOGICAL EXPERIMENTS. EXPERIENCE IN THE USE OF IN VITRO AND IN VIVO TECHNIQUES, INCLUDING SUBCELLULAR FRACTIONATION, IS DESIRABLE. APPLICANTS SHOULD SEND A BRIEF DESCRIPTION OF RESEARCH INTERESTS TO: DR. R. V. KATZ, DEPARTMENT OF PHARMACOLOGY, UNIVERSITY OF MICHIGAN, ANN ARBOR, MICHIGAN 48104.

RESEARCH SCIENTIST: MAMMalian CELL CULTURE

This position is in an interdisciplinary group with research interests in cardiovascular and biochemical pharmacology, cell biology, hemodynamics, and related areas. Experience in mammalian cell culture required, and in hemodynamic studies desired. Qualifications include a Ph.D. and the ability to work independently. The person selected will supervise the mammalian cell culture facility, will have the opportunity to teach and to advise graduate students, and to initiate new research areas. Lecturer rank and salary dependent on qualifications. Starting date negotiable. Send curriculum vitae and names and addresses of three references to: Dr. J. Terzis, Microsurgical Research Center, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, VA 23501.

UNIVERSITY OF ALBERTA DEPARTMENT OF PHYSIOLOGY

The Department of Physiology invites applications for RESEARCH SCHOLARS at the assistant professor rank. Successful candidates must have a Ph.D. degree, and have demonstrated outstanding ability for independent research. Preference will be given to investigators in renal physiology, neurophysiology, and/or endocrinology. The successful candidate will be expected to participate in the department's teaching program. This position will be funded through an external agency such as the Natural Sciences and Engineering Research Council of Canada. The successful candidate will also be expected to set up a research laboratory. Interested applicants should send curriculum vitae and a brief description of research interests to: Dr. L. C. Ginn, M.D., Pulmonary Unit, Belfinch 1, Massachusetts General Hospital, Boston, MA 02114, An Equal Opportunity/Affirmative Action Employer.

RESEARCH POSITIONS IN MOLECULAR BIOLOGY WAYNE STATE UNIVERSITY

The Molecular Biology Center at Wayne State University invites applications for multiple research positions for fall 1988 or sooner hire dates at the level of assistant professor (research), associate professor (research) and professor (research), depending upon qualifications and experience. The positions carry generous start-up funds and are part of a major University-wide expansion in molecular biology. The goal of the Center is improvement in human health, with a focus on bio-technology implementation. Four broad areas of research are emphasized: gene expression and function, organization of the human genome, synthesis and characterization of new macromolecules (products), and protein structure and function. The Center is equipped with the latest technology and provides an active research environment in any area of molecular biology or molecular genetics that will be considered. Send application (deadline: 15 November 1987), including curriculum vitae, the names of at least three references, and a statement of future research plans, to: Orlando J. Miller, M.D. Molecular Biology Center Wayne State University 540 East Canfield Room 526 Scott Hall Detroit, MI 48201 Wayne State University is an Equal Opportunity/Affirmative Action Employer and actively seeks applications from women and minority groups.

SENSORY NEUROPHYSIOLOGIST: Tenure-track position for appointment at assistant professor level. Serious commitment to collaborative work within the Micrornuclear Research Center. Expertise required to characterize electrophysiologically the properties of central auditory neurons that have regenerates along peripheral nerve implants. Preference given to applicants experienced in spinal cord neurophysiology, and tract- ing and histology. Please send curriculum vitae with three letters of recommendation to: Dr. Julio Terriz, Micrornuclear Research Center, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, VA 23501.

VERTEBRATE COMMUNITY ECOSISTIST: Tenure-track assistant professor. Postdoctoral experience desirable. Research interests may be in any ecosystem using any taxonomic group of vertebrates except fish. Preference given to candidates with teaching experience in mammalian or vertebrate ecology. The successful candidate is expected to develop a nationally recognized research program. We seek a person who can complement and strengthen existing programs. Please submit a letter of application, publication list, curriculum vitae, three letters of recommendation, and a statement of teaching and research interests to: Dr. J. V. Hara, Department of Biology, Utah State University, Logan, UT 84322–3805 before 15 September 1988. Minorities and women are encouraged to apply. An Equal Opportunity/Affirmative Action Employer.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP—A 2-year postdoctoral research fellowship is available in the Division of Medical Oncology, Jefferson Medical College for 1 August 1987 to study the role of HLA in human sarcomas. Candidates should have a Ph.D. degree with strong background in performing gel electrophore- sis as well as basic immunology. Tissue culture experience is suggested, but not mandatory. Please submit curricu- lum vitae and a letter to: Dr. Susan F. Solomon, Ph.D., Michael J. Mastrangelo, M.D., Division of Medical Oncology, Jefferson Medical College, Thomas Jefferson University, 1015 Walnut Street, Philadelphia, PA 19107, An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP AT DUKE UNIVERSITY MEDICAL CENTER

This research project involves the study of the toxic ricin in yeast. A major objective will be the generation of mutant yeast resistant to the toxin, as well as the molecu- lar characterization of these mutations. A related project will involve studies in vitro and in vivo studies of the functional domains of ricin, both with regard to uptake and toxicity. The position is available immediately at $18,000 to $21,000 per year. Contact: Dr. Arthur E. Frankel (919-684-4123).

FELLOWSHIPS are available for pre- and postdoctoral study in the Pharmacology Graduate Program of the Roswell Park Memorial Institute, Graduate Division of the State University of New York at Buffalo. Stipends and tuition waivers are available for eligible candidates. The program offers diversified training related to pharmacological, molecu- lar, and biochemical basis for drug action with emphasis on cancer therapeutics. Specific areas include: cellular and molecular, drug metabolism, and pharmacokinetics, metabolism and regulatory mechanisms. Please include curriculum vitae and indicate two reference letters. An Equal Opportunity/Affirmative Action Employer.
At California Biotechnology Inc., our mission is to become the single most important source of biotechnology products vital to human health care in the 1990's and beyond. We're nearing completion of our new state-of-the-art facility. With a strong management team, proper funding and a strategy that enables the company to maximize all of its resources, we're well positioned to build upon our track record of outstanding scientific achievements.

We invite you to consider this opportunity to join a team of dedicated scientists at Cal Bio, where our commitment to innovation and scientific excellence can make an important difference in your future. We've created opportunities in our multidisciplinary Process and Product Development Department at all levels for work in fermentation, isolation, analysis, quality control and formulation of medically active proteins and peptides. All positions require an Ph.D./M.S./B.S. in a related scientific discipline.

Cell Culture/Fermentation Development

You will need 3 or more years' experience in large-scale cell culture techniques and 2 or more years' in the fermentation and expression of recombinant proteins in E. Coli. Experience in scale-up to 500-liters will be helpful.

Downstream Processing

In this area, you'll introduce and apply, novel and classical separation techniques to the development of small- and large-scale purification of proteins. A minimum of 3 years' experience in the recovery, isolation and purification of proteins and peptides produced by recombinant DNA technology is required; familiarity with good manufacturing practices and SOPs will be beneficial. Additional duties require collaboration with others involved in research, structure analysis, quality control and formulation.

Analytical Methods Development

Responsible for the development and implementation of standard testing methods for structural analysis and purity of recombinant proteins, members of this group will have experienced a minimum of 3 years' related work experience. Participate in forming a "grassroots" quality control department which will be responsible for routine testing of raw materials and products, and documentation development for IND submissions and manufacturing practices.

Formulation Development

Qualifications for this area include experience in traditional drug formulation, knowledge of novel delivery systems and sterile filling operations. Three or more years' experience in the formulation of proteins in stable dosage forms is also required.

All these positions offer an excellent opportunity for career growth, and a highly competitive compensation and benefits package. For consideration, please forward curriculum vitae and names of three references in confidence to: Human Resources, California Biotechnology Inc., Dept. MF-JT, 2450 Bayshore Parkway, Mountain View, CA 94043. An equal opportunity employer.
Amino Acid Analysis.
Not just results...the right results...
HP AminoQuant.

Square oranges? You can see it's not quite right. But in amino acid analysis, it's been difficult to tell what is right. At last you can be sure with AminoQuant, the new amino acid analyzer from Hewlett-Packard. Its results meet today's stringent demands for precision and accuracy at a level consistent with the delicacy and significance of your work.

The AminoQuant amino acid analyzer only takes 1 µl of hydrolysate to precisely quantitate primary and secondary amino acids of most importance to you—even down to the sub-picomole level!

In addition to its remarkable resolution and precision, the AminoQuant analyzer makes the process faster and simpler by fully automating derivatization, sample injection, analysis and reporting.

Detailed research and rigorous customer site testing allow us to warrant an exceptional set of performance specifications. And it's not just a promise. At installation, we verify that your system, in fact, meets that set of specifications. The specially designed reagents, column and necessary methodology are all provided with the AminoQuant analyzer.

HP's AminoQuant sets a new standard of performance for today's demanding and challenging era of biochemical research. Make it your standard.

For more information, call the HP office listed in your telephone directory white pages and ask for an analytical products representative. Or write to Hewlett-Packard Analytical Group, 1820 Embarcadero Rd., Palo Alto, CA 94303.