

Science

PERSONNEL PLACEMENT

LINE CLASSIFIED ADVERTISEMENTS

- **Deadlines:** Ads are due by Thursday, 10 a.m., 2 weeks prior to the issue date. *Science* is published each Friday, except the last Friday of the year. Advertisements must be submitted in writing.
- **How to Submit a Classified Ad:** Prepare double-spaced typewritten copy. Do not include any abbreviations. *Science* will edit and typeset ads according to *Science* guidelines. Deadline for applications stated in ad must be at least 2 weeks after date of publication. Include billing information, and desired publication date.
- **Mail or FAX materials to:**
Science Classified Advertising
 1333 H Street, N.W., Room 940
 Washington, DC 20005
 Telephone: 202-326-6555
 FAX: 202-682-0816
- **Rates:** Ads are \$41 per line; \$410 minimum. One line equals 52 characters and spaces; centered headings equal 32 characters and spaces. A 3% cash discount is granted to all prepaid ads. If you would like *Science* to give estimated cost, indicate on letter.
- **Ads from Outside the U.S.:** Prepayment made in U.S. dollars by checks drawn on U.S. banks is required.
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DISPLAY PERSONNEL ADVERTISEMENTS

For rates and information about fractional display ads (all ads 1/8 page and larger) and all Marketplace listings, contact:
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 1515 Broadway
 New York, NY 10036
 Telephone: 212-730-1050
 FAX: 212-382-3725

CONDITIONS: Personnel advertising is accepted only with the understanding that the advertisers do not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap or sexual preference. The AAAS encourages employers to actively recruit and employ underrepresented minority groups. *Science* reserves the right, at its discretion, to decline to publish advertisements submitted to it.

POSITIONS OPEN

ASSISTANT PROFESSOR SECTION OF GENETICS DUKE UNIVERSITY MEDICAL CENTER

The Section of Genetics at Duke University Medical Center invites applications for tenure-track, junior level faculty positions. Individuals utilizing genetic approaches to address problems in most any important area of biology will be considered. The Section of Genetics is a newly created academic unit that offers a cohesive and interactive research environment as well as an extremely attractive and generous package of research support. Applicants should forward curriculum vitae, a statement of research plans, and the names of three references to: Dr. Joseph R. Nevins, Section of Genetics, Duke University Medical Center, P.O. Box 3054, Durham, NC 27710. *Duke University is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR/GENETICIST. The Department of Biology at Hood College has reopened the search for a geneticist. This is an assistant professor tenure-track position to begin 1 January 1992. The successful candidate will teach undergraduate genetics, participate in the Introductory Biology 101 course and teach at least two graduate courses in biomedical sciences. Hood College is a small liberal arts college with a significant nontraditional age student population and a graduate program. The Biology Department offers undergraduate B.A. degrees in biology and environmental studies, an M.S. in environmental biology and an M.S. in biomedical science. Qualified applicants must have a Ph.D. degree, teaching experience and a commitment to research with students. *Women and minority candidates are encouraged to apply.* Send curriculum vitae, undergraduate and graduate transcripts, evidence of teaching effectiveness, statement of research interests, and three letters of recommendation to: Dr. Ann Boyd, Department of Biology, Hood College, Frederick, MD 21701, by 30 September 1991. *Hood College subscribes to the policy of hiring only U.S. citizens and lawfully authorized alien workers. Equal Opportunity Employer.*

ASSISTANT OR ASSOCIATE PROFESSOR

The Department of Pathobiology in the School of Public Health and Community Medicine at the University of Washington announces four to five immediate faculty position openings at either the assistant or associate professor level. Positions require an M.D. or Ph.D. with an established record of independent research as demonstrated by peer-reviewed publications and/or competitive grant proposals. We are seeking individuals with five or more years of postdoctoral experience in three distinctive areas of growth regulation with the following qualifications:

- Experience that includes all of the following: (1) genetic control of the cell cycle, (2) extensive experience in all aspects of mammalian virology, and (3) extensive experience in organotypic culture of stratified squamous epithelium from neonatal epidermis and stratified and secretory epithelium from adult uterine cervix. The candidate will be expected to independently develop novel systems for the organotypic culture of a variety of lining epithelial tissues.
- Research in molecular biology of multidrug resistance and gene regulation in response to anti-tumor agents, with emphasis on the MDR1 gene and its product; extensive experience in studying the mechanisms and molecules controlling transcription.
- Experience in receptor/effector interactions; the isolation, cloning, and characterization of novel cellular receptors involved in cellular inflammatory responses and second messenger signaling; plus the development of new technologies and assay systems for such studies; broad experience with flow cytometry and its varied applications (sorting, calcium mobilization, expression cloning analysis).

The successful candidates are also expected to participate in teaching and precepting graduate students in the department. Applicants should send a letter of interest, curriculum vitae, and names and addresses of a minimum of four references to: George J. Todaro, M.D., Chair, Search Committee, Department of Pathobiology, SC-38, University of Washington, Seattle, WA 98195. The application deadline for these positions is 4 October 1991.

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

POSITIONS OPEN

DEPARTMENT OF BIOCHEMISTRY MICHIGAN STATE UNIVERSITY

The Department of Biochemistry seeks applications for a tenure-track position at the ASSISTANT PROFESSOR rank. Applicants should have demonstrated productivity and evidence of potential for independent research in the areas of protein structure or plant biochemistry. Candidates from groups currently underrepresented in academic science are encouraged to apply.

The Department of Biochemistry has a large family conducting research in most areas of contemporary biochemistry and molecular biology, providing both a stimulating scientific atmosphere and opportunities for research collaboration. The department occupies a modern research building with well-equipped research and teaching laboratories, and has vigorous undergraduate, graduate, and postdoctoral training programs.

Applicants should submit curriculum vitae, a description of research accomplishments and future interests, and have three letters of recommendation sent on their behalf to: Dr. John E. Wilson, Chair, Department of Biochemistry, Box S, Michigan State University, East Lansing, MI 48824. To assure consideration, applications should be received by 1 December 1991. *Michigan State University is an Equal Opportunity/Affirmative Action Employer.*

MOLECULAR OR CELLULAR MARINE INVERTEBRATE BIOLOGY. Department of Biological Sciences, University of California, Santa Barbara, seeks applicants for tenure-track research and teaching position at ASSISTANT PROFESSOR level in modern marine invertebrate molecular or cellular biology, effective 1 July 1992. Candidates sought doing innovative and productive research with marine invertebrate systems, aimed at elucidating basic biological mechanisms. Research areas may include, but are not confined to: differentiation; growth control; cellular recognition; symbiosis; tumorigenesis; clonality versus sexuality; sensory or other signal transduction; motility; etc. Teaching will include invertebrate biology at undergraduate level, and instruction in area of research specialization or biotechnology at graduate level. Unique facilities for research with marine organisms available, including new Marine Biotechnology laboratory building in which successful candidate will be accommodated. Applicants should have a minimum of 1 year of postdoctoral. Interested candidates should submit curriculum vitae and arrange to have three letters of recommendation, three to five relevant publications, and a statement of research interests sent to: Chairman, Department of Biological Sciences, University of California, Santa Barbara, CA 93106. Deadline for submission of completed applications is 1 December 1991. *The University of California is an Equal Opportunity/Affirmative Action Employer. Proof of U.S. citizenship or eligibility for U.S. employment required.*

FACULTY POSITIONS IN NEUROBIOLOGY NEUROBIOLOGY RESEARCH CENTER AND DEPARTMENT OF CELL BIOLOGY UNIVERSITY OF ALABAMA AT BIRMINGHAM (UAB)

Two tenure-track positions in neurobiology are available at the ASSISTANT OR ASSOCIATE PROFESSOR level. Appointments are on a 12-month basis. Faculty will be located in new Neurobiology Research Center space and receive nationally competitive salary and start-up funds. The successful candidates will be expected to conduct an active, extramurally funded research program. These are primary research positions with some teaching responsibilities in graduate neurobiology or medical neuroanatomy. Particular consideration will be given to individuals using contemporary tools of biophysics, cell biology, or molecular biology. Access to shared facilities, including cell culture suites, molecular biology core, image analysis and confocal microscopy, and super computer network, is available in the center. UAB is a major biomedical research center with thriving graduate programs in neurobiology, cell and molecular biology, and physiology and biophysics. A primary emphasis of the university is the vigorous expansion of the basic and clinical neurosciences.

Applicants should send curriculum vitae with a statement of research interests and have three letters of reference sent by 30 September 1991 to: Michael J. Friedlander, Ph.D., Director, Neurobiology Research Center, University of Alabama at Birmingham, Birmingham, AL 35294. *UAB is an Affirmative Action/Equal Opportunity Employer.*

National Center for Research Resources
National Institutes of Health

CHIEF Library Branch

*Applications accepted from
August 12, 1991 to September 30, 1991*

The National Institutes of Health (NIH) is one of the largest biomedical research centers in the world, with a staff of about 13,000. The NIH Library, a component of the National Center for Research Resources, provides comprehensive library services to all of the institutes, centers, and divisions that constitute NIH. It is the focal point for the exchange of information in support of research and clinical activities conducted at NIH. The Library's collection consists of approximately 160,000 bound volumes of periodicals, 85,000 books, and 3,500 journal subscriptions. The staff is made up of 54 employees, 25 of whom are professionals, with additional contract and student support.

Candidates must have an ALA-accredited advanced library degree or equivalent professional experience. Background must demonstrate progressively higher administrative and supervisory responsibilities. A background of education in the biomedical sciences is desirable. Candidates should have knowledge of and involvement with current issues and developments in health sciences librarianship and advanced technological competence in library automation and electronic information management, including experience in networking applications and use of local and wide-area networks. Candidates must have been at a level of difficulty comparable to that of the next lower pay grade (GM-14) in the Federal Service for a period of at least one year. The grade of the position is GM-15 with a salary range of \$61,643 to \$80,138 per annum. The selectee may be required to serve a supervisory/managerial probationary period.

***Applications must be received by
September 30, 1991.***

Further information and qualification requirements can be obtained by contacting:

Mr. Ron Canada
National Center for Research Resources
National Institutes of Health
Building 31, Room 3B50
9000 Rockville Pike
Bethesda, Maryland 20892
Telephone: (301) 496-5621
Fax: (301) 402-6375



NIH is an Equal Opportunity Employer

REQUEST FOR APPLICATIONS

Toward New Therapeutic Strategies for Cystic Fibrosis

NIH-Approved But Unfunded Applications

The Cystic Fibrosis Foundation (CFF) invites highly meritorious applications that have been approved by the National Institutes of Health (NIH) but remain unfunded to apply for CFF support. Proposed projects must have been reviewed by an NIH study section and presented to an Institute council within six months of submission to the CFF. Applications must fall within the upper 40th percentile of NIH-approved applications.

Specific areas of investigation to be supported include but are not limited to:

- Potential therapeutic approaches to reverse the underlying cystic fibrosis (CF) defect and subsequent pathogenesis;
- Model systems to study the regulation and correction of defective cellular processes;
- Abnormal ion transport mechanisms in CF and the relationships to the structure and function of the CF gene's protein product.

In addition to the NIH review, CFF will evaluate the relevance of the project to the overall CF effort. Proposed projects must have the potential of making a unique and significant contribution to developing new approaches to the treatment of cystic fibrosis.

CFF support will be determined by project scope. Projects may be funded up to the amount approved by the NIH. Funding will be limited to a maximum period of two years. No funds for indirect costs will be provided.

Applications are being accepted on a continuing basis. Investigators are encouraged to contact the Foundation to discuss the potential relevance of their work to cystic fibrosis. For more information, contact Dr. Robert J. Beall, CFF Executive Vice President for Medical Affairs.



6931 Arlington Road
Bethesda, MD 20814
(301) 951-4422

TOXICOLOGISTS

Battelle, a world leader in providing safety, efficacy and registration services for pharmaceutical, chemical and government clients, is expanding in the area of routine and specialty mammalian toxicology. Multiple positions are available as described below.

Senior Toxicologists These positions involve designing and directing general toxicity and non-clinical safety studies, project/program management, client interaction, protocol design, technical interpretation, and report writing. A relevant PhD and a minimum of 5 years of experience, including a detailed familiarity with FDA and EPA regulatory processes and GLP, is required. Professional certification is desirable.

Junior Toxicologists These positions provide growth opportunities for a career in mammalian toxicology. A recent PhD in a relevant discipline and/or a post doctoral assignment are the expected credentials for these entry-level positions. Regulatory agency and GLP experience is preferred.

Battelle offers competitive salaries, comprehensive benefits and career development opportunities. Qualified candidates are encouraged to send their resumes to: **Mr. Richard Shaw, Battelle, 505 King Ave., Dept. 103, Columbus, Ohio 43201-2693.** An Equal Opportunity/Affirmative Action Employer M/F/H/V.



Battelle

... Putting Technology To Work

RESEARCH SCIENTIST

BIOLOGICAL PROCESS SCIENCES

SmithKline Beecham Pharmaceuticals, a world leader in pharmaceutical research, has an opportunity available for a Scientist to join its Biological Process Sciences Group in our Biopharmaceutical R&D Division. The incumbent will be responsible for the management and scientific leadership of the Fermentation Microbiology group (with an emphasis on recombinant microbial systems). He/she will also supervise/perform experiments designed to develop highly productive and cost-effective media, as well as supervise the maintenance of the microbial cell collection.

Qualified candidates will have a Ph.D. in Microbial Physiology, Microbial Genetics or a related discipline, preferably with three to six years of postdoctoral experience in an industrial setting. Candidates must have demonstrated experience in optimization of fermentation processes for the production of heterologous gene products and excellent oral and written communication skills.

Our state-of-the-art research facility is located in suburban Philadelphia, near Valley Forge, PA. We offer a competitive compensation/benefits/relocation package, as well as a stimulating and challenging work environment. For prompt consideration, please submit your C.V. and the names of three references to: Nancy Hasson, Employment Administrator, #H0181, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.



SmithKline Beecham
Pharmaceuticals

CMM Center for Molecular Medicine Berlin-Buch, Germany

New developments in cellular and molecular biology have considerably furthered our understanding of the processes involved in health and disease. The use of advanced methodologies in molecular biology is increasingly leading to renewed contacts between clinical research and the basic sciences. The rapid development in these scientific fields necessitates joint efforts across traditional barriers in academic structures.

Following the recommendations of the German Science Council and an international expert panel, the Ministry of Research and Technology of the Federal Republic of Germany and the State of Berlin have decided to establish the **CMM-Center for Molecular Medicine** in Berlin-Buch, Germany. The new center, which will employ approximately 600 people, will provide new opportunities for biomedical research. An important goal is to achieve close cooperation between the basic sciences and clinical research.

Close scientific cooperation between the Center and the universities in Berlin as well as with the surrounding hospitals is desired. The Center will also have about 60 hospital beds for clinical research.

The **CMM-Center for Molecular Medicine**, Berlin-Buch, will endeavour to further the development of molecular medicine by creating experimental and clinical research groups in which molecular and cellular biological methods will be used for investigations in the areas of oncology, immunology, neurobiology and cardiovascular research, as well as in basic issues of molecular biology, cell physiology and genome research. Several independent working groups will be integrated in the respective areas.

Qualified scientists with an established scientific record and a strong interest in cooperative biomedical research are invited now to apply for positions as:

Research Group Leader (C4, C3) Junior Research Group Leader

The remuneration will be according to German university standards. Interested individuals should submit the usual materials as well as a detailed statement on research interests and how they intend to pursue these to:

Detlev Ganten, M.D., Ph.D.
CCM-Center for Molecular Medicine
c/o KAI
Otto-Nuschke-Str. 22/23
O-1086 Berlin
Germany
Tel.: +49-30-392 86 83
Fax: +49-30-392 96 58

Further information on research topics and organizational structure is also available from the above address.

POSITIONS OPEN

PURDUE UNIVERSITY DEPARTMENT OF ANIMAL SCIENCES VERTEBRATE DEVELOPMENTAL BIOLOGIST

A 12-month, tenure-track position with specialty in embryonic/fetal development at the rank of **ASSISTANT PROFESSOR**. (80% research and 20% teaching). The candidate will be expected to: (1) develop a vigorous research program in vertebrate developmental biology; (2) participate in a multidisciplinary research program with scientists in areas of genetics, physiology, growth biology and nutrition; and (3) teach a graduate or undergraduate course. Qualifications should include a Ph.D. in developmental biology/embryology and experience in molecular genetics and embryo tissue culture (stem cells). Postdoctoral experience as well as an understanding of potential applications to animal agriculture are desirable. Applicants should submit a letter of application and detailed résumé by 1 November 1991 and have three letters of recommendation mailed to: **Dr. B. G. Harmon, Head, Department of Animal Sciences, Lilly Hall 3-115, Purdue University, West Lafayette, IN 47907-1151. Purdue University is an Equal Opportunity/Affirmative Action Employer.**

COGNITIVE PSYCHOLOGIST CORNELL UNIVERSITY

The Department of Psychology at Cornell University is considering candidates for a tenure-track **ASSISTANT PROFESSORSHIP** in any area of cognition. Areas of specialization include but are not limited to: memory, attention, language and speech processing, concepts, knowledge representation, reasoning and problem solving, mathematical psychology, motor control and action. The position will begin in August 1992. Review of applications will begin 15 November 1991. Interested applicants should submit curriculum vitae, reprints or preprints of completed research, and letters of recommendation sent directly from three referees to:

**Secretary, Cognitive Psychology Search Committee
Department of Psychology
Uris Hall
Cornell University
Ithaca, NY 14853-7601**

Cornell University is an Equal Opportunity/Affirmative Action Employer.

MICROBIOLOGY AND IMMUNOLOGY ASSISTANT/ASSOCIATE PROFESSOR POSITIONS

The Department of Microbiology and Immunology, The Medical College of Pennsylvania (MCP), invites applications for two tenure-track positions at the Assistant or Associate Professor level to commence 1 July 1992. The department is expanding and relocating to a new well-equipped research/education building (BL3, molecular biology, flow cytometry, biocontainment animal, mass spectroscopy facilities) on a 15-acre wooded residential campus 15 minutes from center city Philadelphia. We are recruiting faculty with research interests in (1) molecular aspects in immunology and (2) molecular aspects of host-pathogen interactions. Collaborative opportunities exist with active research groups in immunogerontology, immunotherapy, molecular virology, and molecular biology of pediatric bacterial and AIDS-associated opportunistic pathogens. Applicants should possess Ph.D. or equivalent degree, postdoctoral experience, demonstrated excellence in research accomplishments, and potential for developing a strong extramurally funded research program. Current extramural funding is required for associate professor position. Teaching is limited to team-taught graduate and medical microbiology and immunology courses. Teaching responsibilities for new assistant professors will be minimal. Salary, start-up funds and fringe benefits are competitive.

MCP is an independent, private medical college and a component of the third largest health care system in Philadelphia. Applicants are requested to send curriculum vitae, statement of research accomplishments and future plans, and the names, addresses, and telephone numbers of three references to: **Dr. Page S. Morahan, Professor and Chairman, Department of Microbiology and Immunology, The Medical College of Pennsylvania, 3300 Henry Avenue, Philadelphia, PA 19129.** Deadline for receipt of applications is 1 December 1991, or until suitable candidates are found.

Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

MOLECULAR BIOLOGIST

The Department of Basic Sciences at the University of Southern California School of Dentistry is inviting applications for a tenure-track position at the **ASSISTANT PROFESSOR** level although qualified applications at all academic levels are encouraged and given serious consideration. The department has a broad base of research activities, an excellent record of federal funding, and a National Institutes of Health training grant. The position allows for a 75% or more research time commitment. Preference is given but not limited to research in the area of prokaryote or eukaryote molecular biology of infectious disease. Collaboration with other investigators and joint appointment in related university departments is available and encouraged. Salary is commensurate with qualifications and experience. Applicants should submit (1) curriculum vitae, (2) a brief statement of research interests, and (3) the names and addresses of three references to: **Dr. Howard M. Landesman, Dean, University of Southern California (USC), School of Dentistry, 925 West 34th Street, Los Angeles, CA 90089-0641. USC is an Equal Opportunity, Affirmative Action Employer.**

FACULTY POSITION

ASSISTANT PROFESSOR OF MARINE BIOLOGY. Pay range: 1-3; College of Arts and Sciences, University of Hawaii at Hilo, general funds, full-time, tenure-track, 9-month type appointment, to begin approximately January 1992, pending position clearance and funding. Duties: Teach undergraduate courses in marine biology, applications of statistics to marine systems, general biology, and area of specialty; conduct research and publish results; counsel and advise students; participate in marine science summer program for additional compensation; participate in the academic functions of the new Kalakaua Marine Education Center, the Department of Biology and the College; perform service to the community. Minimum qualifications: Doctorate in one of the biological sciences, certified SCUBA diver with scientific diving experience. Desirable qualifications: marine invertebrate ecologist, previous undergraduate teaching experience, strong background in statistical applications. Minimum annual salary: \$29,916. Applications: send letter of application, current curriculum vitae, and three letters of recommendation to: **Dr. L. E. Hallacher, Biology Department, College of Arts and Sciences, University of Hawaii at Hilo, Hilo, HI 96720-4091.** Application deadline: postmarked no later than 30 September 1991.

An Equal Employment Opportunity/Affirmative Action Employer.

INTEGRATIVE NEUROSCIENCE ASSISTANT PROFESSOR

The University of California, San Francisco, seeks applications for one or two tenure-track faculty positions in the newly formed W. M. Keck Foundation Center for Integrative Neuroscience and the interdepartmental Neuroscience Graduate Program. Departmental appointments for this position will be in the Department of Physiology and/or the Department of Psychiatry. The successful applicant will develop an independent research program involving some aspect of integrative neuroscience and will participate in graduate and professional teaching. The research may use any combination of approaches including the traditional techniques of systems neuroscience and new approaches employing biological or computational methods. Applications should include curriculum vitae, a statement of research interests, reprints of selected publications, and the names and addresses of three individuals who have been asked to submit letters of recommendations. *Women and minorities are encouraged to apply.* Materials should be sent to: **Chairman, Integrative Neuroscience Search Committee, Department of Physiology, Box 0444, University of California, San Francisco, CA 94143-0444. University of California, San Francisco, is an Equal Opportunity/Affirmative Action Employer.**

SCIENCE welcomes placement of line classified ads by FAX. Please include name and telephone number for our confirmation call when transmitting ad to:

FAX NUMBER: 202-682-0816

POSITIONS OPEN

ASSOCIATE PROFESSOR OF RESEARCH.

The Division of Occupational and Environmental Medicine at the University of Southern California seeks a faculty member to take a major role in an epidemiologic study to determine the chronic respiratory effects of air pollutants on children. A track record in air pollution research is required with expertise in both health effects assessment and exposure quantification. Proven abilities in management, data collection and analysis, and technical writing also required. Send curriculum vitae to: **J. M. Peters, M.D., 1420 San Pablo Street, B-306, Los Angeles, CA 90033.**

FACULTY POSITION

The Department of Biochemistry, Purdue University, is searching for candidates at the **ASSOCIATE OR FULL PROFESSOR** level for a position supported in part by the Walther Cancer Research Institute. The successful candidate will have a strong record of research accomplishments in a relevant area of mammalian molecular biology, such as regulation of gene expression, oncogene function, signal transduction, membrane receptors, retroviral studies, and the like. He/she will participate in the departmental teaching program, assume a leading role in the activities of the Purdue Cancer Center, and be an active participant in the programs of the Walther Institute.

Applications for this position should include curriculum vitae, a statement of research interests, documentation of grant support, and the names and addresses of three references. Nominations of candidates are most welcome. Send materials to:

**Search Committee
Purdue University
1153 Department of Biochemistry
West Lafayette, IN 47907-1153**

Purdue University is an Affirmative Action/Equal Opportunity Employer.

The Theoretical Physics Institute at the University of Minnesota seeks to make one or two appointments at the level of **PROFESSOR** in the area of condensed matter theory. One or both of these might be an endowed Chair. The appointees will have tenure in the School of Physics and Astronomy. Appointments may begin as early as 1 July 1992. The closing date for applications is 30 November 1991. Candidates are expected to present evidence of unusual creativity, supported by publication records and letters of recommendation from recognized leaders in condensed matter physics. Nominations and/or applications for this position should be sent to: **Chair of the Search Committee, Theoretical Physics Institute, University of Minnesota, 116 Church Street SE, Minneapolis, MN 55455. The University of Minnesota is an Equal Opportunity Educator and Employer.**

THE UNIVERSITY OF THE WEST INDIES ST. AUGUSTINE, TRINIDAD

Applications are invited for the **CHAIR** in zoology. All major disciplines will be considered.

Annual salary range: TT\$98,640 to TT\$119,004 plus annual regional allowance of TT\$20,340.

Passages, pension, housing allowances, study and travel and book grants, etc.

Applications naming three referees and detailing qualifications and experience to the **Campus Registrar** as soon as possible. Further particulars sent to all applicants who may request referees to write direct to **Registrar**.

CHAIRMAN, DEPARTMENT OF PHYSIOLOGY.

Georgetown University School of Medicine. The Georgetown University School of Medicine is seeking a new Chairman of the Department of Physiology. Candidates are expected to demonstrate the capacity for leadership of an active research program in molecular or cellular physiology and direct the teaching programs of the Department of Physiology which lead to M.S., M.D. and Ph.D. degrees. The Georgetown University Medical Center provides a strong environment in basic and clinical research and its expanding programs provide an environment conducive to growth in physiology. Individuals interested in this opportunity should apply to: **Jeffrey Cossman, M.D., Chairman, Physiology Search Committee, Georgetown University School of Medicine, 3900 Reservoir Road, N.W., Washington, DC 20007. Georgetown University is an Equal Employment Opportunity/Affirmative Action Employer.**

The Science of Success

Syntex has earned its reputation in the pharmaceutical industry for superior and innovative research. Our strong commitment to R&D has opened new doors on patient care around the world. We currently have several Ph.D level scientist positions at our research headquarters in Palo Alto, CA.

Postdoctoral Fellow

Applicants are invited to consider this postdoctoral fellowship to investigate the role of the tumor necrosis factor and TNF-receptor mediated signal transduction pathways. The molecular analysis of the two TNF-receptors, particularly in blocking murine fat-cell differentiation and in promoting dedifferentiation, is of special interest. Experience in molecular biology, biochemistry and developmental biology is desired.

Staff Researcher—Dosage, Design & Development

You will be responsible for the design, development and testing of transdermal formulations and delivery devices. Both in vitro and in vivo models will be used. A familiarity with polymer and adhesive matrices is required so that studies can be designed to elucidate release characteristics from these matrices. A Ph.D in Pharmacy, Chemistry or a related field is required with actual industrial or academic pharmaceutical experience a plus. Candidate should have a strong physical chemistry background with an understanding of HPLC and a familiarity with diffusion cells including inotophoretic systems.

Staff Researcher—Drug Metabolism

This position will focus on pharmacokinetic and metabolic issues associated with the discovery and selection stages of the drug development process. This will involve interacting with a multidisciplinary team (chemists, pharmacologists and toxicologists) where excellent verbal and written communication skills are essential. You must have a Ph.D in Chemistry (Medicinal, Analytical), Biochemistry or a related field with demonstrated experience in the design, implementation, interpretation and reporting of both in vitro and in vivo studies to define absorption, metabolism and excretion of new drug candidates. Hands-on experience with development of analytical assays (HPLC, GC), separation and purification of drug metabolites, and the design/conduct of in vitro enzymatic reactions is essential.

Syntex offers competitive salaries commensurate with experience, a relocation program and a comprehensive benefits package. For consideration, please send your resume to: SYNTEX, Staffing Department JH/SR, 3401 Hillview Avenue, Palo Alto, CA 94303. We are an equal opportunity employer.



Department of Health and Human Services
Public Health Service • National Institutes of Health
National Heart, Lung, and Blood Institute

Opening Date: August 30, 1991

Closing Date: September 30, 1991

(All applications must be postmarked by the closing date.)

DIRECTOR

DIVISION OF EPIDEMIOLOGY AND CLINICAL APPLICATIONS

The National Heart, Lung, and Blood Institute is recruiting a Director for its Division of Epidemiology and Clinical Applications (DECA). The Director will coordinate the planning, direction, and evaluation of a scientific research effort in the prevention, diagnosis, and treatment of cardiovascular, lung, and blood diseases, with particular emphasis on the prevention of these diseases and the translation of basic and clinical research findings to large patient populations, population subgroups, whole communities, and the general population. The Division itself is divided into two major programs, with a staff of approximately 85 employees.

This is a Civil Service position in the Senior Executive Service (SES), with base salary from \$87,000 to \$100,500 per year depending on qualifications. SES members are eligible for various bonuses and awards, and physicians are eligible for payments of up to \$20,000 per year, although total compensation cannot exceed the rate for Executive Level 1 (currently \$138,900 per year). Alternatively, candidates 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. U.S. citizenship required.

Mandatory professional/technical qualifications are a medical doctorate, and research experience in multicenter clinical trials administration and/or design methodology and in prevention and/or demonstration areas of cardiovascular, blood, or lung diseases, epidemiology or biostatistics.

Mandatory managerial/executive qualifications include evidence of management of a basic or clinical research program, demonstrating ability to assume leadership responsibilities in developing program goals; representing the program to outside groups; directing program planning, execution, and evaluation; and conducting a fair and equitable employment program, including the attainment of EEO objectives.

Candidates who meet the mandatory qualifications will be further evaluated by the Search Committee on the degree to which they exceed the minimally qualified level of the mandatory managerial/executive qualifications, and on the following desirable qualifications such as: scientific reputation/peer recognition, training and education in cardiology or cardiovascular diseases beyond the M.D. degree, leadership of a basic or clinical research or research administration program, and honors and awards indicative of outstanding contributions to the field of cardiology or cardiovascular, lung, or blood diseases.

Application forms may be obtained from and should be returned with a Curriculum Vitae and Bibliography to:
Susan Zimbro, Personnel Management Specialist, National Institutes of Health, National Heart, Lung, and Blood Institute, Building 31, Room 5A28, 9000 Rockville Pike, Bethesda, Maryland 20892, (301) 496-6477. Additional information may be obtained from: Dr. Barbara Packard, Chairman, DECA Director Search Committee, National Institutes of Health, National Heart, Lung, and Blood Institute, Building 31, Room 5A03, 9000 Rockville Pike, Bethesda, Maryland 20892, (301) 496-6331.

NIH is an Equal Opportunity Employer

POSITIONS OPEN

BOSTON UNIVERSITY CHAIR DEPARTMENT OF BIOMEDICAL ENGINEERING

Boston University's College of Engineering invites applications and nominations for the position of Chair, Department of Biomedical Engineering. The department currently has 18 full-time faculty with annual sponsored research exceeding \$3 million, 81 graduate students and 130 upperclass undergraduates. The current research activities of the faculty include auditory, fields and tissues, molecular, neuromuscular, respiratory, and vision research. The department has grown steadily over the last decade, and currently has two associated centers. We seek a distinguished engineer/scientist with a proven research record to lead the department in its continuing growth.

A letter of interest or nomination, curriculum vitae, and the names of at least three references should be sent to: **Allyn Hubbard, Ph.D., Chair, Biomedical Engineering Search Committee, Boston University, 44 Cummington Street, Boston, MA 02215.** Please telephone: 617-353-2815 for additional information if desired.

An Equal Opportunity, Affirmative Action Employer.

SCIENTIFIC DIRECTOR AND CHIEF EXECUTIVE OFFICER MONTANA

The Deaconess Research Institute in Billings, Montana, is now accepting applications for a Scientific Director and Chief Executive Officer.

Qualified candidates will have demonstrated ability to obtain external research support and develop/expand research program(s). While no disciplinary structure has been set for the Institute, applicants should have a demonstrated interest in aging-related research. In addition to research, other duties will include recruitment of up to ten additional research scientists who can attract and maintain external funding. This is also a key position regarding the Institute's fund raising efforts. Billings is Montana's largest city with an incredible array of recreational opportunities in every direction. Yellowstone Park is just 2 hours away by car. Hunting, fishing, boating, camping, hiking, skiing and sightseeing are just minutes from your doorstep!

For application and information call 1-800-325-1774. Send résumés describing research and program development experience to: **Employment Coordinator—M, P.O. Box 37000, Billings, MT 59107.** *Equal Opportunity Employer.*



**Deaconess
Research
Institute, Inc.**

ASSISTANT DEAN NORTHWESTERN UNIVERSITY

Applications are invited for the post of Assistant Dean for Physical Environment, College of Arts and Sciences, a 12-month non tenure-track staff appointment reporting to the Dean of the College. This position has an important role in furthering the college's teaching and research missions. Among its responsibilities are space and facilities management, including maintenance of 1 million gross square feet in 35 buildings, coordination of design projects, implementation of large-scale renovations; major equipment, including computers, furnishings, copiers; direct control of a \$400,000 budget; review of research grant proposals and research staff appointments; security, safety, and emergency activities. Preferred qualifications: facilities and accounts management experience, typically as assistant chair of a university experimental science department, the Ph.D. degree, college teaching experience, excellent interpersonal skills, first-rate oral and written skills. Send cover letter, résumé, and names, addresses, and telephone numbers of three referees to: **Search Committee, Office of the Dean, College of Arts and Sciences, Northwestern University, 1918 Sheridan Road, Evanston, IL 60208.** Screening of applications will begin 23 September 1991 and continue until the position is filled. *Hiring is contingent on eligibility to work in the United States. Women and members of minority groups are encouraged to apply. Northwestern University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

MOLECULAR DIAGNOSTICS

The State University of New York (SUNY) Health Science Center at Syracuse is seeking an **ASSOCIATE DIRECTOR** for its Molecular Diagnostics Laboratory. The Health Science Center is a tertiary care university hospital serving the greater upstate New York area. The individual hired for this position will be responsible for laboratory administration and the research/development of new procedures.

Candidates must have a doctoral degree, 4 years of postdoctoral experience, and be able to document training in genetics. ABMG certification/eligibility in clinical molecular genetics is preferred. Please send a letter of application, curriculum vitae, and names of three references to: **Constance K. Stein, Ph.D., Chair of Search Committee, Division of Clinical Pathology, 750 East Adams Street, SUNY Health Science Center, Syracuse, NY 13210, telephone: 315-464-4716.** *An Equal Opportunity/Affirmative Action Employer.*

EXECUTIVE DIRECTOR THE AMERICAN ASSOCIATION OF IMMUNOLOGISTS

The American Association of Immunologists (AAI) seeks an individual to assume the responsibilities of Executive Director on or about 1 April 1992. The AAI is a not-for-profit professional society with headquarters in Bethesda, Maryland. It is comprised of almost 6000 members who are M.D.'s or Ph.D.'s, principally, and who are active in immunologic/biomedical research. The AAI sponsors an annual scientific meeting, publishes *The Journal of Immunology*, and is active in educational programs, public affairs activities and minority affairs. It is a corporate member of the Federation of American Societies for Experimental Biology (FASEB).

Under the general supervision of the council of the AAI, the full-time Executive Director is responsible for the administrative and business operations of the association and of *The Journal of Immunology*. The Executive Director is required to have experience in administration, financial management and contract negotiations, and meetings management. Scientific background in the biomedical sciences is highly desirable but not mandatory. The salary is negotiable.

Interested applicants should send their résumé, a list of reference and a statement attesting to their qualifications to: **Executive Director Search, The American Association of Immunologists, 9650 Rockville Pike, Bethesda, MD 20814.** Applications must be received on or before 11 October 1991. *The AAI is an Equal Opportunity Employer.*

DIRECTOR SEALY CENTER FOR ONCOLOGY DIVISION OF HEMATOLOGY-ONCOLOGY UNIVERSITY OF TEXAS MEDICAL BRANCH (UTMB)

Applications are invited for the positions of Director, Sealy Center for Oncology, and Director, Division of Hematology-Oncology, Department of Medicine. Responsibilities include leadership of academic and medical oncology programs in research, education, patient care and training. The center director should be a highly qualified, research-oriented oncologist with internationally recognized credentials and demonstrated leadership skills; the division director should be a highly qualified oncologist with both clinical experience and research excellence. Resources to create a leading academic oncology center and first-class division include new faculty positions, an endowed chair, state and foundation support, generous start-up funds, outstanding laboratory and clinical facilities, excellent scientific environment and colleagues, and a large clinical population. Outstanding candidates will be considered for a combined position. Address applications to: **Chairs of Search Committees, Hematology-Oncology/Sealy Center for Oncology, 4.118 John Sealy Hospital, Route E69, c/o Departments of Medicine and Microbiology, University of Texas Medical Branch, Galveston, TX 77550.** *UTMB is an Equal Opportunity, M/F/H/V, Affirmative Action Employer. UTMB only hires individuals authorized to work in the United States.*

POSITIONS OPEN

OPPORTUNITY IN CONNECTIVE TISSUE RESEARCH SENIOR SCIENTIST/DIRECTOR

Shriners Hospital Research Unit, Portland, Oregon, has a position for a senior investigator with an established research program. Research interests could include, but are not restricted to, osteogenesis, chondrogenesis and skeletal morphogenesis and should complement existing programs. The person will also assume the responsibilities of administrative research director.

Shriners Hospital provides a dedicated funding source for basic research. The unit in Portland has extensive resources for protein chemistry, biophysics, molecular biology and ultrastructural analysis. The current focus of departmental research is molecular structure and functional relationships of connective tissue components in normal and diseased conditions.

Please send letters of interest and curriculum vitae to: **Michael Sussman, M.D., Chief of Staff, c/o Barbara Nagle, Administrative Assistant, Research Unit, Shriners Hospital, 3101 S.W. Sam Jackson Park Road, Portland, OR 97201.**

Shriners Hospital maintains a drug/alcohol-free workplace. Equal Opportunity Employer.

CLINICAL CYTOGENETICIST

The Division of Medical Genetics of the Thomas Jefferson University has an opening to fill the position of the **DIRECTOR** of clinical cytogenetics laboratory. Case load includes CVS, amniotic fluids, bloods, bone marrow and solid tissues. Applicants should have experience in clinical cytogenetics, a Ph.D. or M.D. degree, and be Board-certified in cytogenetics by the American Board of Medical Genetics. Inquiries and curriculum vitae should be sent to: **Laird Jackson, M.D., Division of Medical Genetics, Thomas Jefferson University, 1100 Walnut Street, Philadelphia, PA 19107.** Telephone: 215-955-6955; FAX: 215-955-7560.

DIRECTOR, FOOD SAFETY/ TOXICOLOGY CENTER

The Food Safety/Toxicology Center will be a multi-college center for teaching, research and outreach in this subject area. The director will be responsible for the development and administration of an innovative research program probing a broad range of scientific problems pertinent to the safety of the nation's food supply. In keeping with Michigan State University's role as a land-grant university, the director will also have the responsibility for communicating the research findings to the public and for overseeing the outreach functions of the center.

The center will play a leadership and coordinating role in food safety/toxicology research at Michigan State University (MSU), interacting closely with several colleges and many departments. The director will participate in planning the construction and utilization of an already authorized new building containing laboratories and office space.

The director will interact with both state and federal agencies, as well as universities, foundations and businesses. Candidates should hold a doctoral degree and have an established national reputation in a field appropriate to the mission of the center. An academic appointment will be offered to the director by an appropriate department of the director's choice. Applications or nominations, accompanied by curriculum vitae, or requests for additional information, should be sent to:

**Dr. Robert W. Leader
Office for Research and Graduate Studies
226 Administration Building
Michigan State University
East Lansing, MI 48824-1046**

Deadline for receipt of applications is 1 November 1991.

MSU is an Affirmative Action/Equal Opportunity Institution.

MEDICAL WRITER/EDITOR

Strong general biomedical background; flair for writing; ability to read scientific literature and learn new subjects quickly. For medical projects company that writes articles, lecture slides, videos, and other educational/promotional materials for pharmaceutical clients. Send résumé to: **Dr. S. Phillips, Project House, 21 Shepard Avenue, Teaneck, NJ 07666.**

ENVIRONMENTAL SCIENCES MANAGER

EG&G Energy Measurements, Inc., a prime contractor to the U.S. Department of Energy at the Nevada Test Site, has an immediate opening for an Environmental Sciences Manager in Las Vegas, Nevada.

The selected candidate will be responsible for planning, organizing, supervising, and directing the activities of the department including all personnel actions, training career development, developing goals and objectives, operating budgets, capital equipment requirements and funding; developing and maintaining effective customer interface; and in consultation with supervisors will define project teams and make personnel assignments.

Additionally, candidate will develop and maintain liaison with managers in Santa Barbara, CA and Las Vegas, NV on existing programs, changing needs, and new initiatives; in consultation with project manager will formulate the overall technical direction of the project teams, negotiate scope of work, review all work packages; and be responsible for implementing appropriate company policies and procedures.

The qualified candidate will meet the following requirements:

- B.S. degree in biology, zoology, wildlife management or related field of Environmental Sciences.
- Ten years' applicable experience which includes five or more years of increasing responsibility in supervision and management of technical salaried and technical hourly personnel.
- Demonstrated ability to plan, organize, and direct activities to meet management goals and interact with customer personnel in the development of work and scheduling of activities.
- Experience in resource management, budgeting, and budget control.
- Professional level communication skills in making presentations and negotiating department requirements and criteria.

EG&G Energy Measurements, Inc., offers a competitive wage and benefits package. If your qualifications match our requirements, please send your resume to:

EG&G Energy Measurements, Inc.
Attn: Michael Kimberlain/38-91
P.O. Box 1912
Las Vegas, Nevada 89125

An Equal Opportunity Employer. U.S. Citizenship required. Pre-employment physical examination, which includes a drug screening, is required.



ENERGY MEASUREMENTS

Setting Standards For Success

The Goddard Space Flight Center, Laboratory for Hydrospheric Processes is involved in a program of theoretical and experimental research in the oceanic, cryospheric, and hydrologic sciences. Activities include the development of remote sensing methods for hydrospheric variables, the incorporation of remote sensing data into numerical models, and subsequently investigation of the role of hydrospheric process in global and climate change.

The Laboratory will be a major participant in the upcoming NASA flight projects involving TOPEX, SeaWiFS, NSCAT, TRMM, and the NASA Earth Observing System. Data from these missions will support the WCRP and IGBP initiatives of TOGA, WOCE, JGOFS and GEWEX.

The Laboratory is seeking candidates for the following positions:

Associate Chief

The incumbent performs the full range of laboratory management duties with special emphasis on hydrospheric processes, airborne and space-based remote sensing flight projects, and sensor development. He/she will assist in the formulation, advocacy and direction of key research and technology programs within the Laboratory. The incumbent will be expected to perform his/her own research and pursue new directions as appropriate. The incumbent will represent the Center through an active role in professional and scientific organizations.

Head, Oceans and Ice Branch

The incumbent oversees scientists utilizing space-based observations, in-situ measurements, and numerical models to research the global ocean circulation, climate phenomenon such as El Nino, global chlorophyll concentration and oceanic primary productivity, sea ice variability, and ice sheet mass balances. Research programs are currently underway in physical oceanography, biological oceanography, air-sea interaction, and cryospheric processes. Computer facilities available include a CRAY YMP and a network of UNIX workstations. The incumbent will be expected to perform his/her own research and pursue new directions as appropriate.

For both positions, salary is from \$61,643 to \$80,138 (GM-15) depending on experience and qualifications. The successful candidate must be a recognized research scientist with an appropriate professional and academic background (preferably Ph.D.) in a related Earth Sciences discipline area with emphasis on the hydrosphere. The incumbent will have increasingly responsible experience directly related to the duties of the position.

Candidates should submit a resume or Application for Federal Employment (SF-171) by September 15, 1991, to NASA/Goddard Space Flight Center, Employment and Employee Services Branch, Code 115E, Greenbelt, MD 20771. Inquiries should be directed to Dianne Hagerty at (301) 286-8319. U.S. Citizenship is required. Equal Opportunity Employer.



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With quarterly revenues of \$18 million plus, a 28% increase over last year, Biogen reported first quarter '91 net income of \$.05 per share, up from \$.01 a year ago. We are well on our way to achieving our strategic goal of building a research-based fully operational biopharmaceutical company. If you're planning to begin, expand or accelerate your career in biotechnology, you should think first of Biogen.

Research Scientist Protein Chemistry

As part of our Protein Chemistry department, you will apply your knowledge of Biochemistry to a wide range of projects being addressed by our protein purification and characterization group. Specific areas of involvement include developing drug candidates for our Endothelial Cell and LFA-3 programs which will involve working with antibodies and other agents such as cross-linked proteins and peptides; continuing our studies of CD4-HIV interaction; studying viral transcription factors as points of therapeutic intervention; and general purification of novel proteins. Requirements include a PhD in Biochemistry or a related field, and a minimum of 2 years' postdoctoral experience.

Research Associate/Associate Scientist

We currently have need for an individual to continue our research efforts in the areas of Endothelial cells and transcription factors through the characterization of both natural and recombinant proteins. The successful candidate will hold a BS or MS in a Life Science and have a minimum of 2 years' experience in a laboratory setting. Knowledge of Bioassay techniques is desirable.

Our compensation and benefits package is one of the best in the industry, and is designed to attract and retain the finest talent available.

To apply for these immediate openings, send your resume to Biogen, Inc., Ref. SMRS830, 14 Cambridge Center, Cambridge, MA 02142. Biogen is an Equal Opportunity Employer.



POSITIONS OPEN

ECOLOGIST PROGRAM DIRECTOR

The National Research Initiative Competitive Grants Program of the U.S. Department of Agriculture (USDA) seeks a qualified scientist to serve as program director for grants administration in the area of water quality [encompassing soil chemistry and biophysics; rhizosphere biology (soil, plant and microbial interactions); plant/water contaminant interactions; and wetland, riparian or forest ecology]. Candidates must have a B.S. or higher degree with major study in biology or a related field of science underlying ecological research. In addition the candidate must have a Ph.D. or equivalent experience in soil chemistry, soil physics, microbiology, ecology, plant physiology or a related discipline of biological, chemical, physical or earth science.

Closing date is 23 September 1991. For information on this position contact Dr. Anne Datko, National Research Initiative Competitive Grants Program, CSRS/USDA, Room 323 Aerospace Building, Washington, DC 20250-2200. Telephone: 202-401-4871. For information on application procedures/forms, contact Ms. Kathy Asmussen, personal staff specialist, telephone: 202-475-4811. *USDA is an Equal Opportunity Employer.*

DEPARTMENT HEAD MEDICAL MICROBIOLOGY AND IMMUNOLOGY

The College of Medicine, Texas A&M University, invites applications for the position of Head, Department of Medical Microbiology and Immunology. The department presently consists of a small, diverse faculty and is located on the campus of a major university with excellent opportunities for interdepartmental and intercollegiate collaboration. Academic responsibilities include both medical and graduate education. Applicants should have an active research program in one of the major sub-disciplines of microbiology and immunology with a proven ability to compete successfully for extramural funding. Qualifications should also include demonstrated administrative and teaching skills. The position is available for the 1991 to 1992 academic year. Submit curriculum vitae and the names, addresses and telephone numbers of three references to: Dr. George Chiou, Department of Medical Pharmacology and Toxicology, College of Medicine, Texas A&M University, College Station, TX 77843-1114. Application deadline: 30 November 1991. *Texas A&M is an Equal Opportunity/Affirmative Action Employer.*

INSTRUCTOR

Entry-level position to conduct collaborative and independent research and to assist in teaching medical pharmacology. Research areas desired include developmental neurobiology or control of cell growth and division. Experience in cell culture and cell biological techniques desirable. Ph.D. with postdoctoral experience required. Applications, including curriculum vitae and names of three references to: Dr. Herbert M. Geller, Department of Pharmacology, University of Medicine and Dentistry of New Jersey (UMDNJ)—Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854-5635. *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.*



POSTDOCTORAL POSITIONS

Applications are invited for postdoctoral positions as an ASSOCIATE to work in the laboratory of Dr. Stephen T. Warren, whose current research involves molecular studies of the fragile X syndrome and the associated FMR-1 gene. Additional studies involve the positional cloning of X-linked disease genes such as Emery-Dreifuss muscular dystrophy utilizing long-range genomic mapping strategies. Qualified candidates should possess either an M.D. or Ph.D. in genetics or biochemistry. Please forward your curriculum vitae and three letters of recommendation to: Dr. Stephen T. Warren, Emory University School of Medicine, Rollins Research Center, Atlanta, GA 30322. *An Equal Opportunity Employer.*

POSITIONS OPEN

The Department of Ophthalmology and Visual Science, Yale University School of Medicine, invites applications for a **TENURE-TRACK FACULTY POSITION** in molecular genetics and biology. The successful candidate should possess a Ph.D./M.D. or Ph.D. or M.D. degree and have demonstrated ability to develop a vigorous research program. Please send a description of career, research interests, curriculum vitae, and names of three references to: Chair, Search Committee, Department of Ophthalmology and Visual Science, Yale University School of Medicine, P.O. Box 3333, New Haven, CT 06510. *Affirmative Action/Equal Opportunity Employer.*

Stanford University announces a **TENURED OR TENURE-TRACK POSITION IN BIOTECHNOLOGY AND SOCIETY**, funded in part by the Henry R. Luce Foundation, to begin in September 1992. The position is open with respect to rank for candidates with outstanding records in research, publication and teaching. Persons with the following background and interests are encouraged to apply: degrees in the biomedical sciences, and/or the history or sociology of recent science; research interests in the economic, social, ethical, and policy implications of current work in molecular biology and biotechnology. Applicants should submit curriculum vitae and statement of current research interest to: Professor Timothy Lenoir, Program in the History of Science, Building 200-31, Stanford University, Stanford, CA 94305-2024. Closing date for applications is 1 November 1991. *Stanford University is an Equal Opportunity/Affirmative Action Employer.*

DEPARTMENT OF HUMAN GENETICS VIRGINIA COMMONWEALTH UNIVERSITY MEDICAL COLLEGE OF VIRGINIA (VCU/MCV)

INSTRUCTOR IN HUMAN GENETICS (Ph.D.) BEHAVIORAL AND QUANTITATIVE GENETICS

Applications are invited for the position of instructor in human genetics specializing in behavioral and quantitative genetics. The appointment is not eligible for tenure. Applicants should hold the Ph.D. degree with research training in behavioral and quantitative genetics. A record of publication, postdoctoral training and capability of developing an independent research program are essential for this appointment. In addition to research experience in genetics, training in psychiatric assessment or a License in Clinical Psychology would be an advantage. Some teaching will be required. Further particulars may be obtained from: Dr. John Hewitt, Associate Professor of Human Genetics, Department of Human Genetics, Medical College of Virginia, Box 3 MCV Station, Richmond, VA 23298-0003, to whom applications should also be addressed.

VCU/MCV is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

MCDONNELL SCHOLAR IN MOLECULAR ONCOLOGY AT WASHINGTON UNIVERSITY SCHOOL OF MEDICINE

The Division of Hematology/Oncology is seeking applications from physician investigators who want to apply the new advances in basic sciences to oncology. The purpose of the program is to serve as a bridge between postdoctorate training and independent faculty status. The awardee will be able to devote all of his/her time to the development of an independent research program in an environment where outstanding senior investigators are available for encouragement and support. The awardee will receive \$375,000 payable over 3 years, including a stipend of \$50,000 per year. The balance of the award is to be used for supplies and technical support at the discretion of the awardee. Candidates must have an M.D. degree or M.D./Ph.D. degrees and have demonstrated outstanding potential for creative investigation.

Applicants should submit curriculum vitae, a statement of research experience and specific interests, and three letters of recommendation postmarked no later than 31 December 1991 sent to:

Stuart Kornfeld, M.D.
Washington University School of Medicine
Box 8125
660 South Euclid Avenue
St. Louis, MO 63110



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Associate Director, Cellular Immunology

Cytel is a leader in the design and development of new pharmaceuticals through discovery and characterization of immune receptors. Our proprietary technology combines expertise in immunology, glycobiology, and chemistry. The company numbers approximately 100 employees and is located in a new 50,000 square foot facility in La Jolla. This is an exceptional opportunity to play a key scientific and management role in building this rapidly growing, well-funded biotechnology company.

The Associate Director of Cellular Immunology will participate in and guide the efforts of a preclinical research and development group consisting of 8-10 Ph.D.'s plus support staff. We are seeking a Ph.D. or M.D. with a strong background in the area of T cell mediated inflammation and cellular immunity including the role of adhesion and/or accessory molecules in lymphocyte trafficking and activation. Additionally, qualified candidates must have a strong record of scientific accomplishment along with proven organizational and leadership skills.

Cytel offers a generous base salary and benefits package along with significant equity opportunity. For immediate consideration, please send your C.V. to **Cytel Corporation, Department BC, 3525 John Hopkins Court, San Diego, California, 92121.**

POSTDOCTORAL SCIENTIST

PULMONARY DRUG DELIVERY

SmithKline Beecham, a worldwide leader in pharmaceutical research, has an immediate opportunity for a postdoctoral fellow, with a background in pulmonary physiology, to join our group working at the forefront of Drug Delivery R&D. This appointment is for a period of two years.

The Postdoctoral Scientist will join a multidisciplinary team investigating the delivery of novel therapeutic agents, including peptides and proteins. The Scientist will investigate the regional deposition and absorption of molecules in the lung. To qualify you should have a Ph.D. and a background in pulmonary physiology and drug delivery. Experience in any of the following areas will also be advantageous: physiology/molecular biology of the lung; *in vivo* evaluation of aerosol deposition/systemic absorption from the lung; gamma scintigraphy.

The position provides a unique opportunity for an outstanding candidate to work with drug delivery and formulation development scientists in designing novel drug delivery strategies.

Our state-of-the-art facility is located in suburban Philadelphia, near Valley Forge, PA. We offer a competitive salary, benefits and relocation package. Please send resume to Helene McConnell, H0121, Employment Administrator, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406. We are an Equal Opportunity Employer, M/F/H/V.



SmithKline Beecham
Pharmaceuticals

CYTOGENETICS

Laboratory Director

Oakwood Hospital, a 615-bed acute tertiary care facility, seeks an experienced Ph.D. Cytogeneticist to be Director of the Cytogenetics Laboratory. The laboratory is the central recipient of specimens for Oakwood Health Services Corporation (OHSC), a 1900-bed, diversified health care corporation in Wayne County, Michigan.

The director will expand the current annual caseload of 1,000 specimens, that includes amniotic fluid, chorionic villus, blood, bone marrow, tissue and solid tumor specimens and develop the laboratory in the area of molecular biology. Additional opportunities include clinical consultation, education, and research.

Competitive compensation and fringe benefits package. Interested parties should call **Dr. Martin Farber** at (313) 593-5839 or send Curriculum Vitae to: **Martin Farber, M.D., Senior Vice President, Oakwood Hospital, 18101 Oakwood Blvd., P.O. Box 2500, Dearborn, MI 48123-2500.** Equal Opportunity Employer.



Oakwood Hospital

A Subsidiary of Oakwood Health Services

POSITION AVAILABLE

PROGRAM DIRECTOR

Directorate for Education and Human Resources

The Directorate for Education and Human Resources of the American Association for the Advancement of Science (AAAS) seeks a Program Director to plan, implement, and manage projects related to science, mathematics and technology education (SMT).

The responsibilities will include developing grants in 1) teacher education for preservice and/or inservice; 2) undergraduate curriculum reform; and 3) science education; oversight of ongoing projects and offices related to SMT including school reform, Bell Atlantic Project, Science Books and Film and other projects, including developing, monitoring, and evaluating multiple project budgets; recruiting, supervising and evaluating staff; representing the Directorate at national and federal education meetings.

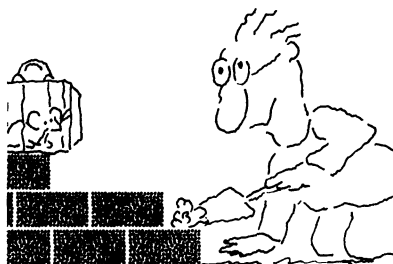
Applicant should have Ph.D. in science, mathematics, engineering or Ph.D. in science or mathematics education; five to ten years prior work experience (directing a science education effort; fundraising; experience in planning, managing and evaluating multi-year funding); demonstrated record of research in education; experience in teacher education and undergraduate curriculum development; supervisory and budget management experience; excellent communications skills.

AAAS offers a competitive salary, excellent benefits, a professional environment, and pleasant surroundings convenient to Metro. Please submit resume, letter of application along with salary requirements to:

Mr. Gregory Stokes
American Association for the
Advancement of Science
Office of Human Resources
1333 H Street, N.W.—Suite 850
Washington, D.C. 20005

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POSITIONS OPEN

Department of Ophthalmology and Visual Science, Yale University School of Medicine. Full-time **ACADEMIC APPOINTMENTS** are available for independent investigators with the possibility of joint appointments with basic science department. Areas of interest include, but are not restricted to, photoreceptor-RPE interactions, immune functions of ocular cells, axonal transport and regulation of RPE cell proliferation and motility, biophysics of transport and neural path finding.

Excellent facilities and environment are available for development of a vigorous research program using contemporary cellular and molecular approaches. Please send curriculum vitae, statement of research interests, and names of three references to: **Chairman, Search Committee, Department of Ophthalmology and Visual Science, Yale University School of Medicine, P.O. Box 3333, New Haven, CT 06510-8061. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION. Available immediately for an NIH-funded project to study mechanisms of P2 receptor-mediated mucous glycoprotein or mucin release from cultured airway epithelial cells. Experience in tissue culture and receptor biology or signal transduction required. Send a résumé and names of three references to: **K. C. Kim, Ph.D., Department of Pharmacology and Toxicology, University of Maryland School of Pharmacy, 20 North Pine Street, Baltimore, MD 21201.**

POSTDOCTORAL POSITION. Available immediately to investigate the molecular genetics of peroxisomal diseases. Requires Ph.D. in basic sciences with two or more years of postdoctoral experience in recombinant DNA techniques. Salary commensurate with experience. Send curriculum vitae and telephone number of three referees to: **Dr. Inderjit Singh, Department of Pediatrics, Medical University of South Carolina, Charleston, SC 29425.**

POSTDOCTORAL POSITIONS AVAILABLE

Opportunities for individuals with strong backgrounds in molecular biology or protein chemistry to join multidisciplinary programs at The University of Rochester Medical Center.

- **Program (1):** Study the regulation of O-glycosylation. Examine elements controlling apo-mucin and glycosyltransferase gene expression.
- **Program (2):** Study signal transduction mechanisms regulating exocrine mucous cell secretion using primary cell-cultures.
- **Program (3):** Study the regulation and structure-function relationship of anion transport proteins.
- **Program (4):** To isolate mucous cell-specific transcripts to help develop mucous cell lines and for studies of mucous cell differentiation.
- **Program (5):** Study the regulation of cell proliferation. Examine role of cell-cycle genes, intracellular pH, and cell-surface carbohydrates.

Submit curriculum vitae and the names of two references to: **Dr. Lawrence A. Tabak, University of Rochester, School of Medicine and Dentistry, Department of Dental Research, 601 Elmwood Avenue, Box 611, Rochester, NY 14642. Telephone: 716-275-3441.**

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

POSTDOCTORAL POSITION. Available November 1991 or later to study surface proteins of *Candida albicans*. Research includes aspects of structure, expression, regulation with morphology and function in host-parasite interactions. Experience with molecular techniques, protein or carbohydrate biochemistry, monoclonal antibodies, or fungi desirable. Send curriculum vitae and names of three references to: **Dr. W. L. Chaffin, Department of Microbiology, Texas Tech University Health Sciences Center, Lubbock, TX 79430.**

POSTDOCTORAL POSITION. Available immediately to participate in structure/function studies of the cystic fibrosis transmembrane conductance regulator (CFTR) protein expressed in a yeast model system. Experience in molecular biology and U.S. citizenship required. Send curriculum vitae and the names of three references to: **Dr. David Bedwell, Department of Microbiology, SDB 801, University of Alabama at Birmingham, Birmingham, AL 35294. Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITION. Available immediately to study the biochemistry and molecular biology of photosynthetic carbon metabolism, with emphasis on the regulation of rubisco activity. Send curriculum vitae and three letters of reference by 30 September 1991 to: **Dr. Jeffrey R. Seemann, Department of Biochemistry/330, University of Nevada, Reno, NV 89557-0014. Equal Opportunity Employer/Affirmative Action.**

POSTDOCTORAL POSITION PLANT MOLECULAR BIOLOGY UNIVERSITY OF STOCKHOLM, SWEDEN

A 2-year postdoctoral position is available from fall 1991 to participate in the cloning and characterization of genes encoding the starch branching enzymes in barley endosperm. The project is part of a Scandinavian Plant Gene Technology Program to improve barley starch as an industrial raw material. Cloned genes will be used as probes both in conventional barley breeding and in analyses of natural and induced barley mutants. As techniques for barley transformation emerge, the genes will also be used to construct transgenic barley plants. Applicants (Ph.D.) should have a strong background in plant molecular biology. Salary according to qualifications and relevant background. Send curriculum vitae, a brief description of research interest, and two letters of reference to: **Dr. Christer Jansson, Department of Biochemistry, The Arrhenius Laboratories, University of Stockholm, S-106 91 Stockholm, Sweden.**

POSTDOCTORAL POSITION FOR RESEARCH IN BONE MARROW TRANSPLANTATION. A position is immediately available in the Bone Marrow Transplantation laboratory in the study of either tumor purging using chemotherapy and monoclonal antibodies, molecular detection of minimal residual disease, or the purification of hematopoietic stem cells. Experience in molecular biology, tissue culture, and immunology is essential, and a Ph.D. degree in molecular biology, immunology, or cellular biology is required. Salary commensurate with experience. Send curriculum vitae and names of three references to: **Mitchell S. Cairo, M.D., Director, Bone Marrow Transplant Program, Children's Hospital of Orange County, 455 South Main Street, Orange, CA 92668.**

POSTDOCTORAL POSITION. Available 1 October 1991 to study gene regulation of reproduction. Experience in molecular biology (PCR of mammalian genes) preferred. Very competitive salary is available. Please send curriculum vitae, three letters of recommendation and copies of relevant publications to: **Dr. Max Rothschild, Department of Animal Science, Iowa State University, 225 Kildee Hall, Ames, IA 50011.**

POSTDOCTORAL POSITION. Available to study ion transport and signal transduction of vascular cells. Research opportunities include: (1) investigation of Na^+ , Ca^{2+} and K^+ transport of cardiac myocytes, vascular smooth muscle cells and endothelial cells of normotensive and hypertensive animals; and (2) investigation of endothelial cell volume regulation and microvascular permeability. Techniques employed in these investigations include nuclear magnetic resonance, radioisotope flux analysis, microspectrofluorometry, and cell culture. Send inquiries to: **Dr. Martha E. O'Donnell, Department of Human Physiology, University of California, Davis, CA 95616. Telephone: 916-752-7626. The University of California is an Equal Opportunity/Affirmative Action Employer.**

POSITION AVAILABLE POSTDOCTORAL FELLOW

A position is available to study the structure/function relationships of Ca^{2+} /calmodulin-dependent myosin light chain kinases. Experimental approaches include site-directed mutagenesis and construction of chimeric kinases to characterize functional domains. Additional opportunities exist for collaborative research in a multidisciplinary training program involving characterization of the biological roles of myosin light chain kinases in cells to analyses of the three-dimensional structures of these enzymes. Previous experience with recombinant DNA methodology is desirable. Please address inquiries to: **James T. Stull, Ph.D., Department of Physiology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9040, telephone: 214-688-6849; FAX: 214-688-2974. An Affirmative Action/Equal Opportunity Employer.**

DEPARTMENT HEAD, PHARMACOKINETICS

Play An Integral Role in the Global Submission Process.

The Medical Research Division of American Cyanamid is recognized as a leader in the research and development of therapeutic compounds. Our products have been instrumental in the treatment of infectious diseases, cancer, cardiovascular and central nervous system diseases. We currently have an opportunity for a Department Head, Pharmacokinetics in our dynamic organization.

Reporting to the Director of Pharmacodynamics Research, the successful candidate will possess a PhD or Pharm D in pharmacokinetics or related field and 10+ years' experience with a documented strong background in Pharmacokinetics and Pharmacodynamics Research with at least 3-5 years' at the supervisory level.

Working closely with Clinical Research, Formulations Research, Statistics, Preclinical Submissions and the Office of Regulatory Affairs, you will be responsible for clinical pharmacokinetics and playing an integral role in the planning and preparation of pharmacokinetics packages for global submissions.

We are located in a new \$150M, state-of-the-art facility in Rockland County, only 25 miles north of New York City. The salary is fully competitive and includes comprehensive benefits. For consideration, send your resume/c.v. with salary history

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to: Personnel, Dept. AY-SCI, Lederle Laboratories, 401 N. Middletown Road, Pearl River, NY 10965. An Equal Opportunity Employer M/F.

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Research Scientist Biochemistry

Organon Teknika/Biotechnology Research Institute conducts research for the Pharma Division of Akzo, N.V., a multinational pharmaceutical and diagnostics company. Our basic research focuses on the development of novel human monoclonal antibodies and tumor associated antigens for the diagnosis and therapy of cancer.

An opportunity is currently available for a Ph.D. scientist with two or more years' postdoctoral experience in protein purification. Experience in the purification of monoclonal antibodies is essential. Recombinant protein purification experience is helpful. The development of novel state-of-the-art purification methodologies for human monoclonal antibodies on both a small and large pharmaceutical scale provides unique scientific challenges to the qualified individual.

Biotechnology Research Institute offers competitive salaries and benefits including relocation assistance and a generous company-matched, pretax savings plan. For consideration, please send your curriculum vitae with cover letter, including salary history and names and telephone numbers of references, to: **Organon Teknika Corporation, Biotechnology Research Institute, 1330-A Piccard Drive, Rockville, MD 20850. Principals Only.** EOE M/H/V/F



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MICROBIOLOGY

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From a single laboratory bench in 1928, Schering-Plough's on-going dedication to the development of new life-enhancing medications has caused us to become one of the world's most successful pharmaceutical organizations. Today, our 2,000 research scientists create medications with sales of over \$3 billion a year. And you can be a part of it.

ASSOCIATE SCIENTIST

You will conduct research to support microbial fermentation development involving microbial bioconversions and generation of secondary metabolic therapeutics.

To be successful, you will need a BS/MS in Microbiology with 2-4 years' academic or industrial experience in the development of microbial fermentations. Familiarity with biochemical procedures necessary, to isolate and characterize enzymes is necessary as is proficiency in culturing and maintaining a variety of microorganisms. Experience with HPLC/GC and/or molecular biology techniques would be an asset.

ASSISTANT SCIENTIST

In this entry-level position, you will be actively involved in the development of methodology for the characterization and assessment of recombinant bacterial cultures. Duties will include the study of host growth characteristics, high level gene expression, product stability and solubility of recombinant gene products.

The successful candidate will possess a B.S. in Microbiology with up to 2 years of related laboratory experience. Familiarity with molecular biology techniques is desirable.

Both positions offer highly competitive salaries, truly superior benefits, and all the challenge and growth potential an international industry leader can offer. Qualified candidates may respond by resume to Personnel Manager KB, AD# DD-91-23, Schering-Plough Research, 1011 Morris Ave., Union, NJ 07083. An equal opportunity employer.



Schering-Plough

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS in metabolic regulation in eukaryotes at Purdue University will become available 1 December 1991. These fellowships will be supported by an NIH training grant for basic scientists and clinicians to conduct research in basic and clinical aspects of metabolic regulation. Current program faculty's research interests are as follows:

- Genes for fatty acid synthesis and regulation of their expression.
- Protein-DNA interaction/regulation of gene expression.
- Regulation of protein-tyrosine phosphorylation.
- Structure and function of membrane transport proteins.
- Growth factors; function of protein tyrosine kinases.
- Genes for muscle development and regulatory factors.
- Structure and function analysis of leucine genes.
- Regulation of membrane structure and function.
- Oncogenes and cellular transformation.
- Enzymology and molecular biology of aldehyde dehydrogenase.
- Genes for aminotransferases, and purine and pyrimidine biogenesis.
- Biochemistry of folate receptors in human cells.

Candidates must be U.S. citizens or permanent residents of the United States. Interested applicants should submit curriculum vitae, three letters of recommendation, and a letter stating their research interests to: **Ki-Han Kim, Department of Biochemistry, Purdue University, West Lafayette, IN 47907-1153. Telephone: 317-494-1666. Purdue University is an Equal Opportunity/Affirmative Action Employer.**

THE MICHAEL D. HIGGINS POSTDOCTORAL FELLOWSHIP INSTITUTE FOR MOLECULAR GENETICS BAYLOR COLLEGE OF MEDICINE

The Michael D. Higgins Postdoctoral Fellowship in Human Genetics is a 2-year fellowship to an outstanding young geneticist (Ph.D. or M.D.) for postdoctoral training in human cytogenetics and/or molecular genetics. This individual must demonstrate a strong desire for a career involving diagnostic laboratory activity including American Board of Medical Genetics certification in cytogenetics and/or molecular genetics. The Higgins Fellowship will involve 1 year of intensive full-time training in diagnostic laboratories and 1 year of research activities aimed at development and application of modern molecular genetic techniques to cytogenetics and/or DNA diagnostic issues. Stipend level is \$35,000 for the first year. Candidates should send a statement of interest including relevant background and career goals, curriculum vitae, and three letters of recommendation by 1 November 1991 to: **Michael J. Higgins Postdoctoral Fellowship, Institute of Molecular Genetics, Baylor College of Medicine, Houston, TX 77030.**

Bonus Distribution
For your Classified Ad
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International Biotechnology Expo
and The
International Genetics Meeting

Our issue of 27 September 1991 will be distributed to scientists attending the International Biotechnology Exposition in San Francisco, CA, 6 to 8 October 1991, and the International Genetics Meeting in Washington, D.C., 6 to 11 October 1991. Deadline for submission of line classified ads: **12 September 1991**

SCIENCE Classified Advertising
Telephone: 202-326-6555
FAX: 202-682-0816

POSITIONS OPEN

FELLOWSHIPS, CELLULAR AND MOLECULAR ASPECTS OF LIPOPROTEIN METABOLISM. The Molecular Medicine Program, Research Medicine/Radiation Biophysics Division, Lawrence Berkeley Laboratory, is seeking trainees (three) interested in pursuing research in one of the following areas: Transgenic mice—synthesis, secretion and metabolism of transgenic lipoproteins and their relationship to atherosclerosis; regulation of apolipoprotein gene expression in CHO cells; role of apolipoproteins in reverse cholesterol transport; role of pro-oxidants and anti-oxidants on lipoprotein structure and metabolism; or physical-chemical parameters affecting in vitro high-density lipoprotein assembly and transformation.

Positions available immediately and funded by an NIH research training program. U.S. citizenship or permanent resident status required. Salary range; \$24,600 to \$35,500, dependent on experience. Applicants should send curriculum vitae, names and addresses of three references, and a summary of research interests to: **Dr. Trudy Forte, Fellowship Program Director, Lawrence Berkeley Laboratory, Donner Laboratory, Berkeley, CA 94720.**

POSTDOCTORAL FELLOW. To study G protein regulation of neural functions using mutant activated G proteins and neuroblastoma cells. Position is funded by an NIDA training grant and hence restricted to U.S. citizens and permanent residents. Reply to: **Dr. R. Iyengar, Department of Pharmacology, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029.**

An Equal Opportunity Employer.

POSTDOCTORAL FELLOW. To study the molecular aspects of cardiac hypertrophy using guinea pigs and baboons as model systems. Candidates should have Ph.D. and experience in basic molecular biology techniques. Send curriculum vitae and three letters of recommendation to: **Dr. Beverly J. Bauer, University of Cincinnati (UC) College of Medicine, Division of Cardiology, Mail Location 542, Cincinnati, OH 45267-0542. UC is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE

Position available for molecular biologist with background in T cells to assist studies of autoimmune arthritis. Salary up to \$35,000. Send curriculum vitae and names of three references to: **Eugene Lance, M.D., Ph.D., Shriners Hospitals for Crippled Children, 1310 Punahou Street, Honolulu, HI 96826.**

An Equal Opportunity Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE MOLECULAR BIOLOGY—MOLECULAR TOXICOLOGY

To study molecular mechanism(s) involved in the expression of proteins following xenobiotic insult. Techniques include cell culture, immunoblot analysis, hybridization analysis (Northern, Southern, etc), PCR, primer extension, DNA library construction/screening, cloning, sequencing, mobility shift assays, transfection, cell-free translation and transcription. Send curriculum vitae and the names of three references to: **Dr. Raymond F. Novak, Director, Institute of Chemical Toxicology, 2727 Second Avenue, Room 4000, Detroit, MI 48201. Wayne State is an Equal Opportunity/Affirmative Action Employer.**

ASSISTANT/ASSOCIATE RESEARCH MOLECULAR BIOLOGIST

Program in Transplant Immunology is offering a position for a molecular biologist/molecular immunologist. Position involves studies of HLA group gene regulation. DNA binding proteins and HLA allele definition utilizing molecular approaches to gain a better understanding of antigen presentation and tolerance induction. Candidates should have Ph.D. degree with at least 2 years of postdoctoral training. Salary range: \$41,600 to \$64,000 depending on experience, and qualifications.

Send curriculum vitae and references to: **Marvin R. Garovoy, M.D., University of California, San Francisco (UCSF), 520 Health Sciences East, Third and Parnassus Avenue, San Francisco, CA 94143-0508.**

UCSF is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

POSITIONS OPEN

POSTDOCTORAL FELLOW

To elucidate signal transduction pathways of PDGF alpha and beta receptors in smooth muscle. Send curriculum vitae and three references to: **Dr. Brian Herman, Department of Cell Biology and Anatomy, University of North Carolina, CB# 7090, Chapel Hill, NC 27599. Equal Opportunity Employer.**

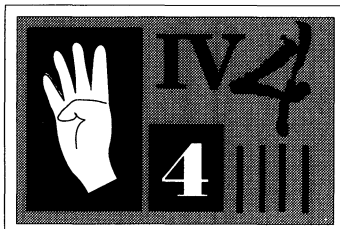
POSTDOCTORAL RESEARCH POSITION IN MOLECULAR HEMATOLOGY/ONCOLOGY. A position is immediately available for a Ph.D. in our Molecular Hematology/Oncology Laboratory to participate in the investigation of either cytokine gene regulation, expression of drug-resistant genes, or the role of antisense oncogenes during lymphoid oncogenesis. Experience in molecular biology is essential and a Ph.D. in molecular biology or immunology is required. Salary commensurate with experience. Send curriculum vitae and names of three references to: **Mitchell S. Cairo, M.D., Director of Hematology/Oncology Research, Children's Hospital of Orange County, 455 South Main Street, Orange, CA 92668.**

INSTRUCTOR OR RESEARCH ASSOCIATE MOLECULAR BIOLOGIST TWO POSITIONS

The Department of Molecular Biology, University of Medicine and Dentistry of New Jersey (UMDNJ) School of Osteopathic Medicine invites applications for two positions at the research associate or instructor level. Experience in protein biochemistry and/or molecular genetics and research interests focused on cell cycle regulation is preferred; however, serious consideration will be given to applicants working in other areas of molecular biology. The successful applicants will work closely with a senior faculty member with the intent of developing extramurally funded research programs and participate in a team-taught course in immunology/microbiology for medical students. Candidates must possess a Ph.D. degree, 2 years of postdoctoral training and show strong potential to generate research funding. Conversion of these positions to tenure-track appointments after 2 years is possible. Send curriculum vitae, with three letters of recommendation, to: **Dr. Richard Schimmel, Acting Assistant Dean for Basic Sciences, 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.**



RESEARCH ASSOCIATE. For university in central Ohio. Develops fast-time resolution physiological methodology (Fura-2 fluorescence and edge detection of change in cell length for intracellular calcium measurements); manufactures double-barrel ion-selective microelectrodes in isolated single cells; works with cultured cells and conducts picrospritzing experiments in neuropharmacology; designs protocols to use traditional acupuncture techniques or electrophysiological approaches to the study of the acutely injured spinal cord, i.e. use stimulation protocols to modify calcium homeostasis in injured spinal neurons. No experience required in the duties described but applicants will qualify with the following: M.S. in physiology or oriental acupuncture and 2 years of research experience with oriental acupuncture techniques, intracellular calcium measurement using Photon Technology International (PTI) Fura-2 fluorescence microscope, manufacturing double-barrel ion-selective microelectrodes and using edge detection (photodiode array interface) devices (experience may be gained concurrent with degree); or, in the alternative, oriental medical diploma and 4 years of research experience with oriental acupuncture techniques and, of the 4 years, 2 years with intracellular calcium measurement using PTI Fura-2 fluorescence microscope, manufacturing double-barrel ion-selective microelectrodes and using edge detection (photodiode array interface) devices. Forty hours per week, 8 a.m. to 5 p.m., Monday through Friday; \$22,000 per year. *Must have proof of legal authority to work permanently in the United States.* Send résumé in duplicate (no calls) to: **J. Davies, JD#1260300, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**



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The Salk Institute Biotechnology/Industrial Associates, Inc., (SIBIA) is expanding its interdisciplinary research programs focussed on the discovery and development of novel therapeutics for CNS diseases, with particular emphasis on neurodegenerative disorders. SIBIA has an established track record in the development of innovative technologies integral to the biopharmaceutical industry. We are currently seeking distinctive candidates for the following positions.

DIRECTOR OF PHARMACOLOGY: Ph.D. and post-doctoral plus 4-7 years in CNS pharmacology with experience in both *in vitro* and *in vivo* pharmacological techniques as applied to neurodegenerative disorders. The ideal candidate will be a recognized leader in CNS pharmacology with an exceptionally broad grasp of molecular/cell biology and neuroscience, and with experience in the drug development process.

DIRECTOR OF CHEMISTRY: Ph.D. and post-doctoral plus 4-7 years in medicinal, organic and/or structural chemistry with experience in both drug design and the drug development process. The candidate must have a strong desire to interact with an interdisciplinary research group to discover and develop novel therapeutic molecules acting through specific receptors and as protease inhibitors.

SCIENTIST: Ph.D. plus 2 or more years post-doctoral experience. Will be involved in the research and direction of expression of cloned voltage- and ligand-gated ion channels in mammalian cells. This position requires experience in molecular biology, recombinant DNA technology, and cell biology.

SCIENTIST: Ph.D. plus 2 or more years of post-doctoral experience in the use of two-electrode voltage-clamp and patch clamp techniques is essential. Electrophysiological characterization of recombinant ion channels and receptors expressed in *Xenopus* oocytes and mammalian cells. Experience with single-channel recordings is preferred.

ASSOCIATE SCIENTIST: Molecular/Cellular Biologist with BS/MS or equivalent degree. Minimum five years experience required in molecular and cellular biology, mammalian cell transfection, and cell line development. Experience in receptor and/or ion-channel expression desirable. Must have ability to independently plan, execute, analyze, and report on experiments.

SENIOR RESEARCH ASSOCIATES: BS/MS or equivalent degree with background in the basic techniques of molecular biology: nucleic acids isolation, blotting techniques, cDNA library construction and screening, restriction mapping, PCR, DNA sequencing, vector construction. Individuals must work independently accepting a significant level of responsibility. Excellent communication (verbal and written) and computer skills a must.

Located in the beautiful area of La Jolla (near San Diego, California), SIBIA not only offers a challenging professional and aesthetic environment, but also an outstanding competitive salary and benefit package. Please send your confidential curriculum vitae with the names of three references to: **SIBIA, Lynn Alba, Human Resources Department, 505 Coast Boulevard South, La Jolla, California, 92037**. SIBIA is an Equal Opportunity Employer.

SIBIA

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BIOTECHNOLOGY/INDUSTRIAL
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POSITIONS OPEN

Calendar of Upcoming Meetings

SCIENCE will be distributed to scientists attending the following meetings:

INTERNATIONAL GENETICS MEETING
6 to 11 October 1991, Washington, D.C.
Issue date: 27 September 1991

BRITISH LAB WEEK
5 to 7 November 1991, London
Issue date: 4 October 1991

GENOME III
21 to 23 October 1991, San Diego
Issue date: 11 October 1991

MINORITY RECRUITMENT PROGRAMS
NIGMS (MARC/MBRS)
3 to 6 November
Washington, DC.
Issue date: 18 October 1991

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ASSOCIATE RESEARCH SCIENTIST POSTDOCTORAL RESEARCH SCIENTIST

Nontenure-track positions available in the Department of Physiology and Cellular Biophysics. Candidates for postdoctoral position must have M.D. or Ph.D. degree and experience in molecular biology and immunology. Candidates for associate research scientist must have in addition at least 3 years of experience in the molecular mechanisms for the pathogenesis of AIDS. Send application with full curriculum vitae to: Dr. Ofra Weinberger, Department of Physiology and Cellular Biophysics, Columbia University, 630 West 168th Street, New York, NY 10032. *Columbia University is an Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSOCIATE

The Pediatric Endocrine Unit at the Shriners Burns Institute, Massachusetts General Hospital, and the Harvard Medical School, is seeking applicants for a research associate to conduct studies of post-lipectomy adipocyte regrowth, lipogenesis and metabolic behavior of regenerating preadipocytes and adipocytes in vivo and in vitro. Previous experience with studies of lipogenesis, tissue culture, cell isolation techniques preferred. Ph.D. degree required. Send curriculum vitae and references to: Lynne L. Levitsky, M.D., Shriners Burns Institute, 51 Blossom Street, Boston, MA 02114. *Women and minorities are encouraged to apply.*

RESEARCH ASSOCIATE. Conduct research in the areas of cellular and molecular basis of autoimmunity, molecular genetics of non-susceptibility for autoimmune disease, experimental allergic encephalomyelitis. Design strategies to identify mechanisms that regulate self-reactivity. Develop transgenic approaches to T-cell regulation. Requirements: Ph.D. in biology, 2 years of experience. Specialized knowledge in culturing and cloning T cells specific for self-antigens, cloning and sequencing of T-cell receptor genes. Ability to make transgenic lines of mice expressing T-cell receptor genes. Salary: \$36,000 per year. Job interview site: Los Angeles, California. Send this ad and résumé to: Job #WS12293, P.O. Box 9560, Sacramento, CA 95823-0560 no later than 15 September 1991.

POSITIONS OPEN

BENTHIC ECOLOGY POSTDOCTORAL RESEARCH ASSOCIATE

Incumbent will manage a research program on the population dynamics of fouling organisms in Chesapeake Bay. Responsibilities will include direction of field personnel and logistics, field and laboratory activities, data management and analysis, report preparation and publication, and development of image analysis techniques for quantifying epifaunal and infaunal communities. Ph.D. required. The program is designed for more than 2 years with the potential for additional grant funding. Experience desired in statistical analysis of ecological data, computer programming, and laboratory experimentation. This is a 12-month, tenure-ineligible position as assistant research scientist with benefits. Send a letter of interest, curriculum vitae, and the names, addresses and telephone numbers of three references to:

Robert J. Diaz, Chair
Postdoctoral Research Associate Search Committee
Virginia Institute of Marine Science
College of William and Mary
Gloucester Point, VA 23062

Review of applications will begin 25 September 1991 and the position will remain open until filled. *The College of William and Mary is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

RESEARCH ASSOCIATES, DEPARTMENT OF NEUROLOGY. Conduct experiments designed to identify and probe structural transitions of the nicotinic acetylcholine receptor. Perform organic and peptide synthesis; purify peptides and proteins via standard and high-performance liquid chromatographic procedures. Chemically modify proteins leading to fluorescence spectroscopic and circular dichroic studies of the receptor. Collaborate with senior investigators and provide guidance for graduate students, medical students and undergraduates; prepare results of research for publication in professional journals. Ph.D. in medicinal chemistry required and 1 year of experience as research associate, Department of Neurology, or 1 year of experience as research assistant required. Previous academic research experience should have included immobilizing biologically active macromolecules, radiolabeling of proteins and developing various enzyme assays using high-performance liquid chromatographic and spectroscopic techniques. Previous academic research experience must also have included publication of research in at least one professional journal. Forty hours, Monday through Friday, 9:00 a.m. to 5:00 p.m., \$21,000 per year. This is a university research position. *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-2812-R. No calls. *An employer-paid ad.*

ASSOCIATE RESEARCH SCIENTIST

Nontenure-track position available in the Department of Physiology and Cellular Biophysics. Applicants must have M.D. or Ph.D. degree and at least 3 years of experience in molecular analyses of neural cell differentiation in amphibia. Required skills include molecular biological techniques, immunohistochemistry and experimental manipulation of the embryo. Send application with full curriculum vitae to: Dr. Jane Dodd, Department of Physiology and Cellular Biophysics, Columbia University, 630 West 168th Street, New York, NY 10032. *Columbia University is an Affirmative Action/Equal Opportunity Employer.*

SENIOR SCIENTIST. Design and execution of exploratory research programs to define novel polymers and auxiliary technology for model systems and product development in polymer and resins group. Improvement of physical and performance properties of waterborne coatings to meet VOC requirements. Optimization of optical properties such as reflectance and scattering of pigmented latex polymer coatings and deficiencies in aqueous latex coatings. Apply backgrounds in chemistry, optics, solid-state technology and polymers. Requirements: Ph.D. in physical chemistry with background in solid-state and optical properties of materials and tools to study polymers light scattering pigments and coatings. Computational and theoretical chemistry background and experience with laser optics. Forty hours per week; \$49,500 a year; submit curriculum vitae or résumé to: Philadelphia Job Bank, 444 North 3rd Street, Philadelphia, PA 19123, Job Order #4382577.

POSITIONS OPEN

RESEARCH ASSOCIATE

Research Associate for university in central Ohio. Conducts developmental biology research utilizing monoclonal antibody production, Western gels, antibody probing of cDNA libraries and recombinant DNA methods; coordinates design of experiments and procedures; analyzes data; writes reports; assists in manuscript and proposal preparations. No experience required in the duties described but applicants will qualify with the following: M.S. in developmental biology and 2 years of experience in antibody production, animal care and recombinant DNA techniques; one of the 2 years in molecular, cellular and developmental biology research utilizing immunological and molecular techniques to study vertebrate regeneration; experience may be gained before, during or after degree. Forty hours per week, 8 a.m. to 5 p.m., Monday through Friday, salary: \$21,612 per year. *Must have proof of legal authority to work permanently in the United States.* Send résumé in duplicate (no calls) to: J. Davies, JO#1260302, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

RESEARCH SCIENTIST. Design and synthesis of organic molecules that serve as probes (substrates and inhibitors) for biologically important macromolecules, including HIV protease renin and several other target enzymes. Conceiving and implementation of multiple-step synthesis of all these target organic molecules. Spectroscopic evaluation of interactions between probe molecules and target enzymes. Enzyme kinetics studies using fluorescence spectroscopy. Solid-phase, automated peptide synthesis. Ph.D. degree in organic chemistry and 3 years of experience as research scientist or 3 years of experience as postdoctoral research fellow or research assistant required. Previous academic experience or employment must have included the design and synthesis of several photoactivable fluorescence probe molecules for studying cell diffusion, use of multiple-step synthesis, purification and characterization of compounds using tools and equipment such as chromatography (TLC, CC, HPLC) and spectroscopy (NMR, MS, UV, IR). Additional previous academic experience or employment must have included the design and synthesis of chromogenic peptidyl substrates for the enzyme HIV protease and the performance of molecular modeling of HIV protease peptide substrates. Applicants must have had one college course in each of the following: (1) physical organic chemistry, (2) quantum chemistry, (3) structural inorganic chemistry, (4) organic reaction mechanisms, and (5) bioorganic chemistry. Forty hours per week, 8:15 a.m. to 4:55 p.m., \$39,000 per year. *Must have proof of legal authority to work in the United States.* Send résumés to: Illinois Department of Employment Security, 401 South State Street—3 South, Chicago, IL 60605, Attention: Ms. D. Rule, Reference #V-IL-2965-R. No calls. *An employer-paid ad.*

Private clinical hospital associated with university seeks **PRINCIPAL INVESTIGATOR** to lead group of molecular biologists and biochemists into study of genes that control cell death in vertebrates. Using results of prior studies of genes ced-3 and ced-4 of the nematode *C. elegans*, researchers will study cell death genes in vertebrates. Ph.D. in neurobiology plus 1 year of experience in postdoctoral associate/neurobiology required. Must have published research on molecular genetics of ced-3 and ced-4, two genes that control programmed cell death in nematode *C. elegans*. Forty hours per week. Salary: \$961.54 per week; no overtime. Send two résumés to: Commonwealth of Massachusetts, Department of Employment and Training, Special Programs, 2nd Floor, 19 Staniford Street, Boston, MA 02114; case #1732.

ELECTRON MICROSCOPE (EM) LABORATORY SUPERVISOR

The Institute of Chemical Toxicology, Wayne State University, is seeking a supervisor manager of the EM facility. Duties involve carrying out research and assisting other investigators requiring EM use. Candidates with experience in autoradiography, immunocytochemistry and in situ hybridization will be given preference. Please send curriculum vitae and names, addresses and telephone numbers of three references to: Dr. D. P. Chopra, Institute of Chemical Toxicology, Wayne State University, 2727 Second Avenue, Room 4000, Detroit, MI 48201. *Wayne State is an Equal Opportunity/Affirmative Action Employer.*

**WESTFÄLISCHE WILHELMS-
UNIVERSITÄT MÜNSTER**

**EXPERIMENTAL PATHOLOGY
FULL PROFESSOR (C4)**

**University of Münster
FR-Germany**

The University of Münster has established a research center for "Molecular Biology of Inflammation". It will finally comprise five new institutes and five associated research groups. The first two positions have been filled by a molecular virologist and an infectiologist. The third position (tenure, full professorship) is now offered in experimental pathology. The appointee candidate will be director of the newly founded institute in accordance with the regulations of § 29 Wiss. HG.NRW.

Applicants should have scientific interests in pathomechanisms of inflammatory processes and should be experienced in methods of modern histomorphology and molecular biology. Participation in regular basic teaching is expected. Applicants from abroad are encouraged.

Please send curriculum vitae, bibliography, an outline of research interests and of teaching experience to **Dekan der Medizinischen Fakultät, Domagkstraße 3, D-4400 Münster, FR-Germany, Closing date: 15.10.1991, Telefax: 0049251/836960.**

Post Doctoral Fellowship

3 year fixed-term

\$35K - \$39K + Superannuation

*Division of Applied Physics,
Lindfield, NSW, Australia*

Our Division has initiated a core research project in Applied Dielectrics to focus research on the mechanisms of insulation behaviour in high electric fields. It is envisaged that the study will examine both new and currently used materials.

We wish to appoint a Post Doctoral Fellow to participate in applied experimental research related to fundamental aspects of electrical insulation used in high-voltage systems. You will develop a theoretical understanding of observed dielectric deterioration mechanisms and in particular, examine the phenomenon of Electrostatic Charging Tendency in liquids.

You will need a PhD degree or equivalent in physics, chemistry or engineering, about to be awarded or awarded within the last two years, with a thesis subject related to electrical insulation preferably at high voltage. Proven ability to plan, perform and analyse experiments on dielectric materials, is desirable.

If you would like a copy of our selection criteria, please contact Vivien Nissim on 612 413 7452. Further details of the position can be obtained by telephoning Dr J Rungis or Dr B D Inglis on 612 413 7045.

Applications should quote reference number AS91/9 and should include relevant personal particulars, including qualifications and experience. Please address your application to: **The Chief, CSIRO Division of Applied Physics, PO Box 218, Lindfield NSW Australia 2070.** Closing date for applications: 30 September 1991.

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DIRECTOR OF DEVELOPMENT

Solvay Animal Health, Inc., a world leader in the development and marketing of animal health products, has an immediate need for a Director of Biological Research & Development.

This position requires an individual with a Ph.D. in biological sciences and a minimum of ten years experience in leading a highly technical biological R & D team. Candidates must have demonstrated knowledge of licensing biological products and have a proven track record in international as well as U.S. regulatory agency requirements. The selected individual will have major strengths in R & D budget management, leadership and interpersonal skills.

Solvay offers an outstanding compensation, benefits and relocation program along with an excellent quality of life in our Corporate R & D center in Minneapolis, MN. For consideration, forward your resume and cover letter in confidence to:

Vice President
Human Resources

**SOLVAY
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Research Biochemist

Merck Sharp & Dohme Research Laboratories has career opportunities for highly motivated scientists at the BS/MS levels. Responsibilities include the purification and characterization of therapeutically important enzymes.

Position requires a BS or MS in Biochemistry or other closely related discipline with 1-2 years of relevant experience in a biochemistry laboratory.

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Please send curriculum vitae with cover letter to: **Personnel Manager, Ad #D-29, Research Personnel, WP42-2, Merck Sharp & Dohme Research Laboratories, West Point, PA 19486.**

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Merck & Co., Inc.

TOXICOLOGY

Amoco's Environmental Affairs and Safety Department in Chicago, Illinois, has a position available in its Toxicology and Product Stewardship Division.

The position involves conducting toxicologic evaluations and coordinating toxicity testing of Amoco products.

Applicants must have a degree in Toxicology, Ph.D. preferred, or a related discipline. Some industry experience would be advantageous. Strong interpersonal skills are expected.

Amoco offers an excellent compensation and benefits package. For consideration, reply with resume and salary history to:



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POSITIONS OPEN

U.S. ARMS CONTROL AND DISARMAMENT AGENCY PHYSICAL SCIENTIST, GS-14 \$52,406-\$68,129

The U.S. Arms Control and Disarmament Agency is seeking a Physical Scientist at the GS-14 level for its Defense and Space Division to serve as a staff specialist and expert in providing technical and policy analysis concerning the Defense and Space Talks (DST), antisatellite (ASAT) arms control, and space arms control. The successful candidate for this position should combine a strong scientific background with an interest in foreign policy and national security applications, especially in defense and space arms control. *U.S. citizenship and a Top Secret level security clearance by ACDA are required before entry on duty.* Applicants should contact: Mr. Wiles at 202-647-2034 for a vacancy announcement and submit form SF-171 before 30 September 1991.

Equal Opportunity Employer.

HEALTH SCIENTIST

The Environmental Criteria and Assessment Office (ECAO) of the Environmental Protection Agency (EPA) is seeking candidates for potential openings of health scientist positions, GS 11 to 13 (\$31,116 to \$57,650 per year, based on qualifications), located at Research Triangle Park, North Carolina. The principal duty is development of noncancer health assessments for air pollutants, including the development of inhalation reference concentrations, comprehensive health evaluation of criteria pollutants (e.g. ozone, carbon monoxide, etc.), research to improve the scientific bases of risk assessments of inhaled chemicals, identification of research needs for air pollutants, and technology transfer to state and regional agencies. *Only U.S. citizens are eligible.* The essential qualifications include an advanced degree (e.g., Ph.D., D.P.H.) in a health science such as toxicology, pharmacology, physiology, biochemistry, epidemiology, or immunology (equivalent experience may be substituted); a minimum of 1 year of professional experience as a principal investigator in toxicology or non-cancer health risk assessment; and publications and presentations at national scientific meetings on toxicology or health risk assessment. Expertise in inhalation toxicology, metal toxicology, immunotoxicology, pharmacokinetics, or epidemiology is desirable, but not required. Please submit curriculum vitae by 20 September 1991 to: Dr. Chon Shoaf, c/o Shirley Bowens, EPA MD-29, Research Triangle Park, NC 27711. Further information: Call Shirley Bowens 919-541-4381. *EPA is an Equal Opportunity/Affirmative Action Employer.*

EPIDEMIOLOGIST/STATISTICIAN

The Environmental Criteria and Assessment Office (ECAO) of the Environmental Protection Agency (EPA) is seeking candidates for potential openings of epidemiologist/statistician positions, GS 13 to 14 (\$44,348 to \$68,129 per year, based on qualifications), located at Research Triangle Park, North Carolina. The principal duty is development of Air Quality Criteria Documents for use in supporting the National Ambient Air Quality Standards. Duties will include the evaluation of appropriate epidemiological and health-related studies, exposure assessments, and published statistical analyses. The incumbent will perform original statistical analyses or reanalyses of existing data. The incumbent will also evaluate current and proposed research projects related to health risk assessment, conduct research to improve the scientific bases of risk assessments of inhaled gases and chemicals, identify research needs for air pollutants, and support technology transfer to state and regional agencies. *Only U.S. citizens are eligible.* The essential qualifications include an advanced degree in epidemiology and/or an advanced degree in statistics (preferably biostatistics) or other health-related discipline (equivalent experience may be substituted for one area); a minimum of 3 years of professional experience as a principal investigator in epidemiology/statistics or health risk assessment; and publications and presentations at national scientific meetings on epidemiology/statistics or health risk assessment. Additional expertise in inhalation toxicology, immunotoxicology, or pharmacokinetics is desirable, but not required. Please submit curriculum vitae by 20 September 1991 to: Mr. Norman Childs, c/o Shirley Bowens, EPA MD-29, Research Triangle Park, NC 27711. For further information: call Shirley Bowens 919-541-4381. *EPA is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

RADIATION THERAPY PHYSICIST (Bronx, New York): Resolve problems related to diagnosis and treatment of cancer by applying knowledge and methods of physics. Advise, consult with physicians regarding use of ionizing radiation in therapy, treatment planning with externally and internally implanted radiation sources, calibration of linear accelerator and cobalt machines, thermoluminescent dosimetry equipment, using multidata and therados RFA-3 phantoms. Develop instrumentation for improved patient care and clinical service. Plan, direct, conduct programs to insure effective and safe use of radiation and radionuclides by physicians. Teach principles of medical physics to residents, medical students and technologists via lectures, problem-solving and laboratory sessions. Forty hours per week; \$56,050 per year. Ph.D. in nuclear engineering with specialization in radiological medical physics plus 1 year of experience in the job or 1 1/2 years of experience as research assistant involved in clinical radiation therapy treatments is required. Must sit for American Board of Radiology Certification Exam within 1 year or be eligible for Board certification. Send résumé/letter in duplicate to: MWD #423, One Main Street, Room 501, Brooklyn, NY 11201.

ANNOUNCEMENTS

BURROUGHS WELLCOME FUND AWARDS

The Burroughs Wellcome Fund offers 5-year, \$350,000 scholar awards for researchers in 1992 through the following programs (deadlines): Experimental Therapeutics (1 November 1991); Toxicology (1 December 1991); Molecular Parasitology (15 January 1992); Immunopharmacology of Allergic Diseases (1 April 1992); and Drug Design and Discovery (1 April 1992). *Applicants must be U.S. citizens or permanent residents.*

For application guidelines, contact: The Burroughs Wellcome Fund, 3030 Cornwallis Road, Research Triangle Park, NC 27709, telephone: 919-248-4136, FAX: 919-248-3052.

The Burroughs Wellcome Fund is a nonprofit foundation supported by Burroughs Wellcome Co., a research-based pharmaceutical company.

INTERNATIONAL FELLOWSHIP

The Dan Charitable Trust Fund for Research in the Biological Sciences provides financial support for collaborative research between Japan and other countries or participation in international conferences or workshops held in Japan or other countries. A total of six fellowships (1- or 3-month duration) will be awarded every year. Applications for fellowships must be submitted by the host scientists by 31 October 1991. For more information, write: Eiji Nakata, The Dan Charitable Trust Fund for Research in the Biological Sciences, Nippon Trust Bank, 3-1-8 Nihonbashi, Chuo-ku, Tokyo 103, Japan.

MEETINGS

FOURTH INTERNATIONAL CONFERENCE ON MOLECULAR BIOLOGY AND PATHOLOGY OF MATRIX PHILADELPHIA, PENNSYLVANIA 10 TO 13 JUNE 1992

Current research in the field of collagen and other extracellular matrix molecules will be presented by invited international experts. Poster sessions will also be held. For information, please write:

Darwin J. Prockop, M.D., Ph.D.
Jefferson Institute of Molecular Medicine
Jefferson Medical College
Thomas Jefferson University
Philadelphia, PA 19107
Telephone: 215-955-2025 or 955-4830

NEW VISTAS IN NEUROONCOLOGY

Sponsored by Chicago Institute for Neuroscience and Neuroresearch; 8 and 9 November 1991. Four Seasons Hotel, Chicago. Featuring latest developments in neurooncology and their application to diagnosis and treatment of brain tumors. C. Everett Koop, M.D., keynote speaker. For information, call 312-883-8585 or 1-800-446-1234.

POSITIONS OPEN

RESEARCH ASSOCIATE. Experienced molecular biologist sought to investigate interactions of extracellular matrix proteins with the fibrinolytic system. Familiarity with mammalian cell expression, PCR, and mutagenesis necessary. Experience with baculoviral expression very desirable. Salary commensurate with experience. Applicants must submit curriculum vitae, three letters of recommendation, and reprints of recent publications to: David Sane, M.D., Box 3360, Duke University Medical Center, Durham, NC 27710.

Duke University is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT RESEARCH IMMUNOLOGIST

Program in Transplant Immunology is offering a position for a molecular/cellular immunologist with expertise in human immunogenetics and transplantation immunology. Candidate must have a Ph.D. degree with at least 2 years of postdoctoral employment. Responsibilities will include: Studies on human tolerance induction, regulation of HLA expression, and immune monitoring of transplant recipients. Salary range: \$41,600 to \$52,400 depending on experience.

Send curriculum vitae and reference to: Marvin R. Garovoy, M.D., University of California, San Francisco (UCSF), 520 Health Sciences East, Third and Parnassus Avenue, San Francisco, CA 94143-0508.

UCSF is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

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Cell Culture Research/ Biochemical Engineering

Scientists and associates will be involved in selection of high producing clones, development of growth and production media, and preparation and characterization of cell banks. Experience in mammalian cell culture techniques, basic biochemical analyses, immunoassays and high cell density fermentation is desirable. For scientist positions, formal training in biochemical engineering is required. Additional experience in flow cytometry, transfection procedures and basic molecular biology procedures will be an asset. **Position code CCR.**

Bioassay Development

Scientists and associates will be involved in development and validation of cell-based biological assays for cytokines, cell surface receptors and adhesion molecules as well as functional assays for monoclonal antibodies. Training in immunology, cell biology or cell physiology and hands-on experience in cell-based bioassays are required. **Position code BD.**

Protein Purification

Scientists and associates will be involved with the development and implementation of novel methodologies for protein purification and overall design of integrated purification processes for murine, chimeric and human monoclonal antibodies. Background in protein purification and experience with modern chromatographic techniques desired. **Position code PP.**

Pharmaceutical Sciences

Scientists and associates will be involved with the research and development in area of pre-formulation/formulation, stability assessment and pharmaceutical process development of biopharmaceutical drugs. Training in areas of biochemistry or pharmaceutical sciences required. **Position code PS.**

Biopharmaceutical R&D

Scientists and associates will be involved in the research and development of anti-cytokine and anti-T cell monoclonal antibody therapeutics. Positions involve design and implementation of various assay systems to assess the efficacy, immune response and pharmacokinetics of monoclonal antibody drugs undergoing clinical evaluation. Demonstrated scientific proficiency in areas of immunoassay development, flow cytometry, receptor biochemistry or cytokine biochemistry preferred. **Position code BR&D.**

Bioanalytical Chemistry

The scientists and associates will be responsible for developing and implementing techniques for the analysis and characterization of monoclonal antibodies. Experience with protein separation techniques such as HPLC, CZE, and electrophoresis is required. Candidates should have experience with assay validation and preparation of written assay documentation. **Position code BC.**

Clinical Research

Associates at various levels will be responsible for assisting with the development of clinical protocols and case report forms for the various clinical research programs, monitoring of clinical research studies, and participating in the compilation of clinical data. Areas of study entail the application of monoclonal antibodies as therapeutic and diagnostic agents in the treatment of cardiovascular, infection and autoimmune diseases, rheumatology and oncology. Requires a background in the life/health science, good oral/written communication skills with regard to scientific/medical information, and practical working experience in healthcare research.

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