

Products & Materials

Fluorescence Spectrophotometer

Model F-4500 fluorescence spectrophotometer combines advanced optical-mechanical technology with Windows software. The instrument can scan at 500 nm per second, allowing full-range spectra from 200 to 900 nm to be acquired in less than 2 s and complete three-dimensional contour plots in less than 1 min. Data-processing functions include variable scale expansion, arithmetic calculating, peak area integration, and phosphorescence lifetime measurements. Hitachi Instruments. Circle 14.

Insect Cell Culture Medium

Sf-900 II SFM is the second generation of Sf-900 Serum-Free Insect Cell Culture Medium. The protein-free medium boosts maximum cell densities of *Spodoptera frugiperda* (Sf9) cells to 9 to 12 $\times 10^6$ cells per milliliter and β -galactosidase expression to 5 $\times 10^5$ U/ml. It can increase cell densities by 20 to 100% with *Lymantria dispar* and *Trichoplusia ni* (Tn-368) cell lines. To create the new formulation, significant changes were made in the amino acid, carbohydrate, vitamin, and lipid components of the original medium. GIBCO BRL. Circle 15.

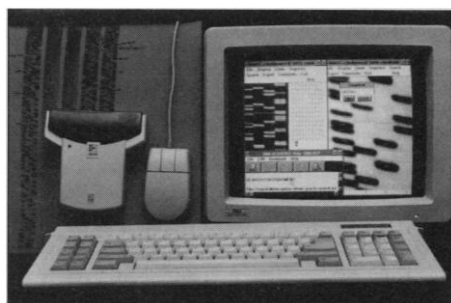
Molecular Graphics Software

MOLCAD is an interactive graphics program for the display and manipulation of molecular structures and the visualization of related data. MOLCAD provides visualization of molecule characteristics such as surface and contour. TRIPOS Associates. Circle 16.

Semiautomatic DNA Sequence Reader

This new product can help researchers enter, edit, and compare DNA data from x-ray film. The film is entered into the system

Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by *Science* or AAAS is not implied. Additional information may be obtained from the manufacturers or suppliers named by circling the appropriate number on the Readers' Service Card and placing it in a mailbox. Postage is free.



using a hand-held optical scanner and is visualized on the monitor as a highly magnified photo-quality image. Search and edit features allow simultaneous visualization of the digitized film image and the assigned sequence data. The product is available as a complete turnkey system or as an upgrade kit for IBM 386 AT class computers. DNA ProScan. Circle 17.

Dehydrator for IEF Gels

The Gel Dryer is a dehydrator for drying horizontal agarose and polyacrylamide gels after isoelectric focusing. Either horizontal or recirculating air flow can be used. The unit has seven shelves, each measuring 35 by 33 cm. Temperature can be set from 32° to 63°C. Drying times from 1 to 24 hours can be selected. Isolab. Circle 18.

Low-Cost AA Spectrometers

Two new atomic absorption (AA) spectrometers deliver high sensitivity and flexibility for difficult samples at a low cost. The SpectrAA-10/20 Plus series spectrometers feature "narrow beam" optics, which match the optical beam to the flame and furnace cross sections for maximum light throughput and sensitivity. Varian's Rotating Beam combiner alternately passes the sample beam or reflects the reference beam to the monochromator, further enhancing light throughput. Varian Associates. Circle 19.

Evaporation Workstation

The TurboVap II Concentration Workstation automates the evaporation process for extraction of solvents, improving the productivity of environmental or sample preparation laboratories. Optical sensors, a digitally controlled water bath, and microprocessor control enable the TurboVap II to monitor the process and stop the evaporation at a fixed end point. At the desired end point the unit beeps and displays a flashing light. Zymark Corp. Circle 20.

High-Recovery Microconcentrators

Microcon disposable microconcentrators provide a fast, convenient, and reproducible method to concentrate, desalt, and purify microsamples of proteins and nucleic acids. Samples of up to 500 ml can be rapidly reduced to as little as 5 ml, using a standard centrifuge. Typical spin time is 5 to 30 min. Cutoffs now available are for molecular weights 3,000 and 10,000. Amicon Division, W. R. Grace & Co. Circle 21.

Cell Penetrator System

The Burleigh Cell Penetrator System simplifies the problem of inserting a pipette through the membrane of a single cell. A precision flexure assembly is driven by a low-voltage piezoelectric actuator to produce



straight, vibration-free motions up to 70 μ m. The system is suited for intracellular recording and microinjection on cell cultures, dissociated cells, and top layers of tissue slices. Burleigh Instruments. Circle 22.

Literature

Directory of Chemical Products for DNA/RNA Synthesis, Peptide Synthesis, Protein Sequencing, and 2-D Electrophoresis is a 72-page specialty catalog that includes monomers and amino acids; columns and bulk supports, kits, reagents, and ancillary supplies. Millipore. Circle 23.

Electrophoresis Products is a 24-page brochure with specifications, characteristics, and ordering information on subcells, sequencers, mini electrophoresis systems, power supplies, and accessories like pre-poured gels, imaging cassettes, and transilluminators. Schleicher & Schuell. Circle 24.

Hamilton: The Measure of Excellence presents 80 pages of a complete line of products, with new products including syringes, high-performance liquid chromatography columns, automated pipetting systems, and miniature inert plug valves. Hamilton Co. Circle 25.

Science

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Daniel Moran, Traffic Manager
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Janis Crowley, Recruitment
Advertising Manager
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POSITIONS OPEN

MOLECULAR BIOLOGY PROGRAM UNIVERSITY OF COLORADO HEALTH SCIENCES CENTER

FULL PROFESSOR, ASSOCIATE OR ASSISTANT PROFESSOR. With the assistance of funding from the Lucille P. Markey Charitable Trust, two faculty positions will become available 1 July 1992. One area of interest is in the general area of macromolecular structure, including molecular electron microscopy. We are also interested in candidates whose work centers around protein/peptide chemistry, mechanistic enzymology and molecular approaches to transcription, recombination or other areas of protein-nucleic acid interaction. Other favored areas of research include studies of oncogenes, antioncogenes, molecular virology and translational control. The successful candidates will be active participants in the Molecular Biology Program and the Department of Biochemistry, Biophysics and Genetics and must have molecular research interests and teaching expertise suitable for a Biochemistry Department. The program has an active graduate program and is fully equipped with most facilities needed for modern molecular research. The search will continue until a suitable candidate is found, but only those applications received before 6 May 1992, can be guaranteed full consideration. Please send applications including curriculum vitae, names of four references and a description of research interests to either the **Full Professor Search Committee or Associate Professor Search Committee, Molecular Biology Program B-121, University of Colorado Health Sciences Center, 4200 East Ninth Avenue, Denver, CO 80262.** The University of Colorado Health Sciences Center is committed to Equal Employment Opportunity and Affirmative Action.

ASSISTANT PROFESSOR/IMMUNOLOGIST

The Department of Microbiology in the School of Dental Medicine invites applications for a full-time tenure-track **ASSISTANT PROFESSOR** in molecular immunology. Candidates must have a D.M.D./D.D.S. degree and extensive postdoctoral training. We seek an individual rigorously trained in the molecular biological approach to immunology preferably in some aspect of microbial disease. The successful candidate will be expected to apply his/her expertise to broad problems related to oral health, teach modern immunology to dental students, establish a vigorous research program, interact with members of the dental school and others at the University of Pennsylvania (PENN) and be involved in graduate student training. Applications including a cover letter, curriculum vitae, three letters of recommendation and pertinent publications should be sent to: **Dr. Gary H. Cohen, Professor and Chair, Department of Microbiology, School of Dental Medicine, University of Pennsylvania, Philadelphia, PA 19104-6003.**

PENN is an Equal Opportunity/Affirmative Action Employer.

CELLULAR BIOLOGIST. Tenure-track **ASSISTANT PROFESSOR** in biology. Ph.D. in biology and commitment to high-quality teaching and scholarly activity required. Courses include: introduction to cellular and organismic biology, genetics, microbiology, and courses in the candidate's area of expertise. Send application, curriculum vitae, graduate transcripts, and three letters of reference to: **Dr. Robert Genter, Environmental and Health Sciences, Johnson State College, Johnson, VT 05656.** Review of applications begins 30 March 1992. The Vermont State Colleges endorses the goals of Equal Employment Opportunity and Affirmative Action.

ASSISTANT PROFESSOR. The Wayne State University, School of Medicine, Department of Pathology, invites applications for a tenure-track position in the Department of Pathology, Wayne State University. Applicants must have a Ph.D. or M.D. with demonstrated research expertise using cellular and molecular approach to address problems in cancer biology relating to tumor progression and spread. The candidate is expected to develop a vigorous, independently funded research program and to participate in some aspect of collaborative projects currently being conducted in the department. Applicants should forward curriculum vitae, a description of research interest and plans, and three references to: **Dr. Avraham Raz, Michigan Cancer Foundation, 110 East Warren Avenue, Detroit, MI 48201.** Michigan Cancer Foundation and Wayne State University are Equal Opportunity/Affirmative Action Employers M/F.

POSITIONS OPEN

BIOLOGIST. Wabash College, a private liberal arts college for men, invites applications for a 1-year appointment to begin 1 July 1992. Ph.D. required. Responsibilities include teaching in a team-taught introductory biology course and a course in one of the following three areas: developmental biology, comparative anatomy and embryology or microbiology. Excellent facilities for research are available. *Wabash College is committed to a diverse faculty of excellent teaching ability. We are eager to receive applications from a broad spectrum of people and especially from women and members of minorities.* Applicants should submit curriculum vitae, three letters of recommendation and a statement of teaching to: **David Polley, Department of Biology, Wabash College, Crawfordsville, IN 47933** by 3 April 1992. Equal Opportunity Employer.

DEVELOPMENTAL BIOLOGIST ST. OLAF COLLEGE

Two-year term position (**ASSISTANT PROFESSOR**) beginning 1 September 1992. Teaching responsibilities in developmental biology, introductory course for majors, and courses related to the candidate's training as needed by the department. Qualifications include a Ph.D., postdoctoral experience, demonstrated ability and interest in teaching, and a desire to participate in research with undergraduate students.

Send curriculum vitae, transcripts, a statement of teaching and research interests, and three letters of recommendations to: **Kathleen Fishbeck, Chair, Department of Biology, St. Olaf College, Northfield, MN 55057-1098.** Applications due 15 April 1992. St. Olaf College is a co-educational liberal arts college of the Evangelical Lutheran Church of America and an Equal Opportunity Employer.

THE UNIVERSITY OF THE VIRGIN ISLANDS ST. THOMAS UNITED STATES VIRGIN ISLANDS

VISITING ASSISTANT OR ASSOCIATE PROFESSOR OF MARINE BIOLOGY. Subject area: general biology, aquatic and terrestrial plant biology (replacement for faculty on administrative assignment).

VISITING ASSISTANT OR ASSOCIATE PROFESSOR OF BIOLOGY. Subject area: genetics, microbiology and occasional immunology (replacement for faculty on administrative assignment).

VISITING ASSISTANT OR ASSOCIATE PROFESSOR OF CHEMISTRY. Subject area: general, organic and physical chemistry, quantitative analysis (1-year sabbatical leave replacement).

DIRECTOR OF THE WILLIAM P. MACLEAN MARINE SCIENCE CENTER. The Marine Science Center is a modern research facility located on Brewer's Bay. The center is equipped with marine aquaria, boat facilities for diving and underwater research. The laboratory has access to the Virgin Islands Ecological Research Center in St. John, the Virgin Islands Marine Advisory Service and the Water Resources Research Center. The Director should have the qualifications to be appointed at the full professor rank. Salary ranges: Assistant, \$34,679 to \$42,468; Associate, \$36,633 to \$50,000; Director—negotiable. Start date is 15 August 1992. However, applications will be accepted until candidates have been selected. To apply, send a letter of application, résumé, official transcripts and three letters of recommendation to: **Dr. Denis F. Paul, Vice President for Academic Affairs, University of the Virgin Islands, Charlotte Amalie, St. Thomas, VI 00802.** For additional details on any position, write or telephone: 809-774-3651. Equal Opportunity Employer and Educator.

PHYSIOLOGICAL/BIOPSYCHOLOGY. Bates College. **ONE-YEAR REPLACEMENT POSITION, INSTRUCTOR OR ASSISTANT PROFESSOR** level, beginning fall of 1992. Responsibilities include teaching physiological psychology, motivation and emotion, and advanced courses in areas of the applicant's strengths, and supervision of undergraduate thesis research. Excellent surgical and behavioral equipment for use with rats is available. *Women and minorities are encouraged to apply.* Deadline for applications is 15 April 1992. Send curriculum vitae and three references to: **Richard V. Wagner, Department of Psychology, Bates College, Lewiston, ME 04240.** An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

BIOLOGIST/ECOLOGIST, Ph.D. ASSISTANT PROFESSOR, tenure track, to begin 1 September 1992, in a growing department at The University of Texas (UT) of the Permian Basin. Teaching responsibilities will include graduate and undergraduate courses in ecology, invertebrate zoology, and evolution. A research interest is expected and professional development will be encouraged. The Department of Life Science offers B.S. and M.S. degrees. After nearly 20 years as an upper division and graduate institution, the university welcomed its first freshman class in 1991-92. Applicants should submit résumé and the names, addresses and telephone numbers of three referees to: **Dr. Donald M. Allen, Chair of Life Science, Division of Science and Engineering, U. T. Permian Basin, Odessa, TX 79762.** Screening of applicants will commence on 6 April 1992.

The University of Texas of the Permian Basin is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT/ASSOCIATE PROFESSOR MEDICAL IMMUNOLOGY

Applications are invited for a tenure-track position in the Department of Microbiology. Applicant should have a solid background in immunology and a strong commitment to development of lectures in team-taught courses in the medical, podiatric, and physician assistant programs. Research interests are open, and limited institutional funds are available. Development of a research program with eventual independent funding is strongly encouraged. The institution is dedicated to teaching excellence. Rank and salary are dependent on qualifications and experience. Send curriculum vitae, brief statement of career goals, and names and locations of three references to: **Richard F. Collins, Ph.D., Department of Microbiology, University of Osteopathic Medicine and Health Sciences, 3200 Grand Avenue, Des Moines, IA 50312.** An Equal Opportunity Employer.

ANATOMIST/PHYSIOLOGIST

Openings in gross anatomy and physiology are available 1 September 1992. These are full-time teaching positions in each discipline, with limited research opportunities. Individuals with both advanced degrees and relevant postsecondary teaching experience are invited to submit a letter of interest and a current complete résumé to: **Director of Basic Sciences, Cleveland Chiropractic College, 6401 Rockhill Road, Kansas City, MO 64131.**

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FRESHWATER BIOLOGY (SEARCH REOPENED)

The expanding program in Freshwater Biology at the University of Mississippi invites applications for a tenure-track (9-month) position, to begin August 1992 in **FISH GENETICS, ASSISTANT PROFESSOR**. Candidates with experience in the genetics of aquatic invertebrates will also be considered. Duties include: conducting basic and applied research in fish genetics, using molecular techniques; developing an extramurally funded collaborative research program that incorporates use of the University of Mississippi Biological Field Station; participating in undergraduate and graduate teaching including a core genetics course, freshman biology, population biology, specialty courses. Position will be involved in directing master's and doctoral students; participating in local and national professional service, and advising undergraduate students. Qualifications include: doctoral degree, publications, and research experience in appropriate area, evidence of a collaborative research orientation and ability to obtain extramural funding. Salaries open, depending on qualifications. Applications will be reviewed starting 27 March 1992. Position open until filled. Send letter of application, description of current and future research plans, complete curriculum vitae and the names, addresses and telephone numbers of three references to: **Dr. James Kushlan, Chair, Department of Biology, University of Mississippi, University, MS 38677.** The University of Mississippi is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

POSITIONS OPEN

ASSISTANT PROFESSOR DEPARTMENT OF MICROBIOLOGY

Applications are invited for a tenure-track **ASSISTANT PROFESSOR** in the Department of Microbiology. We seek candidates with potential or established records in research, and with experience in teaching and training university students at undergraduate and graduate level. The appointment would permit a younger candidate to develop an outstanding research programme that would complement excellent programmes in the department and in centres of excellence established on campus.

The candidate must have experience in any aspect of modern microbiology, typically in research areas such as molecular studies of microbial pathogenesis, microbial response to environmental stimuli, membrane synthesis, structure and function, etc. that are expansive and prospective in character. We seek an individual who is innovative, imaginative, productive and cooperative and invite applications from candidates of such quality. The university and department are committed to increasing the representation of women and minority faculty members and advocates applications from such candidates. In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The position is subject to final budgetary approval.

Please send curriculum vitae, a summary of research interests and the names of three referees by 30 April 1992 to: **Dr. Julian Davies, Head, Department of Microbiology, University of British Columbia, #300-6174 University Boulevard, Vancouver, BC Canada V6T 1Z3.**

PROFESSOR OF CELLULAR AND MOLECULAR PHYSIOLOGY

A position is available for a full-time, permanent, professor of cellular and molecular physiology at Harvard Medical School with a concurrent appointment as professor of medicine, Beth Israel Hospital, Boston, Massachusetts, to carry out research, teaching and administrative duties within the departments. The candidate should have demonstrated outstanding scholarship in phospholipid biochemistry, signal transduction, as well as cell growth regulation and possess proven ability to develop a major academic program for predoctoral and postdoctoral scientists in these areas. Sufficient laboratory and office space will be provided in a state-of-the-art, newly renovated building for the individual to carry out biologic research relevant to his/her interests. Opportunities to recruit several additional junior faculty members exist with sufficient laboratory space and initial funding to facilitate these recruitments. Please send curriculum vitae, a statement of research interests, and reprints of significant recent work to: **Robert D. Rosenberg, M.D., Ph.D., Chairman, Ad Hoc Committee, Molecular Medicine, Beth Israel Hospital, 330 Brookline Avenue, Boston, MA 02215.** Harvard Medical School/Beth Israel Hospital are Affirmative Action/Equal Opportunity Employers, M/F/D/V.

Temple University School of Medicine is offering two tenure-track positions in the Physiology Department and Thrombosis Research Center at the **ASSISTANT PROFESSOR** level. Applicants must have an M.D. or Ph.D., with demonstrated research expertise in liquid-breathing and/or endothelial physiology. The candidates may have a molecular biology, biochemical physiological or pharmacological background. The candidates are expected to develop a vigorous, independently funded research program and to participate in some aspects of collaborative programs. Applicants should forward curriculum vitae, a description of research interests and three letters of recommendation by 30 March 1992 to: **Dr. James Ryan, Department of Physiology, Temple University School of Medicine, Philadelphia, PA 19140.** Temple University is an Equal Opportunity Employer. Applications are encouraged from women and members of minority groups.

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POSITIONS OPEN

ASSISTANT PROFESSOR OF TUMOR BIOLOGY/MOLECULAR BIOLOGY

The Cancer Center of the Massachusetts General Hospital and the Harvard Medical School have openings for physician-scientists at the level of Assistant Professor in the areas of: (1) gene regulation, (2) growth factors, growth factor receptors and signal transduction, and (3) cellular and molecular studies of metastasis. Candidates should hold the degree of M.D. or M.D./Ph.D. and should have sufficient research experience to demonstrate significant accomplishments and strong promise. Resources are available to develop a strong research program addressing problems of contemporary cellular and molecular biology as related to oncology. Letters of application including curriculum vitae, bibliography, a brief statement (less than 500 words) indicating research activities, and three letters of recommendation should be sent to:

**Dr. Kurt J. Isselbacher
Director, Cancer Center
Massachusetts General Hospital
Building 149, 13th Street
Charlestown, MA 02129**

Harvard University/Massachusetts General Hospital are Equal Opportunity/Affirmative Action Employers. Qualified women and minority group members are encouraged to apply.

RESEARCH ASSISTANT PROFESSOR. Duties will include teaching in the classroom and laboratory, research (research duties will include working with human blood products), preparing, breeding, and screening autoimmune induced, and transgenic mice, and the analysis of transgene DNA and RNA expression, the supervision of technicians, and the maintenance of a computer database on large colonies of transgenic mice. M.D. or Ph.D. in medicine or biology with 1 year of training in postdoctoral immunology. Knowledge and skills in the production and analysis of autoimmune transgenic mice. Forty hours per week, 9:00 a.m. to 6:00 p.m. Salary: \$37,000 per calendar year. Contact: **Sandra T. Starnes, Alabama State Employment Service, 3440 Third Avenue South, Birmingham, AL 35222.** RE: Job Order #AL0228720.

ASSISTANT PROFESSOR, TENURE-TRACK POSITION. Department of Pharmacology, University of New Mexico School of Medicine. Applicants should have research experience in molecular or cell biology with a focus on neuroscience, cardiovascular biology, or biochemical pharmacology. Successful applicant will be expected to obtain extramural support for research and participate in teaching graduate and medical students. Qualifications include a Ph.D., M.D. or equivalent degree and a strong postdoctoral research record. Submit curriculum vitae, reprints, and three references by 1 May 1992 to: **Dr. Linda J. McGuffee, Department of Pharmacology, University of New Mexico, School of Medicine, Albuquerque, NM 87131-5316.** An Affirmative Action/Equal Opportunity Employer. Women and minorities encouraged to apply.

ASSISTANT/ASSOCIATE PROFESSOR IN PHARMACEUTICAL SCIENCES

Two tenure-track faculty positions are available in the Department of Pharmaceutical Sciences at Northeastern University. Both positions involve teaching and research within the College of Pharmacy and Allied Health Professions. Candidates will be expected to contribute to undergraduate pharmacy courses in pharmaceuticals-related topic areas and graduate courses in their area of specialization. A research interest in the areas of controlled drug delivery systems or drug targeting (especially peptide/protein delivery) is desirable although those with other pharmaceutical-related interests are encouraged to apply. Collaborative opportunities exist with the Center for Drug Targeting at Northeastern and biomedical enterprises in the Boston region. Applications, including the names, addresses and telephone numbers of three references, should be sent by 1 May 1992 to: **Dr. Richard C. Deth, Chairman, Department of Pharmaceutical Sciences (312 MU), Northeastern University, 360 Huntington Avenue, Boston, MA 02115.** Northeastern University is an Equal Opportunity/Affirmative Action Title IX Employer.

KUWAIT INSTITUTE FOR SCIENTIFIC RESEARCH

Kuwait Institute for Scientific Research (KISR) is a nonprofit organization actively engaged in applied research in the fields of environmental and earth sciences; food resources; engineering; petroleum, petrochemicals and materials and techno-economics.

KISR has vacancies in the following fields:

MICROBIOLOGY/BIOCHEMISTRY

Major duties:

Carrying out fermentation experiments, microbiological work, culture collection and preservation; conducting physiological studies for plants and bacterial cells, laboratory genetic work and various biochemical work.

Qualifications:

Applicants should have a Ph.D. in Microbiology or Biochemistry with at least 2-3 years post doctoral experience. Strong background and experience in recombinant DNA and tissue culture techniques required. Practical knowledge of agro-bacterium mediated transformation technique preferred.

MICROBIAL/ENVIRONMENTAL BIOTECHNOLOGY

Major Duties:

Leading and investigating research and development projects for the numerous fields of application of biotechnology, such as: biochemical process scale-up, applied fermentation technology, advanced bioremediation processes for contaminated soil/water, wastewater technology and management.

Qualifications:

Applicants should have a Ph.D. in Biochemical Engineering (Microbiology, Biochemistry) or any related biological sciences with 10-15 years of experience.

KISR offers attractive tax free salaries commensurate with qualifications and experience and generous benefits that include: gratuity, free furnished and airconditioned accommodation, school tuition fees for children, six weeks annual paid vacation, air tickets, free medical care and life insurance.

Interested applicants are requested to send their Curriculum Vitae with supporting information not later than one month from the date of this publication, to:

Personnel Manager
Kuwait Institute for Scientific Research
P.O. Box 24885
13109 Safat-KUWAIT.

NATIONAL INSTITUTES OF HEALTH THE GRANTS ASSOCIATES PROGRAM

Biomedical and behavioral scientists interested in a career in research administration with the National Institutes of Health are invited to compete for the Grants Associate Program (GAP). The Program is administered by the Office of Extramural Programs in the Office of the Director, NIH. Independent research experience, motivation for a career in health science administration, good interpersonal skills, and evidence of executive potential are important. U.S. citizenship and a doctorate degree or equivalent experience are required.

The Program prepares the GA for a leading role in health science administration. GAs participate in one year of individually structured training including on-the-job assignments, courses, and seminars. Grants Associates may be appointed either in the U.S. Civil Service with a salary range of \$38,861 to \$54,607 (GS 12-14) depending on experience or in the Commissioned Corps of the U.S. Public Health Service at ranks beginning with Senior Assistant Grade (0-3).

For further information please write to:

Director, HSA Development Programs
National Institutes of Health
Building 31, Room 5B35
9000 Rockville Pike
Bethesda, MD 20892



Women and minorities especially encouraged to apply.
NIH is an Equal Opportunity Employer

Postdoctoral Fellow

Hudson Valley Blood Services, a division of the New York Blood Center, is seeking a research-oriented Ph.D. or M.D. for well funded study on newer techniques. Hematopoietic stem cell processing, purging and storage.

Interest in and knowledge of hematopoiesis, tissue culture and flow cytometry important and familiarity with techniques in molecular biology a plus.

Send c.v. to Robert Preti, Ph.D., c/o Hudson Valley Blood Services, Grasslands Reservation, Valhalla, New York 10595. Phone: 914-592-6000 ext 338; Fax: 914-592-1577. Equal opportunity employer M/F/H/V.

Hudson Valley
Blood Services

*A Division of the
New York Blood Center*

Where concern for the community comes first.

ASSOCIATE DEAN FOR RESEARCH AND GRADUATE STUDIES

NORTH CAROLINA STATE UNIVERSITY COLLEGE OF VETERINARY MEDICINE

The College of Veterinary Medicine at North Carolina State University is seeking an individual to provide leadership for an existing, large, and diverse biomedical program. The program is multidisciplinary, encompassing basic and clinical research. Nearly 100 faculty are involved in over \$7 million dollars annually of extramurally funded research. The multidisciplinary graduate program in Veterinary Medical Sciences offers concentration areas in Cell Biology and Morphology, Pathology, Pharmacology, Immunology and Microbiology, and Epidemiology/Population Medicine.

The individual should have an advanced degree that may include PhD, DVM, MD or equivalent. Board certification is highly desirable if candidate is in a clinical discipline in which board certification is available. Evidence of direction of a successful research program with demonstrated productivity, and experience in the direction of graduate student academic and research programs are required. Responsibilities include providing creative leadership for the continuing development and coordination of research and graduate programs at the NCSU College of Veterinary Medicine, actively fostering inter-institutional collaboration with academic, industrial and governmental agencies, particularly in the Research Triangle region of NC, and representing the College of Veterinary Medicine on appropriate University Committees. Continuation of research activities is optional but encouraged.

Send CV and names and addresses of at least three persons who can assess candidate's strengths and experiences to: **Dr. Kenneth B. Adler, Chairman, Associate Dean Search Committee, College of Veterinary Medicine, North Carolina State University, 4700 Hillsborough Street, Raleigh, NC 27606.** Applications will be accepted until a suitable candidate is identified.

North Carolina State University does not discriminate on the basis of race, sex, or handicap and is an Affirmative Action/Equal Opportunity Employer.

SCIENTIST/GROUP LEADER

Upstate Biotechnology, Inc., a rapidly growing supplier of quality products for biological research, currently has an opening for a Scientist to serve as Group Leader in Cell Biology. The Group Leader will supervise 2-4 technicians in the production and testing of growth factors, signal transduction reagents and antibodies. There will also be an opportunity to be involved in new product development.

The position requires a Ph.D. in Cell Biology and experience or familiarity with cell biology techniques including cell culture, immunocytochemistry, antibody production in cell culture and protein purification.

UBI is located in beautiful Lake Placid, New York, a year-round center for outdoor recreation in the heart of the Adirondack Mountains. UBI's affiliation with the W. Alton Jones Cell Science Center, also located in Lake Placid, provides a stimulating scientific environment. UBI offers a competitive salary, moving expenses and excellent benefits. A position with UBI will provide the successful applicant with a diversity of experiences including an excellent introduction to industry in a relaxed, yet challenging, environment.

Send curriculum vitae and list of references to:



UPSTATE BIOTECHNOLOGY, INC.
PRODUCTS FOR BIOLOGICAL RESEARCH

Dr. Robert E. Wagner, Jr.
Upstate Biotechnology, Inc.
89 Saranac Avenue
Lake Placid, New York 12946.

Equal Opportunity Employer

Post-Doctoral Fellow Computational Chemistry

NOVA PHARMACEUTICAL CORPORATION, a leading research & development company in Baltimore, MD, seeks an individual with a recent Ph.D. in chemistry, or related field, to work in a multidisciplinary environment as an expert Computational Chemist. Major responsibilities will include the development of precise three-dimensional models of large proteins, supplemented with theoretical calculations as contributions to ongoing Medicinal Chemistry and Molecular Biology efforts.

Qualified candidates will be well versed in UNIX-based graphics workstations, most preferably the CHARMm, and QUANTA programs. Knowledge of peptide and protein modelling, molecular dynamics and free energy perturbation is preferred.

NOVA PHARMACEUTICAL CORPORATION offers a competitive salary and benefits package which includes company-paid health, life and dental insurance; prescription plan; profit sharing plan; and 401(k) savings plan.

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

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PERSONNEL-92-004
6200 FREEPORT CENTRE
BALTIMORE, MD 21224-6522



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ENZON, Inc.

The excitement is contagious when a company with outstanding products and a vision of the future begins to come into its own. ENZON is such a company. Our core technology enhances the delivery of protein-based drugs; it offers the promise of new life to patients and a unique opportunity for the innovative and imaginative professionals who participate in the development.

DIRECTOR OF RESEARCH

PROTEIN PRODUCTION

Assisting in the development of long-range strategic protein production plans and department goals, you'll plan and direct designated site scientific activities; implement production plans; develop and evaluate novel products/methodologies; and consult with outside companies on research technology and projects, while maintaining a high scientific profile via patents, publication and presentation.

Requires: a PhD in Biochemistry or a related field; 10+ years' experience in the pharmaceutical/biotechnology field, including at least 5 years' experience managing a production department; proven success in the development of new products; and strong administrative and creative skills. In addition, you must be committed to high output, published in several major journals and have submitted recent new products/methodologies for patents.

We offer a fast-paced environment where creativity is valued, and independent thinking, as well as collaboration, is encouraged. In addition to strategic industry and academic affiliations, we offer unparalleled support for your scientific standing, and a generous compensation and benefits package. Please send your resume to: **Corporate Human Resources, Enzon, Inc., 40 Cragwood Road, South Plainfield, NJ 07080.** An equal opportunity employer.

ADDING TIME TO LIFE®

CLARE BOOTHE LUCE FELLOWSHIPS in the Biological Sciences

St. John's University, New York, with support from the Clare Boothe Luce Fund of the Henry Luce Foundation, offers fellowships to highly qualified women for doctoral study in the Biological Sciences.

The Department of Biological Sciences has excellent research facilities for modern cell and molecular biological research and a well-published, funded faculty. Research interests in the department include but are not limited to signal transduction mechanisms; the regulation of developmental processes, including aging; mitochondrial membrane biogenesis; and the regulation of prokaryotic and eukaryotic gene expression.

Students begin their doctoral training with coursework in cellular and molecular biology and biochemistry. A series of research rotations provides experience with a broad range of projects and techniques. Additional courses in areas such as neurobiology, developmental biology, immunology and gerontology allow students to develop their own areas of specialization.

Luce fellowships provide full tuition and an annual \$12,000 stipend, with an additional allowance of \$1,000/dependent. Women appointed as Luce fellows must be U.S. citizens.

For information and application forms, contact:
Graduate School of Arts and Sciences

St. John's University
Jamaica, New York 11439
718-990-6243

St. John's is an equal opportunity
employer-M/F

ST. JOHN'S
UNIVERSITY
FOUNDED BY THE VINCENIAN COMMUNITY

THE CENTER OF IMMUNOLOGY and BIOTECHNOLOGY PIERRE FABRE (C.I.B.P.F.)



**Pierre
Fabre**

Located in FRANCE near GENEVA (Switzerland) is looking for an industrially minded

VIROLOGIST

to set up a virology expertise within the Center.

Part of the PIERRE FABRE Group, the building was been inaugurated in 1990 and is equipped with up to date facilities. The projected staff for 1992 is 95 people (actually 70).

The successful candidate is expected to interact closely with colleagues of related disciplines (Cellular Biology, Genetic Engineering, Biochemistry, Immunology, Clinical Studies).

The work will initially focus recombinant vaccins. A broad experience of classical virology is required.

Please send your application with your curriculum vitae (under reference G 321/BI) to **PIERRE FABRE S.A.** - Service recrutement Cadres - 11, rue Thérion Périé - 81106 CASTRES CEDEX.

Pharmaceutical
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(5 300 staff
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M E D I A P A

DIRECTOR

Molecular Biology Computing Center College of Biological Sciences University of Minnesota

The Molecular Biology Computing Center on the St. Paul campus provides support for macromolecular sequence and structure analysis and molecular dynamics calculations for about four hundred users in several University departments. Hardware consists of two Sun SPARCstations, and SPARCserver, Silicon Graphics 40/70GT workstation and 240S parallel processor and several personal computers. Staff consists of four fulltime equivalents.

The Director will be responsible for Center's overall direction and development. Primary responsibilities include professional support for faculty research and graduate academic activities; staff supervision; collaborating in writing research proposals; mounting short training programs; and overseeing hardware and software development and maintenance.

This position requires a M.S. or higher degree, a commitment to research, and at least one year of research experience in an appropriate field (for example, computational biochemistry or sequence analysis); the ability to be an effective manager; and excellent oral and written communication skills. A doctorate and experience with porting software, VMS and UNIX, computer graphics, Sun workstations, and networks are desirable. Salary range competitive. This is a renewable Professional/Administrative position with an initial term of three years.

Applications should include a curriculum vitae, summary of relevant coursework, names and addresses of three references and a 1-2 page summary of research experience and interests. Send applications to: **Dr. Norma Allewell, Chair, Department of Biochemistry, University of Minnesota, 140 Gortner Laboratories, St. Paul, MN 55108 (FAX (612)625-5780; TEL (612)624-7213; e-mail norma@mollbio.cbs.umn.edu)** by April 15, 1992. The University of Minnesota is an Equal Opportunity Educator and Employer.

UNIVERSITY OF MINNESOTA

TENURE-TRACK POSITIONS IN BIOLOGY

As part of a continuing phase of dynamic growth and expansion, the Department of Biological Sciences at the University of Nevada, Las Vegas will be filling three tenure-track positions.

(I) **Invertebrate physiology.** Preference will be shown towards applicants whose research has an ecological, evolutionary or developmental emphasis. Teaching will consist of invertebrate zoology and physiology offering at the undergraduate/graduate level.

(II) **Plant/Microbe interactions.** Preference will be given to applicants whose approaches are mechanistic and interdisciplinary rather than descriptive. Teaching will consist of participation in general microbiology and an upper-level/graduate course in his/her area of research specialization.

(III) **Developmental biology.** Preference will be given to applicants whose research employs genetic and/or molecular approaches to studying development. The applicant will participate in teaching an undergraduate genetics course (one semester per year) and an upper-level/graduate course in his/her area of research specialization.

These positions will likely be filled at the assistant professor level, but appointments could be made at a higher rank for exceptional candidates. The successful candidates will maintain vigorous, independently funded research programs and provide graduate training in the department's growing Ph.D. program. Competitive salaries, start-up funds and facilities will be offered. The Department of Biological Sciences currently has 25 faculty members, 35 graduate students and 490 undergraduate majors, and projections indicate continued growth for the remainder of the decade.

Applicants (who should indicate clearly in their cover letter which position they are applying for) should send a statement of teaching and research interests (including future research directions), a curriculum vitae, up to three representative publications, and three letters of reference to: **Dr. Warren W. Burggren, Chairman, Department of Biological Sciences, University of Nevada, Las Vegas, NV 89154-4004, Fax # (702) 739-3956.** Applications and letters of reference must be received by April 3, 1992 to receive full consideration.

The University of Nevada, Las Vegas is an equal opportunity/affirmative action employer. UNLV employs only US citizens and aliens authorized to work in the U.S.

ROCKEFELLER FOUNDATION BIOTECHNOLOGY CAREER FELLOWSHIPS

The Rockefeller Foundation announces a program of career development fellowships designed to enable scientists from developing countries, trained at outstanding centers for advanced research in biotechnology, to continue to work at those or other institutions for three months each year, over a period of at least three years, conducting advanced research and keeping abreast of new developments in their fields. The program will focus upon the development and application of advances in molecular and cellular biology and immunology relevant to agriculture, health, reproductive biology, and environmental protection.

Funding will be shared between the Foundation and the host laboratory, with the Foundation providing travel and per diem support. It is hoped that the fellowships will encourage the establishment of ongoing working relationships between outstanding younger scientists working at third world institutions, and research teams at advanced laboratories.

Applicants to this program should have at least Ph.D.- or M.D.-level training, a proven record of scientific productivity, and a permanent position at a research or teaching institution in their home country. A written project proposal must be developed and submitted jointly by the candidate and the laboratory sponsor.

Information about application procedures can be obtained by writing to **Biotechnology Career Fellowships, Fellowship Office, Rockefeller Foundation, 1133 Avenue of the Americas, New York, New York 10036, USA.**

STATISTICAL GENETICIST/ PROGRAM MANAGER

- Weyerhaeuser Company, a Fortune 50, Wood Products/Paper & Pulp Company, has an operational pine breeding program position open in its Timberlands Research and Development Division, in Hot Springs, Arkansas.
- This position requires familiarity with PC-SAS, quantitative genetics, theory and application including BLP and BLUP methodology, selection index techniques and computer modelling. The successful candidate will have a PhD in statistics, animal or plant sciences, genetics or in forestry with an emphasis in forest tree genetics and plant breeding. Managerial experience in plant or animal breeding programs is desirable.
- Please forward by May 1, 1992, a cover letter, resume, official transcripts and 3 references to: Position 175-JLS, WTC 1G42, Tacoma, WA 98477. Equal Opportunity Employer.



MOLECULAR GENETICIST

San Diego

Children's Hospital and University of California San Diego Department of Pediatrics are recruiting a Ph.D. or M.D. Molecular Geneticist. The successful candidate will be expected to manage the molecular genetics component of the Hospital's genetic diagnosis testing program, conduct independent research, and interact with the Hospital's three other geneticists. It is anticipated that the candidate will become a faculty member in the Department of Pediatrics and participate in the UCSD-sponsored American Board of Medical Genetics Training Program.

The Hospital's Molecular Genetics Laboratory is a fully equipped three-year-old facility with 2-3 technicians. It currently provides PCR and Southern analysis-based testing for: muscular dystrophy, Tay-Sachs disease, "fragile-X", cystic fibrosis, and paternity.

Inquiries regarding this position can be directed to Dr. J.T. Mascarello at 619/576-5809. Please apply (by May 15, 1992) by sending curriculum vitae, a list of publications and two letters of recommendation to: Carol Heylman, Human Resources Dept., Children's Hospital - San Diego, 8001 Frost St., San Diego, CA 92123. AA/EOE.

POSITIONS OPEN

ASSOCIATE OR PROFESSOR AND CHAIR, PHYSICS. Dynamic person to chair Physics Department. Begin fall 1992. Enhance intro sequences, expand major. Requires doctorate in physics or related; teaching, research, administrative experience. Nominations, applications to include curriculum vitae, three reference letters, to: **Chair, Physics Search Committee, 3033 Cowley Hall, University of Wisconsin-La Crosse, La Crosse, WI 54601.** All must be received by 15 May 1992. *Women, minorities encouraged to apply. Alphabetical list of nominees and applicants, without differentiation, may be released after deadline. An Affirmative Action/Equal Opportunity Employer.*

NORWICH UNIVERSITY MILITARY COLLEGE OF VERMONT AND VERMONT COLLEGE

Norwich University seeks an **AQUATIC BIOLOGIST** for a tenure-track teaching position as **ASSISTANT PROFESSOR** of biology. Teaching competence must include general biology, comparative vertebrate anatomy, invertebrate zoology and aquatic biology. Ph.D. required (A.B.D. considered); salary commensurate with qualifications and experience. Reply to: **Dr. Lauren D. Howard, Biology Department Chair, Norwich University, Northfield, VT 05663** by 8 April 1992. *Equal Opportunity Employer. Women and minorities are encouraged to apply.*

MOLECULAR BIOLOGIST. The Center for Pharmaceutical Biotechnology invites applications for a position at the level of **ASSISTANT PROFESSOR** in molecular biology, with application to pharmaceutical design or development, available September 1992. Ph.D. and postdoctoral experience required. Preference will be given to applicants who have demonstrated expertise in such areas as protein engineering or genetic engineering. Responsibilities include developing a strong, externally funded research program, and teaching in the graduate and professional programs. The developing Center for Pharmaceutical Biotechnology provides an environment that fosters both collaboration and cooperation, bringing together campus researchers from the full range of biotechnology-related disciplines. In addition to appointment within the center, the successful candidate will have a tenure-track appointment within one of the College of Pharmacy basic science departments. Curriculum vitae, description of research interests, and three letters of reference should be forwarded by 15 April 1992 to: **Dr. Michael E. Johnson, Interim Director, Center for Pharmaceutical Biotechnology, Office of the Dean (m/c 874), University of Illinois at Chicago, P.O. Box 6998, Chicago, IL 60680-6998.** *The University of Illinois is an Affirmative Action/Equal Opportunity Employer.*

CENTER TECHNICAL OPERATIONS MANAGER SENIOR RESEARCH ASSOCIATE

The Center for Research on Occupational and Environmental Toxicology (CROET) at the Oregon Health Sciences University (OHSU) invites applications for a center technical operations manager, M.S. or higher in a biological science preferred. Minimum qualifications: M.S. and 5 years of diverse laboratory experience. Send curriculum vitae with names of three references by 27 March 1992 to: **Dr. P. S. Spencer, CROET, OHSU, 3181 S.W. Sam Jackson Park Road, L606, Portland, OR 97201-3098.** *OHSU is an Equal Opportunity/Affirmative Action Employer.*

DIRECTOR DARTMOUTH COLLEGE

Dartmouth College seeks to fill the position of Director of the John Sloan Dickey Endowment for International Understanding. For the position of Director, the college seeks a person with extended experience in international affairs, either as academic scholar or as an active professional with understanding of academic institutions. Review of nominations and applications will begin on 15 April 1992. Please send applications to: **Chair, Dickey Endowment Search Committee, Office of the Provost, 6004 Parkhurst Hall, Dartmouth College, Hanover, NH 03755-3529.** *Dartmouth College is an Affirmative Action/Equal Opportunity Employer. Minorities and women are encouraged to apply.*

POSITIONS OPEN

DEAN SCHOOL OF MEDICINE UNIVERSITY OF CALIFORNIA LOS ANGELES (UCLA)

Applications and nominations are invited for the position of

DEAN OF THE UCLA MEDICAL SCHOOL

Candidates should have the capacity to exercise leadership not only in the School of Medicine, but at the local, state, and national levels, as well. Salary will be competitive.

To be assured of full consideration, nominations and applications should be sent by 30 April 1992 to:

**Medical School Dean Search Committee
c/o Ms. Connie Chittick
Office of the Chancellor
University of California
Los Angeles, CA 90024**

UCLA is an Equal Opportunity/Affirmative Action Employer.

ENVIRONMENTAL COORDINATOR/ CONSERVATION BIOLOGIST

The Foundation for the Peoples of the South Pacific (FSP) is a San Diego-based nonprofit development organization working in the Pacific Basin since 1965. With assistance from the Biodiversity Support Program of World Wildlife Fund (WWF)-U.S., FSP seeks to hire an environmental coordinator conservation biologist for a U.S. A.I.D.-funded project in Vanuatu to develop and manage implementation of a program to test models of profitable enterprises that protect the environment and conserve biodiversity. To qualify, candidates must have 5 to 10 years of experience in environmental management in tropical ecosystems, and an advanced degree in biology, ecology, or related field. Project management experience desirable. Project management experience desirable. Candidate will be employed by FSP.

Deadline: 3 April 1992. Send cover letter and curriculum vitae to FSP c/o: **WWF-U.S. Human Resources Department 174F, 1250 24th Street, N.W., Washington, D.C. 20037.** FAX: 202-293-9211.

HEAD, DEPARTMENT OF PHARMACOLOGY UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE AT CHICAGO

The University of Illinois College of Medicine at Chicago invites applications and nominations for the position of Head of the Department of Pharmacology. The head will lead a department with a long history of excellence. The department has an active graduate program and continues to excel in its research and teaching missions.

The successful candidate is expected to have an outstanding research career in pharmacology or related disciplines and a commitment to excellence in teaching.

Interested individuals should send curriculum vitae to: **R. John Solaro, Ph.D., Chair, Pharmacology Search Committee, Department of Physiology and Biophysics (m/c 901), University of Illinois at Chicago, 835 South Wolcott Avenue, Room E-202 MSB, Chicago, IL 60612.**

The University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITIONS: BIOCHEMISTRY AND MOLECULAR BIOLOGY. The Department of Biochemistry and Molecular Biology is seeking applicants for tenure-track faculty position, preferably at the **ASSOCIATE** or **FULL PROFESSOR** level. Outstanding individuals with active, funded research programs and teaching experience are being sought. Applicant should send curriculum vitae, list of publications, description of research and names of three references to: **Chairman, Search Committee, Department of Biochemistry and Molecular Biology, Texas College of Osteopathic Medicine (TCOM), 3500 Camp Bowie Boulevard, Fort Worth, TX 76107-2690.** *TCOM is an Affirmative Action/Equal Opportunity Employer and Educator.*

Vacancy Announcement:
POST DOCTORAL SCIENTIST—PD/92/1
VACCINE DEVELOPMENT

The International Laboratory for Research on Animal diseases, based in Nairobi, Kenya, is a member of the Consultative Group on International Agricultural Research with the mandate of developing improved methods for control of livestock diseases. Current research focuses on immunological and genetic means of controlling African trypanosomiasis and immunological control of the theileria disease, East Coast fever. Livestock disease research is supported by a programme of socio-economic research and both programmes are integrated with a programme of collaborative research, information dissemination and training.

A position is available for a microbiologist to participate in the evaluation of recombinant bacterial antigen delivery systems in cattle. The successful candidate will have extensive experience in the generation and expression of foreign gene constructs in Gram negative and Gram positive bacterial systems. Efforts will focus initially on the generation of recombinant Salmonella organisms expressing parasite antigens, and the evaluation of these constructs for the delivery of antigens to the bovine immune system. Other bacterial expression systems will also be assessed. Applicants should have a primary degree in microbiology and should have successfully completed a PhD that involved the generation and use of recombinant antigens. Experience in the assay of humoral and cellular immune responses will be an advantage.

The salary and benefit package are comparable to those offered by similar international organisations, and includes allowances for first arrival, housing, education, commutation and home leave as well as provisions for pension and insurances.

Applications with CV and names and addresses of three referees should be sent to: **The Chief Personnel Officer, ILRAD, P.O. Box 30709, NAIROBI. (Telex: 22040; Fax: 631499; Email: BT TYM-NET CG1017) not later than April 30, 1992, or until a suitable candidate has been identified.**

ILRAD is an equal opportunity employer.

THE AARON DIAMOND FOUNDATION
POSTDOCTORAL RESEARCH FELLOWSHIPS
in the Biomedical and Social Sciences

AIDS OR DRUG ABUSE RESEARCH

The Aaron Diamond Foundation announces the availability of Postdoctoral Research Fellowships in the biomedical and social sciences focusing on AIDS or drug abuse. The purpose of the Fellowships is to attract promising investigators to academic and research institutions in New York City, and to encourage increased research into understanding and solving two of today's most pressing public health problems. The New York State Health Research Council, aided by a distinguished group of scientists comprising The Aaron Diamond Foundation Fellowship Selection Committee, administers the Fellowship Program.

STIPENDS

Fellows are paid annual stipends beginning at \$36,000. Each Fellowship is for two years, with an option for a third year.

ELIGIBILITY

Applicants should have received an MD or PhD within the past seven years. MD's should have completed at least two years of clinical training. PhD's are eligible immediately after graduation or after limited research experience.

The Fellowships are open to U.S. citizens and permanent residents. Women and members of minority groups are especially encouraged to apply.

MENTORS

A potential Fellow must be sponsored by a Mentor at a New York City institution. Mentors who have already expressed interest in participating in the Fellowship Program are listed in the application materials. The Mentor's institution receives \$30,000 annually to cover the Fellow's research costs, travel, tuition and fringe benefits.

APPLICATION DEADLINES

July 31, 1992 and July 30, 1993

INFORMATION AND APPLICATION FORMS

Ellen L. Rautenberg, Program Director, The Aaron Diamond Foundation
Postdoctoral Research Fellowships, New York State Health Research
Council, 5 Penn Plaza, Room 308, New York, NY 10001
(212) 613-2525

National Library of Medicine • National Institutes of Health • Public Health Service
Department of Health and Human Services

ASSOCIATE DIRECTOR FOR EXTRAMURAL PROGRAMS

The National Library of Medicine (NLM), National Institutes of Health (NIH), invites nominations and applications for the position of Associate Director for Extramural Programs. This is a Civil Service position in the Senior Executive Service (SES), with a salary range of \$90,000 to \$104,000 per annum. The person selected may be eligible for Physician's Comparability Allowance up to \$20,000 per year. A one-year probationary period must be served by the individual selected if not currently in the Senior Executive Service.

The Associate Director for Extramural Programs will coordinate a multi-million dollar program with responsibility for the planning, design, and implementation of programs which support national biomedical communications programs.

For more information contact Ms. Constance Mantzuranis at (301) 496-4943. The following forms are **required**: Application for Federal Employment (SF-171), accompanied by a current curriculum vitae and bibliography. These must be submitted to:

Ms. Constance Mantzuranis
National Library of Medicine
Office of Personnel Management
Building 38, Room 2N05

Applications must be postmarked no later than
April 24, 1992

Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, religion, sex, national origin, politics, marital status, physical or mental handicap, age, or membership or non-membership in an employee organization.

NATIONAL INSTITUTES OF HEALTH



8600 Rockville Pike • Bethesda, MD 20894

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THE APS COMMITTEE ON THE STATUS OF WOMEN IN PHYSICS

In 1972, the American Physical Society (APS), a membership society comprised of over 43,000 physicists world-wide, established the Committee on the Status of Women in Physics (CSWP). The APS has charged the CSWP with the task of addressing the production, retention, and career development of women physicists and gathering and maintaining data on women in physics in support of these objectives. The CSWP has responded to this charge by:

- Sponsoring special sessions at APS meetings
- Co-sponsoring the 1990 National Conference on the Recruitment and Retention of Women in Physics
- Assisting institutions in their efforts to improve the climate for women studying physics by conducting site visits
- Publishing the CSWP newsletter, the *Gazette*
- Publishing *Physics In Your Future*, a career information brochure
- Maintaining the Colloquium Speakers List of Women in Physics, containing over 200 names of women physicists willing to present talks
- Administering a Travel Grants Program which reimburses up to \$500 to any physics department hosting two or more women speakers during an academic year
- Maintaining the Roster of Women in Physics which is a database containing over 4,000 names. The Roster is used to disseminate employment information, conduct demographic studies, and distribute the *Gazette*

For further information, please contact Bonnie L. Brownstein, The American Physical Society, 335 East 45th Street, New York, NY 10017 or call 212-682-7341.

The American Physical Society

BETH ISRAEL HOSPITAL

Quantitative Genetics and Computational Molecular Biology

Beth Israel, a major Harvard Teaching and Research Hospital, is seeking a Senior Research Analyst to establish and maintain a computer software resource for Cell & Molecular Biology research. Applicants should hold an advanced degree and have demonstrated experience in the field of Quantitative Genetics and Molecular Biology Computing. The successful candidate is expected to enable and enhance the ability of research staff to conduct research through collaboration and service. In addition to scientific qualifications, the applicant must be proficient in C programming and UNIX system management; experienced with networks consisting of UNIX workstations, PCs and Macs; and experienced with standard molecular biology software and databases. Experience with linkage analysis and with international genome projects is desirable.

Applications from minorities, women, and handicapped individuals are especially encouraged. Qualified candidates should forward a CV, and the names and phone numbers of three references to: Rodney Hines, Human Resources, Beth Israel Hospital, 330 Brookline Avenue, Boston, MA 02215.



**Beth Israel
Hospital Boston**

An Equal Opportunity Employer M/F

POSITIONS OPEN

PLANT BIOLOGISTS NATIONAL TAIWAN UNIVERSITY

FACULTY POSITIONS will be available in 1992/93 in the Department of Botany, National Taiwan University, at the **ASSOCIATE OR FULL PROFESSOR** level. Candidates with training in molecular genetics, developmental biology, cell biology, or evolution will be considered. Chinese citizenship is not a prerequisite for application, but successful candidates must meet immigration requirements and are expected to teach in Mandarin. Send curriculum vitae, statement of interest and plans in both research and teaching, list of publications, and two letters of recommendation to: **Dr. C. C. Chen, Search Committee Coordinator, Department of Botany, National Taiwan University, Taipei, Taiwan, Republic of China.** Review of applications will begin 15 May 1992 and continue until the positions are filled.

FACULTY POSITION IN CARDIOVASCULAR MOLECULAR PHYSIOLOGY

The University of Utah School of Medicine is recruiting an individual to join its Program in Cardiovascular Molecular Physiology. This tenure-track position will include joint appointments at the **ASSISTANT OR ASSOCIATE PROFESSOR** rank in the Departments of Medicine (Cardiology Division) and Human Genetics. Candidates should have an M.D. or a Ph.D. or both, an interest in human cardiovascular disease mechanisms, and a record of accomplishment in the application of molecular biology techniques to study cardiovascular physiology. Send curriculum vitae and bibliography to: **William H. Barry, M.D., Cardiology Division, University of Utah School of Medicine, Salt Lake City, UT 84132.** Closing date: 30 April 1992 or until a suitable candidate is identified. *The University of Utah is an Affirmative Action/Equal Opportunity Employer.*

TWO FACULTY POSITIONS

One position available for a **MICROBIOLOGIST** to teach medical microbiology and one position available for a **PATHOLOGIST** to teach general and organ system pathology and work independently and/or collaboratively with other research/teaching faculty. Primary responsibilities: not more than 25% of time teaching and at least 75% of time for research. Salary and academic rank open and commensurate with training, teaching experience and grant track record. Please send curriculum vitae and publications list detailing teaching experience, research interests, past, present and pending grant support information and the names of three references to: **Dr. Arnold L. Nagler, Associate Dean, Preclinical Medical Education, New York College of Osteopathic Medicine, Old Westbury, NY 11568.** *Affirmative Action/Equal Opportunity Employer.*

The University of Chicago is seeking **JUNIOR AND SENIOR FACULTY** for its cardiology program. Opportunities are broadly available in clinical cardiology, in non-invasive imaging, electrophysiology, and hypertension. Opportunities are available in clinical research and basic investigation in device trials, applications of newer technologies, clinical pharmacology and molecular biological approaches to cardiovascular disease. Teaching of students, housestaff and fellows is an integral part of all positions. Send curriculum vitae and the names of three referees to: **The University of Chicago, Human Resources Management, 956 East 58th Street, c/o CFAC, Chicago, IL 60637.** *An Affirmative Action/Equal Opportunity Employer.*

NEUROSCIENTISTS, CELL AND MOLECULAR BIOLOGISTS. Tenure-track faculty positions open in gross and microscopic anatomy. Research interest in neurosciences, cell and molecular biology. Rank and salary commensurate with experience. Research start-up funds available. Send curriculum vitae, statement of research interests, and the names and addresses of three references to: **Dr. James C. Story, Chairman, Department of Anatomy and Cell Biology, Meharry Medical College, 1005 D. B. Todd Boulevard, Nashville, TN 37208,** by 1 May 1992. *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

INSTRUCTOR-BIOLOGY/PHYSICAL SCIENCE. Teach biology and chemistry. Requires master's in biological science; Ph.D. or A.B.D. preferred. Salary: \$27,800 to \$34,100 (9-month, probationary, faculty appointment). Begin September 1992. Deadline: 23 April 1992. For required application, contact: **Human Resources, Central Oregon Community College, 2600 N.W. College Way, Bend, OR 97701; telephone: 503-385-5513.** *Equal Opportunity Employer/Affirmative Action Employer.*

TWO FACULTY POSITIONS

One position available for a **BIOCHEMIST** to teach medical biochemistry and one position available for a **PHYSIOLOGIST** to teach medical physiology and work independently and/or collaboratively with other research/teaching faculty. Primary responsibilities: not more than 25% of time teaching and at least 75% of time for research. Salary and academic rank open and commensurate with training, teaching experience and grant track record. Please send curriculum vitae and publications list detailing teaching experience, research interests, past, present and pending grant support information and the names of three references to: **Dr. Arnold L. Nagler, Associate Dean, Preclinical Medical Education, New York College of Osteopathic Medicine, Old Westbury, NY 11568.** *Affirmative Action/Equal Opportunity Employer.*

The University of Michigan, Department of Ophthalmology seeks to add to its **FACULTY** an individual with subspecialty training in vitreo-retinal surgery. Applicants must have satisfactorily completed at least 36 months of training in ophthalmology in an ACGME-accredited residency program, and must have demonstrated interest in patient care, education, and research. Faculty rank is flexible and will be commensurate with the individual's academic credentials. Individuals interested in this position should send their curriculum vitae and bibliography to:

**Paul R. Lichter, M.D.
F. Bruce Fralick Professor and Chairman
Department of Ophthalmology
The University of Michigan
W. K. Kellogg Eye Center
1000 Wall Street
Ann Arbor, MI 48105**

The University of Michigan is an Equal Opportunity and Affirmative Action Employer and actively seeks diversity in its applicant pool.

FACULTY POSITION IN MACROMOLECULAR CRYSTALLOGRAPHY

Texas A&M University invites applications at all academic levels for a tenure-track position in the area of macromolecular structure. The position is within the Department of Biochemistry and Biophysics and the Center for Macromolecular Design of the Institute of Biosciences and Technology of Texas A&M University. Substantial resources are available to establish a new program in the area of protein or nucleic acid structure, complementing existing programs. We request that applications be submitted prior to 15 April 1992. However, applications will be accepted until the position is filled. Applicants should submit curriculum vitae, a description of research plans and the names of three references to:

**Dr. Thomas O. Baldwin, Director
Center for Macromolecular Design
Department of Biochemistry and Biophysics
Texas A&M University
College Station, TX 77843-2128
Telephone: 409-845-1782; FAX: 409-845-9274
email BALDWIN@TAMBIGRF**

Texas A&M University is an Affirmative Action/Equal Opportunity Employer.

YOUR PERSONNEL PLACEMENT AD

in our line classified columns
can be boxed for higher visibility.
Call **SCIENCE** at 202-326-6555 for details.

**POSITION AVAILABLE
CHIEF, SCIENCE POLICY AND ANALYSIS BRANCH
OFFICE OF SCIENCE POLICY, EDUCATION AND
LEGISLATION
NATIONAL INSTITUTE ON DRUG ABUSE
ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH
ADMINISTRATION
PUBLIC HEALTH SERVICE
DEPARTMENT OF HEALTH AND HUMAN SERVICES**

The Alcohol, Drug Abuse, and Mental Health Administration invites applications for the position of Chief, Science Policy and Analysis Branch, Office of Science Policy, Education and Legislation, National Institute on Drug Abuse.

This is a position in the career Civil Service, with full Federal benefits, at the GS 15 level, with an annual salary range of \$64,233 to \$83,502. The position is located in Rockville, Maryland.

The Chief is responsible for conceptualizing, developing, directing, and implementing a science-based strategic planning process for the Institute. This includes coordinating the planning activities of the five research divisions; soliciting and integrating input from the scientific community, professional organizations, and treatment practitioners; and conducting analyses, developing options, and making recommendations to the Office Director, the Institute Director, and other senior program officials on the Institute's research priorities. The incumbent is also responsible for assessing the state of development of areas of scientific knowledge and the level of readiness and availability of researchers affecting the Institute's research programs, interpreting these observations, designing and conducting or overseeing studies examining issues in science policy and planning and making recommendations regarding long-range plans, policies, programs, and scientific activities of the Institute to the Office Director, the Institute Director, the Extramural Science Advisory Board, and the National Advisory Council on Drug Abuse. The Chief chairs the Institute's Training Task Force. In this capacity, the incumbent coordinates the activities of the five research divisions with respect to planning the Institute's research and clinical training strategy, developing a consolidated long-term research training plan for the Institute, recommending to the Office Director and the Institute Director new, or modifications to the existing, research and clinical training programs, developing implementation plans for such programs, and evaluating the quality and effectiveness of the Institute's efforts to train drug abuse researchers and clinical professionals. The incumbent also has lead responsibility for the Institute's science education initiatives. This includes developing, coordinating, implementing, and evaluating the Institute's science education activities and representing the Institute on the Science Education Committee of the Alcohol, Drug Abuse, and Mental Health Administration. The Chief is also responsible for planning and directing the activities of the Branch which is composed of a staff of 6.

Qualification Requirement: Successful completion of a full 4-year course of study in an accredited college or university leading to a bachelor's or higher degree with a Major in an academic field related to the health sciences or allied sciences appropriate to the work of the position.

In addition, all applicants must have at least one (1) year of specialized experience at the GS-14 level or higher which included responsible experience in the scientific administration of biomedical and/or behavioral research and experience in the management of programs demonstrating competence to assume leadership in planning, directing, coordinating, and allocating resources. Applicants should have an extensive knowledge of research methodology and a knowledge of a biomedical, behavioral, or social science relevant to drug abuse, e.g., neuroscience, pharmacology, physiology, chemistry, psychology, sociology.

For inquiries or to request an Application for Federal Employment (SF 171), please contact Earle Stalfort, Personnel Management Specialist, on (301) 443-9593. If interested in applying, applicants must mail a completed SF 171 and, if available, their last performance appraisal to: ADAMHA, Division of Personnel Management, 5600 Fishers Lane, Room 15C-12, Rockville, Maryland 20857. Applicants should cite ADM 92-36 in Block 1 under General Information of the SF 171 (failure to do so may result in nonconsideration for the position). Applications must be postmarked by April 13, 1992 and received by close of business on April 20, 1992. *ADAMHA is an equal opportunity employer. U.S. citizenship is required.*

The perfect environment for the world's most advanced research.

Los Alamos National Laboratory is the birthplace of many of the technologies which drive the technical, economic and ecological advancements of our country.

At Los Alamos, this starts with research into the basic sciences and engineering disciplines and extends into a myriad of innovative programs and projects.

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Ecology Team Leader

As Technical Team Leader, you will be expected to perform duties as ecologist/ecotoxicologist within the Environmental Protection Group, for a program to develop, plan and implement a Laboratory-wide biological survey. You will perform risk assessment of contaminants in aquatic and terrestrial ecosystems and compile/evaluate existing data and resources. Based on the data, you will develop a plan for performing risk analyses, implement the plan concurrent with other assessments associated with preoperational surveys and evaluate remedial alternatives at ERP hazardous waste sites. In implementing this plan, your responsibilities will include assembling historical data, developing data bases for data acquisition/storage, establishing protocol for consistent data entry, becoming familiar with the GIS used for data manipulation/display and developing a biological resource survey plan for the Laboratory. Additional responsibilities include establishing sampling protocols, developing species diversity models and ground-truthing them, determining animal/plant groups to be surveyed and developing ecological end points for decision-making criteria. You will also coordinate with other parties on survey work to be performed, establish agreements, supervise field activities and conduct/supervise analyses and assessments.

To qualify, you must have extensive experience in ecosystem structure and function, environmental chemistry and ecotoxicology as well as experience with ecological computer models/data bases. Organizational and program management skills and excellent interpersonal/oral/written communication skills are necessary. Knowledge of EPA protocols and QA requirements is desired as is familiarity with GIS and relevant government regulatory requirements. This position requires a Ph.D. in Ecology or related field or the equivalent combination of education and experience. Additional training in pathway analysis and ecological risk assessment is desired.

To formally apply for this position, interested candidates should forward a resume to Charles Pacheco (MS P280), Personnel Services Division **20082-J**, Los Alamos National Laboratory, Los Alamos, NM 87545. Affirmative Action/Equal Opportunity Employer. Must be able to obtain a Department of Energy "Q" Security Clearance, which normally requires U.S. citizenship.

Los Alamos

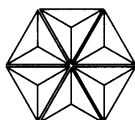
NATIONAL LABORATORY

ASSOCIATE RESEARCH SCIENTISTS

The Bristol-Myers Squibb Company Pharmaceutical Research and Development Division, has two excellent career opportunities available at our Syracuse location for Associate Research Scientists.

- This position will be responsible for the development of methodology for analysis of new drug candidates including biotechnology derived materials and chemically synthesized agents. We seek a BS or MS with appropriate experience in analytical chemistry/ chromatography.
- This position is involved in the evaluation of biotechnology derived protein products using in vitro cell culture, immunological techniques for antibody production, development of assays, and ligand/receptor interactions involved in signal transduction. The successful candidate will also support development and validation of alternative analytical methods of detection and must be willing to learn new techniques needed for biological assay development. Applicants should possess a BS or MS degree with experience in cell culture, biochemical, immunological and molecular techniques.

We offer an excellent starting salary, comprehensive benefits and a working environment conducive to professional growth. For prompt, confidential consideration, forward your resume to: **Bristol-Myers Squibb, Pharmaceutical Research & Development Division, Analytical Chemistry Dept. JW, P.O. Box 4755, Syracuse, NY 13221-4755.** Equal Opportunity Employer, M/F/D/V.



Bristol-Myers Squibb Company

Plant Community Ecologist: The Kansas Biological Survey seeks applicants for a full-time, 12-month, academic staff position at the Assistant Scientist level, beginning July 1, 1992. The Survey is a nonregulatory research and service unit of the State, located at the University of Kansas, with major research initiatives in biological diversity and natural areas, freshwater quality, and agrichemicals. Primary responsibilities will be to assist the Survey's Natural Heritage Inventory with the development and maintenance of computer databases on plant, animal, and natural community occurrences in Kansas. The successful applicant also is expected to develop an active research program and to seek extramural funding. Required qualifications include a Ph.D. in plant ecology or related field, experience in plant community characterization or habitat assessment, and a demonstrated ability to plan and conduct field work. Preference given to applicants with: 1) knowledge of and experience with a) plants of the Great Plains; b) wetland ecosystems; and c) data processing or quantitative skills; 2) demonstrated ability to engage in cooperative research; and 3) demonstrated ability to attract research funds. Send letter of application, résumé, selected reprints, statement of research interests, and three letters of recommendation to: Dr. Chris L. Lauer, Kansas Biological Survey, 2041 Constant Ave., Lawrence, Kansas 66047-2906 (913/864-7725). March 31, 1992 deadline. EO/AA

Molecular Biology Assistant/ Associate Scientist

PARKE-DAVIS Pharmaceutical Research Division, Warner-Lambert Company, has an opening for a Molecular Biologist at the Assistant/Associate Scientist level in the Atherosclerosis- Pharmacology Department at our Pharmaceutical Research facility in Ann Arbor, Michigan.

The candidate will have extensive experience in molecular biology and cell culture techniques. Expertise in: RNA/DNA isolation/ analysis; cDNA/genomic DNA cloning; DNA sequencing (Maxam-Gilbert/Sanger-dideoxy)/analysis; in vitro mutagenesis; PCR analysis/cloning and DNA/RNA mediated transfection is required. Training in protein purification/analysis will be an added benefit.

Requirements include:

- BS/MS in Molecular Biology/Biochemistry with 2-5 years' experience post-graduation.
- Familiarity with computers and use of software designed for: nucleic acid/protein analysis; scientific reference management; graphics generation and word processing.
- Good written and oral communication skills.
- Self-motivation and the ability to work as part of a team effort.

Employment will be at our modern facilities next to the University of Michigan north campus in an outstanding living and working environment. Interested, qualified applicants should send letter of application with curriculum vitae and names of three references in confidence to **Box WEB-92060, Human Resources, PARKE-DAVIS, 2800 Plymouth Road, Ann Arbor, MI 48105.** "Smoke-Free Work Environment"

"Equal Opportunity in Action"



PARKE-DAVIS

A DIVISION OF

**WARNER
LAMBERT**

FACULTY POSITIONS IN CELLULAR, MOLECULAR OR DEVELOPMENTAL BIOLOGY

The newly formed and rapidly expanding Departments of Cell Biology and Molecular Biology at UMDNJ, NJ's university of the health sciences, invites applications for several positions at the ADJUNCT ASSISTANT PROFESSOR LEVEL in the areas of molecular, cellular and developmental biology. Entry level positions are non-tenure track, but may be converted to tenure-eligible positions within 3 years. Highly competitive start-up funds, laboratory space, salary and benefits are offered. Candidates having research interests in the cellular/molecular aspects of developmental biology or sensory transduction are especially encouraged to apply, although applicants with research interests in other areas of cell or molecular biology will also be considered. The successful candidate will be expected to develop an independent, extramurally funded research program and participate in the instruction of the Basic Sciences to Osteopathic Medical students. The salary range is \$45,000.00 to \$55,000.00, depending on the level of experience. Applicants should send CV, a statement of research interests and 3 letters of recommendation to: **Robert G. Nagele, PhD, Chairman, Search Committee, Department of Molecular Biology, UMDNJ-School of Osteopathic Medicine, 401 South Central Plaza, Stratford, NJ 08084.** The UMDNJ is an Affirmative Action/Equal Employment Opportunity Employer, m/f/h/v, and a member of the University Health System of New Jersey.

UMD
NEW JERSEY

**POSTDOCTORAL RESEARCH/
TEACHING FELLOWSHIPS
INTEGRATIVE NEUROBIOLOGY,
ECOLOGY
BRYN MAWR COLLEGE**

The Department of Biology and the Neural and Behavioral Systems Group have available two two-year postdoctoral fellowships for scientists who aspire to careers in which research and teaching are understood to be complementary and mutually supportive activities. One position requires a background in behavioral, physiological, or theoretical ecology, and the other a background in integrative neurobiology. Both Fellows will be expected to contribute to the intellectual and research activities of the Neural and Behavioral Systems Group, which is dedicated to trying to find and communicate productive ways to characterize complex biological systems at all levels of organization (cf. *Experientia* 44:960, 1988). Part of this activity may involve continuing research in the Fellows' own most immediate area of interest. Fellows will also be expected to participate in the teaching programs of the Department, offering courses in their own area of expertise.

Applicants should send a letter of interest, curriculum vitae, and the names of three references to: Paul Grobstein, Department of Biology, Bryn Mawr College, Bryn Mawr, Pennsylvania 19010.

Bryn Mawr College is an Equal Opportunity/Affirmative Action employer. It encourages applications from women and members of minority groups, and seeks employees who both respect and appreciate human diversity. The post-doctoral fellowship program is a Bryn Mawr College Tide-Pool activity.

POSTDOCTORAL FELLOWSHIPS

A well-established interdisciplinary program focused on airway and epithelial cell biology and cystic fibrosis, located in modern new labs on the campus of Case Western Reserve University, offers pre- and post-doctoral training opportunities supported by NIH and CF Foundation. Coursework tailored to individual interests available to all trainees; M.D. postdoctoral fellows receive special introductory coursework and introduction to statistics. Facilities include cell culture, video enhanced fluorescence microscopy, electron microscopy support, and core molecular biology support.

Areas of special interest and participating faculty include:

Neutrophil physiology and airway inflammation

—M. Berger, M.D., Ph.D., Departments of Pediatrics, Pathology

Structure-function relationships in CFTR

—Dorr Dearborn, Ph.D., M.D., Departments of Pediatrics, Biochemistry

Mucin structure

—Thomas Gerken, Ph.D., Departments of Pediatrics, Biochemistry

Epithelial Na/K/2 Cl cotransporter

—C. Liedtke, Ph.D., Departments of Pediatrics, Physiology & Biophysics

Gene transfer to airway epithelium

—P. Davis, M.D., Ph.D., Departments of Pediatrics, Molecular Biology & Microbiology

Anti-idiotypic antibodies for pseudomonas vaccines

—J. Schreiber, M.D., Department of Pediatrics

Epithelial cell biology—relation of electrolyte and macromolecular secretion

—U. Hopfer, M.D., Ph.D., Department of Physiology & Biophysics

Pancreatic duct cell bicarbonate secretion

—C. Cotton, Ph.D., Departments of Pediatrics, Physiology & Biophysics

The polymeric immunoglobulin receptor

—C. Kaetzel, Ph.D., Department of Pathology

Oxidant damage to airway epithelium

—S. Alpert, M.D., Department of Pediatrics

Arachidonic acid metabolism in airway epithelium

—R. Walenga, Ph.D., Departments of Pediatrics, Physiology & Biophysics

Epithelial-mesenchymal interactions

—M. Infeld, M.D., Department of Pediatrics

Inflammation in CF airways

—M. Konstan, M.D., Department of Pediatrics

Further information available through either of investigators below. To apply, send c.v. and three letters of reference. CWRU is an equal opportunity employer: women and minorities are encouraged to apply.

P. Davis, M.D., Ph.D.

or

U. Hopfer, M.D., Ph.D.

Pediatric Pulmonary Division

Department of Physiology and Biophysics

Rainbow Babies and Childrens Hospital

Case Western Reserve University

2101 Adelbert Road

School of Medicine

Cleveland, OH 44106

2119 Abington Road

Cleveland, OH 44106-4970

**SCIENTIST
MACROMOLECULAR SCIENCE**

SmithKline Beecham, a world leader in pharmaceutical research, has an exciting opportunity for a Scientist to join its Macromolecular Sciences Department. The selected candidate will design, interpret and modify experiments to purify and characterize novel peptides and proteins for biochemical and biophysical studies.

Qualified candidates will have a BS in biochemistry, chemistry or related discipline, plus 3-8 years relevant laboratory experience; or M.S. degree with 0-6 years experience. Experience in the characterization of proteins using fluorescence spectroscopy, analytical ultracentrifugation and calorimetry is preferred.

Based in our modern, state-of-the-art research facility in suburban Philadelphia, near Valley Forge, PA, SmithKline Beecham Pharmaceuticals provides you with the opportunity to work in an environment where advancement is based on performance. In addition, we offer competitive compensation that is industry adjusted annually, an excellent relocation package and a flexible benefits package. For confidential consideration, please submit your resume indicating job #L0108 and the names of three references to: Marilyn Leggieri, Associate Employment Administrator, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.

SB
SmithKline Beecham
Pharmaceuticals

**Associate Director
Insecticide/Fungicide Research**

Merck, Sharp & Dohme Research Laboratories has an immediate opening in its Agricultural Research & Development Department for an Associate Director of Insecticide/Fungicide Research.

The successful candidate will have responsibility for directing the laboratory and pre-development field research activities to evaluate and characterize novel insecticide and fungicide leads from our basic research programs and for making recommendations for further product development. The candidate will be expected to lead a multidisciplinary team in the design and validation of new bioassays for the discovery of fungicides and insecticides with unique mechanisms of action and to introduce these assays into high volume screens within our basic research programs. In addition, he/she will be expected to lead the team responsible for selecting and profiling active moieties in early phase field trials to define efficacy and commercial utility.

The successful candidate should have a Ph.D. or equivalent in plant pathology, biochemistry, or biology with relevant publications and an established record of success. Experience in the design and implementation of fungicide and insecticide evaluation programs is required.

Excellent salary and benefit programs accompany this position at our research facilities located in Three Bridges, New Jersey, approximately 50 miles west of New York City. Please forward a curriculum vitae and cover letter to: **Human Resources Manager, Dept. S-34, Merck Sharp & Dohme Research Laboratories, P.O. Box 2000, WBC-155, Rahway, NJ 07065-0900.**

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Assistant Professor

**Joslin Diabetes Center
Department of Medicine
Harvard Medical School**

The Joslin Diabetes Center and Department of Medicine of Harvard Medical School invite applications for a position of Assistant Professor in the area of transplant immunology. Qualifications must include a strong background in immunology and interest in the problem of xenograft rejection as it relates to transplantation of the islets of Langerhans.

Individuals with Ph.D. or M.D./Ph.D. degrees are encouraged to apply. Applicants should submit a curriculum vitae, a brief description of research interests and ask three references to submit letter of recommendation by May 1, 1992. These materials should be directed to: Gordon C. Weir, M.D., Professor of Medicine, Section on Islet Transplantation and Cell Biology, Elliott P. Joslin Research Laboratories, Joslin Diabetes Center, One Joslin Place, Boston, MA 02215.

The Joslin Diabetes Center and Harvard University are Equal Opportunity/Affirmative Action Employers and encourage the applications of qualified women and minorities.



**Joslin
Diabetes Center**

CELL CULTURE CORE MANAGER

A long-term position with excellent salary and benefits is available for a manager of the Liver Center's Cell Culture Core at the Albert Einstein College of Medicine. Requirements are a Master's degree or PhD or the equivalent in extensive training and experience. Technical or bench skills must include routine cell culture technologies, radioisotope use, and light microscopy. Experience in one or more of the following technologies is an advantage: centrifugal elutriation, cell sorting and FACS analysis, immunohistochemistry, fluorescence microscopy, or extracellular matrix preparations. Knowledge of or experience in liver studies is welcome but not essential. Good communication skills, managerial skills, and the ability to work independently are critical. Independent research is an option and would be ideal for studies in culture biotechnology or on liver. Salary and benefits commensurate with training and experience. Please send resume and at least three letters of reference to: **Dr. L. M. Reid, 601 Chanin Cancer Center, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Jack and Pearl Resnick Campus, Bronx, NY 10461.**

An Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITION IN NEUROPHYSIOLOGY

The Center for Network Neuroscience (CNNS) and Department of Biological Sciences at the University of North Texas (UNT) is seeking a tenure-track **ASSISTANT PROFESSOR** for fall 1992. Candidates with strong research and publication records in neurophysiology with specialization in neuronal network dynamics and modeling, statistical time series analysis and electrophysiology with 2 years of postdoctoral work and degrees in physiology or neurobiology are preferred. A working knowledge of Unix and computer programming in "C" is desirable. CNNS specializes in small network dynamics with emphasis on pattern generation, recognition, storage and fault tolerance and provides excellent multichannel data acquisition, processing facilities and cell culture support. UNT is an emerging national research institution in the Dallas-Fort Worth metropolitan area with over 900 regular faculty and over 27,000 students. Applications including curriculum vitae and names of at least three references should be sent to: **Chair, CNNS Search Committee, University of North Texas, P.O. Box 5218, Denton, TX 76203.** Applications will be accepted until 1 May 1992. *UNT is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available July 1992 to study the molecular basis for cocaine modulation of T lymphocyte proliferation. Experiments involving lymphocyte signal transduction and gene expression pathways will be pursued. Candidates should have a recent Ph.D. degree and a strong background in biochemistry and molecular biology. *Must be U.S. citizen/permanent resident.* Salary is competitive, the research environment stimulating, and the length of appointment negotiable up to 2 years. Send complete curriculum vitae and three references to: **Dr. Thomas W. Klein, University of South Florida, Department of Medical Microbiology and Immunology, 12901 Bruce Downs Boulevard, Tampa, FL 33612.** *An Affirmative Action/Equal Opportunity Employer.*

MOLECULAR CYTOGENETICIST MOUNT SINAI SCHOOL OF MEDICINE

Tenure-track position for experienced, A.B.M.G.-eligible or -certified Ph.D. or M.D. cytogeneticist to: (1) direct clinical cytogenetics laboratory; (2) implement in situ culture and FISH techniques; (3) conduct independent research; and (4) train fellows. Competitive salary and benefits. For immediate consideration, please send curriculum vitae to: **R. J. Desnick, Ph.D., M.D., Box 1203, Medical and Molecular Genetics, Mount Sinai School of Medicine, Fifth Avenue and 100th Street, New York, NY 10029-6574.** *An Equal Opportunity Employer.*

WOUND REPAIR RESEARCH. POSTDOCTORAL POSITION available to study how extracellular matrix and growth factors regulate keratinocyte and fibroblast functions important for repair. Applicants should have the Ph.D. or M.D. degree and be experienced with cell biology and molecular biology techniques. Send curriculum vitae and three letters of recommendation to: **Dr. Fred Grinnel, Department of Cell Biology and Neuroscience, Southwestern Medical Center, Dallas TX 75235.**

An Equal Opportunity Employer.

POSTDOCTORAL POSITION

A **POSTDOCTORAL FELLOWSHIP** position is available immediately in Pediatric GI/Nutrition research. The fellow would study the regulation of glutathione peroxidase by selenium and/or oxidative damage to polarized enterocytes using cell culture techniques, in vitro labeling, protein immunoprecipitation and Northern blot analysis. Applicants should hold a Ph.D. or equivalent and have experience in molecular biology and protein electrophoresis. Please send curriculum vitae and three letters of reference to: **Susan S. Baker M.D., Ph.D., Division of Pediatric Gastroenterology and Nutrition, University of Massachusetts Medical Center (UMMC), 55 Lake Avenue North, Worcester, MA 01655.** *UMMC is an Equal Opportunity Employer.*

POSITIONS OPEN

POSTDOCTORAL POSITION is available to study the neuroendocrine and neuroanatomical basis for successful integration of neural grafts containing GnRH cells in hypogonadal mice. Experience in reproductive neuroendocrinology is preferred. Send curriculum vitae and names of three references to: **Marie J. Gibson, Ph.D., Division of Endocrinology, Box 1055, The Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574.** *An Equal Opportunity Employer.*

POSTDOCTORAL POSITION IN GROWTH FACTOR SIGNAL TRANSDUCTION. Available immediately for a recent Ph.D. with training in cell and molecular biology. Research involves the role of receptor coupling components/p21^{ras}/second messengers in growth factor signaling of normal and transformed cells, with particular emphasis on TGF β . Send curriculum vitae and names of three references to: **Dr. Kathleen M. Mulder, Department of Pharmacology, Pennsylvania State University College of Medicine, 500 University Drive, Hershey, PA 17033; FAX: 717-531-5013.**

POSTDOCTORAL POSITION available to investigate the regulation of smooth muscle contraction. Studies include use of isolated proteins and permeabilized and intact muscle to examine the mechanical and biochemical events involved in the initiation of contraction. Previous experience in muscle studies desirable but not required. Please send curriculum vitae and names of three references to: **Robert S. Moreland, Ph.D., Bockus Research Institute, Graduate Hospital, 415 South 19th Street, Philadelphia, PA 19146.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION DEPARTMENT OF MEDICINE HARVARD MEDICAL SCHOOL

A postdoctoral position is available for a recent Ph.D. to join a multidisciplinary laboratory studying the control of blood cell differentiation, including the molecular biology and biochemistry of hematopoietic growth factors and their mechanism of action. Experience with molecular biological and/or protein biochemical techniques is required.

Send curriculum vitae, statement of research interests, and names of three references to: **Arthur J. Sytkowski, M.D., Laboratory for Cell and Molecular Biology, New England Deaconess Hospital, Harvard Medical School, 185 Pilgrim Road, BURL Building, 5th Floor, Boston, MA 02215.**

POSTDOCTORAL POSITION available immediately to study mechanisms of prokaryotic gene regulation, using a combination of genetics and biochemistry. Work will deal with cooperative DNA binding by repressors or the mechanism of specific LexA cleavage. Expertise in at least one of the following areas is strongly preferred: molecular genetics, recombinant DNA, enzymology, and/or protein chemistry. Send curriculum vitae and names of three references to: **John W. Little, Department of Biochemistry, University of Arizona, Tucson, AZ 85721.** Review of applications will begin 1 April 1992, but applications will be accepted until the position is filled. *The University of Arizona is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

POSTDOCTORAL POSITION

A postdoctoral position is available immediately with the USDA Forest Service to study polyhedra producing mutants of the *Lymantria dispar* nuclear polyhedrosis virus at the molecular level. A background in molecular biology with experience in gene cloning, sequencing, site-directed mutagenesis and expression analysis is desirable. Starting salary at \$32,423 per annum plus benefits. *U.S. citizenship is required.* Send curriculum vitae and the names and addresses of three references to: **Dr. James Slavicek, USDA Forest Service, 359 Main Road, Delaware, OH 43015.** *The USDA is an Affirmative Action/Equal Opportunity Employer.*

CLINICAL DIRECTOR, NIDCD

Opening Date: February 10, 1992

Closing Date: April 27, 1992

(All applications must be post-marked by the closing date.)

The National Institute on Deafness and Other Communication Disorders (NIDCD) is recruiting for the position of Clinical Director, NIDCD. The Clinical Director, NIDCD, will serve as the principal advisor to the Institute Director on biomedical scientific affairs involving the clinical research program. He/She will recommend and develop policies and programs for the execution of clinical research, determine the ongoing effectiveness of clinical research programs, and recommend or develop new or revise programs of clinical research related to diseases and disorders of hearing, balance, smell, taste, voice, speech, and language. In collaboration with senior officials, incumbent will participate in the design and implementation of overall Institute

management policies including program planning, budget formulation, and resource allocation.

This is a Civil Service position in the Senior Executive Service (SES), with base salary currently from \$90,000 to \$112,100 per year depending on qualifications. SES members are eligible for various bonuses and awards, and physicians are eligible for a Physician's Comparability Allowance of up to \$20,000 per year, although total compensation cannot exceed the rate for Executive Level I (currently \$143,800 per year). A recruitment bonus of up to 25 percent of base pay may be available to a nonfederal candidate selected for this position, subject to individual approval. (Alternatively, applicants may be eligible

for appointment in the Commissioned Corps of the U.S. Public Health Service.) The SES individual selected, if not presently in the Senior Executive Service, must serve a one-year probationary period.

Further information about the position and qualification requirements may be obtained by contacting Ms. Gayle G. Mundell at (301) 402-0508 (Voice or TDD) or TDD (301) 402-1134. An Application for Federal Employment (SF-171) along with a Curriculum Vitae and Bibliography should be submitted to:

Ms. Gayle G. Mundell, Personnel Management Specialist, NIDCD, National Institute on Deafness and Other Communication Disorders, Building 31, Room 3C11

NATIONAL INSTITUTES OF HEALTH



9000 Rockville Pike • Bethesda • MD • 20892

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MOLECULAR BIOLOGIST/BIOCHEMIST

The Department of Obstetrics and Gynecology and the Sealy Center for Molecular Science at the University of Texas Medical Branch, Galveston invite applications for a joint appointment to a tenure-track position at the **ASSISTANT, ASSOCIATE, OR FULL PROFESSOR** level. The appointee will be expected to build a strong research program in the area of molecular studies of gene expression, as related to uterine contraction and/or physiology. Candidates with demonstrated expertise in uterine contractility and/or smooth muscle biochemistry are especially encouraged to apply. Candidates must have the Ph.D. and/or M.D. degree, with appropriate postdoctoral training and publication record. Salary and start-up funds are highly competitive. The Department and the Center offer a stimulating scientific environment and are deeply committed to high-quality research and teaching. Send complete curriculum vitae, including publications list, brief statement of future research plans, and names and addresses of three references, to:

Dr. Robert Garfield, Search Committee Chairman, Department of Obstetrics and Gynecology, Room 2.143 Medical Research Building, Rt. J-62, University of Texas Medical Branch, Galveston, TX 77555.

EO/AA Employer, M/F/H/V. UTMB hires only individuals authorized to work in U.S.



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Research Scientist I

Will assist in the study of the pathophysiology of global and focal cerebral ischemia and test therapeutic treatments in the appropriate model.

Candidates must have a Master's degree in a biological science **OR** a Bachelor's degree plus 2 years of experience in a biological science. Experience required in one of the following areas: autoradiography, densitometric measurement and brain tissue sectioning; or in vivo ischemia models, or surgery or histology. Other factors to be considered include experience with any of the following: histology, immunohistochemistry, radioimmunoassay, enzymatic metabolite assays, cerebral blood flow determinations, various in vivo ischemia models. Candidates selected for interview will take an on-site writing assessment.

At Burroughs Wellcome Co., you will enjoy a compensation and benefits package that is among the best in the pharmaceutical industry, along with the advantages of being part of an innovative pharmaceutical leader. Please send your resume, indicating position number in your cover letter by **April 6, 1992**, to: **Burroughs Wellcome Co., Recruiting and Staffing, Pos. #62993-4, 3030 Cornwallis Road, Research Triangle Park, NC 27709.**

For information on other job opportunities with Burroughs Wellcome Co, call our Job Information Line at **(919) 248-8347**.



BURROUGHS WELLCOME CO.

An Equal Opportunity Employer

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately for a Ph.D. in biochemistry/molecular biology or a related subject. Project involves studies on the biochemical and molecular mechanism of cellular gene regulation by interferon-gamma, identification of transcription regulating factors, and on signal transduction. Experience in recombinant DNA techniques is highly desirable. Send résumé and names of three references to: **Manager, Human Resources, Hipple Cancer Research Center, 4100 South Kettering Boulevard, Dayton, OH 45439-2092. FAX: 513-293-7652.**

An Equal Opportunity/Affirmative Action Employer.

MOLECULAR CHAPERONES

Three-year **POSTDOCTORAL POSITION** is available to study roles of chaperones in protein folding, assembly, and translocation. Structure and function of 70K stress proteins emphasized. Ph.D. in biochemistry or related field required. Send curriculum vitae, reprints, and names of three references to: **Dr. William J. Chirico, Department of Anatomy and Cell Biology, Box 5, State University of New York—Health Science Center at Brooklyn, 450 Clarkson Avenue, Brooklyn, NY 11203. Equal Opportunity/Affirmative Action Employer. DMC#CO377.**

POSTDOCTORAL POSITION IN GENETICS/MOLECULAR BIOLOGY

Postdoctoral position available immediately for up to 3 years for participation in genetic analysis of the role of *Drosophila* heterochromatic genes/DNA sequences in regulating spermatogenesis and causing meiotic drive. Expertise in *Drosophila* molecular and classical genetics required, experience in genetic transformation and/or cytogenetics preferred. Send curriculum vitae and three letters of reference to:

**Dr. Terrence W. Lytle
A102 Biomedical Sciences Building
Department of Genetics and Molecular Biology
University of Hawaii
Honolulu, HI 96822**

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ECOSYSTEMS POSTDOCTORAL POSITIONS. Study on the effects of climate change on Chihuahuan Desert shrub ecosystems. Position #1: Expertise in studies of plant-soil interactions and nutrient cycling. Contact: **Dr. Ross A. Virginia, Biology Department, San Diego State University, San Diego, CA 92182; telephone: 619-594-6519.** Position #2: Expertise in simulation modeling of plant growth and ecosystem processes. Contact: **Dr. James F. Reynolds, Department of Botany, Duke University, Durham, NC 27706; telephone: 202-357-9596.** Both positions involve field research at the Jornada Long-Term Ecological Research Site at Las Cruces, New Mexico. Send curriculum vitae, and names of three references. Application review begins 28 March 1992. Positions available immediately. *An Equal Opportunity/Affirmative Action Title IX Employer.*

POSTDOCTORAL POSITION IN MOLECULAR BIOLOGY will be available on or about 1 June 1992 to study the molecular biology of natural product and antimetabolite drug resistance in mammalian systems. Projects include, (1) the use of *in vitro* mutagenesis and drug selection *in vivo* to obtain altered forms of p-glycoprotein in order to determine the functional properties of this class of membrane transporters, and (2) the characterization of mutant forms of dihydrofolate reductase and the reduced folate transporter(s) to determine the genetic basis for intrinsic resistance to antifolates. Candidates must have a Ph.D., M.D., or equivalent degree and significant expertise in molecular biology and recombinant DNA techniques. The deadline for applications material is 24 April 1992. Send curriculum vitae to: **Dr. Peter W. Melera, Molecular and Cell Biology Program, University of Maryland, 660 West Redwood Street, Baltimore, MD 21201.**

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

POSITIONS OPEN

POSTDOCTORAL POSITION UNIVERSITY OF CALIFORNIA SAN FRANCISCO

Possible projects include genetic mapping studies of neuropsychiatric disorders and molecular analyses of genome composition. Applicants should have an M.D. or Ph.D. and some experience in molecular genetics. Send curriculum vitae with names of references to: **Nelson Freimer, M.D., Neurogenetics Laboratory, University of California, Box F 0984, San Francisco, CA 94143.**

POSTDOCTORAL POSITION. Immediate opening. Requires Ph.D. with a background in cellular and molecular biology to participate in research using monoclonal antibodies, cDNA expression clones, fluorescence microscopy and microinjection techniques to study structure and function of cytoskeletal proteins in normal and transformed cells. Send curriculum vitae and three references to: **Dr. Jim Lin, Department of Biology, University of Iowa, Iowa City, IA 52242. An Equal Opportunity/Affirmative Action Employer. Women and minorities encouraged to apply.**

FISH CONSERVATION GENETICS

POSTDOCTORAL POSITION examining interspecific hybridization and ecological adaptation in fish. Applicant must be familiar with modern molecular techniques for analyzing genetic relationships at the individual and population levels. Two-year position; annual salary: \$24,000 to \$26,000. Send letter of interest, including names and phone numbers of three references, curriculum vitae, and copies of recent publications to: **I. J. Schlosser, Department of Biology, Box 8238 University Station, Grand Forks, ND 58202.** Consideration of applications will begin 1 May 1992 and continue until filled.

POSTDOCTORAL POSITION. University of North Carolina at Chapel Hill. Position available for a postdoctoral fellow with a strong background in molecular biology and/or virology to study transcription, replication and genetics of coronaviruses. Send curriculum vitae, three letters of recommendation and a statement of research interest to:

**Dr. Ralph S. Baric
Department of Epidemiology
University of North Carolina at Chapel Hill
Chapel Hill, NC 27599-7400
FAX: 919-966-2089**

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ESTUARINE SCIENTIST POSTDOCTORAL POSITION

The University of Georgia Marine Institute announces an opening for a postdoctoral researcher in salt marsh estuarine science. The position is a 12-month appointment with the potential for renewal. The area of specialization is open, but researchers whose areas of interest would utilize the extensive marsh and estuarine field sites, while interacting with the current staff, are preferred.

The Marine Institute is located on Sapelo Island, which is isolated from mainland Georgia by 5 miles of cordgrass marshes. Access to the island is by ferryboat and residence of the research faculty on the island is expected.

Interested individuals should send curriculum vitae, names of three references and a one-page statement of research goals to: **Dr. James J. Alberts, Director, University of Georgia Marine Institute, Sapelo Island, GA 31327.** Applications will be accepted until 1 June 1992.

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POSITIONS OPEN

POSTDOCTORAL POSITION at Savannah River Laboratory, Aiken, South Carolina, to work on analytical spectroscopy of waste and environmental restoration samples. Research is directed toward applying the latest analytical technology to Department of Energy waste management efforts. Must have Ph.D. in chemistry or physics with detailed knowledge of emission spectroscopy and C and FORTRAN programming. For application material: **Postgraduate Research Program/SRL, Science/Engineering Education Division, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117; telephone: 615-576-3456.**

POSTDOCTORAL POSITIONS in an interdisciplinary training program at Brown University applying cell and molecular biology, physiology, biochemistry, and experimental pathology to problems of lung disease.

Funding under NIH/NRSA. *Candidates from minority groups especially welcome. U.S. citizenship or permanent residency required.* Contact: **Dr. Frederic Hoppen, Brown University, Box G, Providence, RI 02806. Telephone: 401-729-2636.**

POSTDOCTORAL POSITIONS

Mallinckrodt Medical, Inc., has openings in 1992 (one immediately) for **POSTDOCTORAL FELLOWS.** Applicants should have a strong background in inorganic or analytical chemistry. A background in synthetic organic chemistry to experience in the handling of radioactivity is desirable but not required. Salary range will be in the mid to high 30's and the appointment is for 1 to 2 years. Send résumés and three letters of recommendation to: **Dr. Dennis Nosco, Mallinckrodt Medical, Inc., 675 McDonnell Boulevard, P.O. Box 5840, St. Louis, MO 63134. Equal Opportunity Employer, M/F.**

POSTDOCTORAL FELLOWSHIP. Postdoctoral fellowship for studies of the cellular and molecular biology of the action of serotonin. The project involves an investigation of 5-HT receptors, the role of 5-HT in intercellular signaling, and the development of serotonergic cells. The position is available immediately. A background in biochemistry and/or cell biology is desired. Send curriculum vitae and three letters of recommendation to: **Dr. Eladio A. Nunez, Department of Anatomy and Cell Biology, Columbia University, College of Physicians and Surgeons, 630 West 168th Street, New York, NY 10032. Columbia is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOWSHIP IN NEUROSCIENCE (NIH-funded). Available immediately to study the mechanism of molecular and morphological neurodegenerative changes in olfactory receptor neurons in Alzheimer's disease, aging and in model systems, using modern immunohistochemical and molecular techniques. Send curriculum vitae and names of three references to: **Dr. Barbara Talamo, Neuroscience Laboratories, Tufts University School of Medicine, 136 Harrison Avenue, Boston, MA 02111.**

FOUR POSTDOCTORAL FELLOWSHIPS in the Molecular Virology and Plant Transformation Section are available at the Noble Foundation. Applicants should have a Ph.D. in molecular biology, virology, plant physiology, or related fields. Position A will involve the study of long distance transport of viruses in plants, and/or expression of antibodies against viruses in plants; apply to **Dr. Richard Nelson.** Position B will study the molecular evolution of peanut stunt cucumovirus; apply to **Dr. Marilyn Roossinck.** Position C will continue current research on polyvirus replication; apply to **Dr. Brandt Cassidy.** Position D will continue research on transformation of a regionally important forage grass, to allow future genetic manipulations; apply to **Dr. Chandra Franklin.** Minimum starting salary will be \$22,000 per year, with funding available for 3 years, for each position. Positions will begin on either 1 June 1992 (A and B), or 1 August 1992 (C and D). Applicants should send curriculum vitae and the names of three references to the appropriate individuals at: **The Samuel Roberts Noble Foundation, Plant Biology Division, P.O. Box 2180, Ardmore, OK 73402.**

JPL/NASA VISITING SENIOR SCIENTIST PROGRAM

EARTH SCIENCE AND APPLICATIONS DIVISION

OCEAN BIOGEOCHEMISTRY RESEARCH

The Jet Propulsion Laboratory invites applications to the Visiting Senior Scientist Program in the area of biological, chemical, or optical oceanography to advise and assist in the management of a multi-disciplinary research program in Earth Science. The position in oceanic biogeochemical dynamics supports two branches, one conducting process-oriented research and the other conducting modeling and satellite data analysis. The overall program seeks to understand, and to better predict, the role of the ocean in Earth system processes, especially the cycling of major biogeochemical elements. Process studies include in-situ and aircraft studies of primary productivity, phytoplankton dynamics, trace element fluxes (including carbon), and interactions between physical and biological processes in the open ocean. Modeling, Data, and Information studies are concerned with satellite data analysis, principally of remote ocean color observations, and biogeochemical modeling.

The successful applicant would be expected to (1) provide advice and guidance regarding the management of the Ocean Biogeochemistry program elements of NASA's sponsored research program in global change; (2) act as Program Scientist for the SeaStar/SeaWiFS ocean color project; (3) assist in program science activity for various sensors proposed to fly on the Earth Observing System; and (4) interact with other agencies in the development and implementation of interagency and international research programs.

Prospective candidates must hold a Ph.D (or have equivalent training and experience) in biological, chemical, or optical oceanography or a closely related field; a record of research publications in the refereed literature; and strong communications skills (both oral and written). Although experience with use of satellite data is desirable, it is not required. Additional information about this position may be obtained from either Dr. Robert E. Murphy or Dr. Diane E. Wickland at (202) 453-1720/8195.

Frequent travel and residence in the Washington, D.C. area will be required. Tenured faculty members are the preferred choice, although other qualified individuals from nonprofit institutions may also be considered. The desired start date is September 1, 1992, or as soon thereafter as possible. Normal assignment in the Visiting Senior Scientist Program does not exceed two years. Appointees must be U.S. Citizens or Permanent Residents and are expected to return to their home institution following the NASA assignment. Please provide Curriculum Vitae, bibliography, and the names of five references to: Dr. Harry Ashkenas, Jet Propulsion Laboratory, MS 183-900, Dept. T-57, 4800 Oak Grove Drive, Pasadena, California 91109; (818) 354-8251.

JPL

Jet Propulsion Laboratory
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PLANT BIOTECHNOLOGY

ICI Seeds is one of the World's leading seed companies with breeding and biotechnology research centers in the major commercial seed markets and sales in over 40 countries. The North American group, based in Iowa, markets corn hybrid under the ICI Seeds, Garst and Supercroft brand names as well as leading varieties of soybean, sorghum, sunflower, canola and alfalfa. Expansion of the product-driven biotechnology programs at the company's research center near Ames, Iowa, has created openings for a number of BS/MS level scientists. Successful candidates will join interdisciplinary teams applying state-of-the-art cell and molecular biology to crop improvement programs.

EXPERIMENTAL BREEDING: We seek applicants with interest in field research to assess the utility of transgenic plants in corn improvement and advance the application of RFLP technology to breeding.

MOLECULAR SCREENING: Laboratory-oriented applicants with background or interest in molecular genetics and the application of RFLP technology to plant breeding are encouraged to apply.

PLANT TRANSFORMATION: Researchers with an interest in: (a) controlling, optimizing and characterizing gene expression in transgenic plants, or (b) participating in cell biology research focussed on corn transformation, are encouraged to apply

CELL BIOLOGY: We are seeking an individual with a strong interest in the use of tissue culture techniques for crop improvement to join a team working on the generation and testing of doubled haploids

Enjoy the advantages of belonging to a worldwide organization with the professional and financial resources to support and sustain aggressive long-term research.

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experience and relevant background in a similar research-oriented setting. Experience using MACCS and/or Rdb software is a plus. The ability to deal effectively with scientists and administrators is the key to success in this highly visible position.

We offer a highly competitive salary and an excellent benefits package. Please send resume to Human Resources, PO Box RI91-26, Schering-Plough Research, 60 Orange Street, Bloomfield, NJ 07003. We are an equal opportunity employer.



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MAJOR NATIONAL PATENT LAW FIRM located in New York City seeks highly qualified Ph.D. scientists in biomedical fields interested in second career opportunities in Intellectual Property law. Demonstrated technical writing skills essential. Competitive salaries and benefits, and opportunities for challenging assignments. Send résumé to:

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CELLULAR ELECTROPHYSIOLOGIST

A senior fellowship or nontenure-track faculty position is available for a electrophysiologist with experience in patch clamp methods. This is a growth position within a new multidisciplinary research center focused on the problem of neuronal injury. Send curriculum vitae and references (names or letters) to: **Dennis W. Choi, M.D., Ph.D., Professor and Chairman, Department of Neurology, Box 8111, Washington University School of Medicine, 660 South Euclid Avenue, St. Louis, MO 63110.** *Washington University is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL FELLOWSHIP (NIH-funded). Available immediately to characterize the purinoreceptor for extracellular ATP. Neuronal regulation and pharmacological modulation of this putative nonselective cation channel/receptor will be studied by biochemical and molecular expression cloning methods using video imaging of cytosolic calcium responses as a functional assay. Send curriculum vitae with names of three references to: **Dr. Barbara Talamo, Neuroscience Laboratories, Tufts University School of Medicine, 136 Harrison Avenue, Boston, MA 02111.**

POSTDOCTORAL FELLOW. NIH-supported training opportunities with an interdepartmental, multidisciplinary orientation. Research areas include glycoprotein synthesis and role in implantation, cell-cell interactions in androgen-regulated gene expression, steroid hormones and carcinogenesis, neuroendocrine control of gonadal function, protein transitions in spermatogenesis and reproductive toxicology, control of placental blood flow and fetal cardiac output, mechanisms controlling gene activity and Ca^{2+} in testis and uterus, cell interactions during fertilization and early development, Sertoli cell function and regulation of testicular functions, control of corpus luteum function, role of growth factors and oncogenes in growth and differentiation, genetics of gonadal gene expression. *U.S. citizen or permanent resident.* Contact: **Dr. B. Sanborn, Department of Biochemistry and Molecular Biology, University of Texas Medical School, Houston, P.O. Box 20708, Houston, TX 77225.** *The University of Texas is an Equal Opportunity Employer. Women and minorities are encouraged to apply.*

POSTDOCTORAL POSITION WASHINGTON UNIVERSITY SCHOOL OF MEDICINE

A **POSTDOCTORAL RESEARCH FELLOWSHIP** is available for the study of the cell and molecular biology of intracellular protein trafficking and degradation. Our studies focus on receptor biology, endocytosis and protein turnover. Experience in biochemistry, cell and molecular biology desirable. Send curriculum vitae and two references to: **Alan L. Schwartz, Ph.D., M.D., Box 8116, Washington University School of Medicine, 660 South Euclid, St. Louis, MO 63110.**

TWO POSTDOCTORAL RESEARCH ASSOCIATE positions are available immediately to study the regulation of expression of protein phosphatases and their role in hormone-induced cellular responses and in cell cycle control. Experience in molecular biology/enzymology/cell biology is required. Send curriculum vitae and references to: **Anna DePaoli-Roach, Ph.D., Department of Biochemistry and Molecular Biology, Indiana University School of Medicine, 635 Barnhill Drive, Indianapolis, IN 46202. FAX: 317-274-4686.**

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POSITIONS OPEN

DIANON SYSTEMS

POSTDOCTORAL RESEARCH ASSOCIATE

A position is open for the investigation of the clinical utility of diagnostic tests in oncology. To qualify, you should have a Ph.D. or equivalent in epidemiology, or expectation of a degree within a few months, or a Ph.D. or equivalent in biological or medical science with graduate level work in epidemiology. An understanding of statistical methods, familiarity with computers, statistical software packages, and medical terminology is preferred. This position presents the opportunity to learn clinical study project management in a fast-growing biotech company where scientific rigor is highly valued. Results of this research will be published in a peer-reviewed journal. Please send your curriculum vitae to: **Dianon Systems, Inc., Personnel Department 7001, 200 Watson Boulevard, Stratford, CT 06497, or telephone: 203-381-4043. An Equal Opportunity Employer.**

POSTDOCTORAL FELLOWS NEURAL PLASTICITY/GENE REGULATION MASSACHUSETTS GENERAL HOSPITAL

The Laboratory of Molecular Neurobiology has two positions available to study the regulation of neurotransmitter gene expression in cell culture and transgenic animal models. Projects involve analysis of intracellular signaling pathways and transcription factors mediating regulation of neurotransmitter gene expression with emphasis on the role of this process to neural plasticity. Minimum requirements include a Ph.D. degree in molecular biology, biochemistry, neuroscience, or a related field with some experience in the molecular biology of signal transduction and gene regulation. Candidates with backgrounds in molecular biology, biochemistry, and protein phosphorylation are encouraged to apply. Expertise in histological analysis of gene expression in the nervous system would also be useful. Salary is dependent upon level of experience. Send résumé to: **Dr. Michael J. Comb, Department of Neurology and Neuroscience, Massachusetts General Hospital and Harvard Medical School, Building 149, 13th Street, Charlestown, MA 02129. FAX: 617-726-5677.**

POSTDOCTORAL ASSOCIATE, we are seeking a 2-year candidate to study polyphenoloxidase genes in the fungus, *Botrytis cinerea*. The work will emphasize characterization of the genes and their use in a gene transfer system to study their function in the pathogenesis of plants. A Ph.D. in biochemistry, plant pathology, mycology, or relevant field, and a strong background in molecular genetics is desired. Please send curriculum vitae and three letters of reference by 15 April 1992 to: **Dr. Richard C. Staples, Boyce Thompson Institute, Cornell University, Tower Road, Ithaca, NY 14853. Boyce Thompson is an Equal Opportunity and Affirmative Action Employer, women and minorities are encouraged to apply.**

FISH ECOLOGY: RESEARCH ASSOCIATE to examine predation and production of pelagic fishes in the Chesapeake Bay using spatially explicit models of fish growth rate and foraging. Ph.D. in fish ecology or related field and good writing skills required. Experience with bioenergetics and SUN workstations helpful. Send curriculum vitae and three letters of reference: **S. Brandt, Chesapeake Biological Laboratory, Solomons, MD 20688-0038 by 27 March 1992. The University of Maryland System is an Affirmative Action/Equal Opportunity Employer.**

RESEARCH ASSISTANT PROFESSOR to join a leading team of clinicians and research scientists at a major university. This nontenured, nontenure earning position will be responsible for directing the molecular biologic component of an established fundamental research laboratory. Interested applicants should have expertise in molecular biology, especially transfection. Experience in receptor biology is desired. The position requires a Ph.D. degree. Competitive salary and generous benefit package. Send curriculum vitae and reply to: **William J. Koopman, M.D., Howard L. Holley Professor of Medicine, Director, Division of Clinical Immunology and Rheumatology, The University of Alabama at Birmingham (UAB), Birmingham, AL 35294. UAB is an Affirmative Action/Equal Opportunity Employer.**

13 MARCH 1992

CLARE BOOTHE LUCE PROFESSORSHIP

St. John's University

Department of Biological Sciences

The Clare Boothe Luce Fund of the Henry Luce Foundation, established through a bequest from Mrs. Luce, aims to increase the number of women in academic positions in scientific and technological fields in which they have historically been underrepresented. St. John's University, New York, one of the beneficiaries of the Fund, seeks applications for a Clare Boothe Luce professorship in biological sciences, to begin in the fall of 1992-93. The department currently has 16 faculty and strong programs leading to the B.S., M.S., and Ph.D. degrees.

Applications should have the academic qualifications and background necessary for appointment as an assistant or associate professor, including an earned Ph.D. and post-doctoral research experience. Applicants for the rank of Associate Professor should have the experience and distinction expected at this level. Specialization in cellular, molecular, or developmental biology is preferred. Commitment to providing quality instruction, primarily at the graduate level is expected. In addition, the successful candidate will be expected to establish a vigorous research program and to obtain external research support. According to the terms of the Luce Fund, Clare Boothe Luce professors must be women who are citizens of the United States.

Applications with a list of three references, should be sent to:

Richard A. Lockshin, Ph.D.
Professor and Chairman
Department of Biological Sciences
St. John's University
Jamaica, New York 11439

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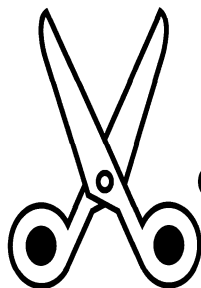
Huxley College of Environmental Studies seeks a dean to represent the faculty and administer its undergraduate and Masters programs. The Dean reports to the Provost and is the general administrative officer responsible for all programs in the College, including academic affairs, research, budget and related student activities.

Huxley College, founded in 1968, has an interdisciplinary approach supported by courses in marine, freshwater and terrestrial ecology; environmental chemistry; environmental toxicology and nutrition; watershed management; human ecology; environmental policy and decision-making; social impact assessment; outdoor and experiential education; and environmental journalism. Research institutes reporting to the dean include Watershed Studies, and Environmental Toxicology and Chemistry. Most of Huxley's courses are at the junior, senior and graduate levels.

Undergraduate environmental studies at Huxley center on four academic majors: environmental science, environmental policy and assessment, environmental education, and environmental studies. The M.S. degree in Environmental Science offers instruction in seven specializations. Cooperative programs include: Biology, Chemistry, Economics, Journalism, and an M. Ed. in Environmental Education and an M.A. in Political Science/Environmental Studies. At present, there are 14 faculty, 22 affiliated faculty, approximately 400 undergraduate majors, and 50 Master's students.

Western Washington University has 9,500 students in six colleges, with graduate programs at the Master's level. Bellingham is located between Seattle and Vancouver, B.C., on Puget Sound.

Candidates should have the Ph.D. degree, experience with multi-disciplinary programs, an academic record that would qualify for appointment at the rank of tenured full professor, and relevant administrative experience. Salary competitive. Nominations welcome. Application materials should include a letter describing the candidate's administrative experience and academic interests, a curriculum vitae, and letters of reference (or names and addresses) from at least four persons evaluating the candidate's qualifications and background for the position. These should be mailed to Prof. Kenneth Hoover, Chair, Dean of Huxley College Search Committee, Dept. of Political Science, Arntzen Hall 415 -MS 9082, Western Washington University, Bellingham, WA 98225. Fax Number: 206-647-7295. Consideration of applications will begin on March 25, 1992, and will continue until candidates have been identified. Western Washington University is strongly committed to the principle of diversity. Therefore, we are interested in receiving applications from a broad spectrum of candidates, including women, members of ethnic and racial minorities and persons with a disability.



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Sphinx Pharmaceuticals Corporation, a Research Triangle-based company, working in the area of lipid second-messengers and signal transduction pathways, has several openings for qualified individuals to join our rapidly growing company.

Molecular Biologist

We are seeking a molecular biologist for our Biochemical Research Program. The successful candidate will have a Ph.D. in molecular biology, biochemistry, or related scientific field, at least two years of postdoctoral experience, and expertise in the use of recombinant DNA technology including PCR techniques, construction and screening of cDNA libraries, and *in vitro* mutagenesis. **POSITION 166**

Cell Biologist

We are seeking a cell biologist for our Biochemical Research Program. Candidates will have a Ph.D. in cell biology or related discipline with a minimum of three years postdoctoral or industrial experience. A familiarity with growth factor responses, and a working knowledge in the area of signal transduction processes would be helpful. **POSITION 167**

Sphinx Pharmaceuticals offers excellent compensation and benefits as well as an attractive relocation policy. We are located in the Research Triangle area of North Carolina which offers excellent living conditions and outstanding schools. For confidential consideration, please forward your curriculum vitae, list of publications and names of three references, indicating the position number for which you are responding, to: **Sphinx Pharmaceuticals Corporation, P.O. Box 52330, Durham, North Carolina 27717.** Equal Opportunity Employer.



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The Agricultural Research Service, as the principal scientific research agency of USDA, conducts research to solve technical food and agricultural problems of broad scope and high national priority. The agency's work is carried out under six specific research objectives—conservation of soil, water and air, plant productivity, animal productivity, commodity conversion and delivery, human nutrition and well-being, and integration of systems. Overall aim of ARS research is to ensure the continuation of an adequate supply of food and fiber of high quality to meet the needs of American people and for export.

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- Engineering

Successful candidates will be hired initially for up to 2 years in duration. Salary for these positions \$32,423 to \$38,861 (higher in parts of CA and NY) will be based on qualifications and experience. There are some employment restrictions for non-U.S. citizens.

For written descriptions of positions and application procedures, write to:

N.L. Bakes
Personnel Division (SC)
USDA/ARS
6305 Ivy Lane, Room 129A
Greenbelt, MD 20770-1435
or call:
Ms. Donna Schimming
(301) 344-2796

Fellowships In Diagnostic Radiological Research.

The Diagnostic Radiology Research Program of the National Institutes of Health is accepting applications for two-year fellowship positions beginning in July 1992 and July 1993. This program provides an excellent opportunity for individuals who plan a research career in radiological sciences.

The fellowship training program emphasizes basic research in all aspects of imaging and image processing. Fellows will have no clinical responsibilities unless they are related to their project. The imaging laboratories of the Diagnostic Radiology Research Program include: state-of-the-art 0.5 and 1.5 Tesla MR units; a newly devel-

oped image analysis program with hardware support; ultrafast CT; and an experimental angiography suite. The facilities in the *In Vivo* NMR Research Center; the PET and monoclonal antibody programs of the Nuclear Medicine Department, and other laboratories on the NIH campus will be made available to the fellow, providing an opportunity to develop expertise in areas related to imaging research. Basic research in functional or metabolic imaging, contrast agents, biochemistry, biology, chemistry, immunology, physics and physiology will be encouraged. Laboratories are being developed which will include "hot" and "cold" wet labs and tissue culture facilities. Collaboration with other

scientists on the NIH campus will be encouraged.

Applicants should hold the MD or PhD degree and should have completed clinical training in diagnostic radiology or nuclear medicine. Applications from individuals currently in US residency programs may also be considered for research fellowship positions. US citizenship or permanent residency is required for this full-time appointment.

Candidates should submit a Curriculum Vitae, at least two letters of reference and a preliminary statement concerning their area of research interest to Dr. Joseph A. Frank, Acting Director.



National Institutes Of Health Diagnostic Radiology Research Program

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**DEPARTMENT OF ANATOMY
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BIOLOGY
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Lecturerships

Applications are invited for three lectureships available from 1st October 1992. The Department of Anatomy and Developmental Biology at University College London is a large and thriving Department with an outstanding record of research in Neuroscience, Developmental Biology, Mineralised Tissue Biology and Cell Biology. The Department is looking for applicants who are committed to scholarship and research in these areas and others including molecular biology, and who will also take an active part in the teaching of medical and science students. Please send a C. V., including details of publications and grants, plus the names and addresses of 3 referees to Professor G. Burnstock DSc, FAA, MRCP (Hon.), FRS, Department of Anatomy and Developmental Biology, University College London, Gower Street, London WC1E 6BT. Further details may be obtained by ringing (071) 380 7053. Closing date for receipt of applications is 10th April 1992. *University College London is an equal opportunity employer.*



TECHNICAL SERVICES MANAGER

Kemin Industries, Inc., a manufacturer of mold inhibitors, antimicrobial compounds, marigold pigments, antioxidants, flavors and surfactants for animal feed seeks a Technical Services Manager for its North and South America operations. Based in Des Moines, Iowa, the successful candidate will have a Ph.D. in Biochemistry or related field and possess excellent oral presentation skills. The Technical Services Manager will provide technical product information and consulting for customers, organize university efficacy trials, provide technical training for salespeople and distributors, and supervise two technical service laboratory personnel. A background in animal agriculture as well as commercial experience is preferred. Frequent overnight travel is typical during the work week. Only non-smokers need apply. Pre-employment physical with drug screen required. Please submit a resume as well as other relevant information to Dr. C. E. Nelson, Kemin Industries, Inc., Box 70, Des Moines, IA 50301.

Equal Opportunity Employer.

POSITIONS OPEN

RESEARCH ASSOCIATE, Division of Cardiology: organ transplantation research on animals with focus on detection of heart graft rejection, evaluation of antirejection agents, development of xenograft transplantation techniques to analyze immunosuppressive regimens. Must have at least 5 years of experience in cardiology. Must have experience in anesthesiology. M.D. required. Forty-plus hours per week. Salary: \$38,000 per year. Jobsite interview: Los Angeles. Send résumé to: **Job# MD21568, P.O. Box 9560, Sacramento, CA 95823-0560** not later than 28 March 1992.

RESEARCH ASSOCIATE

Conduct independent research project studying the genetics of human and animal craniofacial development. Collect and analyze research data and design protocol for further experiment. Perform the technical tasks in the fields of cellular, molecular and developmental biology. Requirements: Ph.D. in craniofacial biology. Specialized knowledge and/or ability in: Tissue and culture techniques; recombinant DNA technology; embryology, cellular biology and histology; RT-PCR and Antisense strategies; biostatistical methods and their application. Computer programs including PC3D and Sigma Scan. Salary: \$22,713 per year. Job/interview site: Los Angeles. Send ad and résumé to: **Job #JW24125, P.O. Box 9560, Sacramento, CA 95823-0560** not later than 27 March 1992.

**CENTER FOR BIOLOGICAL TIMING
UNIVERSITY OF VIRGINIA
MATHEMATICIAN, STATISTICIAN,
BIOPHYSICIST**

RESEARCH ASSISTANT OR ASSOCIATE PROFESSORSHIP available for an applicant with a Ph.D. in biophysics or an allied discipline. Must have scholarly contributions in the area of mathematical modeling of biological systems. Individual will work closely with biology and medicine research teams. For information send inquiry and curriculum vitae to: **Dr. Johannes D. Veldhuis, Director of Biomathematics Core, Box 202 Health Sciences Center, Charlottesville, VA 22908.** *The University of Virginia is An Equal Opportunity Employer.*

JACOB JAVITS NEUROSCIENCE AWARD laboratory has an opening for a **RESEARCH ASSISTANT PROFESSOR**, with a Ph.D., or an extremely well-qualified **RESEARCH ASSOCIATE**, to supervise the main histology laboratory. Candidate should have experience as a histologist or morphologist and will be required to learn computer-based morphometry. Special consideration will be given to individuals with previous experience in the investigation of brain microvascular anatomy or vascular disease.

Check the following references for a sense of the direction of the research: *Soc. Neurosci. Abstr.* 13, 1251 (1987); *AJNR* 11, 431-439 (1990); *Ann. Neurol.* 28, 477-486 (1990); *Clin. Neuropathol.* 9, 196-204 (1990).

Send a single-page concise résumé to: **Dixon M. Moody, M.D., Department of Radiology, Bowman Gray School of Medicine, Medical Center Boulevard, Winston-Salem, NC 27157-1088, or FAX: 919-748-2029.** *Affirmative Action/Equal Opportunity Employer.*

FACULTY RESEARCH POSITIONS

Three full-time senior level faculty research positions available for experienced basic scientists with expertise in either **CARDIOVASCULAR PHARMACOLOGY, CELL BIOLOGY or VIROLOGY/MOLECULAR BIOLOGY** to participate in programs of hypertension, diabetes and retrovirology research, respectively. Applicants will become part of a research team consisting of pharmacologists, pharmacokineticists and pharmaceutical chemists. Successful candidates must have the Ph.D. degree and should be capable of independent research. Salaries: competitive. *Women and minorities are encouraged to apply. Applicant must have legal proof of authority to work permanently in the United States.* Send curriculum vitae and references by 31 March 1992 to: **Barbara Hayes, Ph.D., Chairperson, Division of Pharmaceutical Sciences, College of Pharmacy and Health Sciences, Texas Southern University (TSU), 3100 Cleburne, Houston, TX 77004.** *TSU is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

RADIOECOLOGIST

A full-time **ASSISTANT RESEARCH FACULTY** position is available at the University of Georgia's Savannah River Ecology Laboratory located on the U.S. Department of Energy's Savannah River Site in Aiken, South Carolina.

The person in this position will conduct research on the dynamics and distribution of radionuclides in aquatic and terrestrial ecosystems. Research will involve field work in sites contaminated with radioactive materials, gamma spectroscopy measurements, kinetics experiments with plants and animals, and development of predictive simulation models to evaluate human and ecological risk. Qualifications must include a Ph.D. in radioecology or closely related field, appropriate experience with radioisotopes, computer modeling skills, and U.S. citizenship.

Send a résumé, reprints of several relevant publications, and names of four references by 17 April 1992 to:

Dr. Carl L. Strojan
Chair, Radioecology Search Committee
Savannah River Ecology Laboratory
Drawer E
Aiken, SC 29802

An Equal Opportunity/Affirmative Action Institution. Women and minority candidates are particularly encouraged to apply.

**EMORY UNIVERSITY
SCHOOL OF MEDICINE
DEPARTMENT OF RADIATION ONCOLOGY
RESEARCH POSITIONS**

The Department of Radiation Oncology seeks faculty at the **ASSISTANT, ASSOCIATE AND PROFESSOR** ranks for new positions in the department. Areas of particular interest include the nature and origin of mutations creating dominant and recessive oncogenes, molecular mechanisms of tumor progression, the role of oxygen radicals in radiation toxicity and mutagenesis, differential sensitive of tumor cells to environment and therapeutic agents, and model systems for metagenesis. The department includes a new state-of-the-art Radiation Therapy Center with significant laboratory research space. Collaborations are anticipated with faculty in the Departments of Surgery, Genetics and Molecular Medicine and the Cancer Center. Candidates should hold credentials suitable for faculty appointment at the various ranks with a demonstrated record of research.

Applications will be accepted until positions are filled and should include curriculum vitae and the names of three references and should be forwarded to:

Lawrence W. Davis, M.D.
Professor and Chairman
Department of Radiation Oncology
The Emory Clinic
1365 Clifton Road, N.E.
Atlanta, GA 30322

Affirmative Action/Equal Opportunity Employer.

BASIC SCIENCE RESEARCH NEPHROLOGISTS. The Pennsylvania Center for Molecular Studies of Kidney Diseases at the University of Pennsylvania seeks several individuals at the **ASSISTANT OR ASSOCIATE PROFESSOR** level who will bring their basic science research program into an already active research division currently supporting 25 postdoctoral fellows. Research space and resource assistance for implementation of a laboratory program will be provided by the Renal-Electrolyte Division through the Department of Medicine in conjunction with a Molecular and Cell Biology Core at the institution. The research interests of our program are diverse, and we seek additional faculty who might bring new investigative interests to our division, particularly in the areas of signal transduction, development, inflammation, molecular transport, connective tissue, or diabetes. While such individuals should be Board-certified or Board-eligible in nephrology, these positions will involve a major commitment to research and the training of research-oriented postdoctoral fellows. Interested individuals should forward a description of their research program with curriculum vitae and two letters of reference to: **Eric G. Neilson, M.D., Chief, Renal-Electrolyte Division, 700 Clinical Research Building, University of Pennsylvania, 422 Curie Boulevard, Philadelphia, PA 19104-6144.** *The university is an Affirmative Action/Equal Opportunity Employer and solicits applications from women and minority persons.*



ROCHE

PhD RESEARCH SCIENTISTS

At Hoffmann-La Roche, remarkable pharmaceutical breakthroughs are the direct result of talented teams of innovators with a firm commitment to discovery, and scientific professionals enjoying an extraordinary level of freedom and resources . . . financial, technical and human.

Our commitment to discovery is exemplified by our \$1 billion annual investment in R&D; and the construction of our new Worldwide Research Headquarters, conveniently located on our 127-acre campus in suburban New Jersey. We offer a generous compensation program . . . and then go beyond to offer a progressive child care center and family-sensitive features which position our benefits among the country's most generous. Opportunities for PhD-level scientists include:

BRONCHOPULMONARY RESEARCH

This is a unique opportunity for a Senior Scientist to create the next generation of novel therapies for asthma and allergies by conceiving, designing, performing and evaluating bronchopulmonary studies which investigate inflammatory mechanisms. Also involves pioneering knowledge of other issues including the role of T-lymphocytes and cytokines, sensory neuropeptides, cell adhesion molecules, selective anticholinergics and airway epithelium. To qualify, we require a PhD in Pharmacology, Biochemistry or Immunology with 2-3 years' postdoctoral experience including expertise in whole animal models of pulmonary mechanics. You must also be conversant in molecular biology/genetics as well as peptide and protein biochemistry. Please refer to Position EM42MW on resume and envelope.

NEUROSCIENCE RESEARCH

We're poised to focus considerable resources on having meaningful impact in the area of cerebral ischemia.

IN VITRO: Define and conduct mechanistic approaches by studying neuroprotective mechanisms in cell cultures. To qualify, we require the level of education and training expected of a professional with a PhD in Pharmacology, Biochemistry or Neuroscience. Experience in research related to cerebral ischemia is desired. Please refer to Position EM42JST on resume and envelope.

IN VIVO: Develop and establish models for identifying and characterizing the neuroprotective properties of test compounds. This will involve creating acute ischemic/stroke models. In addition to a PhD, we require a background in pharmacology or the neurosciences, experience with ischemic models and surgical skills. Please refer to Position EM42JSV on resume and envelope.

BIOANALYTICAL RESEARCH

PROTEIN CHEMIST: Supervise activities associated with the development and implementation of bioanalytical techniques, including protein structure elucidation, protein-protein interaction, protein stability monitoring and glycoprotein analysis. Qualifications include a PhD in Biochemistry, managerial/supervisory experience and an in-depth knowledge of protein chemistry and biotechnology. A minimum of 5 years of industrial experience is preferred. Please refer to Position EM42LFW on resume and envelope.

DRUG METABOLISM

PHARMACOKINETICIST: Lead and manage animal pharmacokinetic and toxicokinetic studies, both independently and in collaboration with Pharmacology and Toxicology; may supervise staff performing routine drug assays; and ensure GLP compliance. PhD and considerable related experience with demonstrated ability to apply sophisticated and/or practical technologies to support pharmacology and toxicology studies are required. Please refer to Position EM42BM on resume and envelope.

MASS SPECTROMETRIST: Implement state-of-the-art procedures to structurally characterize products that result from the biotransformation of therapeutic agents; and join/lead interdisciplinary teams involved with drug discovery and development. Qualifications include a PhD in Chemistry (or a related field), a minimum of 8 years' experience in mass spectrometry/structure identification (including 2+ years in a supervisory capacity), a strong background in key methodologies of mass spectrometry (LC/MS, MS/MS, etc.) and a record of achievements in drug metabolism. Please refer to Position EM42DL on resume and envelope.

For confidential consideration, please send your resume, indicating the code for your position of interest and salary history/requirements, to: **Mrs. Eleanor M. Malone, Staffing Department, Hoffmann-La Roche Inc., Nutley, New Jersey 07110.** We are an equal opportunity employer.



ROCHE

Hoffmann-La Roche

SCIENCE Presents:

Pharmaceutical/Biotechnology Careers in Industry A Special *SCIENCE* Recruitment Advertising Section

The May 8 issue of *SCIENCE* features a *special* section on careers in industry. This first-time supplement to *SCIENCE* is custom-made for your recruitment advertisement and the perfect place to tell *SCIENCE's* readership of science professionals about career opportunities at your pharmaceutical or biotechnology firm.

This *first-time special section* will explore these and other important questions:

- What challenges and incentives does a career in a pharmaceutical or biotechnology firm offer?
- What qualifications are needed?
- How do scientists in the industry view their own careers?

Take advantage of greater exposure by placing your full page ad in this special section. The traditional recruitment section is also available.

Your recruitment ad will receive even more visibility in this issue which will be distributed at the American Society of Microbiology (ASM) in New Orleans, May 26-30.

Don't miss this opportunity, contact Janis Crowley at (212) 496-7704 to reserve your space.

SPACE RESERVATION DEADLINE: TUESDAY, APRIL 21, 1992

Research Assistant Hematopoietic Growth Factors

As a global force in blood cell research, the Lindsley F. Kimball Research Institute is expanding staff to intensify activities in stem cell projects. We have an opportunity at our Manhattan East 60s location for an experienced researcher who will support the work of hematopoietic growth factors.

Involvements include cell purification by physical and/or immunological means, micromanipulation of cells, and specific studies of primary and secondary cultures of normal cells.

Requirements include either a Master's degree with a minimum of two years experience OR a Bachelor's with a least five years experience in cell culture, establishment of cell lines, immunologic phenotyping and viral transformation of cells.

We offer excellent benefits including 100% tuition refund and 26 personal days. Please reply with resume in confidence to: **The New York Blood Center, Manager of Human Resources/HG, 150 Amsterdam Avenue, New York, NY 10023.** Equal opportunity employer M/F/H/V.



Lindsley F. Kimball
Research Institute

A Division of the New York Blood Center

Where concern for the community comes first

WOMEN IN SCIENCE March 13 Reprint

This first-time special section, reprinted from the March 13 issue of SCIENCE, takes an in-depth look at women in science.

This career-issue explores:

- Women's Progress in Science
- Career Advancement
 - Networking
 - Mentoring
- Two Career Couples in Science

Also included are profiles of leading women in science, as well as valuable insights on the key to their success - ones you can use in your own career.

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R & D OPPORTUNITIES AT BOEHRINGER MANNHEIM

HELPING OTHERS LIVE A BETTER LIFE

Boehringer Mannheim Corporation is a growing leader in the field of Medical Diagnostics, Biochemicals and Medical Research. This leadership has been attained through emphasis on quality and team effort. Due to exceptional growth, we currently have opportunities available at our U.S. Headquarters in Indianapolis for the following professionals:



PROTEIN ENGINEERING POSTDOCTORAL SCIENTIST

We are seeking a Postdoctoral Scientist to assist in establishing an aggressive program involving protein engineering. The goal of this program is the generation of unique proteins that serve specific needs in diagnostic laboratory medicine. The candidate should have a Ph.D. in a field which provided 1-3 years experience with various aspects of molecular biology. This background should include purification of mRNA, cDNA cloning, site-specific and cassette mutagenesis, expression of recombinant genes and M13 based sequencing. Knowledge of antibody evaluation and tissue culture helpful. This individual will help solve protein system problems by working in an exciting multidisciplinary environment where world-class training is available. Respond to Dept. A.B.

RESEARCH INVESTIGATOR/ SCIENTIST

We are seeking Ph.D./B.S.-M.S. level professionals with industrial experience in DNA probe assay development. Preference will be given to individuals with documented contributions in the following areas: DNA amplification, assay formatting, non-isotopic labeling, and automation. Strong experimental design and execution skills required. Respond to Dept. N.B.

ANALYTICAL CHEMIST

The successful candidate will have a B.S. or M.S. in Analytical Chemistry with 2-5 years experience in applying HPLC to solve non-routine analytical problems. Experience in HPLC operation, instrumentation, and computerized data collection is required, in conjunction with a proven track record in method development and problem solving. Good communication skills and attention to detail are a must. Respond to Dept. S.L.

At Boehringer Mannheim, we offer an exciting and challenging work environment as well as an excellent compensation and benefit program including 401(K) and relocation package. Qualified applicants should send resume with cover letter, indicating position of interest by department code, for confidential consideration to: Boehringer Mannheim, Human Resources, P.O. Box 50100, 9115 Hague Road, Indianapolis, IN 46250. An Equal Opportunity Employer.

**BOEHRINGER
MANNHEIM
CORPORATION**



Assistant Professor of Biology

The Department of Life Sciences of the University of New England seeks to fill two full-time tenure track positions beginning fall 1992 at the rank of Assistant Professor. Candidates for both positions should have demonstrated interests/experience in interdisciplinary education and alternative teaching methodologies promoting active learning, critical thinking, communication skills, research, and environmental awareness for undergraduate students. Candidates are also expected to participate in on-going departmental curriculum reform. The Department has majors in environmental science/studies, marine biology, medical biology, general biology, and medical technology. A commitment to teaching excellence and contributions to scholarship and professional growth are required of all faculty within the Department.

One position will emphasize teaching majors in biology and environmental studies/science. Teaching responsibilities might include biology for first-year students, genetics, general/advanced physiology, environmental physiology, immunology, and an upper level case studies course for medical biology or environmental majors. A second position will emphasize teaching majors in nursing, physical therapy, and occupational therapy. Teaching responsibilities will include general biology, anatomy and physiology, and microbiology.

Send a cover letter describing interest in the position, statement of teaching philosophy, résumé, names of three references, and sample publications to: Michael Miles, Director of Human Resources, University of New England, Biddeford, ME 04005. Review of applications will begin on March 31st. *The University of New England is an affirmative action/equal opportunity employer. Applications from women and minorities are encouraged.*

Immunologist, Antibody Production

This professional will manage antibody production operation. To qualify, applicants must have 5+ years of production experience in the diagnostic industry and demonstrated expertise in characterization of antibodies and protein purification. We also require extensive experience in the development of hybridoma cell lines, production of monoclonal antibodies using ascites and in vitro methods, and production of polyclonal antibodies. Expertise in cell culture & protein purification & experience with custom and volume antibody production are also important to success in this position. Ph.D. in Immunology a must.

Please send resumes to:
**Human Development, TSI
Washington Laboratories,
6634 Electronic Drive,
Springfield, VA 22151.
Principals only. No phone
calls will be accepted.**

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TSI

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POSITIONS OPEN

DEVELOPMENTAL NEUROSCIENCE Ph.D.

ASSISTANT/ASSOCIATE PROFESSOR, tenure track, to establish a program in developmental neuropharmacology/neurobiology. Projects should include studying effects of toxic insults or early (neurochemical/behavioral) drug exposure and CNS dysfunction. Send curriculum vitae and research plans to: **Dr. William Rayburn, Professor and Chief, Maternal-Fetal Medicine Section, Department of Obstetrics and Gynecology, University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, OK 73190. FAX: 405-271-8547. Application deadline is 30 April 1992. The University of Oklahoma is an Equal Opportunity Employer.**

RESEARCH SCIENTIST. Nichols Institute's Diagnostic Division, a leading innovator in laboratory technology, is seeking a research scientist. Requires a Ph.D. with experience in immunochemistry and immunoassay development; or a B.S./M.S. degree in chemistry, biochemistry or immunochemistry with 3 to 5 years of experience. Must have excellent communication skills and a strong research interest in diagnostic products. We offer a competitive salary and benefits package in a nonsmoking environment. Please send résumés to: **Nichols Institute, Human Resources, 33608 Ortega Highway, San Juan Capistrano, CA 92690-6130. FAX: 714-728-4985. Equal Opportunity Employer.**

QUANTITATIVE ECOLOGIST—FISHERIES.

Immediate opening for a quantitative fisheries ecologist with expertise in applying statistical and population models in assessments and population analyses of regional fisheries. The position (Assistant Marine Scientist-Contract) at the Marine Resources Research Institute, South Carolina Wildlife and Marine Resources Department (SCWMRD), is on a federally funded contract. Emphasis is on collecting and analyzing long-term fishery-independent sampling data, primarily on southeastern reef fishes. Ph.D. required and the successful candidate is expected to participate in field work and to develop and apply innovative analyses. Send preliminary application materials, including curriculum vitae, statement of research interests and goals (three pages), and three letters of reference to: **Fisheries Ecologist Search, Personnel, Marine Resources Research Institute, Marine Resources Division, P.O. Box 12559, Charleston, SC 29422-2559. Filling of this position is subject to receipt of funding. The SCWMRD prohibits discrimination on the basis of race, sex, color, national origin, handicap or age.**

RESEARCH ASSOCIATES SOUGHT FOR A MULTIDISCIPLINARY ACADEMIC ENVIRONMENT

- (1) **POSTDOCTORAL**—molecular biology/enzymology: cloning, expression, kinetics; ethylene biosynthesis pathway.
- (2) **TECHNICAL**—DNA/RNA synthesis: phosphoramidite/phosphotriester, synthesizers, purification, base and support derivatization. Anti-sense/triple helix, genome.
- (3) **POSTDOCTORAL**—bioorganic chemistry: photochemistry or enzymology. Study of biological processes using light. Light-directed synthesis, photoaffinity labeling, caging.

Curriculum vitae and references to: **Professor Michael Pirrung, Department of Chemistry, Duke University, Durham, NC 27706. Duke University is an Affirmative Action/Equal Opportunity Employer.**

RESEARCH FACULTY. Position for Ph.D. to develop research laboratory dedicated to a broad range of problems in plastic and reconstructive surgery. Close working relationship with academic plastic surgeons on biomaterial grafts, microvascular patency and tissue microcirculatory response.

Requires strong background in tissue culture. Experience in soft tissue physiology and small animal models would be helpful. Please send curriculum vitae and names of three references to:

**Search Committee
Division of Plastic and Reconstructive Surgery
Dr. Raymond Dunn
University of Massachusetts Medical Center
55 Lake Avenue North
Worcester, MA 01655**

An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

California Clinical Trials Medical Group has a **SENIOR POSITION IN CLINICAL DRUG RESEARCH** (e.g., CNS and cardiovascular). The successful candidate will be a published physician with a strong scientific background in pharmacology, 5 to 10 years of experience in clinical research, good motivational, interpersonal, and communication skills. Benefit package, and salary will be commensurate with experience. Send curriculum vitae to: **California Clinical Trials Medical Group, 8500 Wilshire Boulevard, Lobby Suite, Beverly Hills, CA 90211; or telephone Nancee at: 310-854-4949 or FAX: 310-854-3965.**

DEPARTMENT OF NEUROSCIENCES SYNTAX RESEARCH

BIOLOGIST. Two positions are currently available for individuals interested in conducting research on models of neurodegenerative disease. Applicants should hold a B.A./B.S., M.S. in the biological sciences, preferably with an emphasis in neuroscience, and have at least 1 year of relevant laboratory experience in the behavioral neurosciences, electrophysiology, and/or neurohistology.

Syntax offers a competitive salary and benefits package. For consideration, please send your résumé to: **Syntax, Staffing Department JH/GS, 3401 Hillview Avenue, Palo Alto, CA 94304. We are an Equal Opportunity Employer.**

RESEARCH ASSISTANT PROFESSOR—ELECTRON MICROSCOPIST: Ph.D. or equivalent with experience in transmission and scanning electron microscopy. Successful applicant will supervise operation and maintenance of shared SEM/TEM facilities and associated laboratories. The facility serves a number of independently funded research programs. Applicant must have experience in current SEM/TEM techniques including immunolocalization and in situ hybridization techniques. The position will have a major service component toward interacting with primary users, but will also permit the applicant to develop independent research projects. Contact: **Henning Birkedal-Hansen, Research Center in Oral Biology, SDB 740, University of Alabama at Birmingham, Birmingham, AL 35294.**

RESEARCH SCIENTIST

Study the mechanism of generalization of absence epileptic seizures: By using electrophysiological (e.g., electroencephalographic, brain mapping, site-specific brain lesioning) and neuropharmacological (e.g., quantitative receptor autoradiography, synaptosomal radioligand binding and ion flux assays) techniques. Requirements: Ph.D. in neuropharmacology. Knowledge in computerized quantitative image analysis, receptor autoradiography, electrocorticography, high-performance liquid chromatography, gas chromatography, rodent brain mapping, brain lesioning, in situ hybridization, ion flux techniques and synaptosomal radio-ligand binding technique. Salary: \$30,686 per year. Job/interview site: Los Angeles, California. Send this ad and résumé to: **Job # AM7624, P.O. Box 9560, Sacramento, CA 95823-0560 no later than 27 March 1992.**

STAFF RESEARCHER (PHARMACEUTICAL CHEMIST). Responsible for research and development of oral dosage forms for peptide/protein delivery. Will design and carry out experiments to determine and investigate the mechanisms controlling macromolecule absorption. Will utilize both in vitro and in vivo model systems to characterize the delivery systems developed. Also responsible for development of model systems to characterize inherent molecule permeability. Ph.D. in pharmaceuticals, pharmaceutical chemistry or chemical engineering. Must be knowledgeable in analytical techniques and polymer chemistry. Must have experience/knowledge in the mechanisms and techniques involved in evaluation of peptide and protein delivery, including covalent coupling of peptides and carriers, in vitro evaluation of protein transport and polymer-based delivery systems, specifically epithelial cell culture techniques and pharmaceutical (oral) controlled release systems. Salary: \$52,000 per year. Send this ad and your résumé to: **Syntax, 3401 Hillview Avenue, Palo Alto, CA 94304 no later than 28 March 1992.**



**THE UNIVERSITY
OF HONG KONG**

Department of Anatomy

Applications are invited for the following posts:

Readership/Senior Lectureship

(tenable from September 1, 1992–Ref. 91/92-71)

Applicants should have a higher degree in a relevant scientific subject or a medical or dental degree. They will be expected to be experienced teachers who can provide academic leadership in the teaching of one or more of the anatomical specialities. They should also have a strong commitment to research with evidence of original achievement and standing in their chosen field.

Lectureship

(tenable from September 1, 1992–Ref. 91/92-79)

Applicants should have a higher degree in a relevant scientific subject with post-doctoral research experience or a medical or dental degree and clinical experience.

Appointees to both posts will be expected to undertake general teaching duties for pre-clinical students of medicine and dentistry in one or more of the anatomical specialities and to contribute to the department's research programmes and supervision of graduate studies. Preference may be given to applicants who have research interests in one of the department's existing areas of expertise which include Anthropology, Cancer Biology, Cell Biology, Neurobiology, Neuroendocrinology and Reproductive Biology. Medically qualified graduates who have just completed their pre-registration year will be appointed as Lecturer at the minimum point of the scale.

Annual salaries (superannuable) are on the scales: Reader HK\$501,120–665,700 (9 points); Senior Lecturer HK\$480,360–645,300 (9 points); Lecturer HK\$309,120–516,480 (11 points) (approx. US\$1=HK\$7.70) as at 12 February 1992. Starting salaries depend on qualifications and experience. At current rates, salaries tax will not exceed 15% of gross income. Children's education allowance, leave and medical benefits are provided; housing or tenancy allowances are also provided in most cases at a charge of 7.5% of salary.

Further particulars and application forms may be obtained from Appointments (40368), Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF, UK; or from the Appointments Unit, Registry, University of Hong Kong, Hong Kong (Fax (852) 5592058, E-mail APPTUNIT@HKUVM1.HKU.HK).

Closes: 15 April 1992.



Most businesses plan for the next fiscal year. We plan for the next millennium.

We're creating an executive level team to meet the challenges of South Florida's current and future water and environmental demands. Only dynamic leaders with exceptional management and technical credentials will be considered to develop and administer our highly visible programs. Only those who thrive in an atmosphere of creative problem solving, with a high regard for bottom line accountability, will succeed.

The District is responsible for environmental and water supply protection for 5 million people in 16 counties. And with over 1,450 employees and an annual budget in excess of \$250 million, strong consensus-building and interdisciplinary communications skills are essential.

Reporting to the Executive Director, these executives will be integral participants in strategic planning of this sophisticated agency. We expect a Master's degree in a related discipline and at least 10 years of demonstrated management expertise with 5 years of executive decision making at a major organization. In support of these top-level executives, we will provide the latest in technology and a highly talented staff of professionals. The following position is now available only to exceptional candidates.

Assistant Executive Director - Water Resource Management
Directs approximately 450 engineers, scientists and technical personnel in Research, Evaluation, Regulation and Planning areas involved with wetland ecosystem research and evaluation, restoration of wetlands, water supply and water quality planning, wetland mitigation and enforcement.

If you're interested in working for a business that really knows how to plan for the future, please send your resume to: Human Resources Division, Re: S/31392/WRM, South Florida Water Management District, 3301 Gun Club Road, West Palm Beach, FL 33416.

Equal Opportunity Employer M/F/V/D.

South Florida Water Management District

When we talk about the environment, we mean business.

POSITIONS OPEN

RESEARCH SCIENTISTS MOLECULAR BIOLOGY

Two openings to join group studying (1) tissue-specific gene expression and (2) ion transport and water movement in mucin-producing exocrine glands. Requires strong "hands-on" experience in eukaryotic molecular biology (e.g., construction of libraries, "expression cloning" in eukaryotic cells, vector design, purification and characterization of transcription factors). Group is multidisciplinary in nature (protein purification and sequencing, rDNA methods including transgenics, Mab production, patch-clamping, fluorimetric determination of ion concentration). Salary will be highly competitive and commensurate with experience. Applications, including curriculum vitae and the names of three references, should be sent to: **Dr. Lawrence A. Tabak, University of Rochester, School of Medicine and Dentistry, 601 Elmwood Avenue, Box 611, Rochester, NY 14642. Telephone: 716-275-3441; FAX: 716-473-2679. The University of Rochester is an Equal Opportunity/Affirmative Action Employer. We especially encourage women and members of underrepresented groups to apply.**

PROTEIN BIOCHEMISTRY MILES INC.

The Pharmaceutical Division of Miles Inc. (formerly Cutter Biologicals) is seeking a **RESEARCH BIOCHEMIST** with experience in the purification of proteins of therapeutic interest from natural or recombinant/hybridoma sources. The ideal candidate will have a Ph.D. in a biological discipline with 2 to 3 years of academic/industrial experience. Proficiency in state-of-the-art biochemical characterization, viz. structure-function relationship, HPLC/FPLC techniques, epitope mapping via monoclonal antibody probes, is desired. Please send curriculum vitae to:

**JoAnn McHugh
Miles Inc.
4th and Parker Streets
P.O. Box 1986
Berkeley, CA 94701**

STAFF SCIENTIST POSITION WOODY PLANT PATHOLOGIST PLANT MOLECULAR BIOLOGIST

The USDA Forest Service, Northeastern Forest Experiment Station, Delaware, Ohio, is seeking a woody plant pathologist/plant molecular biologist for a staff scientist position. The incumbent is to work in the area of tree pathogen/host interactions at the molecular level, and work towards the development of biological or biorational agents or methods for the control of tree diseases. The successful candidate will be expected to establish an independent and vigorous research program. A Ph.D. and U.S. citizenship are required. Salary is commensurate with experience (GS/GM 12/13, \$38,861 to \$46,210). Send curriculum vitae and the names and addresses of three references to: **Dr. James Slavicek, USDA Forest Service, 359 Main Road, Delaware, OH 43015. The USDA Forest Service is an Affirmative Action/Equal Opportunity Employer.**

WILDLIFE DISEASE SPECIALIST. The U.S. Fish and Wildlife Service is searching for a wildlife disease specialist to develop a program that identifies and addresses wildlife disease problems in Hawaiian wildlife, particularly avifauna. The position is located in the State of Hawaii. Candidates should have broad experience in epidemiology, diagnostic pathology, and disease control in free-ranging wildlife. Duties will include development of a network of cooperating federal and state agencies to address wildlife disease problems, and conduct of field investigations, postmortem examinations and disease control activities. *Must be a U.S. citizen.* Recruitment for this federal position will be at the GS-12 (\$38,861 to \$50,516) or GS-13 (\$46,210 to \$60,070) level, plus 15 to 25% cost-of-living allowance as applicable, depending on qualifications. For information contact: **Dr. Thomas J. Roffe, National Wildlife Health Research Center, 6006 Schroeder Road, Madison, WI 53711; telephone: 608-271-4640. All applicants will be considered without regard to race, creed, color, sex, age, national origin, political affiliation, or any other nonmerit factors.**

POSITIONS OPEN

RESEARCH ASSISTANT/BASIC SCIENTIST

Applications are invited for two research assistant positions in the Department of Genitourinary Pathology, American Registry of Pathology. Applicants for one position should have publication and experience in pathology, preferably urologic pathology. The second position is for a basic scientist interested in molecular biology. Salary for each position is \$36,000. Applicants will join a strong department concerned with consultation, education, and research in pathology and pathobiology. Interested applicants should send curriculum vitae, a list of publications and two references to: **F. K. Mostofi, M.D., AFIP-CPG, Armed Forces Institute of Pathology, Washington, DC 20306-6000. Deadline for applications is 1 May 1992.**

RESEARCH SCIENTIST. Conducts research on the nature and the physiological and biochemical process involved in the formation of the arginine-derived moiety(ies) EDRF/NO. Perform research using nonadrenergic noncholinergic innervated smooth muscle preparations including rat anococcygeus muscle and bovine retractor penis muscle to study the nature of nonadrenergic noncholinergic neurotransmitter. Research will include investigating smooth muscle relaxants including nitrovasodilators by using pharmacological and physiological techniques such as organ baths, perfused cascade system and measurement of cyclic nucleotides. Ph.D. in pharmacology and 3 years of experience as research scientist or 3 years of experience as research assistant required. Previous research experience must have included the identification of therapies for patients diagnosed with hypertension, nervous system irregularities, gastrointestinal and cardiovascular diseases. Research must have involved the study of action of neurotransmitters on the smooth muscles by a comparison of the sensitivity of the inhibitory factor, and a comparison of hemoglobin and erythrocytes as inhibitors of smooth muscle relaxation. Research must also have included the nature and physiological and biochemical process involved in the formation of the arginine-derived moiety(ies) EDRF/NO. Forty hours, 8:15 a.m. to 4:55 p.m.; \$54,000 per year. *Must have proof of legal authority to work permanently in the United States.* Send résumés to: **Illinois Department of Employment Security, 401 South State Street-3 South, Chicago, IL 60605, Attention: D. Rule, Reference #V-IL-4890-R. No calls. Two copies of your résumé required. An employer-paid ad.**

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POSTDOCTORAL RESEARCH TRAINING FELLOWSHIPS

Fellowships available to residents of North America with Ph.D., M.D., or comparable degree and less than 1 year of postdoctoral laboratory experience by application date for beginning training in basic biomedical research. The 3-year award consists of a stipend of \$25,000 per year for each of the 3 years; \$2,000 per annum research allowance; travel to fellowship location; annual meeting. Application deadline 15 August 1992; fellowships activate following July. For application forms, write or telephone: **The Helen Hay Whitney Foundation, 450 East 63rd Street, New York, NY 10021; telephone: 212-751-8228.**

DOCTORAL PROGRAM IN MOLECULAR AND CELLULAR BIOLOGY AND PATHOBIOLOGY. Interdisciplinary program seeks qualified candidates interested in fundamental molecular and cellular biology and its application to disease. Stipends of \$10,000 to \$15,000 available on a competitive basis. Contact: **Director, MCBP Program, College of Graduate Studies, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.**

POSITIONS OPEN

SENIOR RESEARCH SCIENTIST, Department of Immunology and Infectious Diseases (Groton, Connecticut)—Responsible for research and development of new drugs which will treat arthritis. To work with a project team to discover potential new therapies for arthritis. Research and develop scientific approaches to be used in discovery of new drugs to treat and slow down disease. To work in close collaboration with a staff of medicinal chemists who are involved in design, preparation and improvement of new drugs. Requirements: Ph.D. in pharmacology or equivalent; 2 years of experience in job offered or 1 year of experience as researcher, pharmacology; research experience must include use of in vitro and in vivo models to develop antiarthritic drugs. Forty hours per week; \$64,000 per year. Send résumé to: **Job Service, Technical Unit, Connecticut Department of Labor, 200 Folly Brook Boulevard, Wethersfield, CT 06109, J.O. #3096289. No calls please.**

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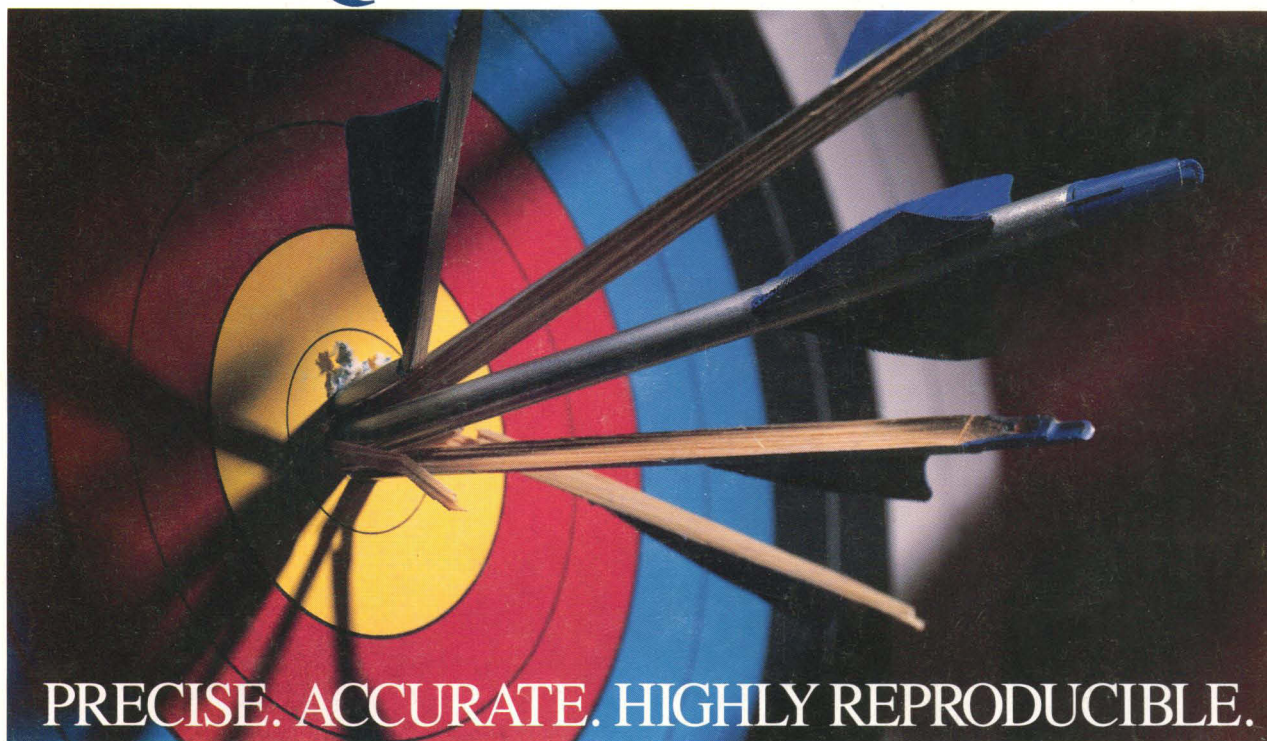


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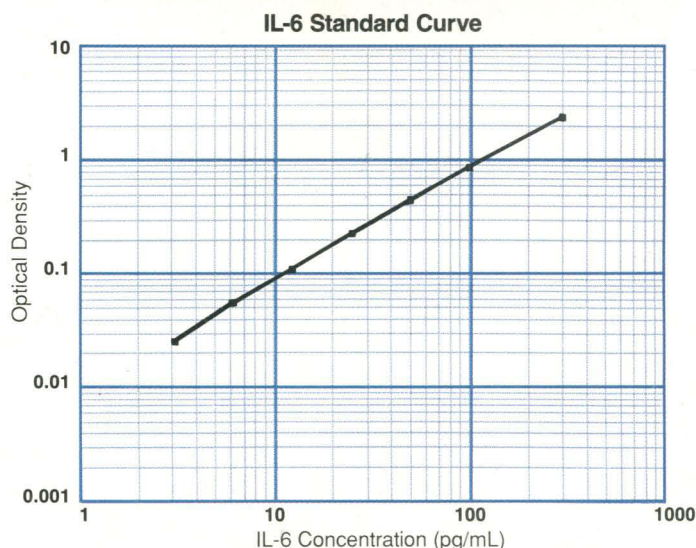
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