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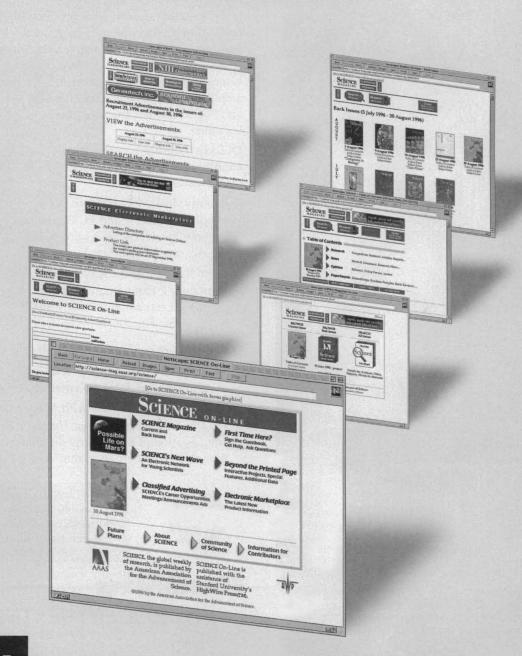
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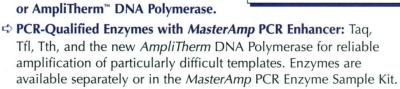
AmpliTherm DNA Polymerase.

Fig. 1. PCR of the human ApoE gene

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(75% GC). Lane 1, standard PCR

(Taq); lanes A-L, PCR with each of the 12 MasterAmp 2X PCR PreMixes





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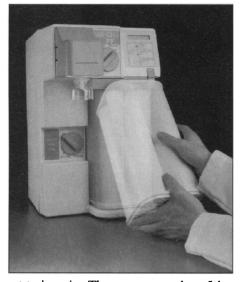


PRODUCTS & MATERIALS

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critical results. The system provides a 5-log reduction in pyrogens while delivering high resistivity and low total organic carbon. The purification media in the purification pack are hermetically sealed and never come into contact with human hands or the environment, thereby greatly minimizing ribonuclease contamination. Millipore. For information call 617-275-9200 or circle 141 on the reader service card.

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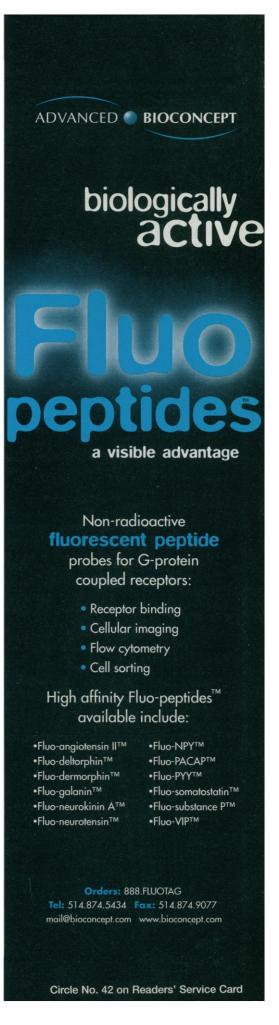
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Reversible Binding of Nucleic Acids and Proteins

Two new VECTREX matrices allow reversible binding of biotinylated or fucosylated molecules for potential use in probe purification, polymerase chain reaction, complementary DNA and subtraction library construction, hybridization analysis, and in vitro mutagenesis. The matrices are cross-linked sugar polymers with a large surface area for maximum binding of large or small molecules and low nonspecific binding for charged molecules. Avidin DLA (a modified form of avidin with a reduced affinity for biotin) has been conjugated to the surface of the VECTREX particle. Biotinylated mol-

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



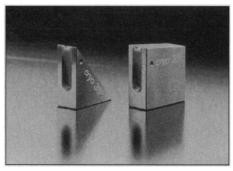
ecules can be bound to VECTREX Avidin DLA and eluted with biotin under nondenaturing conditions. Fucosylated nucleic acids can be bound to VECTREX AAL (*Aleuria aurantia* lectin, a fucose-specific lectin) and subsequently eluted with fucose under nondenaturing conditions. Vector Laboratories. For information call 415-697-3600 or circle 144 on the reader service card.

Drug Discovery Software

ChemIdea is a new module for Chem-X drug discovery software that provides a novel approach to lead optimization. ChemIdea can suggest the appropriate constituents to include in new molecules made and tested for activity. ChemIdea makes use of existing data from biological activity testing. It produces clear volume/hydrophobicity plots, critical molecular properties for drug design. Chemical Design. For information call 201-529-3323 or circle 145 on the reader service card.

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Literature

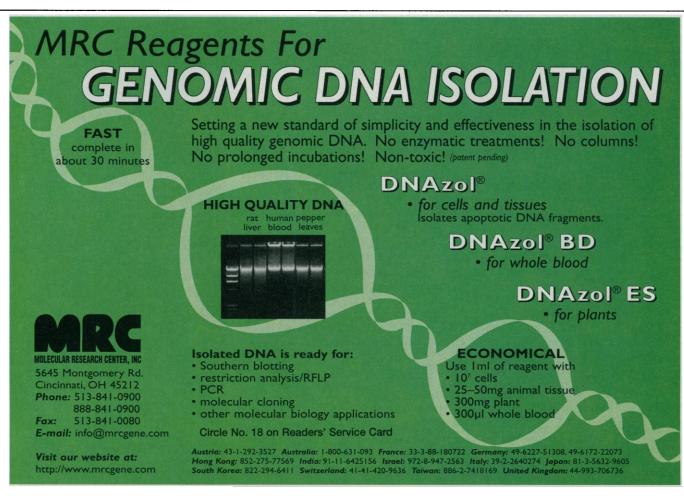
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97/98 Novabiochem Catalog and Peptide Synthesis Handbook introduces 100 new products and contains more than 80 pages of updated technical information, including a special section on resins for use in combinatorial chemistry. Calbiochem-Novabiochem. For information call 619-450-5697 or circle 148 on the reader service card.

A Guide to Laboratory Water Purification is a 12-page booklet that starts with an overview of water standards and applications followed by a discussion of contaminants and water testing. It then compares the effectiveness and ease of use of water purification methods. Labconco. For information call 816-333-8811 or circle 149 on the reader service card.

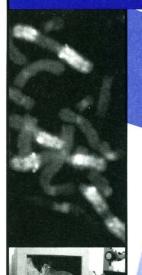
Chiraldex GC Columns: A Guide to Using Cyclodextrin Bonded Phases for Chiral Separations by Capillary Gas Chromatography describes the use of these columns for the separation of enantiomers. Advanced Separation Technologies. For information call 201-428-9080 or circle 150 on the reader service card.



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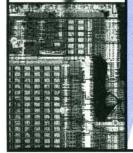


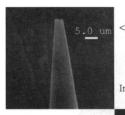
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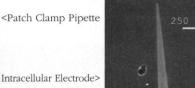
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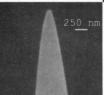
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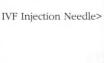






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POSITIONS OPEN

FACULTY POSITION OPTICS

The University of Houston College of Optometry invites applications for two tenure-track FACULTY PO-SITIONS in the area of optics. One position is available for a senior scientist with expertise in the field of visual optics, the other position is for a more junior scientist. The positions require a Ph.D. and/or an advanced clinical degree. Successful candidates will be expected to develop and maintain a strong, independent research program capable of attracting external grant support. The candidates will be expected to teach geometrical and/or physical optics in the optometry and graduate programs. The successful senior scientist candidate will be expected to develop new courses in visual optics for our graduate program and lead a research institute centered on the application of optics to the practice of optometry. We are particularly interested in scientists whose work relates to the optics of the eye and to theoretical and applied issues relevant to the practice of optometry. Academic rank and salary will depend on qualifications and experience. Review of applications will begin March 1, 1997. Applicants should submit a curriculum vitae, detailed research plans, a statement of career goals, and have three letters of reference sent to: Dr. Roger Boltz, Associate Dean for Professional Studies, University of Houston, College of Optometry, Houston, TX 77204-6052. Email: of Optometry, Houston, 1A //204-0052. Entail: boltz@uh.edu. The University of Houston is an Equal Oppor-tunity/Affirmative Action Employer. Minorities, women, veterans, and persons with disabilities are encouraged to apply.

FACULTY POSITION IN EXPERIMENTAL BIOPHYSICS, DEPARTMENT OF PHYSICS, UNIVERSITY OF WATERLOO

The Department of Physics, University of Waterloo, invites applicants for a tenure-track position at the AS-SISTANT PROFESSOR level in one or more of the following areas of experimental biophysics: biophysical studies of materials, biomedical materials, X-ray diffraction of biological macromolecules, and soft condensed matter; although outstanding candidates in other fields of materials research will also be considered. In exceptional cases appointment at a more senior level will be considered. Appointments will be available September 1, 1997.

Applicants must have a Ph.D. degree and postdoctoral experience with a strong record of research, and strong interactions with industry will be encouraged. Duties include research, teaching at undergraduate and graduate levels, and supervising graduate students. Salary range commensurate with qualifications and experience. Candidates should submit a curriculum vitae, an outline of research accomplishments, a brief research plan, a statement of their teaching goal, and the names and addresses of at least three referees by April 30, 1997 to: Dr. J. R. Lepock, Chair, Department of Physics, University of Waterloo, Waterloo, Ontario N2L 3G1 Canada. Telephone: 519-888-4567, Extension 2214; Email: physics@uwaterloo.ca; FAX: 519-746-8115.

In accordance with Canadian immigration require-

In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. The University of Waterloo encourages applications from all qualified individuals, including women, members of visible minorities, native peoples, and persons with disabilities. This appointment is subject to the availability of finds.

DIRECTOR OF BIOLOGICAL SCIENCE

We are currently seeking a proven scientific leader to head the development of the Biological Sciences Division of MedLennium. He/she will develop and oversee an active research program in the molecular genetics/immunotherapy of human tumors. The successful candidate must have an established track record of excellence, an M.D. and/or Ph.D. degree in molecular sciences, three to five years of relevant postdoctoral experience, and strengths in immunology and/or analysis of different gene expression. This is an exciting opportunity to significantly impact the growth and direction of MedLennium. MedLennium offers a competitive salary package, equity participation, and a stimulating environment. The laboratory facility is located in Santa Barbara, California, which offers an excellent quality of life. Interested candidates should submit résumé to:

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An outstanding clinician-investigator to establish an independent research program and oversee intramural clinical research is sought by the Division of Intramural Clinical and Biological Research (DICBR), National Institute on Alcohol Abuse and Alcoholism (NIAAA), National Institutes of Health (NIH). The position is located in Bethesda, Maryland.

The CLINICAL DIRECTOR oversees a research

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The position must be filled by a physician. Applicants with certification in internal medicine, psychiatry, neurology or related specialties, and demonstrated research and clinical excellence are encouraged to apply to:

NIAAA Personnel Attention: Kathleen Hanratty NIH, Building 31, Room 1B58 31 Center Drive MSC 2088 Bethesda, MD 20892-2088

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DEPARTMENT CHAIRMAN— SYSTEMATIC ENTOMOLOGY

The Department of Entomology, National Museum of Natural History, Smithsonian Institution, invites applications for the position of Supervisory Research Entomologist to serve as DEPARTMENT CHAIR. Candidates with any taxonomic and research specialty may apply. Applicants must have a Ph.D. or equivalent experience with a background in entomology, systematics, and evolutionary biology. Preference will be given to those showing evidence of demonstrated administrative capabilities and a continuing commitment to a program of independent and collaborative research with associated field and laboratory work. In addition to research, duties will include the improvement and expansion of collections, participation in museum activities, such as exhibits, education, capital campaign, and involvement with professional associations and other organizations within the scientific community. Federal Civil Service position. Starting salary: \$64,555 to \$75,935, depending on qualifications

For a complete application package, call 202-287-3102 (24-hour autoline), press 9 and request Announcement Number 97R-1028. Complete applications must be postmarked by April 15, 1997 and should include: a current curriculum vitae; copies of selected publications; a cover letter addressing the selective and quality ranking factors which appear on the announcement; and the names, addresses, and telephone numbers of at least three references. Equal Employment Opportunity/Affinnative Action.

FACULTY POSITION ASSISTANT PROFESSOR OF BIOLOGICAL SCIENCES OHIO NORTHERN UNIVERSITY

Search reopened. The Department of Biological Sciences invites applications for the position of ASSIST-ANT PROFESSOR of Biological Sciences to begin September 1, 1997. The position will be a tenure-track, four-year renewable contract nine-month appointment or a visiting nine-month appointment dependent on interests and qualifications of the candidates. A Ph.D. degree, evidence of effective undergraduate teaching, and an ability to collaborate with other faculty in teaching are expected. Teaching assignments will include introductory biology courses and the teaching and coordination of the introductory anatomy and histology course for students in the College of Pharmacy. The credentials must indicate strong preparation in zoology and human biology. For full consideration, submit by April 4, 1997, curriculum vitae, evidence of undergraduate teaching ability, a statement of teaching philosophy, official transcripts of undergraduate and graduate training, and three letters of recommendation to: Terry Keiser, Chair, Department of Biological Sciences, Ohio Northern University, Ada, OH 45810. Email: t-keiser@onu.edu. Applications will be received until the position is filled. Ohio Northern University is an Equal Opportunity/Affirmative Action Employer. Women and members of minority groups are encouraged to apply.

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We are seeking a talented Organic Chemist to join a multi-disciplinary team engaged in the development of instrumentation for automating aspects of the drug discovery process. Apply your chemistry skills to the implementation of robotic-based solid-phase organic synthesis (SPOS) methodologies, particularly those required for producing small-molecule libraries. Qualified candidates must possess a PhD in Organic Chemistry with 1-2 years' postdoctoral experience, ideally working in the field of Combinatorial Chemistry. A strong background in modern methods of Organic Chemistry is required; SPOS experience utilizing analytical techniques is highly desirable. In addition to computer fluency, you must have a facility for instrument automation. Ref: 5767.

GENETIC ANALYSIS R&D SCIENTISTS

As a key member of a team focused on developing innovative approaches to applying fluorescent PCR fragment technology to human disease research, we will rely on you to develop systems for high-throughput PCR fragment sizing and quantitation. Key duties will include standards development and systems optimization of chemistry and protocols, definition of user interface and data analysis requirements. Successful candidates will possess a PhD in Genetics, Molecular Biology or Biochemistry with 2-3 years' relevant postdoctoral experience in an academic or industrial setting. Demonstrated experience using basic techniques for genetic analysis (PCR, linkage mapping, and genotyping) required. Experience in analytical approaches to molecular genetic technologies, fluorescent PCR analysis, ABD sequencers, and GeneScan software is also desirable. Ref: 5901/5902.

SCIENTIST

Focused on developing new approaches to applying fluorescent PCR fragment technology to the analysis of gene expression, you will be responsible for applications development and systems optimization of chemistry and protocols, definition of user interface and data analysis requirements. This includes the application of novel gene expression monitoring technology to the development of fluorescent, high-throughput transcript imaging systems. The ideal candidate will possess a PhD in Genetics or Molecular Biology or related field with 2-3 years' post-doctoral relevant experience including basic techniques (Northern blotting, RNAase protection, RT-PCR). Experience with fluorescent PCR analysis, ABD sequencers and GeneScan software is highly desirable. Ref: 5928.

SCIENTIST

You will be responsible for developing reagent systems for use in fluorescent-based genotyping. Key duties include the on-going development of microsatellite markers for high-throughput genetic analysis, as well as working on novel reagents and technologies for gene mapping. This includes the management of marker-associated genetic data and collaborative interactions with internal and external scientists. Successful candidate will possess a PhD in Molecular Genetics, Molecular Biology or a related field and 2 years' postdoctoral relevant experience. A demonstrated familiarity with linkage analysis and human disease research techniques is required along with prior experience with all aspects of gene mapping, including sample prep, marker assays, data analysis and bioinformatics. Familiarity with the software and instrumentation requirements of genetic mapping in a high-throughput setting is desirable as is experience with fluorescent PCR analysis, ABD sequencers and GeneScan software. Ref: 5926.

SCIENTIST/SENIOR SCIENTIST

You will be responsible for chemistry development, testing, implementation and troubleshooting on breadboard DNA electrophoresis instruments. As part of a multidisciplinary team effort to develop next generation electrophoresis instrumentation, you will demonstrate feasibility of automated applications. This will include troubleshooting hardware problems, defining chemistry specifications for new instrumentation, and supporting breadboard instrumentation at test sites. Requires an MS or PhD in Molecular Biology, Biochemistry, or related field with 2+ years' experience (or equivalent combination of education and experience). Excellent troubleshooting skills and ability to develop novel solutions to complex chemical and mechanical problems are required as is a solid working knowledge of robotics, electrophoresis, automation, PCR and DNA sequencing. Ref: 4041.

SCIENTIST

Working as part of a multidisciplinary team, you will develop genetic assays based on ABD DNA sequencing technology. Duties will include the development of DNA sequencing-based assays from the inception through clinical trials. Experience with HIV virology, PCR, RT-PCR and DNA sequencing desirable. Other duties include primer design, PCR optimization, design for production kits, and promotion and support to field organization. Requires a PhD in Molecular Biology or MS with 2+ years' experience (or equivalent combination of education and experience). Industrial experience in the development of clinical applications and experience with PCR, DNA sequencing and ABD genetic analysis technology are desirable. Knowledge of HIV virology and experience with RNA manipulations are strongly preferred. Ref: 4566.

SENIOR SCIENTIST

You will coordinate and manage the implementation of microsatellite and DNA sequencing applications onto advanced instrumentation technologies. You will develop new polymer formulations, hardware interfaces and protocols to facilitate applications. Requires a PhD with 2 years' postdoctoral experience in a chemical or biological field with emphasis on the development of new electrophoresis systems for DNA separations and a minimum of 2-3 years' industry experience. Ref: 4058.

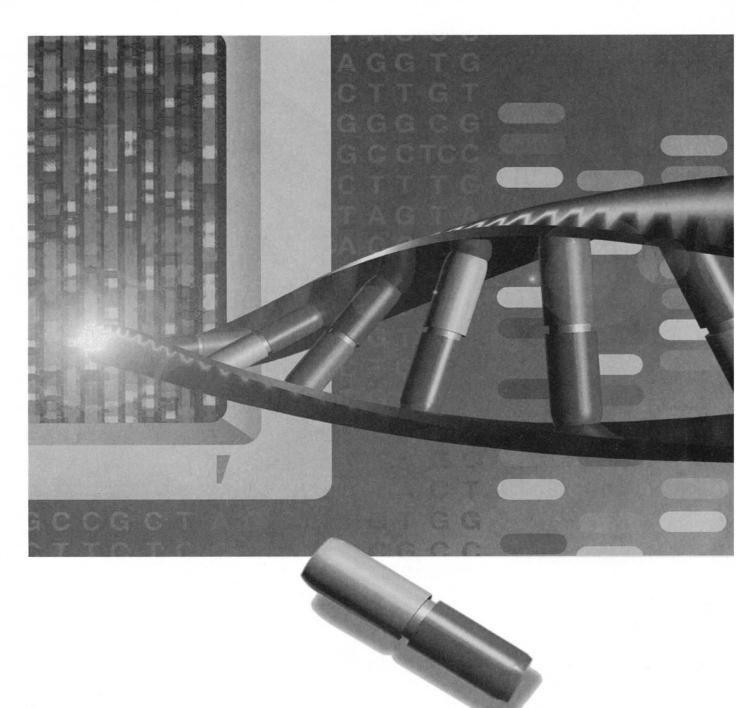
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The applicant's research should employ the use of modern biological techniques to study the role signal transduction systems and gene expression in the regulation of cell phenotype and organ systems function.

cell phenotype and organ systems function.

Applicants should submit a curriculum vitae, a statement of research goals, and arrange for four letters of recommendation to be sent to:

Dr. David E. Millhorn Chairman, Department of Molecular and Cellular Physiology P.O. Box 670576 University of Cincinnati Cincinnati, OH 45267-0576

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FACULTY POSITION MICROVASCULAR AND/OR CEREBROVASCULAR PHYSIOLOGY OREGON HEALTH SCIENCES UNIVERSITY

Candidates are sought for a non-tenured faculty position at the rank of **ASSISTANT** or **ASSOCIATE PROFESSOR** in the Division of Neurosurgery. The successful candidate will be expected to develop an independent vascular research program and to collaborate with clinical faculty in the Division. Individuals with an interest in microvascular or cerebrovascular physiology are encouraged to apply. Interested applicants should submit curriculum vitae, statement of research interests and names of three references to:

Johnny Delashaw, Jr., M.D. Division of Neurosurgery L-472 3181 SW Sam Jackson Park Road Portland, OR 97201

CHAIRPERSON

Department of Range, Wildlife, and Fisheries Management, Texas Tech University, Lubbock, Texas. Responsibilities include leadership and administration plus teaching and research in an area of personal expertise. A Ph.D. in Range, Wildlife, Fisheries or closely related field is required. The Department has 13 faculty members, 234 undergraduate students, and 46 graduate students, M.S. and Ph.D. degrees are offered in all three disciplines. Send résumé and names, addresses, and telephone numbers of five references to: Dr. Don Ethridge, Chairperson, Search Committee, College of Agricultural Sciences and Natural Resources, Texas Tech University, Lubbock, TX 79409-2132. Telephone: 806-742-2821; FAX: 806-742-1099; Email: ethridge@ttu.edu. Review of applications will begin on June 1, 1997. Texas Tech is an Equal Employment Opportunity and Affirmative Action Employer.

ASSISTANT PROFESSOR—GENETICS

Vanderbilt University School of Medicine invites applications for several new tenure-track faculty positions as part of an interdepartmental program expansion in genetres. Appointments will be made at the ASSISTANT PROFESSOR level. Applicants must have had research experience and high-quality publications in one of the following areas: 1) gene mapping, identification of disease loci and mutational analysis; 2) population genetics and genetic epidemiology; 3) bioinformatics related to gene and genomic databases; and 4) use of mammalian or lower organism model systems for studies of molecular and developmental cell biology, molecular regulation of gene expression or novel signal transduction mechanisms. Appointments will be in departments most relevant to the interests of the applicant and will come with well-appointed space and generous start-up funds. Applicants should submit, by July 1, 1997, a curriculum vitae, three letters of reference, and a concise description of research plans to: Genetics Search Committee, c/o Jan Lotterer, CCC-3322 Medical Center North, Vanderbilt University Medical Center, Nashville, TN 37232-2103. Vanderbilt is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply

POSITIONS OPEN



FACULTY POSITION

The Department of Basic Health Sciences at Marquette University invites applications for a tenure-track faculty position at the level of ASSISTANT PROFESSOR to begin in August 1997. The successful candidate will be expected to develop an independent, funded research program in an area of neuroscience and teach physiology to undergraduates and professional students. Send a curriculum vitae, description of research interests, and the names of three references by April 15, 1997 to: Search Committee, College of Health Sciences, Department of Basic Health Sciences, Marquette University, P.O. Box 1881, Milwaukee, WI 53201-1881. Affirmative Action/Equal Opportunity Employer.

FACULTY POSITIONS DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY SAINT LOUIS UNIVERSITY SCHOOL OF MEDICINE

Saint Louis University, a Catholic Jesuit Institution dedicated to education, research, and health care is seeking applications for tenure-track positions involving research and teaching at the ASSISTANT PROFESSOR level, although outstanding candidates at a more senior level will be considered. We seek applicants who will complement ongoing research in the areas of biochemical and cellular regulation, molecular and developmental biology, genetics, cell biology, and physical chemistry. Individuals interested in studying mechanisms of biological processes at the molecular level using a combination of biochemical and modern molecular biological strategies are especially encouraged to apply. The successful candidate is expected to establish a strong extramurally-funded research program. Consequently, a potential for or demonstrated evidence of competing successfully for external funding will be an important criterion for selection. Excellent start-up funds and salary are available. Curriculum vitae, description of research plans, and at least three letters of recommendation should be sent to: Search Committee c/o William S. Sly, M.D., Chairman, E. A. Doisy Department of Biochemistry and Molecular Biology, Saint Louis University School of Medicine, 1402 South Grand Boulevard, St. Louis, MO 63104-1028. Saint Louis University is an Affirmative Action/Equal Opportunity Employer and encourages nominations of and applications from women and minorities.

FACULTY POSITION ANATOMY DEPARTMENT

The Department of Anatomy at Midwestern University seeks applicants for a tenure-track position at the level of ASSISTANT PROFESSOR. Applicants must have a Ph.D. or equivalent, postdoctoral training, and a commitment to excellence in teaching. Applicants are expected to establish an independent research program capable of attracting extramural funding. Preference will be given to individuals broadly trained in the anatomical disciplines, with an emphasis on neuroanatomy, and who have had previous teaching experience in a professional health care curriculum. Send curriculum vitae, names of at least three references, and a statement specifying teaching interests and research plans to: T. A. Dombrowski, Ph.D., Department of Anatomy, Midwestern University, 555 31st Street, Downers Grove, IL 60515. Affirmative Action/Equal Opportunity Employer. Women/minorities/veterans/disabled are encouraged to apply.

PROFESSOR/DIRECTOR—WEST FLORIDA RESEARCH AND EDUCATION CENTER

CENTER DIRECTOR provides leadership and support for research, teaching, and extension programs. An earned Ph.D. in a field related to agriculture or natural resources with experience in conducting a major research, extension and/or teaching program with academic credentials equivalent to the full professor required. Previous administrative experience is desirable. Salary is commensurate with qualifications. Interested individuals should contact: Dr. Barry Brecke, WFREC, 4253 Experiment Drive, Jay, FL 32565 for complete position description. Position open until May 9, 1997. Women and minorities are encouraged to apply.

POSITIONS OPEN

AQUATIC COMMUNITY DYNAMICS— TWO FACULTY POSITIONS

ASSISTANT PROFESSOR-Quantitative Population/Community Dynamics of Fish, Department of Natural Resources, Cornell University. Tenure-track; 12-month position; 50% teaching-50% research. Develop an active research and teaching program on freshwater ecosystems. Seek external funding for research, advise graduate and undergraduate students, and cooperate with fishery management agencies. Develop and implement a coldwater fishery research program in cooperation with Bureau of Fisheries in New York State. Incumbent will be responsible for teaching a quantitative course in population/community dynamics, a course in the ecology of exploited fish populations (alternate years), and a course in the individual's specialty (alternate years). Applicants must be knowledgeable in subject areas such as population dynamics, community analysis, quantitative fishery models, sampling design, and statistics. ASSISTANT PROFESSOR—Fish and Aquatic Habitat Ecology, Department of Natural Resources, Cornell University. Tenure-track; 12-month position; 50% research-50% extension/outreach. Develop a strong research/extension program focused on the responses of fish and the aquatic community to changes in lake and stream environments, such as stream flow management, human perturbations to fish habitat, and water pollution problems. Develop and implement a coldwater fishery research program in cooperation with Bureau of Fisheries in New York State. Extension responsibilities include leadership in the development and implementation of a statewide fishery extension program focused on watershed use and aquatic habitats. Duties will include graduate student supervision and undergraduate advising. For either position, Ph.D. in fishery and/or aquatic science or a related field required. Review of applications will begin on May 1, 1997. Applicants for either position should submit a letter of application, current curriculum vitae, a statement of research interests and professional goals, and the names and addresses of three references to: Charles C. Krueger, Chair, Search Committee-SM, Department of Natural Resources, Fernow Hall, Cornell University, Ithaca, NY 14853. More information is available at http://www.dnr. cornell.edu/facpos.htm. Cornell University is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT/ASSOCIATE PROFESSOR, SYSTEMATIC MYCOLOGY, THE PENNSYLVANIA STATE UNIVERSITY

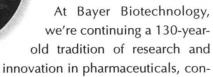
Applications are invited for this position in the Department of Plant Pathology with 75% research and 25% teaching responsibility. Duties include research that significantly contributes to the understanding of pathogenic and mycotoxin-producing fungi, with priority given to the molecular/classical systematics and ecology of Fusarium. The person in this position will develop collaborations as appropriate with colleagues engaged in research related to food safety, animal toxicology, mycotoxicology, human health, plant health, and systematics. One introductory level mycology course will be taught each academic year and participation in graduate education through advising graduate student research and serving on student research committees is expected. This 11month, TENURE-TRACK position requires that candidates have a Ph.D. in a biological science and interest in molecular systematic mycology. In-depth research experience with the genus Fusarium and/or teleomorphs is desirable. Submit a statement of research interests, curriculum vitae, transcripts, and at least three letters of reference by May 15, 1997, to: Gary W. Moorman, Chair, Search Committee, Department of Plant Pathology, 207 Buckhout Laboratory, Box F-104, University Park, PA 16802-4507. An Affirmative Action/Equal Opportunity Employer. Women and minorities encouraged to apply.

UNIVERSITY OF FLORIDA

Seeks ASSISTANT PROFESSOR/ASSOCIATE PROFESSOR for the Department of Medicine, Division of Nephrology. M.D. degree with expertise in renal transplantation and general clinical nephrology. Clinical research training desirable. Salary and benefits commensurate with experience. Recruiting deadline date: April 30, 1997. Anticipated starting date: July 1, 1997. Please reply to: Cindy Corpier, Assistant Professor or C. Craig Tisher, Eminent Scholar and Chief, Box 100224 JHMHC, Gainesville, FL 32610. Telephone: 352-392-4008; FAX: 352-392-3581. Affinnative Action/ Equal Opportunity Employer.



The rewards outstanding.



sumer care and diagnostics. Now, at our 43-acre campus in Berkeley, we're doing research into some of the most challenging areas in genetic research. If you have a commitment to innovation, consider a company with a history of breakthrough accomplishments and the resources to support it.

PRECLINICAL PHARMACOLOGY SR. STAFF SCIENTIST

You will lead a team to develop novel indications for existing plasma-derived products through experimental research to identify and develop additional products. This position reports directly to the head of Pharmacology. You and your team will significantly contribute to the development of several preclinical drug discovery/development products. In addition, your expertise will also contribute in technology, publications, patents and trade secrets. You will need an advanced degree in Pharmacology, Physiology or related field, 8+ years of proven accomplishments, an in-depth knowledge of preclinical evaluation and development of experimental protein therapeutics, team skills, and experience supervising laboratory technicians. Experience with plasma-derived proteins is highly desirable.

To find out more about these and other opportunities, send your resume to: Bayer Corporation, Human Resources, Job# MJY-006, P.O. Box 1986, Berkeley, CA 94701.



EOE/AA/D

STA FELLOWSHIP PROGRAM

Postdoctoral Fellowships in Japanese National Laboratories

Introduction

The Science and Technology Agency (STA), an administrative organ of the Government of Japan, established the STA Fellowship Program in 1988 in order to offer opportunities for promising young foreign researchers in the fields of science and technology to conduct research at Japan's national laboratories and public research corporations (excluding universities and university-affiliated institutes).

The Program is also a response to calls from the international community of science and technology for greater international cooperation through the exchange of promising researchers.

Since Oct. 1, 1989, the Program has been managed by the Japan Science and Technology Corporation (JST), a statutory organization under the supervision of STA, in cooperation with the Japan International Science and Technology Exchange Center (JISTEC). JST also has the strong support and cooperation of the Responsible Organizations listed in Table 1.

Tenure and Field of Research

The tenure will be from 6 months to 2 years (Long-Term Fellowship), or 1–3 months (Short-Term Fellowship), to be decided upon through negotiation between the candidate and the host institute. The field of research will also be decided upon through negotiation between the candidate and the host institute, the results of research activities produced during the tenure will be subject to the regulations of the host institute.

Research fields include: Mathematics; Physics; Geology; Electricity; Electrons; Information Engineering; Mechanics; Engineering Works; Architecture; Erosion Control; Landscaping; Chemistry; Metals; Resources Engineering; Medical Science; Pharmaceuticals; Agricultural Technology; Farming; Forestry; Fisheries; others in the Natural Sciences.

Fellowship Qualifications

The long term fellowships are open to PhD holders of under 35 in principle, (N.B.: Any age is acceptable for Short-Term Fellowships) from universities, research councils, government research laboratories and industry. Any science or engineering discipline will be considered except military R & D.

Applicants should be of sufficient good health to pursue research activities in Japan.

Have sufficient language ability to pursue research activities in Japan, Japanese language ability is preferable, but English is sufficient in most cases. With the agreement of the host research institute, other languages may suffice. The short term fellowship has no age limitation but applicants should have same qualifications except age limitation.

FELLOWSHIP AWARDS

Fellowships include round-trip air tickets (economy class; not available for dependents) and the following allowances:

- 1) Living allowance: 270,000 a month
- 2) Family allowance: 50,000 a month if Fellows are accompanied by one or more dependents during their tenure.
- 3) Housing: Apartments will normally be provided to awardees. The apartment floor area is 40m² for awardees unaccompanied by their family and 60m² for awardees to stay with their family in other than metropolitan areas such as Tokyo. If an awardee prefers to use a larger apartment because of the family size or otherwise 106,000 maximum per month may be paid as housing allowance; any shortfall is to be borne by the awardee. Short term fellows will necessarily be requested in hotels.
- 4) An initial international settling-in allowance: 200,000 (This amount is less in the case of short stays.)
- 5) An annual allowance of up to 115,000 for travel within Japan related to research activities.
- 6) Medical insurance (N.B. not available for dependents)

Assistance for Fellows

If they wish, Fellows may take advantage of the following assistance:

- 1) Free Japanese language courses for Fellows whose host research institutes are in Tsukuba area. Fellows where institutes are located elsewhere are entitled to reimbursement of reasonable amounts for language tuition at a private school. (N.B. not available for dependents);
- 2) Since most apartments in Japan are unfurnished, basic furniture and electric appliances will be provided free of charge to Fellows;
- 3) Counseling on problems relating to such aspects of daily life as children's schooling, medical care and shopping, is available for Fellows living in Tsukuba area.

APPLICATION PROCEDURE FOR STA FELLOWSHIP (Fig 1)

There are two methods as they are explained below.

- 1) Application through Responsible Organization (Fig. 1-A)
- Applicants possessing the nationality or citizenship or permanent resident status of a country listed in Table 1 should:
- ① Contact the Responsible Organization in their country to obtain an application form and information about the host research institutes given in Table 2.
- ② Communicate with host research institutes of interest to ascertain their suitability for the applicant's area of specialization. This should be done using the attached Form 1.
- After agreeing with the prospective host institute on the subject of research, the length of tenure and starting date for the Fellowship, the applicant should obtain from the institute a formal letter of acceptance expressing its willingness to serve as a host.
- Submit the completed application form and the letter of acceptance to the Responsible Organization concerned. The Responsible Organization will then screen applicants, and submit its recommendations for Fellowship candidates to JST through JISTEC, accompanied by a complete dossier on the candidates. (The time to submit the application form will differ for each Responsible Organization, so it is necessary to check this beforehand.)
- ⑤ JST will then conduct a further screening and notify successful applicants by sending a Letter of Award through JISTEC. The Responsible Organization and the host research institute concerned will also be informed in this respect. (It will take approx. two months to complete the screening.)
- 2) Application through Host Research Institute (Fig. 1-B)
- All applicants can apply by using this procedure, whether or not applicants have nationality or citizenship or permanent resident status of a country listed in Table 1. Applicants should send enquiries directly to institutes of interest listed in Table 2. This should be done using the attached Form 1.
- The institute will screen the applicant and, if willing to pursue the application, will request him/her to send pertinent documents and information. These will then be sent along with a letter of recommendation to JST through JISTEC. (Complete dossiers on candidates are all submitted to JST through JISTEC twice a year, usually in January and in June.)
- ③ JST will then conduct a further screening and notify successful applicants by sending a Letter of Award through JISTEC. The host research institute concerned will also be informed in this respect. (It will take approx. two months to complete the screening.)

Fig. 1-A Application through Responsible Organization

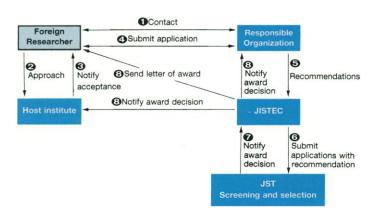
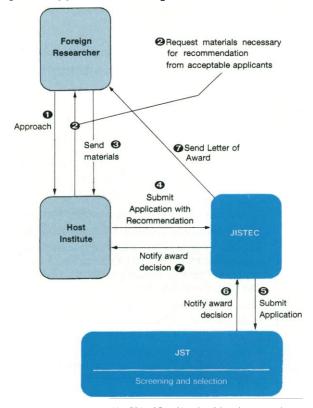


Table 1 RESPONSIBLE ORGANIZATIONS

Table 1 RESPONSIBLE ORGANIZATIONS		
Country	Contact	
AUSTRALIA	THE AUSTRALIAN ACADEMY OF SCIENCE Ms. Thérèse Lewis International Exchange Officer GPO Box 783, Canberra ACT 2601 Tel: 61-6-247-3966 Fax: 61-6-257-4620	
AUSTRIA	FEDERAL MINISTRY FOR SCIENCE AND RESEARCH Ms. Susanna Peterka Administrative Officer, International Affairs Minoritenpl atz 5, A 1014 Vienna Tel: 43-222-531-20-6794 Fax: 43-222-531-20-6205	
CANADA	NATURAL SCIENCE AND ENGINEERING RESEARCH COUNCIL Ms. Patricia Houston Program Officer, International Programs Constitution Square, Tower II 350 Albert Street, Ottawa, Ontario K1A 1H5 Tel: 1-1613-947-0190 Fax: 1-613-992-5337	
GERMANY	ALEXANDER VON HUMBOLDT-STIFTUNG (for Long-Term Fellowship) Dr. Klaus Manderla Department Sponsorship Abroad Jean-Paul-Str. 12, D-53173 Bonn Tel: 49-228-833-101 Fax: 49-228-833-199	
	DEUTSCHER AKADEMISCHER AUSTAUSCHDIENST (for Short-Term Fellowship) Mr. Peter Groscurth Program for Japan Kennedyallee 50, D-53175 Bonn Tel: 49-228-882-0 Fax: 49-228-882-444	
FINLAND	THE ACADEMY OF FINLAND Ms. Kaisu Lindelman Exchange Program Secretary P.O. Box 57, SF-00551 Helsinki Tel: 358-9-774-881 Fax: 358-9-774-88379	
FRANCE	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE Ms. Flora Gheno Mission of International Relations 3-5 rue Michel-Ange, 75781 Paris Cedex 16 Tel: 33-1-44-96-46-91 Fax: 33-1-44-96-49-10	
ITALY	MINISTERO DELL'UNIVERSITÀ E DELLA RICERCA SCIENTIFICA E TECNOLOGICA Dr. Gioacchino Fonti Department for International Relations-UFFICIO VI Piazzale J.F. Kennedy 20-00144 Roma Tel: 39-6-59912819 Fax: 39-6-59912967	
NETHERLANDS	STICHTING VOOR DE TECHNISCHE WETENSCHAPPEN (STW) Dr. C. A. M. Mombers Program Officer Postbus 3021, 3502 GA Utrecht Van Vollenboueniaan 661. Litrecht	

Van Vollenhovenlaan 661, Utrecht Tel: 31-30-923275 Fax: 31-30-961536

Fig. 1-B Application through Host Research Institute



NEW ZEALAND MINISTRY OF RESEARCH, SCIENCE AND TECHNOLOGY

Mr. Rick Petersen

International Science Officer P.O. Box 5336, Wellington

Tel: 64-4-472-6400 Fax: 64-4-471-1284

THE RESEARCH COUNCIL OF NORWAY Ms. Else Boon

Advisor

P.O. Box 2700 ST. Hanshaugen 0131 Oslo Tel: 47-2-2037000 Fax: 47-2-2037001

NUTEK SWEDEN

NORWAY

Mr. Kurt Boigne Coordinator Asia

Liljeholmsvägen 32, S-117 86, Stockholm Tel: 46-8-681-9100 Fax: 46-8-681-9625

SWISS NATIONAL SCIENCE FOUNDATION SWITZERLAND

Dr. Benno G. Frey

Head of the Fellowship Section Wildhainweg 20, CH-3012, Bern Tel: 41-31-27-22-22 Fax: 41-31-23-30-09

UNITED KINGDOM THE ROYAL SOCIETY

(for Long-Term Fellowship) Ms. Vida Cody

Head of Japan Exchanges

6 Carlton House Terrace, London SW1Y 5AG

Tel: 44-71-839-5561 Fax: 44-71-930-2170

UNITED STATES NATIONAL SCIENCE FOUNDATION Mr. Randall Soderquist

Japan Programs, Room 935 Division of International Programs 4201 Wilson Blvd. Arlington, VA 22230 Tel: 1-703-306-1701 Fax: 1-703-306-0476 or 0477

NATIONAL INSTITUTES OF HEALTH

Mr. Mike Snyder
Director, Div. of International Training and Research

Fogarty International Center

Bldg. 31, Rm. B2C39 Bethesda, Maryland 20892 Tel: 1-301-496-1653 Fax: 1-301-402-2056

EUROPEAN COMMISSION FUROPEAN UNION

Mr. Mario Merla

Directorate-General for Science, Research and Development

200 Rue de la Loi, 1049 Brussels, Belgium Tel: 32-2-295-39-90 Fax: 32-2-296-98-24

Further information regarding the STA Fellowship and host institute is available from the responsible organizations, JISTEC and JST. (See below)

Japan Science and Technology Corporation (JST) Kawaguchi Center Building 1-8, Hon-cho 4-chome, Kawaguchi-city, Saitama Pref. 332, Japan Tel: 81-48-226-5634 Fax: 81-48-226-5652



Public Announcement Regarding Research and Development Projects Based on the Industrial Science and Technology Frontier Program

by the New Energy and Industrial Technology Development Organization on March 20, 1997

The New Energy and Industrial Technology Development Organization (NEDO) will launch the following four research projects in FY1997 based on funds provided by the Ministry of International Trade and Industry (MITI) of Japan. NEDO would like to invite applications from research organizations interested in participating the projects. This public announcement regarding the work to be entrusted is based on the condition that the government budget for FY1997 now under discussion shall be approved.

1. Outline of the Projects and Research and Development Themes to be Entrusted In FY1997

(1) Technological Development of Biological Resources in Bioconsortia

In order to realize the use of bioconsortia consisting of more than one kind of organism, handling techniques shall be developed to enable in situ analysis of bioconsortia, their functions and their active component organisms by using molecular genetic analysis methods. Also, basic technology will be developed in order to use bioconsortia for industrial use (e.g. the production of functional materials) by using bioconsortia analytical techniques and isolation techniques.

Note: In principle, the research will be carried out at a central domestic laboratory to be selected by NEDO, and research organizations participating in the project should dispatch their researchers to the laboratory.

- (2) Advanced Photon Processing and Measurement Technology
- Macroscopic Processing Technology
 Highly reliable laser welding technology which applies "in-process monitoring technology" and "forecasting control technology" shall be developed.
- Microscopic Processing Technology
 Technology shall be developed which prepares ultra-fine particles with high purity and homogeneous sizes and structures through a high temperature and high pressure field generated by a laser. Technology to assemble the particles into a new microscopic structure having functions on the quantum level shall also be developed.
- In-situ Measuring Technology
 Technology shall be developed in which high sensitivity in-situ measurement of the content and concentration of gasses and fine particles and the shape and temperature of objects can be made using photons in the wavelength which extends from the infrared to the ultraviolet region.
- Non-Destructive Composition Measuring Technology Non-destructive composition measuring technology shall be developed which accurately measures the composition and condition near the surface and internal defects by using a compact short wavelength photon source of high brightness.
- High-Power All Solid-State Laser Technology
 Technology for a high power and high efficiency solid state laser pumped by a laser diode (LD) which is expected to be a basic tool for high accuracy and precision processing shall be developed.
- Solid-State Laser Technology
 Technology for a tightly-focusing all solid-state laser with high operability which is expected to be a basic tool for high accuracy and finesse processing shall be developed.

(3) Super Metal

- Technology for Creating Mesoscopic Structured Steel
 - Research shall be conducted, for example, on forecasting the mechanical properties of ultra-fine multi-microstructure steel and the design of innovative steel. Research shall also be conducted on inventive processing such as heat treatment under a high magnetic field and hot deformation conditions with an extremely high strain rate of high flow stress for the refinement of microstructure in steel.
- Technology for Creating Mesoscopic Structured Bulky Aluminum Materials

 The creation of bulky aluminum materials with a mesoscopic structure shall be studied using such technology as the

 "high dislocation density technique" and the "recovery and recrystallization control technique."
- Technology for Creating Nanostructured Bulky Materials

 The creation of structural metallic materials with microstructures smaller than approximately 100 nanometers shall be studied using such technology as the "hyper-solidification technique," the "fine dispersion of nano-particles technique," and the "high-cluster deposition/high-rate superplastic forming technique."
- Technology for Creating Amorphous Bulky Materials
 The creation of bulky metallic materials with nonequilibrium phases like amorphous phases shall be studied using such technology as the "advanced solidification forming/advanced synthesis forming technique," the "high density energy phase structure control technique," and the "controlled cooling technique."
- (4) Technology for Novel High Functional Materials
- Harmonized Molecular Materials
- Fundamental technology shall be established which makes new high-functional molecular materials by directing the shape, size and/or phase of self-assembled monolayers, mesophase materials, and microporous materials through the control of weak intermolecular interactions (molecular harmonization).



2. Application Procedures

(1) Qualifications of Applicants

Research organizations such as companies, research associations, public corporations or universities, interested in participating in a project independently or in the form of partnerships which meet all of the following qualification criteria may submit an application.

- a. The applicant must have previous research and development experience in the field or related field of project. Also, the applicant must also have the organizational structure and human resources required to carry out the entrusted research and development.
- b. An applicant must be in sound financial condition and be able to firmly manage its finances and facilities to smoothly carry out the entrusted research and development.
- c. An applicant must be willing and able to comply with NEDO's instructions, if such are necessary, in order to fully execute all of the provisions of the entrustment contract.

Participation in the project is open to both domestic and overseas applicants. However, from the viewpoint of ensuring efficiency and flexibility, carrying out research and development at domestic laboratories is one of the important aspects considered. To be specific, regarding overseas research, only research and development items which cannot be conducted in Japan, which are impossible to carry out without using special facilities located overseas and so on, will be selected.

The criteria which NEDO will follow to select project participants are as follows:

Regarding project (1), in principle, a central laboratory should be established in Japan. As for other laboratories, the contents of the research and development corresponding to more than one-half of the amount of the total budget (on an annual expenditure basis) for other laboratories should be carried out in Japan.

Regarding projects (2) and (3) the contents of the research and development corresponding to more than three-quarters of the amount of the total budget (on an annual expenditure basis) for each entire project should be carried out in Japan. Regarding project (4), the contents of the research and development corresponding to more than three-quarters of the amount of the total budget (on an annual expenditure basis) for the entire project should be carried out in Japan. Here, the budget for the three themes which already started shall be included in the total budget for the entire project.

- (2) Application Method
- ① Please submit proposals in accordance with the Proposal Guideline during the period for application for the research and development project or the research and development theme of your interest.
- ② You can obtain the following information posted on NEDO's Internet site: (http://www.nedo.go.jp/index-e.html) Basic Plans

Implementation Policies (for the first year)

Proposal Guideline

- ③ Applicants who can not access NEDO's Internet site, please attend the below mentioned explanatory meetings. At the meetings, documents concerning application, such as the Basic Plans, as well as contract forms (draft) will be made available in written form.
- To obtain the above documents, including contract forms (draft), please send a request together with a self-addressed envelope and international reply stamp to the following address:

New Energy and Industrial Technology Development Organization

Applied Technology Development Dept.

29th Floor, Sunshine 60 Building

3-1-1, Higashi-Ikebukuro

Toshima-ku, Tokyo 170

(3) Explanatory Meetings

Explanatory meetings will be held in order for NEDO to fully explain the contents of the entrustment work, procedures concerning contracts, documents to be submitted, etc. We would appreciate the attendance of all interested parties. Please note that Japanese will be the only language used during the meetings.

Date and place of the meetings: Date: April 9 (Wednesday), 1997

(1) Technological Development of Biological Resources in Bioconsortia 10:00 a.m. to 11:30 a.m. (2) Advance Photon Processing and Measurement Technology 12:00 p.m. to 13:30 p.m.

(4) Technology for Novel High Functional Materials
(3) Super Metal
(4) Technology for Novel High Functional Materials
(4) Technology for Novel High Functional Materials
(5) P.m. to 15:30 p.m.

Place: Kanpo Health Plaza Tokyo, Room Tancho (4F) 4-7-7, Higashi-Ikebukuro Toshima-ku, Tokyo 170 Tel. +81-3-5952-6881

Questions concerning the research and development and contract for the work to be entrused will be accepted at the meetings and by fax (only in Japanese) from April 10 to 17, 1997.

Inquiries concerning the contract for the work to be entrusted:

Fax number: +81-3-5992-1184 (Contract Division, Accounting Department)

Inquiries concerning the contents of research and development:

Fax number: +81-3-3987-9396 (Applied Technology Development Dept.)

(4) Period for Application

All applications must arrive at NEDO no later than May 9 (Friday), 1997.

(5) For further information regarding the research and development work to be entrusted under the above projects, please contact NEDO as follows:

New Energy and Industrial Technology Development Organization

Contract Division, Accounting Department

Telephone: +81-3-3987-9322



SARS INTERNATIONAL CENTRE FOR MOLECULAR MARINE **BIOLOGY GROUP LEADERS**

The Sars International Centre for Molecular Marine Biology is a recently established independent research institute dedicated to basic research on marine organisms, established by the Research Council of Norway in collaboration with the University of Bergen. The laboratory is located in the modern facilities of the Bergen High Technology Centre together with three departments of the University of Bergen in the fields of molecular biology, biochemistry and marine sciences.

The recruitment of scientific staff is international. The Centre will consist of six to seven research groups, each having a budget for six years which gives an average core workforce of four to five persons. Space allows the accommodation of additional personnel on external grants. The groups will also use common laboratory personnel and facilities, including administrative support. The goal of the Centre is to house 70-80 researchers on core funding and external grants.

The Sars Centre is seeking candidates capable of conducting independent research and leading a research group, based upon extensive research on post doctoral level. Candidates should have strong experience in molecular marine biology or related fields. Preferences will be given to outstanding molecular biologists able to prepare and implement original proposals. Functional and comparative investigations on marine animals (including invertebrates and protochordates) are encouraged, but applications in marine microbiology will also be considered. The remuneration is dependent upon experience and personal situation. The appointment is for six years.

Tentative starting date for projects is September 1, 1997. For further information, please contact: Director Dr. Daniel Chourrout, Sars International Centre (email: dch@diamant.jouy.inra.fr; Fax: +33 1 34 65 27 04; Telephone: +33134652354) or Research Advisor Ivar Lossius (Email: ivar.lossius@fa.uib.no; Fax: +47 55 58 49 91; Telephone: +47 55 58 49 95). http://www.uib.no/

Application, including a full CV, list of publications, description of research interests (maximum 5 pages), and the names of three referees, should be sent to:

Bergen University Research Foundation,

UNIFOB/SEP

att: Liv-Grethe Gudmundsen,

Prof. Keysersgt. 8, N-5020 BERGEN

Norway.

Application deadline: April 30, 1997.



applications are invited for a

GROUP LEADER in Molecular Tumor(cyto)genetics

to be employed at the Assistant or Associate Professor level for a period of five years in the Department headed by H. H. Ropers.

The successful candidate is expected to build up his or her own group. Together with the other group leaders, he/she will be given equal access to the department's resources, including personnel (presently 1 post-doc, 1 graduate student and 1 technician per group), bench fees, equipment and sufficient laboratory space to accommodate research projects financed by external grants. The administration of the MPI-MG will assist him or her to find suitable housing.

After the appointment of two new directors, the MPI-MG is re-orienting most of its research towards Molecular Human Genetics, and it plays a major role in the German Genome Research Program. The Ropers Department has a strong interest in the elucidation of hereditary disorders by employing positional cloning and related strategies. Because of its formalized collaboration with the Departments of Human Genetics of the University Hospitals in Nlimegen (NL) and Berlin, it provides an ideal environment for fundamental and applied research at the interface of biology and medicine.

Applications including the usual documents (curriculum vitae, certificates, list of publications, etc.) and the names of two referees should be addressed to: Prof. H. H. Ropers, Max-Planck-Institut fuer Molekulare Genetik, Ihnestrasse 73, 14195 Berlin, Germany (Fax: +49-30-84131383; Email: h.ropers@antrg.azn.nl). The application deadline is April 25, 1997.

FACULTY OF MEDICINE AND HEALTH SCIENCES UNITED ARAB EMIRATES UNIVERSITY

The Faculty of Medicine and Health Sciences in the United Arab Emirates University is seeking to recruit a suitably qualified individuals to the positions of:

Assistant Professor, Associate Professor and Professor in the **Department of Physiology**

The appointees will be expected to support the mission of the Faculty of Medicine, contribute to undergraduate teaching, assist in the development of graduate programs and pursue relevant independent and/or collaborative research activities. The Faculty of Medicine in Al Ain was established in 1986, and has since developed a highly regarded integrated and problembased undergraduate curriculum. There also exists ample opportunity for research with the completion of our new medical school complex which is adjacent to a 500-bed referral hospital. More detailed information can be obtained from our web site at http://www.uaeu.ac.ae

Applicants for these exciting and challenging appointments should hold a Bachelor's degree in Medicine or in the Physiological Sciences and a higher University Degree (e.g. PhD., MD). Evidence of teaching undergraduate medical students and quality research productivity is essential. Successful candidates will receive a competitive tax-free salary and attractive benefits including housing, air tickets and assistancce with dependents' school fees.

Please direct informal inquiries to Prof. W. Montague, Vice Dean, +971 3 672000 (tel), +971 3 672001 (fax) or email montague@medic.uaeu.ac.ae

Formal applications should include a comprehensive curriculum vitae, a list of publications, name/phone/fax/address of five referees, and a covering

Personnel Department (C/o. CP Nair) Faculty of Medicine and Health Sciences UAE University P O Box 17666 Al Ain

United Arab Emirates

We anticipate the successful candidate to be assigned by September 1997; but applications will be accepted until the position is filled.

Geneva Biomedical Research Institute Glaxo Wellcome Research and Development S.A.

The Geneva Biomedical Research Institute is a state-of-the-art-centre of scientific excellence. Its research is directed towards the discovery of novel molecular mechanisms that can be used as drug targets to treat various diseases. Outstanding opportunities have arisen for five talented and experienced research scientists with the following expertise:

Biosensors for Genomics

We are searching for highly motivated scientists who are willing to participate in an interdisciplinary team in the development of novel approaches to extremely high-throughput DNA sequencing.

Qualified candidates will have expertise in biosensors, biochips and micro/nano-system technologies at the PhD and postdoctoral level. Experience in physical biochemistry on solid supports and with non-radioactive biomolecular detection techniques, DNA chips and micro/nanosonic device development and methodology will be highly appreciated.

Informal enquiries can be directed to Dr Eric Kawashima (ehk4287@ggr.co.uk) or Dr Pascal Mayer (pm48747@ggr.co.uk).

Medical Geneticist

To discover genes and identify mutations affecting important psychiatric diseases and open the way to the development of novel therapies. We work in a powerful multidisciplinary team with access to novel technologies of DNA sequencing, protein modeling, cellular biology and transgenic animals with the availability of large collections of human DNA.

Qualified candidates will have a MD or PhD degree, followed by a postdoctoral research experience in medical genetics linkage or association studies and have experience in the use of statistical and in molecular biology technologies.

Informal enquiries can be directed to Dr Jean-Jacques Mermod (jim4182@ggr.co.uk).

Bioinformatics

The two successful candidates will have a key role in a multidisciplinary team studying novel aspects of bacterial biology and identifying molecular targets for the development of novel antibiotics. Qualified candidates will have a PhD degree, a strong background in programming, sequence analysis, protein structure and relational databases.

Bioinformatic Support

with a PhD or Biology degree. The successful candidate must have broad biological knowledge and must be an experienced user of bioinformatic tools. He/She will play a key role in assisting users with bioinformatics-related questions and curating biological databases. Knowledge of World-Wide Web-based technology will be an asset.

Informal enquiries for the three positions can be directed to Dr Manuel C. Peitsch (mcp13936@ggr.co.uk).

The Geneva Biomedical Research Institute is part of the Glaxo Wellcome group, one of the world's most successful healthcare companies which has an outstanding reputation for the quality of both its research and products.

If you are interested, please quote the position applied for and send your detailed curriculum vitae with a list of publications and the names of three referees to: Personnel Department, Geneva Biomedical Research Institute, Glaxo Wellcome Research and Development S.A., 14 chemin des Auix, 1228 Plan-des-Ouates/Geneva, Switzerland.

BONE BIOLOGY

Rhône-Poulenc Rorer, a global leader in the pharmaceutical industry, is seeking highly-motivated, team-oriented scientists to join their Bone Biology group located in Collegeville, Pennsylvania.

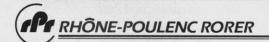
RESEARCH SCIENTIST The candidate will be responsible for designing and conducting in vivo studies to support the evaluation of novel therapeutic agents for the treatment of osteoporosis and for evaluating, interpreting and presenting the study results.

To qualify, you should have a Ph.D. or D.V.M. with 2-5 years post-doctoral or equivalent experience. 3-5 years experience performing histological and histomorphometric analysis of undecalcified bone and experience designing and conducting studies to evaluate the effect of novel agents on bone tissue are also required. **Position JO-BM**.

MOLECULAR/CELLULAR BIOLOGIST The candidate will be responsible for identifying novel molecules or pathways involved in osteoblast proliferation, differentiation or physiology and for collaborating with other Discovery Research and Gene Medicine scientists to identify and validate potential drug targets for the treatment of osteoporosis.

To qualify, you should have a Ph.D. in Biology or related field with 0-2 years postdoctoral experience. Experience in analyzing gene expression in developmental/differentiation systems is required; and familiarity with bone biology a plus. Expertise in molecular biology is necessary; and familiarity with cell biology and cell culture techniques are preferred. **Position JO-SJ.**

Rhône-Poulenc Rorer offers a competitive salary, excellent benefits, a highly challenging work environment, and opportunities for advancement. Qualified candidates should send their resume, indicating position of interest, to: Rhône-Poulenc Rorer Research & Development, Human Resources, Mailstop H37, Position _____, P.O. Box 5096, Collegeville, PA 19426-0800. Equal Opportunity Employer, M/F/D/V.



Howard Hughes Medical Institute

Research Technician

The Howard Hughes Medical Institute, the nation's largest private philanthropic organization, conducts scientific research at leading academic medical centers throughout the United States. Currently, we have a position available for a Research Technician at our laboratory at Vanderbilt University Medical Center.

The laboratory is identifying novel, evolutionarily conserved genes that are required for neuronal morphogenesis in the Drosophila embryo (Neuron 15: 273-286, Cell 87: 197-204). We seek a highly motivated individual who has practical experience in molecular biology or protein purification and/or a strong academic record. Familiarity with genetics preferred. BS or equivalent required.

HHMI offers a competitive salary and excellent benefits package. Please send your resume, salary requirements, and three references to: HHMI, Vanderbilt Medical

Vanderbilt Medical Center, Attn: Kim Parker, 823 Light Hall, Nashville, TN 37232-0295. EOE.

http://www.hhmi.org



GLOBAL CAREER OPPORTUNITIES

FACULTY OF MEDICINE AND HEALTH SCIENCES UNITED ARAB EMIRATES UNIVERSITY

The Faculty of Medicine and Health Sciences in the United Arab Emirates University is seeking to recruit a suitably qualified individual to the position of:

Professor and Chairman in the Department of Physiology

This position requires performance at a high level of competence in education, research and administration. The appointee will be expected to demonstrate strong leadership skills which should ensure the smooth and efficient running of the department in support of the Faculty's mission. The Faculty of Medicine in Al Ain was established in 1986, and has since developed a highly regarded integrated and problem-based undergraduate curriculum. There also exists ample opportunity for research with the completion of our new medical school complex which is adjacent to a 500-bed referral hospital. More detailed information can be obtained from our web site at http://www.uaeu.ac.ae

Applicants for this exciting and challenging appointment should hold a Bachelor's degree in Medicine or in the Physiological Sciences and a higher University Degree (e.g. PhD., MD). Evidence of leadership skills in the development and implementation of educational programs for medical students and graduate students in basic medical sciences and also competitive research programs is essential. The successful candidate will be able to establish independent research efforts and collaborate with on-going investigations with scientists in other departments, and will receive a competitive tax-free salary and attractive benefits including housing, air tickets and assistance with dependents' school fees.

Please direct informal inquiries to Prof. W. Montague, Vice Dean, +971 3 672000 (tel), +971 3 672001 (fax) or email montague@medic.uaeu.ac.ae

Formal applications should include a comprehensive curriculum vitae, a list of publications, name/phone/fax/address of five referees, and a covering letter to:

Personnel Department (C/o. CP Nair)
Faculty of Medicine and Health Sciences
UAE University
P O Box 17666
Al Ain
United Arab Emirates

We anticipate the successful candidate to be assigned by September 1997; but applications will be accepted until the position is filled.

LeukoSite, Inc., located in Cambridge, MA, is a growing biopharmaceutical company whose mission is the discovery, development and commercialization of drugs that block disease-causing actions of leucocytes. Our success in inflammation research and corporate partnering have resulted in the following opportunities.

DIRECTOR, EXPERIMENTAL THERAPEUTICS

We are seeking a dynamic and energetic Director or Experimental Therapeutics who will report to the Vice President of Research. The new Director will validate new and selective molecular pathways of leucocyte recruitment in disease; evaluate both monoclonal antibodies as well as small molecule inhibitors in vivo; provide support for the optimization of pharmacologic activity of small molecule inhibitors; participate in the drug discovery and development efforts with our corporate partners; and interact regularly with our scientific advisory board. The successful candidate will have 5-10 years' experience in a leadership position in the pharmaceutical industry; a thorough knowledge of inflammation biology; a strong record of accomplishment evidenced by publications in major journals; the ability to articulate the department's strategy both internally and externally; and a strong desire to work in a highly collaborative environment.

SENIOR SCIENTIST, IMMUNOLOGY

We are seeking a Ph.D.-level scientist with at least 2 years' postdoctoral training who will report to the Senior Director of Immunology. This individual will work on the biology of chemokine receptors as part of our drug discovery programs. The major emphasis will be on the expression and function of T cell chemokine receptors both *in vitro* and *in vivo*. The successful candidate will have a strong publication record; a team-oriented approach to science; and experience with cytokines, receptor-ligand interactions and animal models of inflammation. Experience in molecular biology, especially relating to G-protein coupled receptors, would be an advantage. LeukoSite encourages presentation of scientific advances at meetings and in leading journals.

Please forward your resume along with a cover letter, indicating job title, and 3 references to: Personnel, LeukoSite, Inc., 215 First St., Cambridge, MA 02142.

An Equal Opportunity Employer.

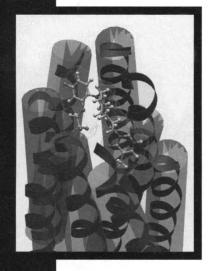
For more information, visit our website at: www.leukosite.com.

employer.
visit our website LEUKOSITE

Roche Bioscience offers an exciting environment of innovation in human pharmaceutical research. Situated in one of California's most vital technological regions, our Palo Alto campus presents a unique setting that combines the synergy of science and business to produce research that delivers results. Join our research-based enterprise as we discover important new medical therapies and create a future of industry firsts.



As an equal opportunity employer, we are committed to workforce diversity. We proudly offer ongoing career opportunities for Research Associates and Scientists in most areas of modern biology and chemistry, including these featured positions:



research associates and research scientists

Chemical Development

Our Chemical Development group is responsible for conducting research to solve synthetic organic chemical problems related to process research, process development and scale-up. Research Scientists are part of our lead teams involved in the production of drug substances needed for proof of concept. They devise and implement procedures for both laboratory and pilot plant operations, following GMPs. Research Associate candidates will need a BS/MS or equivalent in Chemistry with at least 3-5 years of experience. Those interested in our Research Scientist role will need a PhD in Organic Chemistry with 1-4 years of relevant experience or a BS/MS degree in Chemistry with 10+ years of experience. Job# SCI0321KH-A

Synthetic Organic Chemistry

In this Research Scientist role, you will design, prepare and characterize organic compounds for biological evaluation. This will involve interaction with cross-functional teams to meet program goals and the development of staff. You will also interpret and evaluate results of research and make recommendations to management on programs and projects. A PhD with 1+ years of relevant post-doctoral experience and a broad knowledge of all theoretical and practical aspects of synthetic organic chemistry are required. Job# SCI0321KH-B

Located in the San Francisco Bay Area—close to Stanford University and near scores of biotechnology companies—Roche Bioscience offers a highly attractive salary, bonus plans, a full benefits package including relocation assistance, plus a unique environment that rewards new ideas and courageous decision-making. If you would like to explore our opportunities firsthand, apply today by sending your resume to: Roche Bioscience, (indicate Job Number), 3401 Hillview Avenue, A2-HR, Palo Alto, CA 94304. Fax 415/424-8159.

You may also see us on the www at: http://www.roche.com/bioscience.

the future happens here first

POSITIONS OPEN

TENURE-TRACK POSITIONS AVAILABLE

ASSISTANT/ASSOCIATE PROFESSOR, Oral Biology: Applications are invited for two full-time, tenure-track faculty positions. The positions will be available as early as September 1997, but may be filled during the academic year. Applicants must have a doctoral degree, appropriate postdoctoral experience, and will be expected to develop research programs with external funding. Areas of research should be focused on the head and neck biology of the following: mineralization and demineralization; soft connective tissue; and the immune system. Other interests in the department include craniocervical systems: developmental, functional, and pathological anatomy. Teaching competence is required at the dental, graduate, and postgraduate student levels and should include either or both general as well as oral/dental histology and oral immunobiology. Application deadline is May 1, 1997, or until the positions are filled. Priority consideration will be given to applications received by May 1. Applicants should send curriculum vitae, statement of research interests, and the names of three or more references to: Dr. James H. Fuller, Chair, Search Committee, Department of Oral Biology, College of Dentistry M/C 829, The University of Illinois at Chicago, Chicago, IL 60612-7213. University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

ASSISTANT PROFESSOR/Preharvest Food Safety/Bacteriologist in the Food Animal Health Research Program. Department of Veterinary Preventive Medicine, Ohio Agricultural Research and Development Center, The Ohio State University, Wooster, Ohio. Qualifications for this tenure-track position include D.V.M., or equivalent degree, Ph.D. degrees, certification or eligibility for certification by the American College of Veterinary Microbiologists. Candidates must have comprehensive training in bacteriology including current molecular methods used to investigate bacteria and their pathogenesis. Responsibilities include the development and leadership of a research program on food borne human pathogens of animal origin related to preharvest food safety that leads to scholarly publications and extramural funding. Participation in teaching and graduate training programs is expected. Collaboration with other researchers is essential. Review of applications will begin May 1, 1997 and will continue until a suitable candidate is recruited. Salary is commensurate with qualifications. Qualified applicants are invited to submit curriculum vitae and names of five references to: Dr. K. W. Theil, FAHRP, OARDC, The Ohio State University, Wooster, OH 44691. Telephone: 330-263-3744; Email: theil.1@osu.edu

The Ohio State University is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR BIOLOGY

The University of Dubuque, a private liberal arts university located in Dubuque, Iowa, seeks qualified applicants for the position of ASSISTANT PROFESSOR of Biology. This tenure-track position is part of a field-oriented Environmental Science Program which features team-teaching among biologists, chemists, and geologists. Teaching responsibilities will include courses in general zoology, comparative vertebrate anatomy and embryology, and general ecology. Qualifications include Ph.D. in an appropriate field, prior teaching experience, and a demonstrated commitment towards teaching excellence. To apply for this fall 1997 opening, send letter of application, curriculum vitae, academic transcripts, and three letters of reference to: Human Resources, University of Dubuque, 2000 University Avenue, Dubuque, IA 52001-5099. University of Dubuque is an Affirmative Action/Equal Opportunity Employer.

SCIENTIFIC WRITER/RESEARCH GRANT COORDINATOR

Coordinate and facilitate preparation and submission of research proposals for Department of Radiology, serve as a liaison during preparation of collaborative proposals, keep department aware of NIH and other funding opportunities, establish an internal review process for research proposals and counsel new faculty about funding process and assist with their grant submissions. Experience in scientific writing and degree in English required. Experience in research funding mechanisms desirable. Salary commensurate with experience. Please reply to: Reuben Mezrich, M.D., Ph.D., Interim Chair, University of Pennsylvania, 3400 Spruce Street, Philadelphia, PA 19104. Equal Opportunity Employer.

POSITIONS OPEN

ASSISTANT OR ASSOCIATE PROFESSOR CELLULAR/MOLECULAR PATHOGENESIS OF INFECTIOUS DISEASES OF ANIMALS

Tenure-track, twelve-month position for an outstanding SCIENTIST to explore the mechanisms of infectious diseases and/or host immune mechanisms. Successful candidate will establish a research program in an area of immunology, microbiology, or virology which complements existing strengths in infectious diseases of animals. Candidates must have demonstrated excellence and productivity in research and have interest in graduate education. Ph.D. required. Postdoctoral experience and a professional degree (D.V.M., M.D., or equivalent) desirable. The primary appointment will be in the Department of Veterinary and Biomedical Sciences with a joint appointment in the School of Biological Sciences. Submit a curriculum vitae, statement of research plans, and the names and addresses of three references postmarked by May 1, 1997 (or until suitable candidate is found) to: Dr. John A. Schmitz, Department of Veterinary and Biomedical Sciences, University of Nebraska-Lincoln, P.O. Box 830905, Lincoln, NE 68583-0905. Telephone: 402-472-2952. University of Nebraska-Lincoln is committed to a pluralistic campus community through Affirmative Action/Equal Opportunity, is responsive to the needs of dual career couples, and assures reasonable accom-modation under the Americans with Disabilities Act. Contact Dr. Schmitz for additional information

TENURE-TRACK POSITION ASSISTANT PROFESSOR EQUIVALENT IMAGING PHYSICIST

A tenure-track position is available in the Laboratory of Cardiac Energetics (Chief, Robert S. Balaban, Ph.D.), National Heart, Lung and Blood Institute (NHLBI) for a RESEARCH SCIENTIST to direct an independent imaging physics laboratory developing methods and technology in biomedical imaging. The candidate may have a Ph.D. or M.D. degree and have achieved independent research status as evidenced by publication in major peer reviewed journals. Research experience in any of the following areas is appropriate: MRI, ultrasound, image processing, and/or optics. Salary and research support will be commensurate with experience. This position will be supported by two postdoctoral fellows and one technician. Tenure-track candidates are supported for up to six years before consideration for tenure.

Applications must be received within six weeks of the publication of this advertisement. Please submit a curriculum vitae and a brief statement of research plans, and have three letters of reference sent to:

Office of the Scientific Director NHLBI 10 Center Drive MSC 1668 Bethesda, MD 20892-1668

NIH is an Equal Opportunity Employer.

ASSISTANT OR ASSOCIATE PROFESSOR DEPARTMENT OF NEUROBIOLOGY

The Department of Neurobiology at the University of Alabama at Birmingham (UAB), School of Medicine invites applications for a tenure-track position at the AS-SISTANT or ASSOCIATE PROFESSOR level. The Department is seeking an outstanding individual who uses contemporary research methods to evaluate the development and/or function of the nervous system. Candidates utilizing imaging technologies and/or genetic approaches to study integrative function of the nervous system are encouraged to apply. Teaching responsibilities include participation in the neuroanatomical component of medical neuroscience. Attractive facilities and start-up package are available. The Department currently has a strong base of molecular and cellular neurobiologists studying problems of receptor and ion channel function and signal transduction. Send curriculum vitae and statement of research plans and have three letters of recommendation sent to: Michael J Friedlander, Ph.D., Professor and Chair, Department of Neurobiology, 1719 6th Avenue South, CIRC 516, University of Alabama at Birmingham, Birmingham, AL 35294-0021 by May 2, 1997. UAB is an Affirmative Action/Equal Opportunity

POSITIONS OPEN

The University of Washington, Division of Oncology is seeking a full-time faculty member at the level of ASSIS-TANT PROFESSOR. This individual should have M.D. or M.D., Ph.D. degrees and be a Board eligible or Board certified hematologist with at least two years of previous experience in the direct care of patients undergoing allogeneic bone marrow transplantation. The individual should have research interests and accomplishments in the cellular and molecular biology of hematopoietic stem cells as demonstrated by publications in peer-reviewed journals. A significant portion of the applicant's salary and research support should be derived from external funding sources. Candidates should send a curriculum vitae, a concise statement of their research plans, three letters of reference and letter of application to: Robert B. Livingston, M.D., Head, Oncology, University of Washington, Box 3565043, Seattle, WA 98195-6043. The closing date for applications is April 30, 1997. The University of Washington is building a culturally diverse faculty and strongly encourages applications from female and minority candidates. The University of Washington is an Equal Opportunity/Affirmative Action Employer.

SCIENCE ADVISOR

The National Center for Environmental Assessment-Cincinnati (NCEA-CIN) of the U.S. Environmental Protection Agency is seeking candidates for a significant multidisciplinary position, GS-14/15 (\$64,338 to \$98,382 per year, based on qualifications), located in Cincinnati, Ohio. The principal duties include responsibilities as SCIENCE ADVISOR and project leader for complex human health and/or ecological risk assessments. Selecter reviews and/or develops risk assessment documents, methods or guidelines; identifies, resolves or elevates to the Director (Dr. Terry Harvey) major issues arising from the scientific peer review of NCEA documents and other assessment products; provides scientific expertise/technical assistance to other federal, local government agencies, as well as national/international governments and organizations.

The applicant must have a highly developed proficiency (Ph.D. or equivalent experience) in at least one of the following disciplines: ecology, toxicology, pharmacology, microbiology, epidemiology, or environmental health sciences with at least three years of experience in the area of health or environmental risk analysis. Essential qualifications also include publishing and presenting papers at national/international meetings on risk assessment; knoweldge of management practices, theories, and techniques, and evidence of effective coordination of team work efforts. Experience leading national/international scientific projects is desirable.

Plese submit a résumé, SF-171 or OF-612, three references, bibliography and copy of two recent publications, and other supporting documentation by April 17, 1997 to: Jessie Hopkins, U.S.EPA, (Mail Code 3648) 401 M Street, S.W., Washington, DC 20460. Telephone: 202-260-2965. EPA is an Equal Opportunity/Affinnative Action Employer.

The USDA, Agricultural Research Service (ARS), Beltsville Agricultural Research Center, Plant Sciences Institute, Insect Chemical Ecology Laboratory, Beltsville, Maryland is seeking a RESEARCH CHEMIST, GS-1320-11/12. Salary is commensurate with experience (GS-11: \$38,330-\$49,831 per annum; GS-12: \$45,939-\$59,725 per annum). Candidates must be U.S. citizens. The position involves planning and conducting independent and cooperative research in the area of arthropod chemical ecology with special emphasis on pheromones, kairomones, synthetic attractants and repellents. In addition to the basic educational requirements, applicants must demonstrate 1) knowledge of the principles, theories, practices, methods, and procedures of organic chemistry; 2) ability to calibrate, maintain, and operate analytical instruments in order to perform measurements and analyses; 3) ability to design, plan, and conduct research and analyze and publish results; and 4) knowledge of synthetic organic chemistry. For information on the research program contact: Dr. Jerry Klun, Telephone: 301-504-6085. For information on application procedures/forms and a copy of the vacancy announcement, contact Veronica Olaaje, Telephone: 301-344-1014. Applications submitted in response to this advertisement must include announcement number ARS-07B-087/B-7-14, must be postmarked by April 14, 1997, and mailed to: USDA, ARS, HRD, Beltsville/Headquarters Operations Branch, 6305 Ivy Lane, Room 361, Greenbelt, MD 20770. USDA/ARS is an Equal Opportunity

NATIONAL CENTER FOR **BIOTECHNOLOGY INFORMATION** NATIONAL LIBRARY OF MEDICINE NATIONAL INSTITUTES OF HEALTH

PUBLIC HEALTH SERVICES

Fellowship program focusing on Information Science and Technology.

There is an opening for an appointment in the NIH Intramural Programs of the National Center for Biotechnology Information for a postdoctoral scientist interested in the mathematical and statistical analysis of algorithms for the discovery and display of information in large textual databases. The focus is data of biological importance. Strong computer and quantitative skills are essential as well as an interest in modeling the information access problem for natural language text. Applicants must have a Ph.D. or M.D. degree or equivalent, with less than 5 years of experience. Applicants need not be U.S. citizens. Stipends start at or above \$25,000 per year depending on experience. Applications will be accepted if postmarked by May 31, 1997.

Candidates should send curriculum vitae and the names, addresses, and telephone numbers of three references directly to:

W. John Wilbur, M.D., Ph.D. **National Institutes of Health** NLM/NCBI Building 38A, Room 8S814 Bethesda, MD 20894

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

NIH is an Equal Opportunity Employer.



NORTHWESTERN UNIVERSITY VICE PRESIDENT FOR RESEARCH AND GRADUATE STUDIES

The vice president for research and graduate studies is the senior officer with primary responsibility for the quality and vitality of Northwestern University's graduate education, research, and other scholarly activity on the Evanston and Chicago campuses. Within these areas, the vice president provides leadership in policy formulation, strategic planning, and operational oversight. The vice president's portfolio includes the Graduate School, University research centers, Office of Research and Sponsored Programs, and Technology Transfer Program. Northwestern's research awards exceed \$170 million annually, and the Graduate School enrolls 2,700 students in 80 degree programs. Staff reporting to the vice president include the dean of the Graduate School and the associate vice presidents for research and for business and technology development.

Northwestern is an affirmative action, equal opportunity educator and employer.

For full consideration, nominations and applications should arrive by April 15, 1997, at the office of: Secretary, Search Committee for the Vice President for Research and Graduate Studies, Northwestern University, Rebecca Crown Center 1-110, Evanston, Illinois 60208-1119.



ALSAC . Danny Thomas, Founder

CHAIRPERSON

Department of Hematology-Oncology

St. Jude Children's Research Hospital, a premier center for biomedical investigation, is accepting applications for Chairperson of the Department of Hematology-Oncology. This individual will be expected to direct an internationally recognized research program and lead a department that integrates patient-oriented and laboratory-based research. The department currently has 30 faculty positions and substantial laboratory and clinical research space. The institution has well established research programs in Hematological Malignancies, Molecular Oncogenesis, Signal Transduction, Solid Malignancies, Transplantation and Gene Therapy, Viral Oncogenesis and Tumor Immunology, and developing programs in Cancer Prevention and Control, and Neurobiology and Brain Tumors. Applications are encouraged from physicians experienced in pediatric hematology-oncology with appropriate board certification and an established record of leading an outstanding research program.

Applicants should submit a curriculum vitae and the names and addresses of four references to:

William F. Evans St. Jude Children's Research Hospital 332 N. Lauderdale Street Memphis, TN 38105 Ph: (901) 495-3663

Fax: (901) 525-6869

St. Jude Children's Research Hospital is an equal opportunity employment/affirmative action employer.

NEW APPROACHES TO CROP PROTECTION

DuPont Agricultural Products is seeking a highly motivated **SCIENTIST** for an opening in our Global Technology, CPC Discovery, organization.

HERBICIDE LEAD DISCOVERY PRINCIPAL INVESTIGATOR

Partner with other Principal Investigators to lead initial screening programs focused on the discovery of new herbicides. Collaborate with other scientists working in chemistry, biochemistry, biokinetics, biology, and other disciplines to evaluate novel chemistry for utility as herbicides.

Requirements for the position include a Ph.D. in a relevant scientific area such as plant physiology, biochemistry, or organic chemistry, and/or experience with evaluating novel chemistry for specific attributes in a biological evaluation and screening environment. Demonstrated skills and ability in data management, modeling, visualization and interpretation are highly desirable.

The successful candidate will also have strong leadership and organizational skills and the ability to work both independently and as part of a multidisciplinary team.

We offer a stimulating work environment, a strong history, and mission in discovery of new CPCs, and excellent company benefits.

CPCs, and excellent company benefits.

Qualified candidates should send their letter of application and curriculum vitae to:

Stine-Haskell Research Center Attention Human Resources, SCI97-010 P.O. Box 30 Newark, DE 19714

DuPont is an Equal Opportunity Employer.

SUPERVISORY BIOLOGICAL SCIENTIST OR SUPERVISORY ENVIRONMENTAL SCIENTIST (GS-0401/1301-14)/Salary Range: \$63,169-\$82,120. The Subsurface Protection and Remediation division of the National Risk Management Research Laboratory of the U.S. Environmental Protection Agency (USEPA), located in Ada, Oklahoma, has an opening for a Supervisory Biological or Environmental Scientist to serve as Chief of the Biotic Processes and Applications Branch. The primary function of the position is to provide leadership to the Branch in planning, conducting, and overseeing research to meet the Agency's needs for data and models of subsurface phenomena for application to the protection and remediation of subsurface environments, and to the restoration of watershed ecosystems that are strongly influenced by ground-water flow and contaminant transport. The successful candidate will have an established record of research and publication in the biological or physical sciences, or in environmental engineering. This is a supervisory position and requires the ability to lead interdisciplinary research teams. U.S. citizenship is required. Applications must be postmarked no later than April 18, 1997. For further information and a copy of the announcement, qualifications, and necessary forms, please contact: Career America Connection, Telephone: 912-757-3000; The Federal Jobs Opportunities Bulletin Board (BBS), Telephone: 912-757-3100, or our Web site: http://www.epa.gov/epahome/Jobs.html. The USEPA is an Equal Opportunity Employer

PEDIATRICIAN WITH MOLECULAR GENETICS AND BASIC RESEARCH BACKGROUND

The University of Kentucky is interested in recruiting a PHYSICIAN SCIENTIST with pediatric training combined with molecular genetics. Pediatric training may include clinical genetics or other relevant specialties of pediatrics. Opportunities for interaction with the Cancer Center, Aging Center, and basic science departments are excellent. Commitment to develop a strong institutional focus on molecular genetics research has been made. Senior physician scientists with NIH funding, or those with strong potential for extramural funding will be considered. Interested candidates should write to: Dr. V. Mankad, Department of Pediatrics, University of Kentucky Medical Center, 740 South Limestone, Room J406, Lexington, KY 40536-0284.

POSITIONS OPEN

INSTITUTE OF MOLECULAR BIOLOGY (IMB) ACADEMIA SINICA, TAIPEI, TAIWAN, ROC

Tenure-track Principal Investigator positions are open for outstanding individuals to establish research programs in an expanding, stimulating research institute. Applicants are expected to have a Ph.D. degree and at least two years of postdoctoral experience in the research areas of chromosomal structure/function and yeast cell biology.

mosomal structure/function and yeast cell biology.

There are now 27 laboratories in IMB working on genetics and development, cellular communication and signal transduction, nuclear structure and function, and structural biology. The IMB is well-funded and equipped with excellent facilities.

Successful candidates will be appointed at the ASSISTANT, ASSOCIATE, or FULL RESEARCH FELLOW level, and are expected to develop their own independent research programs as well as program projects with other research fellows in the Institute.

Deadline for application is April 20, 1997. First-round candidates will be selected by May 5. The interview process and final decision are expected to be completed by May 31, 1997.

Interested individuals should send curriculum vitae, a description of past research accomplishments and future research interests, and three letters of reference by April 20, 1997 to: Search Committee, c/o Fei Chen, Institute of Molecular Biology, Nankang, Taipei, Taiwan 11529, ROC. FAX: 886-2-782-6085. Email: feichen@cvax.sinca.edu.tw

FORENSIC SCIENTIST (SEROLOGY/DNA) \$3,341-\$5,331 MONTH

Full-time position with benefits at the City and County of Denver Police Crime Laboratory. Requires Baccalaureate Degree in molecular biology or molecular genetics plus two years of professional criminal and forensic experience in serology (DNA), including using related analytical equipment. Advanced degree in molecular biology or molecular genetics is preferred. Prior court qualification is highly desirable. Applicants possessing the highest qualifications in terms of length and quality of experience and education will be invited to further examination. You must reside within the City and County of Denver three months after the completion of the probationary period. Current vacancy is at Denver Police Department.

Apply by calling 303-640-3946 to request an application through the mail. Completed application can be faxed to 303-640-1048 or mailed to: Career Service Authority, 110 16th Street, Denver, CO 80202-5206 and received by Friday, June 27, 1997 in order to be accepted. Equal Opportunity Employer.

RESEARCH SCIENTISTS

The Universities Space Research Association (USRA) Alliance for Microgravity Materials Science and Applications (AMMSA) seeks potential candidates to fill anticipated openings for: RESEARCHER, POSTDOCTORAL FELLOW, and SENIOR RESEARCHER for fundamental and applied ground-based and flight studies of 1) protein, other biological, and inorganic crystal growth from solutions; 2) growth of II-VI crystals from melt and vapor; 3) gravity related biological phenomena at the NASA/Marshall Space Flight Center Space Sciences Laboratory. Experience in modern optical, AFM, various X-ray, theory, modeling, and other approaches to crystal growth, characterization, protein biochemistry, purification, crystallization, and X-ray structural analysis are desirable. Letter of application and curriculum vitae should be received no later than 60 days after publication date to: Ms. Paula Cushman, AMMSA, 4950 Corporate Drive, Suite 100, Huntsville, AL 35806. Affirmative Action Participant/Equal Opportunity Employer.

Environmental Science. A one-year sabbatic replacement position for an environmental SCIENTIST will be available August 1, 1997 for an individual with teaching and research interests in environmental science. Teaching responsibilities will include participation in a team-taught introductory course, a sophomore course in environmental problem solving, a junior-level seminar in the candidate's area of expertise, an advanced environmental science course, and directing senior research projects. Send curriculum vitae, statements of teaching and research interests, and three letters of recommendation to: Dr. Eric Pallant, Chair, Department of Environmental Science, Allegheny College, Meadville, PA 16335. Review of applications will begin on April 4, 1997. Allegheny College is an Equal Employment Opportunity.

POSITIONS OPEN

COMPUTATIONAL BIOCHEMIST

DuPont is seeking a **SCIENTIST** to help design safe and effective crop protection chemicals in our Agricultural Products organization. The scientist will work with protein crystallographers, biochemists, and synthesis chemists to design enzyme inhibitors and receptor active compounds using protein structural and molecular modeling approaches.

Responsibilities include maintaining software systems for structure based design. The successful candidate will have skills in the application of protein modeling programs to the study of protein-ligand interactions. A working knowledge of physical organic chemistry, structural biochemistry, chemometrics, and bioinformatics are desirable.

A Ph.D. in chemistry, biochemistry, or related field is required and postdoctoral and/or industrial experience is preferred. Interested candidates are invited to forward their résumés and a list of three references to:

Stine-Haskell Research Center Attention Human Resources, SCI97-030 P.O. Box 30 Newark, DE 19714

DuPont is an Equal Opportunity Employer.

BIOINFORMATICS MARKETING MANAGER GENETICS COMPUTER GROUP (GCG)

GCG has an opening for a **BIOINFORMATICS MARKETING MANAGER**. Responsibilities include producing market communications, competitive landscape analyses, and feasibility analyses for new products; positioning and pricing new products; representing GCG in lead sales and at exhibits; and overseeing customer relations, licensing, and sales. This person will travel about 25–50% of the time, and report to either the Chief Executive Officer or Chief Operating Officer.

The ideal candidate will have excellent written and verbal communication skills, advanced degrees in a biological science and business, experience in marketing to the Biotech-Pharma market, and familiarity with computers.

GCG produces the Wisconsin PackageTM for sequence analysis, used by over 40,000 scientists in 40 countries. GCG offers an excellent benefits and compensation package, an exceptional work environment, and relocation assistance. We are located in Madison, Wisconsin, a great place to live and raise a family.

Please send résumé with réferences to:

Genetics Computer Group, Inc. Marketing Manager 575 Science Drive Madison, WI 53711

ASSISTANT RESEARCH SCIENTIST position available to study the LH/CG and FSH receptors in the laboratories of Drs. Deborah Segaloff and Mario Ascoli. Applicants must have a Ph.D., M.D. or equivalent and demonstrated proficiency in planning and executing independent research with molecular biological techniques. Preference will be given to those individuals having three or more years of postdoctoral experience, research experience with the gonadotropin receptors, gene promoter analyses, site-directed mutagenesis, expression of recombinant proteins in mammalian and nonmammalian systems, cDNA cloning, and DNA mutational analyses. Please send curriculum vitae and two letters of reference to: Dr. Deborah L. Segaloff, Department of Physiology and Biophysics, The University of Iowa, Iowa City, IA 52242. The University of Iowa is an Affirmative Action/Equal Opportunity Employer. Women and minorities are strongly encouraged to apply.

SCIENTIFIC ADVISOR

Full-time **SCIENTIFIC ADVISOR** position available in a biotechnology patent law firm for an individual with a Ph.D. in molecular biology, biochemistry, or chemistry. We seek a highly motivated individual with a strong, broad-based technical background who is committed to becoming a patent agent. Excellent communication skills also required. Send curriculum vitae and a statement of interest to:

CAMPBELL & FLORES LLP 1111 Third Avenue Seattle, WA 98101

Scientist/ Sr. Scientist

ZymoGenetics, a Seattle-based biotechnology company located in the historic Lake Union Steam Plant, is looking to fill the following positions:

PRINCIPAL SCIENTIST, ENDOCRINOLOGY

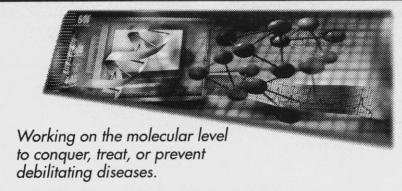
We have developed world class bioinformatics capabilities, which we seek to leverage by the application of functional genomic techniques and the rapid elucidation of the biological properties of novel proteins appearing in the database. To help in this effort, we are seeking a Principal Scientist specializing in endocrinology. This position will entail the design and implementation of in vitro and in vivo assays for biological function across a wide spectrum of therapeutic areas. Qualified candidates will have at least 10 years postdoctoral experience in endocrinology and/ or physiology, with an established track record of scientific accomplishment. Clinical experience or associations will be a distinct advantage. This is a senior position that will command an excellent salary and benefits. Respond to Reference

SCIENTIST/SR. SCIENTIST

We are looking for a Ph.D.-level Developmental Biologist/Geneticist with 3-5 years of post-graduate experience in the elucidation of novel gene function. The successful candidates will have a strong background in functional or molecular genetics and/or vertebrate development. Experience in in-situ hybridization and immunohistochemistry, analysis of expression patterns in both adult and fetal tissues, and cross species comparisons is required. Demonstrated skill in the use of genetic databases is highly desired. Respond to Reference #15N297.

As a subsidiary of Novo Nordisk A/S, the world's largest producer of industrial enzymes, ZymoGenetics offers an exciting environment characteristic of a small research and development company, along with the scope and stability of a large pharmaceutical corporation. We also offer intellectual challenge, state-of-the-art facilities and a generous benefits package. Please apply by sending your resume or CV, (noting reference #) to: ZymoGenetics, Inc., Human Resources, 1201 Eastlake Avenue East, Seattle, WA 98102. ZymoGenetics is committed to Equal Opportunity and Diversity.





INFECTIOUS DISEASES & ONCOLOGY DISCOVERY RESEARCH

AT SCHERING-PLOUGH

At the Schering-Plough Research Institute, scientists are discovering innovative therapeutic agents that challenge humankind's most debilitating diseases. If you are seeking an opportunity to be on the cutting edge of exploratory pharmaceutical discovery, become part of an advanced multidisciplinary research team in one of the following areas:

ASSOCIATE SCIENTIST - Microbial Genetics

An excellent opportunity is available for a versatile, organized and highly motivated scientist to join an interdisciplinary team involved in Actinomycete molecular biology and the production of secondary metabolites. To qualify, you will need a BS degree in Molecular Biology or related discipline and 4-7 years of experience or an MS degree and 2-4 years of experience. Background must include expertise in microbial genetics as well as a solid knowledge of molecular biology and biochemical techniques. Familiarity with secondary metabolite production and actinomycete biology is helpful. Demonstrated ability to work both independently and as an effective team member is critical. To be considered for this position, please reference Dept. DD9715/TH-DS.

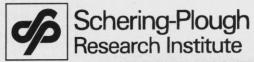
ASSISTANT SCIENTISTS - Natural Products

We are currently seeking two talented Chemists to conduct bioassay-guided isolation and structure elucidation of drug candidates from marine, plant and microbial sources. The individuals must be proficient in HPLC instrumentation, methodology and spectroscopic techniques. One position requires a background in computer programming and database management skills; the other requires experience with LC-MS instrumentation for rapid dereplication and characterization of potential leads from natural product extracts and knowledge of computer database management. The ideal candidates will possess a Bachelor's degree in Analytical or Organic Chemistry and 2-4 years of experience or a Master's degree and 0-2 years of experience. Excellent oral and written communication skills, the ability to collaborate with scientists from many disciplines, and the desire to learn the necessary skills to stay at the leading edge of new drug discovery are essential. To be considered for these positions, please reference Dept. DD9709/16-DS.

ASSOCIATE SCIENTIST - Oncology

An opening exists in our Oncology Department for a talented scientist to conduct research on relevant drug discovery targets. The successful candidate will have a BS degree in Biology and 4-7 years of laboratory experience or an MS degree and 2-4 years of experience. A background in molecular biology and tissue culture techniques is critical. Experience in all basic molecular biology techniques as well as maintenance and transfection of mammalian cells is essential. Experience in biochemical techniques is preferred. To be considered for this position, please reference Dept. DD9732/CK-DS.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to forward a resume indicating the Dept. Code for your position of interest and salary requirements to: Human Resources-DMS, Schering-Plough Research Institute, 2015 Galloping Hill Road, K-15, Kenilworth, NJ 07033-0539. You may also respond via e-mail to: spri@spcorp.com. Please include the Department Code for your position of interest in the Subject Line. We are an equal opportunity employer. We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.



Using Science for Human Advantage

PRINCIPAL MICROBIOLOGIST

Corporate resource for micro, enzyme, and fermentation issues. Responsible for problem solving and process changes. Illinois location. M.S. or Ph.D. preferred. Send résumé to: David Rindom, Human Resources, P.O. Box 130, Atchison, KS 66002.

UNIVERSITY OF MASSACHUSETTS DARTMOUTH

Applications are invited from applied mathematicians and/or statisticians for a tenure-track position in the Department of Mathematics. Responsibilities include 25% teaching (one course per semester) and 75% research at the University's Center for Marine Science and Technology. Qualifications include an earned doctorate, evidence of excellence in teaching, and experience/interest in marine fisheries and resource management.

Send letter of application, curriculum vitae, and names and addresses of three references to:

Chair, Search Committee
Department of Mathematics
University of Massachusetts Dartmouth
285 Old Westport Road
North Dartmouth, MA 02747-2300

University of Massachusetts Dartmouth is an Affirmative Action/ Equal Opportunity Employer.

The University of Nebraska Medical Center announces three INSTRUCTOR, Ph.D., M.D., or D.V.M. positions available immediately in an expanding multidisciplinary program investigating the neurobiology of HIV infection utilizing electrophysiological and molecular methods to analyze virus-associated neurotoxicity. Applicants must have strong background in electrophysiology with at least two years of prior postdoctoral experience. Curriculum vitae and three references by April 15, 1997 to: Howard E. Gendelman, M.D., Professor, Laboratory of Viral Pathogenesis, Path/Micro, University of Nebraska Medical Center, 600 South 42nd Street, Omaha, NE 69198-5215. An Affirmative Action/Equal Opportunity Employer.

IMAGE ANALYSIS CORE FACILITY MANAGER

The Scripps Research Institute (TSRI) has an immediate opening for a Core Facility MANAGER to perform fluorescence microscopy; micro-injection, confocal microscopy and image analysis. Qualified candidate will possess a degree in a biological science and a minimum of five to ten years of directly related experience and strong computer skills.

Send résumé to: Dr. David Cheresh, TSRI, 10550 North Torrey Pines Road, IMM24, La Jolla, CA 92037. We value and support diversity in our workforce/Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSOCIATE position available for one year to study the human health effects of gasoline ethers. Position requires a Ph.D. or equivalent and extensive postdoctoral experience in cytochrome P450-mediated metabolism and in genetic polymorphism. Salary is commensurate with experience and a comprehensive benefits package is available. Please send curriculum vitae by April 11 to: Ms. Leithauser, Laboratory for Cancer Research, College of Pharmacy, Rutgers, The State University of New Jersey, Piscataway, NJ 08855-0789. FAX: 908-445-0687.

CYTOGENETIC TECHNOLOGISTS

Genzyme Genetics in Santa Fe, New Mexico seeks experienced cytogenetic technologists to help with volume growth. Qualified candidates will be NCA-certified or eligible and have two or more years of experience. Genzyme Genetics offers competitive compensation and a comprehensive benefits program. Send your confidential résumé and salary history to: Diane Marbourg, 2000 Vivigen Way, Santa Fe, NM 87505. Equal Opportunity Employer.

COORDINATOR

Cleveland MetroParks Zoo is seeking a COORDINA-TOR of Scientific Research. Requirements include a Ph.D. in biology with emphasis on behavior, experience conducting research in a zoological park, grant development and scientific publication, excellent communication skills. Résumés to: P.O. Box 360411, Strongsville, OH 44136. FAX: 216-572-5676.

POSITIONS OPEN

PROGRAM OFFICER-EMERGING INFECTIOUS DISEASES

The Burroughs Wellcome Fund, an independent private foundation established to advance the medical sciences, seeks an individual with a doctoral degree in a biomedical field; with a demonstrated working knowledge in the areas of infectious diseases, microbiology, and genetics; and relevant experience in developing, implementing, managing, and evaluating grant programs. Knowledge of the academic research environment essential. Excellent oral and written communication skills as well as planning and organizational skills required. Excellent benefits package. Salary range: \$45,000–\$55,000. Submit résumé by April 21, 1997 to:

Martha G. Peck
Vice President, Programs
Burroughs Wellcome Fund
4709 Creekstone Drive, Suite 100
Durham, NC 27703
FAX: 919-941-5884
Email: mpeck@bwfund.org

SCIENTIST PRIMARY CELL CULTURE

In Vitro Technologies, Inc. (IVT) invites applications for the position of Primary Cell Culture SCIENTIST. This person will have at least five years of experience in the isolation, culture, characterization, and production of primary cell cultures from a variety of organs and tumors, from animal and/or human tissues. Excellent verbal and communications skills required. Ph.D. preferred, but we will consider B.S./M.S. candidates with significant experience and expertise. We offer a competitive salary and excellent benefits. Candidates should send their curriculum vitae with references to: Human Resources, In Vitro Technologies, Inc., 1450 South Rolling Road, Baltimore, MD 21227. FAX: 410-455-1245. We are an Equal Opportunity Employer.

CYTOGENETICS LABORATORY DIRECTOR

Genzyme Genetics is seeking applicants for the position of Cytogenetics Laboratory **DIRECTOR** for its Santa Fe, New Mexico facility. Candidates must be American Board of Medical Genetics certified in clinical cytogenetics. Significant experience in managing a cytogenetics laboratory is required. Interested applicants should submit a letter of interest, curriculum vitae, and a list of references to:

Diane Marbourg, Human Resources Manager Genzyme Genetics 2000 Vivigen Way Santa Fe, NM 87505 FAX: 505-438-1120

Genzyme Genetics is an Equal Opportunity Employer that is proud of the diversity of its workforce.

DNA DIAGNOSIS SECTION CHIEF. The Texas Department of Health (TDH) is recruiting a Microbiologist V to develop a molecular laboratory at the Genetics Testing Center in Denton. Prefer Ph.D. applicants with experience in Clinical Molecular Genetics, ABMG eligibility or certification and supervisory experience. Contact: TDH Bureau of Human Resources, 1100 West 49th Street, Austin, TX 78756. Telephone: 512-458-7345. Résumés not accepted. Use posting number 97-TDH-0594 to apply. The posting closes on April 30, 1997. Equal Opportunity/Americans with Disabilities Act Employer.

Senior postdoctoral fellow/researcher SCIENTIST position is available to study neuronal reorganization in the aging rat brain, employing pharmacological, cell biological, molecular techniques. The laboratory is an interdisciplinary environment and advancement is possible. Training in tract-tracing, c-fos, cholinergic or water maze techniques is desirable. Please send curriculum vitae, including the names of three references to: Dr. J. Michael Wyss, Department of Cell Biology, University of Alabama at Birmingham, Birmingham, AL 35294-0019. Email: jmwyss@uab.edu. An Equal Opportunity/Affirmative Action Employer.

RESEARCH TECHNICIAN/ASSOCIATE/GRADUATE STUDENT with experience in cellular and molecular biology techniques for projects related to neuronal aging. The University of South Alabama in Mobile combines a fine teaching environment with a low cost of living and a great climate. Convenient to Gulf beaches. Submit curriculum vitae and references to: Miguel Pappolla, M.D., Department of Pathology, 2451 Fillingim Street, Mobile, AL 36617.

POSITIONS OPEN

POSTDOCTORAL FELLOW POSITION

Position for a POSTDOCTORAL FELLOW in a cellular/molecular immunology laboratory with an emphasis on the pathogenesis of systemic lupus erythematosus. Projects include the molecular basis of autoantibody pathogenicity, nitric oxide in inflammation, and interactions of bacterial DNA with the immune system. Expertise in signal transduction desired. Please send letter of interest and curriculum vitae to: Gary S. Gilkeson, M.D., 912 CSB Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425. The Medical University of South Carolina is an Equal Opportunity Employer.

POSTDOCTORAL FELLOW, BIOCHEMISTRY UNIVERSITY OF TEXAS MEDICAL BRANCH

Available immediately, to study the role of lipid peroxidation and antioxidants in age related macular degeneration. Required qualifications: M.D. or Ph.D. in biochemistry or related field, experience with GC, HPLC, UV-VIS spectroscopy, managing large volumes of data, and written communications. Screening begins April 1, 1997. Contact: Dr. Frederik van Kuijk, Department of Ophthalmology and Visual Sciences, University of Texas Medical Branch, Galveston, TX 77555-1067. University of Texas Medical Branch is an Equal Opportunity/Affinnative Action, Minorities/Females/Disabled/Veterans, University.

POSTDOCTORAL RESEARCH UNIVERSITY OF CALIFORNIA, DAVIS

Position available immediately to study myocardial metabolism and ion transport in animal models of adaptation to myocardial ischemia such as preconditioning and hibernation. Candidates should have experience in biochemistry and NMR. Send curriculum vitae, summary of research interests and experience, and names of three references to: Saul Schaefer, M.D., Division of Cardiovascular Medicine, TB 172, University of California, Davis, CA 95616.

POSTDOCTORAL POSITIONS (one requires U.S. citizenship or permanent residency) are available to study control mechanisms of cytokine signal transduction and gene expression. Candidates with background in molecular biology or biochemistry should send curriculum vitae and addresses of three references to: Dr. Yu-Chung Yang, Indiana University School of Medicine, IB540, 975 West Walnut Street, Indianapolis, IN 46202. Telephone: 317-274-7512; FAX: 317-274-7592; Email: vcyang@usa.net

POSTDOCTORAL ASSOCIATE POSITIONS available immediately to study the molecular basis of aggressive behavior or alcoholism, and to overexpress membrane protein for X-ray crystallography. Experience in receptor assay is essential. Send résumé, statement of current research, and addresses of three references to: Dr. Jean Shih, Department of Molecular Pharmacology, University of Southern California School of Pharmacy, 1985 Zonal Avenue, Los Angeles, CA 90033. Email: jeshih@lssc.usc.edu.

POSTDOCTORAL POSITION available starting July 1, 1997 to study DNA damage and repair in yeast and/or mammalian cells. Qualifications: Ph.D. in biology or biochemistry with significant experience in molecular/cell biology and/or genetics related to DNA damage and repair. Send curriculum vitae, summary of research experience, and names/addresses of three references to: Dr. Bevin Engelward, Division of Toxicology, 56-631, MIT, Cambridge, MA 02139. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE. Starting date flexible. To carry out research on enzyme kinetics and mechanisms. Please respond to: R. Pollack, Department of Chemistry and Biochemistry, University of Maryland Baltimore County, Baltimore, MD 21250. Applicants will be accepted until a suitable candidate is found. The University of Maryland is an Equal Opportunity/Affirmative Action Employer and applications from qualified minorities, women and individuals with disabilities are encouraged.

POSTDOCTORAL/RESEARCH ASSOCIATE

Molecular modeling and molecular dynamics research involving investigations centered around the protein: ligand interaction. CHARMM experience preferred. Send curriculum vitae and references to: Dr. William M. Southerland, Department of Biochemistry and Molecular Biology, Howard University College of Medicine, 520 W Street, NW, Washington, DC 20059. Email: bill@lmc.med.howard.edu.



in the research and development of ophthalmic and vision care products, has a position immediately available in our Research & Development Division

for a senior scientist in Molecular Biology. The selected candidate must be willing to collaborate actively within a multidisciplinary team of biochemists, cell biologists, pharmacologists, and medicinal chemists in identifying new therapeutic targets and drugs for treatment of ocular disease.

Requirements include a Ph.D. in Molecular Biology, Biochemistry or Cell Biology, with at least 7-10 years of productive research in Molecular Biology, preferably in a pharmaceutical research environment. Candidates must have a strong and broad background in molecular biology, including recombinant DNA techniques, cDNA library construction and screening, plasmid construction, gene transfection, expression systems, protein production, and bioinformatics. Preference will be given to applicants with either experience or strong interest in the genetics of ocular disease.

Alcon Laboratories, Inc., offers competitive salaries and excellent benefits, including medical/life/dental/vision insurance and a generous profit sharing trust plan. Our 160-acre headquarters campus is located in Fort Worth, Texas, renowned for its warm climate, favorable cost of living, and a variety of educational, recreational, and cultural attractions. Please send your curriculum vitae and current salary requirements to: Alcon Laboratories, Inc., Placement & Development, T1-3 (PSMB), P.O. Box 6600, Fort

Worth, TX 76115. An Equal Opportunity Employer, M/F/D/V. Pre-employment drug testing.



More Than Meets The Eye

Columbia University Biosphere 2 Center, Inc. **Deputy Director/Director of the Earth** Learning Center

Columbia University is developing a new campus in Arizona that focuses on planetary stewardship. The Earth Learning Center comprises the interdisciplinary research, education and public programs (200,000 visitors a year) which will emerge over the next several years. We are now conducting a search for the Deputy Director of the Biosphere 2 Center/ Director of the Earth Learning Center with responsibility for developing the Biosphere 2 apparatus—the world's largest enclosed and controlled environment—as a research, teaching and learning tool. The Biosphere 2 facility is supported by a spectrum of analytical laboratories and is a 250 acre campus located at the base of the Santa Catalina mountains. The successful candidate will lead the development of an integrated teaching, learning and research program in areas such as climate change, agriculture, biogeochemistry, ecology, biodiversity, botany, system and climate modeling, ocean studies, and other related areas and will have the opportunity to develop a nationally competitive user's research facility.

The successful candidate must have an established record of research and productivity in any of the research areas noted above as evidenced by national and international recognition. The incumbent must also have a record of commitment to interdisciplinary education and teaching and a recognition of the necessity of a connection of science and education to the public interest. The successful candidate must demonstrate effective experience with collegial, constructive partnerships with a broad spectrum of institutions, including the private sector and Federal agencies. It is expected that the Director of the Earth Learning Center will maintain active research and teaching.

Applicants/nominees must submit an up-to-date curriculum vitae and publication list and the names of at least three references. It would be helpful if the application letters included a 1-2 page statement giving an assessment of challenges and opportunities confronting this world-unique facility. Review of the applications will begin April 1 and continue until the position is filled. Materials should be sent to Dr. William C. Harris, Biosphere 2 Center, P.O. Box 689, Oracle, AZ 85623; www.bio2.edu. An Equal Opportunity Employer.



We recognize that diverse perspectives are a key factor in the process of discovery.

Diversity

Combining the best of science, health and environmental discovery, Amgen continues to emerge as one of the most forward-thinking biotechnology companies in the industry. At our beautiful campus in Boulder, Colorado, there are even more opportunities worth discovering than you imagined.

RESEARCH SCIENTIST

Position is responsible for designing, implementing, and directing specific scientific experiments which significantly contribute to attaining goals jointly established by the Research Staff. The requirements for this position include a Ph.D. in Organic Chemistry or related field (preferably Synthetic Organic Chemistry), postdoctoral training or related experience, and typically two or more years of related experience in a research or laboratory setting. The successful applicant will have expert knowledge of synthetic organic chemistry with a proven track record of accomplishments supported by publications. Applicant must have good interpersonal communication skills. In addition, expert knowledge of medicinal chemistry, record of research proposals, and previous supervisory experience preferred. (Job Code: BPSC-5725)

RESEARCH SCIENTIST

Working in a multi-disciplinary research team, you will develop and implement state-of-the-art high throughput and secondary screens to identify and characterize small molecule effectors of molecular and cellular targets. You will analyze HTS and follow-up data and perform preliminary SAR to advance active compounds. Requirements for this position include a Ph.D. in Biochemistry, Cell Biology, or a related field and typically 3-5 years of industrial HTS experience. The successful candidate will have knowledge of cell biology and of molecular mechanisms of drug action. Ability to work productively in a goal-oriented team essential. (Job Code: BPSC-9852)

We recognize that diverse perspectives are a key factor in the process of discovery.

At Amgen, you'll find our approach as rewarding as it is effective. We offer a highly competitive compensation and benefits package. Please mail your resume to: Amgen, Boulder, Human Resources, Dept. BPSC-(insert appropriate code), P.O. Box 19409, Boulder, CO 80308-2409. Please consult our Web site at: www.amgen.com or call our Job Hotline at: (800) 446-4007 for information on other career opportunities available at Amgen. Principals only, please.

EEO/AA Employer M/F/D/V



Pharmacology POSTDOCTORAL: Experience in enzyme assays, membrane binding, protein chemistry and cell culture preferred. Send résumé to: Prof. R. J. Bergeron, Department of Medicinal Chemistry, P.O. Box 100485, Gainesville, FL 32610-0485. FAX: 352-392-8406. No telephone calls please.

DUKE UNIVERSITY POSTDOCTORAL POSITION INVESTIGATING THE ROLES OF PROTEOGLYCANS IN TRANSPLANT BIOLOGY

A POSTDOCTORAL POSITION in the Transplantation Biology program at Duke University is available immediately to an individual with experience in the biochemistry and/or the cell biology of proteoglycans. Research is directed at the role of proteoglycans in the immunological responses to allogenetic and xenogenetic transplantation. The Transplantation Biology Laboratory, headed by Dr. Jeffrey L. Platt, consists of a large, interactive and multidisciplinary group which includes students at all levels and research faculty. To apply, send curriculum vitae and names of two references to: Dr. Jeffrey L. Platt, Professor of Experimental Surgery, Box 2605, Duke University Medical Center, Durham, NC 27710.

POSTDOCTORAL POSITION BETH ISRAEL DEACONESS MEDICAL CENTER HARVARD MEDICAL SCHOOL

An NIH-funded **POSTDOCTORAL POSITION** is available to study the role of heparan sulfate extracellular matrix in regulation of angiogenesis. Research interests of the laboratory focus on molecular and cellular aspects of endothelial cell biology and involve a wide range of approaches including cell culture studies, transgenic animals, and heparan sulfate biochemistry.

Send FAX or cover letter describing research interests and experience, along with names of three references, to: Dr. Michael Simons, Division of Cardiology, Beth Israel Deaconess Medical Center, 330 Brookline Avenue, Boston, MA 02215. FAX: 617-975-5201.

POSTDOCTORAL POSITION DUKE UNIVERSITY MEDICAL CENTER DIVISION OF PEDIATRIC NEURO-ONCOLOGY

POSTDOCTORAL POSITION will be available July 1, 1997 to focus on alkylator induced DNA damage and repair, specifically repair of DNA interstrand cross links. Requires Ph.D. in molecular biology, biochemistry, or related field. Stipend: \$25,000–35,000 plus benefits. Applicants should submit a curriculum vitae and three letters of recommendation to: Dr. Henry S. Friedman, Professor of Pediatrics, Duke University Medical Center, Box 3624 DUMC, Durham, NC 27710

Duke University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION in biophysical NMR. Participate in the development of novel solid state NMR methods, including sophisticated structural techniques and optically-pumped NMR, and in their application to biophysical problems, including structural studies of biologically significant proteins and fundamental studies of protein folding. Applicants should be highly skilled in experimental physics, physical chemistry, biophysics, or structural biology. Must be less than five years postdoctoral. Send curriculum vitae and two reprints to: Dr. Robert Tycko, Laboratory of Chemical Physics, NIDDK, National Institutes of Health, Building 5, Room 112, Bethesda, MD 20892-0520. The NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION to study tyrosine kinases in synapse formation and function at the neuro-muscular junction. Two kinases, Fyn & Fyk, that phosphorylate the acetylcholine receptor will be studied using molecular and cellular approaches. Projects involve investigating the i) regulation of Fyn & Fyk by innervation and extracellular factors, ii) signal transduction cascade, and extracellular factors, ii) signal transduction cascade, and eiii) role of Fyn & Fyk in acetylcholine receptor expression, clustering, and channel kinetics. Dr. S. Swope, EPO8 Research Building, Georgetown University Medical Center, 3970 Reservoir Road, Washington, DC 20007

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP, Molecular Immunology, Departments of Medicine and Microbiology, University of California, San Francisco. NIH-funded. Project: Genetic manipulation of neuropeptide receptors on lymphocytes and neuroendocrine cells. Résumé to: Edward J. Goetzl, M.D., University of California, San Francisco, Box 0711, San Francisco, CA 94143-0711. FAX: 415-476-6915.

POSTDOCTORAL TRAINING PROGRAM Cellular and Molecular Aspects of Aging

Positions are available for **POSTDOCTORAL TRAINEES** (Ph.D. and/or M.D.) to obtain two years of specialized training in the methods and models of research on aging. This program is funded by the National Institute on Aging and directed by a consortium that includes:

-Allegheny University of the Health Sciences (formerly Medical College of Pennsylvania and Hahnemann University) (Drs. V. J. Cristofalo, E. Friedman, D. Murasko, and J. Roberts).

Thomas Jefferson University (Dr. R. Baserga).
 University of Medicine and Dentistry of New Jersey (Dr. H. Ozer)

-The Wistar Institute (Dr. E. Levine).

Research emphases include: cell cycle kinetics/dynamics; growth factor regulatory mechanisms; growth regulatory genes; cellular transformation and immortalization; regulation of gene expression; cytogenetics; nutrition, aging, and cancer; immune parameters as biomarkers of aging; immune suppression; vascular cell physiology; cardiovascular physiology/pharmacology; adrenergic neurotransmission.

Address applications (curriculum vitae, three letters of recommendation, and graduate school transcripts) to: Vincent J. Cristofalo, Ph.D., Audrey Meyer Mars Professor and Director, Center for Gerontological Research, Allegheny University of the Health Sciences, 2900 Queen Lane, Philadelphia, PA 19129-1191.

POSTDOCTORAL POSITION NEUROIMMUNOLOGY

A POSTDOCTORAL POSITION is available immediately. This laboratory is studying the role of cytokines and nitric oxide in human CNS diseases including HIV encephalitis and multiple sclerosis (*J. Immunol.*, 157:3569, 1996, and references therein). Recent focus includes mechanism of neuronal death by activated glia and iNOS regulation. Training in neurobiology, molecular/cell biology, or neuropathology is essential. Qualification for training grant preferred. Salary support is available for two to three years in an intellectually stimulating and nurturing environment. Please send cover letter, curriculum vitae, and three references to: Sunhee C. Lee, M.D., Department of Pathology, F-717N, Albert Einstein College of Medicine, Jack & Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461. FAX: 718-430-8867; Email: slee@aecom.yu.edu. *Equal Opportunity Employer.*

POSTDOCTORAL POSITION IN CARDIAC MMR SPECTROSCOPY MASSACHUSETTS GENERAL HOSPITAL AND HARVARD MEDICAL SCHOOL

A POSTDOCTORAL POSITION to study cardiac biochemistry and carbon-13 NMR spectroscopy is available at the NMR Center of Massachusetts General Hospital and Harvard Medical School in Charlestown, Masachusetts. Qualified candidates will hold a Ph.D. or M.D. with experience in NMR or cardiovascular sciences.

Submit curriculum vitae and three letters of reference to: E. Douglas Lewandowski, Ph.D., NMR Center, Massachusetts General Hospital, Building 149, Thirteenth Street, Charlestown, MA 02129.

POSTDOCTORAL RESEARCH ASSOCIATE CORNELL UNIVERSITY MEDICAL COLLEGE

Ongoing position available July 1, 1997 for highly motivated scientist with expertise in biochemistry, molecular and cell biology to study signal transduction mechanisms in vascular biology. Applicant should be interested in developing a long-term relationship with this laboratory. Send or FAX curriculum vitae to: K Craig Kent M.D., Chief, Division of Vascular Surgery, NYH-CUMC, Box 207, 525 E. 68th Street, New York, NY 10021. FAX: 212-746-8802. Equal Opportunity Employer/Affirmative Action.

POSITIONS OPEN

POSTDOCTORAL POSITION available to study signal transduction and gene regulation in mammalian cells activated by bacterial products. Send curriculum vitae and references to: Dr. Roman Dziarski, Indiana University School of Medicine, 3400 Broadway, Gary, IN 46408.

POSTDOCTORAL POSITION HARVARD MEDICAL SCHOOL-TRANSLATIONAL RECODING

A POSTDOCTORAL POSITION is available to study the mechanism of decoding UGA as selenocysteine. This process requires specific cis-acting secondary structures in selenoprotein mRNAs (Nature, 353:273, EMBO, 12:3315) and trans-acting factors unique to selenocysteine incorporation (see TiBS 21:203). Projects include investigation of RNA-protein interactions involved, and mechanisms of recoding and suppression of termination. Experience in molecular biology required. Due to available funding, preference given to U.S. citizens or permanent residents. Individuals eligible for other funds are also encouraged to apply. Please send curriculum vitae and names of three references to: Marla Berry, Ph.D., Department of Medicine, Brigham and Women's Hospital, Harvard Medical School, Boston, MA 02115. FAX: 617-731-4718. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION AVAILABLE

One or more POSTDOCTORAL POSITIONS are available at the University of Pennsylvania Health System in the Department of Anesthesia to participate in studies of the physical chemistry of anesthetic/protein interactions. This work is a collaborative effort between the Departments of Anesthesia and Biophysics/Biochemistry of the Medical School and the Department of Chemistry in the College of Arts and Sciences. Training in pharmacology, biochemistry, and protein chemistry preferred. Interested applicants should send a curriculum vitae and letters of recommendation to: Roderic G. Eckenhoff, M.D., Associate Professor of Anesthesia, Department of Anesthesia, 7 Dulles Building, University of Pennsylvania Health System, 3400 Spruce Street, Philadelphia, PA 19104-4283. Email: reckenho@mail.upenn.edu.

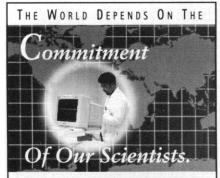
POSTDOCTORAL RESEARCH FELLOWSHIP-IN T-CELL SIGNALING DIVISION OF TUMOR IMMUNOLOGY DANA-FARBER CANCER INSTITUTE

Available immediately for cellular immunologist or molecular **BIOLOGIST** to study the role of protein-tyrosine kinases (p⁵⁶lck), SH2 domain binding proteins, TcR/CD3, CD4, and CD28 signaling in the regulation of T-cell growth. Background in signal transduction is desirable but not essential. Candidate should have a good publication record in order to eventually raise own salary. Send résumé and three letters of recommendation to:

Dr. Christopher Rudd Division of Tumor Immunology Dana-Farber Cancer Institute 44 Binney Street Boston, MA 02115 Telephone: 617-632-3574

POSTDOCTORAL FELLOWSHIP. An NIH-supported position is available starting July 1997 for a minimum of two years to study the regulation of mammalian organogenesis. Systems under study include mammary gland (Development, 121:3539, 1995) and endochondral bone (PNAS, 93:10240, 1996) with current emphasis on tooth and lung development. Send curriculum vitae, summary of relevant experience, and the names of three references to: William Philbrick, Ph.D., Yale University School of Medicine, Box 208020, New Haven, CT 06520. U.S. citizenship or permanent residency required. Yale University is an Equal Opportunity Employer.

POSTDOCTORAL POSITION is available immediately to study ion channels and calcium regulation in human and animal vascular smooth muscle cells. Experience with patch clamp technique (whole-cell and single-channel recording) is required. Send curriculum vitae, research experience, and names of three references to: Dr. Xiao-Jian Yuan, Division of Pulmonary Medicine, University of Maryland School of Medicine, 10 South Pine Street, Suite 800, Baltimore, MD 21201. FAX: 410-706-8162; Email: xyuan@umabnet.ab.umd.edu.



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At Abbott Laboratories, our professionals are researching, developing and marketing the health care products that will make a significant impact on generations to come. The Pharmaceutical Products Division of Abbott Laboratories is currently seeking the following professionals to join the Abbott team.

SENIOR RESEARCH NEUROSCIENTIST

We are seeking an individual with a strong background in molecular and cellular neurobiology with considerable experience in receptor mediated signal transduction pathways as applicable to Neuroscience drug discovery opportunities. The selected candidate will contribute to novel research in an Exploratory Neuroscience area and have several years of appropriate experience at the post-doctoral level. To qualify, you must have a Ph.D. in Neuroscience or a related field with at least 3 years of postdoctoral experience. Strong communication and interpersonal skills are essential. Knowledge of neuroscience, molecular biology, receptor pharmacology, signal transduction pathways, genomics and bioinformatics is highly desirable. (Job #96-LAM-3047)

ASSOCIATE MOLECULAR BIOLOGIST

The ideal candidate will have a B.S./M.S. in Molecular Biology, Biology or a related field and 2–5 years of laboratory experience. A thorough knowledge of cDNA cloning techniques and eukaryotic expression systems is essential. Experience in neurobiology and pharmaceutical drug discovery and expertise in *in situ* hybridization techniques are desirable. (Job #97-LAM-0489)

With 52,000 employees worldwide, and more than \$11 billion in annual sales, we've established ourselves as a respected global business and innovative leader in the changing health care industry. For consideration, please send a CV and salary history to: Abbott Laboratories, Job #(please select), D583, AP9A(LL), 100 Abbott Park Road, Abbott Park, IL 60064. Abbott is an Affirmative Action Employer/Smoke-Free Environment.



PENNSTATE



ASSOCIATE DEAN FOR RESEARCH AND GRADUATE EDUCATION AND DIRECTOR OF THE AGRICULTURAL EXPERIMENT STATION

The Pennsylvania State University College of Agricultural Sciences is seeking candidates for the position of Associate Dean for Research and Graduate Education and Director of the Agricultural Experiment Station.

The College of Agricultural Sciences is a leading college of agriculture in the nation. It is one of 10 colleges on the University Park Campus. Currently there are 265 faculty in the College. Undergraduate student enrollment is approximately 3,000 and graduate student enrollment is 446; about 25 percent of the graduate students are enrolled in intercollege graduate programs. Research expenditures of the College for 1995/96 totaled nearly \$57 million. Major education and research thrusts of the College include the life sciences, food systems and natural resources/environment.

The Associate Dean and Director provides leadership and administration for the College's research and graduate education programs. Reporting to the Dean of the College, the Associate Dean and Director is a member of the administrative team of the College which functions in a collaborative and integrative manner across the teaching, research, cooperative extension and outreach functions of the College. The Associate Dean and Director is supported by several staff associates. Specific responsibilities include: (1) providing leadership, advocacy, and facilitation in support of faculty and staff research; (2) coordinating planning, implementation, evaluation, and promotion of research and graduate education programs; (3) establishing and maintaining close working relationships and collaborations within the College, with other colleges' programs and institutes of the University, external constituencies, and state and federal agencies; (4) encouraging and assisting faculty in securing external funding; (5) serving as College liaison to the Dean of the Graduate School and serving as a member of the University Administrative Committee on Research; (6) assuring compliance with all applicable institutional, state, and federal reporting requirements; (7) administering three outlying research centers of the College.

Candidates must have a distinguished record of research achievement in a field of study commonly associated with a college of agricultural sciences with credentials appropriate for rank of professor in her/his discipline. Demonstrated excellence in research and effective administrative, leadership, and communication skills are essential. The candidate should be thoroughly familiar with the role and missions of the land-grant university. Salary will be commensurate with experience and qualifications.

Candidates should submit a letter of application, curriculum vitae, two-page summary of her/his view of the challenges facing a leading agricultural research institution, and complete contact information for four references. Please send nominations, application, or inquiries to:

Dr. Steven L. Fales, Chair
Search Committee for Associate Dean
for Research and Graduate Education
College of Agricultural Sciences
The Pennsylvania State University
201 Agricultural Administration Building, Box SCI
University Park, PA 16802

The search committee will review applications and nominations beginning April 15, 1997, and will continue to receive them until the position is filled.

An Affirmative Action/Equal Opportunity Employer.
Women and Minorities Encouraged to Apply.

Exelixis Pharmaceuticals, Inc. is a rapidly growing, well-funded private genomics company focused on defining biochemical pathways involved in chronic human diseases. Exelixis uses model organisms to bridge the gap between gene sequence and drug screening targets in multiple disease areas.

We currently have the following openings for Scientists. A Ph.D. and/or M.D. with at least 2 years experience is required.

GENETICS. Join a group exploiting model organisms to dissect disease pathways. Extensive experience desired with genetic and molecular techniques used for the analysis of genes and pathways in *Drosophila* or *C*.

MOLECULAR BIOLOGY/GENE DISCOVERY.

Join a group focusing on gene discovery, isolation and analysis. The successful candidates will possess expertise in cDNA and genomic library construction and screening, PCR techniques, positional cloning of genes, and mutation detection techniques.

MOLECULAR BIOLOGY/ YEAST. Join a group focusing on the analysis of protein-protein interactions. Extensive experience desired with yeast molecular genetic techniques including large scale genetic screens and use of yeast two-hybrid methods.

ASSAY DEVELOPMENT. Join a group developing cell-based and/or in vitro assays for the identification and characterization of novel drug candidates. Extensive experience desired in molecular and cellular aspects of cell signalling and assay development. Experience in high-throughput screening technology is a plus.

PROTEIN BIOCHEMISTRY. Join a group responsible for the purification and characterization of recombinant proteins used in assays of potential protein therapeutics. The successful candidates will have four or more years of experience with optimization and scale-up of protein purification processes. A background in the expression of recombinant proteins is a

For prompt consideration, please specify the position you are applying for and send your resume to:



Human Resources, Exelixis Pharmaceuticals, Inc. 2220 Livingston St., #201, Oakland, CA 94606

Fax: 510-534-9534 Equal Opportunity Employer

Senior Scientists: Biotechnology



The Space Sciences Laboratory, NASA Marshall Space Flight Center, Huntsville, AL, seeks senior scientists to provide scientific research and leadership in NASA's Microgravity Biotechnology Program. Successful candidates will have a record of peer-approved research and experience in leading a research team in theoretical and experimental protein crystal growth or protein crystallography or other areas of gravity-related biological phenomena. Salary: \$45,112-\$96,935.

Address technical inquiries to:

NASA Marshall Space Flight Center ES01/Ms. Ernestine Cothran Huntsville, AL 35812

Phone: 205-544-0649, Fax: 205-544-9243 e-mail: ernestine.cothran@msfc.nasa.gov

For information on how to apply contact:

NASA Marshall Space Flight Center CM41/Phyllis Lones Huntsville, AL 35812

Phone: 205-544-7502, Fax: 205-544-5158 e-mail: phyllis.lones@msfc.nasa.gov

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New Bonus Distribution:

American Society for Microbiology, 5-7 May.

25-26 April BioSCIENCE Career Fair has been canceled.

Space reservation deadline: First come, first served until 10 April.

FACULTY POSITION

THE SCHEPENS EYE RESEARCH INSTITUTE HARVARD MEDICAL SCHOOL

The Schepens Eye Research Institute, an affiliate of Harvard Medical School, seeks well-qualified (M.D., M.D./Ph.D., or Ph.D.) applicants for a position at the Associate Professor level to develop a basic research program in molecular biology or multifactorial retinal diseases (diabetic retinopathy, age-related macular degeneration). Resources and newly renovated laboratory space for initiation of this program have been provided by a generous grant from the Lucille P. Markey Charitable Trust, as well as private philanthropy. Candidates should have experience at the faculty level in creating, sustaining and supporting an independent research program. The successful candidate should have experience in one or more of the following areas: transcription factors and molecular control of gene function; signaling pathways among plasma membrane, cytosol, and nucleus as they relate to growth factors, neuropeptides, cytokines, their receptors and respective inhibitors; regulation of neovascularization, including both angiogenesis and angiostasis; extracellular and intracellular factors involved in causing apoptosis. Candidates are expected to establish their own independent research programs, and to develop substantive collaborations with Institute scientists currently working on retinal pathobiology, to be active in training of pre- and post-doctoral fellows, and to participate as a member of the Harvard Medical School faculty in its teaching programs.

Applicants should send their curriculum vitae, a statement of research interests, and the names of three references by April 15, 1997, to:

J. Wayne Streilein, M.D.
President and DeWalt and Marie Ankeny Director of research
Professor of Ophthalmology and Dermatology
Harvard Medical Íchool
20 Staniford Street
Boston, MA 02114

SERI and Harvard Medical School are Equal Opportunity/Affirmative Action Employers.

Women and minorities are encouraged to apply.

HARVARD MEDICAL SCHOOL



IMMUNOLOGY FACULTY POSITIONS SLOAN-KETTERING INSTITUTE FOR CANCER RESEARCH

Tenure-track positions at the Assistant or Associate Member levels are available in the Immunology Program at Sloan-Kettering Institute (SKI). Candidates should have either the ability to develop a strong, independent research program, or a proven record as an independent investigator, depending on the level of appointment. The Immunology Program has an active faculty whose research interests encompass transplantation, immunogenetics, T lymphocyte development and function, immunology and biology. Interactions with faculty in Memorial Sloan-Kettering Cancer Center, including other SKI faculty and the clinical faculty of Memorial Hospital, are encouraged. Appointment at the Cornell University Graduate School of Medical Sciences is possible. Support will be provided for the investigator to establish or re-establish his/her laboratory. Applicants should send a Curriculum Vitae, bibliography, statement of research interests and names of three references to: Dr. Alan Houghton, Chairman, Immunology Program, Sloan-Kettering Institute, 1275 York Avenue, New York, NY 10021.



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POSTDOCTORAL POSITIONS AVAILABLE

The NIH-funded postdoctoral research positions are available immediately to study the PITSLRE family of protein kinases. Selected isoforms from this family (3 tandemly linked genes producing 16-20 isoforms in humans) appear to be involved in certain aspects of cell cycle regulated spliceosome assembly/disassembly, apoptotic signaling, and response to DNA damage (Lahti et al., Mol Cell Biol 15:1-11, 1995; Loyer et al., EMBO J, submitted). Although the major focus of this work involves mammalian systems, the recent cloning of avian, Drosophila and Xenopus homologues will now allow us to also examine cell cycle and apoptotic functions in vitro (e.g., Xenopus cocyte extracts for apoptotic assays and gene knockout; Li et al., Gene 153: 237-242, 1995; Li et al., Gene 167: 341-342, 1995; Sauer et al., Mol Biol Cell 7: 1759-1769, 1996; Lahti et al., J Biol Chem, in press). Specific PITSURE isoforms are targets of multiple Caspase proteases during TNF- and Fas-induced programmed cell death, producing a novel p40-46 isoform that is an active histone H1 kinase (Lahti et al., Mol Cell Biol 15: 1-11, 1995; Beyaert et al., J Biol Chem). This proteolytic processing is blocked by bel-2, crmA, and peptide inhibitors (e.g., AVAD). The mechanism(s) involved in activating/regulating these protein kinase(s) by ICE-like proteases, association with regulatory subunits, and phosphorylation are currently being investigated. Projects require individuals with prior experience in molecular biology, cell biology, and/or biochemical purifications. Recent Ph.D., M.D., or M.D./Ph.D. is required.

For consideration, please submit a current CV, a list of publications and the names and addresses of three references to: Dr. Vincent Kidd, Associate Member, Dept. of Tumor cell Biology, St. Jude Children's Hospital, 332 North Lauderdale, Memphis, TN 38101.

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BIOANALYTICAL RESEARCH POSITIONS

The Bioprocess and Bioanalytical Research Department within Merck Research Laboratories has immediate openings for several scientists to aid in development and validation of analytical and immunological assays to be used for process monitoring, product characterization, stability and release testing. The Bioanalytical Group is responsible for the development of analytical techniques to be used for all new vaccine products and the eventual transfer of appropriate assay to the Quality Control laboratories. Specific openings that we are currently recruiting for include:

ANALYTICAL IMMUNOLOGIST — The successful candidate must have a Ph.D. in Immunology, Biochemistry or a related field, with substantial experience in the immunological characterization of bacterial and/or viral targets, and knowledge of medical or biochemical virology, bacteriology or immunology. The focus of this position will be to develop analytical methods to assess the antigenic and immunogenic properties of new vaccine candidates. Experience with laboratory automation and robotics is also desired.

ANALYTICAL BIOCHEMIST — The successful candidate must have a Ph.D. in Biochemistry, Analytical Chemistry or a related field. The focus of this position will be to develop analytical methods to characterize the biochemical, biophysical and immunological characteristics of bacterially-



derived vaccine candidates (e.g., polysaccharides, outer membrane proteins, polysaccharide-protein conjugates). Experience with characterization of polysaccharides or oligosaccharides is desired.

ANALYTICAL CHEMIST — The successful candidate must have a Ph.D. in Analytical or Bioanalytical Chemistry or a related field. The focus of this position will be to develop methods to monitor clearance of impurities and residuals throughout the purification process of biotechnology-derived vaccine candidates. Experience with complex sample matrices, a variety of extraction techniques and a broad range of analytical separation procedures is highly desired.

STABILITY COORDINATOR — The successful candidate will have at least a B.S. in biological sciences and at least five years laboratory experience, with significant involvement with biological product development and GMP testing. Responsibilities will be to coordinate and administer stability studies in support of research clinical studies and new product development.

Related openings are expected to be available in the near future for B.S. and M.S. level positions. Interested applicants are encouraged to apply.

Merck offers excellent salary and benefits programs for these positions located in our research facilities 25 miles northwest or Philadelphia. Please send curriculum vitae with cover letter and three references to: Personnel Manager, Ad B-89, MRL Human Resources, WP42-2, Merck Research Laboratories, P.O. Box 4, West Point, PA 19486. Only candidates considered for interviews will receive responses. EEO/AA/V/Employer.

Announcement

The Department of Molecular Biology at Princeton University Announces the Lewis Thomas Fellows Program in Computational and Physical Biology

A fellowship program has been established for outstanding young scientists to work in the Department of Molecular Biology. The Program provides opportunities to exceptional individuals holding Ph.D. degrees (or the equivalent) who wish to gain expertise in Molecular Biology but who do not have formal training in this area. Preference will be given to scientists whose previous research has been in the areas of physics, chemistry, computer science or computational approaches to biology. Research will be carried out in collaboration with members of the Department of Molecular Biology. The Fellows Program provides an annual stipend of \$38,000 and an annual research budget of up to \$15,000 to foster collaborative experimental research in laboratories within the Department of Molecular Biology. Fellows will be appointed for 2 years, with the potential for one additional year of support. The application deadline is April 1, 1997 for a nominal start date of September 1, 1997. For more information about the Program and the Department of Molecular Biology visit http://www.molbio. princeton.edu.

Applications must include a curriculum vitae, list of publications, brief statement (3 pages) of research interests and goals, and the names of three referees who have been asked to send references. Address applications to: Lewis Thomas Fellowship Committee, Department of Molecular Biology, Princeton University, Princeton, NJ 08544-1014. Princeton University is an Affirmative Action/Equal Opportunity employer and welcomes applications from women and members of minority groups.

SYMPOSIUM

MID-ATLANTIC PHARMACOLOGY SOCIETY AND UNIVERSITY OF MEDICINE & DENTISTRY OF NEW JERSEY SCHOOL OF OSTEOPATHIC MEDICINE

JUNE 6, 1997 (8:00 A.M. - 6:00 P.M.)

Symposium I

NO, Reactive Oxygen Species in Ischemia Reperfusion and Tissue Injury

Chairs: C. Hock and R. Klabunde

Michael S. Wolin Overview: NO, Free Radicals in Tissue In-

iurv

Allan M. Lefer Interaction between NO and Peroxynitrite:

Role in Myocardial Reperfusion

Charles N. Serhan Endogenous "Stop Signal" in Reperfusion

Injury

Harry Ischiropoulos Pathophysiological Reactivities of NO

Giora Z. Feuerstein Gene Expression and Genomic Reformat-

ting by Ischemia and Reperfusion: New Insights for Novel Therapeutic Strategies

Symposium II

Lipid Mediators in Cardiovascular Pharmacology and Microcirculation in Honor of the Distinguished Contributions of

John C. McGiff and Gabor Kaley Chairs: P. Y-K Wong and R. Sharma

John C. McGiff Where Did it Begin?

Gabor Kaley Endothelium and Cardiovascular Regula-

tion

Contact:: Patrick Y-K Wong, UMDNJ-SOM, Department of Cell Biology, Stratford, NJ 08084, Phone: (609) 566-6078, Fax: (609) 566-6195



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Postdoctoral Fellowship in Pharmaceutical Sciences

Programmatic research is geared toward improving drug therapy by elucidating underlying mechanisms and pharmacodynamic heterogeneity. Areas of study include leukemogenic effects of anticancer drugs, the contribution of reactive metabolites to pharmacologic effects, and genetic polymorphisms of human drug metabolism. Send curriculum vitae and names of three references to: Mary V. Reilling, Pharmaceutical Sciences, St. Jude Children's Research Hospital, 332 N. Lauderdale, Room D-1052, Memphis, TN 38105. E-mail: mary.relling@stjude.org EOE/AA

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In this critical role, you'll use your expertise and skills to contribute toward research and initial development of immunological assays as well as providing your hands-on technical know-how in general laboratory procedures. To be considered, you must possess a Ph.D. (or equivalent) and 1-5+ years post doctoral experience in cancer research. Candidates with a strong background in immunochemistry and cell biology are preferred and encouraged to apply.

If you have the dedication, spirit and flexibility to rise to our many challenges, send your resume to: Chiron Corporation, Human Resources, 1401 Harbor Bay Parkway, Alameda, CA 94502. We are an equal opportunity employer.

CHIRON

DIRECTOR Structural Biology

Headquartered in a new 66,000 square foot research facility in the San Francisco Bay Area, **Tularik Inc.** is a privately-held biotechnology company dedicated to the discovery and development of small molecule drugs that act through the regulation of gene expression. Tularik has therapeutic programs in viral diseases, inflammation, hypercholesterolemia, immune disorders, obesity and bacterial diseases. The Company's strength in discovering key proteins involved in gene regulation provides a unique opportunity to apply structure-based approaches for drug discovery. Proteins recently discovered at Tularik that are potential targets for drug discovery include human STAT4, STAT6, TRADD, TRAF2, TRAF6 and IRAK.

Tularik has an exceptional opportunity for an individual to build and lead a structural biology group incorporating both NMR spectroscopy and x-ray crystallography capabilities. The successful candidate will have outstanding achievements utilizing NMR spectroscopy to study all aspects of protein structure and an intense desire to apply this expertise to drug discovery. This innovative leader will have responsibility for establishing state-of-the-art laboratories and recruiting an outstanding group of scientists to study the structures of novel proteins discovered at Tularik and their interactions with other molecules. The group will also develop novel technology to study the interactions of proteins with small molecules and will be integrated into Tularik's multidisciplinary project teams in order to advance the Company's drug discovery efforts.

The Director, Structural Biology position at Tularik offers exceptional professional challenge and opportunity, and is accompanied by an attractive compensation package including equity. To be considered for this exciting position, please send, fax or e-mail your resume to:

Tularik Inc., Human Resources Two Corporate Drive South San Francisco, CA 94080 Fax: (415) 829-4355 email: strbiodirector@tularik.com



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Member of the Hermann von Helmholtz Association of German Research Centres We are seeking a

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– Code 011/97 –

for our Institute of Biotechnology.

The main area of work will be the synthesis of chiral building blocks and drugs using a combination of chemical and enzymatic steps based on biotransformations already established in-house.

Requirements: outstanding PhD in bioorganic chemistry; experimental experience in drug synthesis; ability to work in a team; flexibility and reliability; experience in collaboration with industrial partners would be advantageous.

The position is currently limited to two years; if the candidate is suitable, the position might be extended.

Salary and social benefits will conform to the provisions of the Federal Employees Collective Salary Agreement (BAT). The Research Centre Jülich would like to increase the number of women employed and therefore especially encourages qualified women to apply. Applications from disabled persons with appropriate qualifications are welcomed.

Detailed applications including the usual documents should be submitted by 3 May 1997 to

Forschungszentrum Jülich GmbH Personal- und Verwaltungsabteilung – Personalentwicklung – D-52425 Jülich

TWO POSTDOCTORAL OR RESEARCH ASSOCIATE POSITIONS AVAILABLE

Position 1 is for work on structural and functional analysis of bioengineered apolipoprotein A-I variants. Experience in molecular biology, protein and cell culture techniques, or prior experience in apoA-I is required.

Position 2 is for work in apolipoprotein gene regulation. Experience in gene regulation, antisense methodologies, or adenovirus mediated gene transfer is required.

Salary: NIH scale.

References: J. Biol. Chem., 267:16553; J. Biol. Chem., 271:8402.

Applicants should send curriculum vitae to: Dr. Vassilis Zannis, Section of Molecular Genetics, Boston University Medical Center, Center for Advanced Biomedical Research, 700 Albany Street, W509, Boston, MA 02118-2394.

Two POSTDOCTORAL POSITIONS are available immediately in the Synaptic Mechanisms Section of the National Institute of Neurological Diseases and Stroke (NINDS) intramural program. The laboratory studies ion currents and transmitter release in vertebrate synapses with an emphasis on the modulation of presynaptic calcium channels, the molecular basis of transmitter release and the ultrastructure of the transmitter release face. The fellows will address these questions using techniques that range from patch clamp, molecular biology, biochemistry, fluorescence microscopy to electron microscopy, and must have a strong background in cellular neurobiology and/or electrophysiology, a collegiate attitude, and an intent to follow a research career. Visit us at http:// intra.ninds.nih.gov/sms/index.html then send a curriculum vitae, three letters of reference, a letter indicating your interests and long term goals to: E. F. Stanley, SMS, NINDS, Building 36, Room 5A25, NIH, Bethesda, MD 20892. For position information and qualification requirements contact Ms. Christine Steyer, Telephone: 301-496-6334. NINDS is an Equal Opportunity Employer.

Two POSTDOCTORAL POSITIONS available. Areas of investigation include: 1) novel anticancer agents, including interferon and compounds which are biochemical modulators of cancer chemotherapeutic drugs or have anti-angiogenesis properties. Studies include molecular analysis of genes involved in the two processes; 2) the design, synthesis, and testing of novel tumor anti-angiogenesis agents. Candidates should have strong background in biochemical or molecular pharmacology or related fields (first position), or in organic chemistry, including carbohydrate or heterocyclic synthesis, and basic experimental biochemistry skills (second position). Send curriculum vitae and names of three references to: Dr. Edward L. Schwartz or Dr. Robert S. Klein, Department of Oncology, Albert Einstein Cancer Center, Montefiore Medical Center, 111 East 210th Street, Bronx, NY 10467

POSTDOCTORAL POSITIONS

Two NIH-sponsored POSTDOCTORAL POSITIONS available May 1997 for candidates with expertise in molecular biology. Projects include epidermal/endothelial cell and basement membrane biology with gene therapy applications. Send curriculum vitae and names of three references to: Drs. G. S. Herron and M. P. Marinkovich, Department of Dermatology, Stanford University School of Medicine, MSLS Building P204, Stanford, CA 94305. Email: mpm@stanford.edu; FAX: 415-723-8762.

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

POSTDOCTORAL POSITION NEUROBIOLOGY

NIH-sponsored project to investigate gene therapy in rat models of Parkinson's disease with catecholamine genes. Also investigates the role of free radicals and oxidative stress in the mechanism of dopaminergic neuronal degeneration. Experience in some of the areas of molecular biology, tissue culture, histology, and HPLC of catecholamine is required. Send curriculum vitae and names of three references to: U. Kang, Department of Neurology—MC2030, University of Chicago, 5841 South Maryland Avenue, Chicago, IL 60637. FAX: 773-702-9076.

POSITIONS OPEN

POSTDOCTORAL FELLOWS RUTTENBERG CANCER CENTER

Mount Sinai School of Medicine's Ruttenberg Cancer Center has three postdoctoral opportunities available immediately. One will study the regulation and function of UV-inducible transcription factors and protein kinases (PNAS, 92:10585, 1995; Oncogene, 12:2233, 1996; Oncogene, 13:1531, 1996). The second will study tumor suppressor p53 mediated apoptosis in mammalian cells (PNAS, 91:3602, 1994; MCB, 16:2445, 1996). The third will study the biochemistry of the recombination activating proteins Rag-1 and Rag-2 (Cell, 87:263–276, 1996).

All positions require highly motivated scientists with extensive molecular and cellular biology experience. Individuals interested in the first position are encouraged to forward curriculum vitae and the names of three references to: Ze'ev Ronai, Ph.D. For the second position, respond to: Xiangwei Wu, Ph.D. For the third, respond to: Dr. Eugenia Spanopoulou, Ruttenberg Cancer Center, The Mount Sinai School of Medicine, One Gustave L. Levy Place, Box 1130, New York, NY 10029-6574. FAX: 212-987-2240. The Mount Sinai Medical Center is an Equal Opportunity Employer. We foster diversity in the workplace.

POSTDOCTORAL FELLOWSHIPS Genetic Epidemiology and Molecular Genetics

POSTDOCTORAL FELLOWSHIPS in Genetic Epidemiology and Molecular Genetics are available in the Department of Psychiatry at Washington University, St. Louis, Missouri. M.D. or Ph.D. candidates may have degrees in Genetics, Molecular Biology, Bio-statistics, Mathematics, Psychology or Psychiatry. Participation in research groups conducting family and/or molecular studies of Bipolar Disorder, Unipolar Disorder, Schizophrenia, Attention Deficit Disorder, and Alzheimers' Disease accompany a strong didactic program. Methodological linkage and association projects are also in progress. This is an NIMH Institutional Postdoctoral Fellowship Grant so only United States citizens and Permanent Residents may apply. Please send a letter of application including research interests, transcripts, a copy of your curriculum vitae and the names of three references to: Theodore Reich, M.D., Washington University School of Medicine, Department of Psychiatry, 4940 Children's Place, St. Louis, MO 63110. Washington University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP

A research FELLOWSHIP is available in the Department of Immunology and Infectious Diseases at the Research Institute, Palo Alto Medical Foundation with a co-appointment at Stanford University for an M.D. or M.D./Ph.D. to study the immune response to intracellular pathogens, especially Toxoplasma gondii, and to develop new, innovative, molecular approaches for diagnosis of infectious diseases. Project incorporates studies of the role of different stages of the organisms in the immune response of humans and animals. Prior experience in molecular biology and/or immunology required. Send curriculum vitae and names and addresses of three references to: Trisha Mitchell, Research Institute, 860 Bryant Street, Palo Alto, CA 94301. FAX: 415-329-9853. Equal Opportunity Employer.

DUKE UNIVERSITY POSTDOCTORAL POSITION AVAILABLE IMMEDIATELY

A POSTDOCTORAL POSITION for a biochemist, molecular biologist, or immunologist in the Transplantation Biology program at Duke University. Research is directed at the immunological responses to allogeneic and xenogeneic transplantation and includes endothelial cell biology, molecular biology, and biochemistry of the cell surface, and humoral and cellular immunology. To apply, send curriculum vitae, list of publications, and names of three references to: Dr. Jeffrey L. Platt, Professor of Experimental Surgery, Box 2605, Duke University Medical Center, Durham, NC 27710.

POSTDOCTORAL POSITION is available immediately in wound healing and carcinogenesis. Experience in biochemistry techniques, binding assays, and molecular biology is required. Must be U.S. citizen or permanent resident. Send curriculum vitae and names of three references. Contact: Dr. Diana Messadi, UCLA School of Dentistry, CHS 20-118, 10833 LeConte Avenue, Los Angeles, CA 90095. FAX: 310-825-7232. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL FELLOW

Position available in Pediatric Hematology Oncology, the University of Michigan Comprehensive Cancer Center. Full-time available in February 1997. The candidate should have interest in studying apoptosis and hemoblastoma biology along with experience in molecular techniques, neural cell isolation and culture, or isolation of nucleic acids from microdissected samples. Ph.D. required.

Send applications to: The University of Michigan, Pediatric Hematology Oncology, L2110 Women's Hospital, Ann Arbor, MI 48109-0238.

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HARVARD MEDICAL SCHOOL MASSACHUSETTS GENERAL HOSPITAL THREE IMMUNOBIOLOGY POSITIONS AT MASSACHUSETTS GENERAL HOSPITAL

Applications are invited for three POSTDOCTORAL POSITIONS in the Immunobiology Laboratory. Promising researchers will be invited to study the basic biology of human disease as it relates to autoimmunity.

Position 1. Monoclonal antibody production and biochemical characterization. (M.S., B.S. or Ph.D. required.) Candidate most importantly must have track record in monoclonal antibody production. Position has benefit of learning flow cytometry techniques on a state-of-the-art flow cytometer. Possibility for advancement in laboratory management.

Positions 2 and 3. Molecular biology/molecular immunology. (Ph.D. required.) Candidates must have strong Ph.D. thesis and training and some past skills in some of the following areas: transcription assays, promoter assay, gene expression constructs, gene expression in eukaryotic cells, production and screening of cDNA libraries, intracellular eukaryotic protein processing and sequencing.

Applicants should send a curriculum vitae, brief statement of research interests, and have at least two letters of recommendation sent to:

Director/Immunobiology Laboratory Massachusetts General Hospital-East Building 149, 13th Street, CNY-3601 Charlestown, MA 02129

POSTDOCTORAL POSITIONS

- 1) Position available to study developmental regulation of human b globin gene family in YAC transgenic mice. Background in molecular biology required; experience with yeast mutagenesis or transgenic procedures preferred.
- 2) Position available to study mechanisms of gene delivery and expression in hematopoietic progenitors in vivo and in vitro with potential application to gene therapy; background in hematopoiesis and molecular biology required. Please send curriculum vitae and names of three references to: Dr. Karin Gaensler, Department of Medicine, Box 0724, University of California San Francisco, Third and Parnassus, San Francisco, CA 94143-0724. FAX: 415-566-4969.

POSTDOCTORAL POSITION open immediately to explore cardiac repair and muscle regeneration after myocardial infarction. Current efforts include: 1) myoenic conversion of fibroblasts; 2) skeletal and cardiac myoblast transplantation; and 3) molecular regulation of infarct repair. Candidates should have a doctorate, publications, and experience in either molecular biology or cardiac physiology. Submit curriculum vitae, research interests/career plans, and three references to: Charles E. Murry, M.D., Ph.D., Department of Pathology, Box 357470, University of Washington, Seattle, WA 98195. FAX: 206-685-3644. Email: murry@u. washington.edu.

POSTDOCTORAL RESEARCH FELLOW-SHIP—Immediate openings for recent graduates in molecular biology and/or cytogenetics to investigate molecular mechanisms of X chromosome inactivation and genomic imprinting in human cells. Submit curriculum vitae and three references to: Dr. Barbara R. Migeon, Center for Medical Genetics, CMSC 10-04, The Johns Hopkins Hospital, 600 North Wolfe Street, Baltimore, MD 21287-3914. FAX: 410-955-0484; Email: bmigeon@welchlink.welch.jhu.edu.

POSITIONS OPEN

POSTDOCTORAL TRAINING PROGRAM IN CHEMOSENSORY NEUROBIOLOGY

A newly funded NIH Training Program in Chemosensory Neurobiology at the University of Maryland School of Medicine invites applications for POSTDOCTORAL POSITIONS. Our faculty consists of junior and senior investigators with excellent records of training and research in the taste and olfactory systems. Research programs span a wide range of approaches, from molecular biology to human psychophysics. Faculty members have expertise in contemporary molecular approaches, tissue culture, immunocytochemistry, in situ hybridization, quantitative anatomical and functional imaging, electron microscopy, intracellular, patch-clamp and extracellular electrophysiology in both *in vivo* and *in vitro* preparations, neuropharmacology, and behavioral and psychophysical methods. The program is organized around new, stateof-the-art core laboratories for neuroanatomical and immunocytochemical processing, light and confocal microscopy and digital image processing, electron microscopy, neurophysiological recording and functional imaging, tissue culture, and molecular biology. The new University of Maryland at Baltimore Program in Neuroscience, which includes over 80 faculty, provides additional opportunities for multidisciplinary training.

Successful applicants must have a Ph.D. or M.D. in a

Successful applicants must have a Ph.D. or M.D. in a related biological discipline. Preference is given to candidates who bring new approaches to research in the chemical senses. Applicants must be citizens of the U.S. or hold a currently valid I-551 Alien Registration Receipt Card. Send curriculum vitae and the names of three references to: Dr. David V. Smith, Department of Anatomy & Neurobiology, University of Maryland School of Medicine, 685 West Baltimore Street, Baltimore, MD 21201-1509. Affirmative Action/Americans with Disabilities Act/Equal Opportunity Employer.

RESEARCH ASSOCIATE AND POSTDOCTORAL POSITIONS RNA EDITING IN TRYPANOSOMES, GENE FUNCTION IN *LEISHMANIA*

RESEARCH ASSOCIATE and POSTDOC-TORAL POSITIONS are available on projects that study RNA editing in trypanosomes (see Science, 273: 1189, 1996; Cell, 84:831, 1996; Mol. Cell. Biol., 16: 1410, 1996) and gene function in *Leishmania* (see Mol. Cell. Biol., **15**:6845, 1995; Mol. Biodem. Parasit., **66**:11, 1994). The first project is investigating the editing mechanism and the macromolecular complex that catalyzes this process. The second is exploring the functions of novel genes to determine their role in pathogenesis. These projects employ a variety of molecular biological, bio-chemical, immunochemical and cell biological approaches, will develop new techniques, and utilize genetic manipulation of trypanosomes and Leislanania. The Research Associate position requires prior postdoctoral experience and entails research supervision and coordination. Send curriculum vitae and three letters of recommendation to Dr. Ken Stuart, Seattle Biomedical Research Institute and University of Washington, Job 97-02, 4 Nickerson Street, Seattle, WA 98109-1651. Email: kstuart@u.washington.edu. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION DEPARTMENT OF SURGERY AT JOHNS HOPKINS BAYVIEW MEDICAL CENTER

Position available July 1, 1997 to study transfection of cutaneous wounds with plasmids containing the DNA for growth factors such FGF, EGF, or PDGF to enhance wound healing. Experience in molecular biology applicable to performing and documenting transfection is critical. Ability to communicate in written English. Send curriculum vitae and names of three references to: John W. Harmon, M.D., Chairman, Section of Surgical Sciences, Johns Hopkins Bayview Medical Center, 4940 Eastern Avenue, Baltimore, MD 21224. Email: harmon@welchlink.welch.jhu.edu.

POSTDOCTORAL POSITIONS in experimental pathology. Two postdoctoral positions are available for development of independent study of liver stem cells and models of molecular carcinogenesis. Candidates should have a doctoral degree and experience in either tissue culture or molecular biology, and an interest in cell cycle control or developmental biology. Please send curriculum vitae, names and addresses of three references, and statement of research interests to: Dr. Stewart Sell, Department of Pathology A-81, Albany Medical College, 21 New Scotland Avenue, Albany, NY 12208-3479.

POSITIONS OPEN

X-RAY CRYSTALLOGRAPHY

NIH-funded POSTDOCTORAL POSI-TION available immediately at the Center for Advanced Research in Biotechnology (CARB) for a protein crystallographer with a recent Ph.D. to join multidisciplinary team investigating structural basis of antigen recognition by antibodies and T-cell receptors (TcRs). Projects include X-ray crystallographic studies of: 1) recombinant TcRs, MHC molecules, and superantigens and 2) antigen-antibody complexes. Experience in protein gen-antibody complexes. Experience in protein biochemistry highly desirable (*Science*, **267**:1984, 1995; *Nature*, **37**4:739, 1995; *Science*, **270**:1821, 1995; *Nature*, **384**:188, 1996). CARB is a joint research center of the National Institute of Standards and Technology and the University of Maryland. State-of-the-art X-ray and computing facilities. Excellent opportunities for collaborative studies with molecular biologists and physical biochemists. Send curriculum vitae and names of three references via Email to: mariuzza@ indigo2.carb.nist.gov. or to Dr. Roy Mariuzza, CARB, 9600 Gudelsky Drive, Rockville, MD 20850.

POSTDOCTORAL FELLOWSHIPS IN CANCER BIOLOGY UNIVERSITY OF WISCONSIN-MADISON

The Department of Human Oncology invites applications for highly competitive NIH-funded postdoctoral FELLOWSHIPS that are open to recent Ph.D.s (or equivalent) who have a strong research background in biochemistry, cell biology, molecular biology, genetics, immunology, pharmacology, or related fields, and who wish to apply their skills to cancer-related problems. For further information, qualified individuals (U.S. citizens or permanent residents, only) contact: Director, Cancer Biology Program, K4/510A CSC, University of Wisconsin, 600 Highland Avenue, Madison, WI 53792. The application deadline is April 30, 1997.

Faculty and research programs include: Hirak Basu, Ph.D., role of DNA structure in regulating cell growth, gene transcription and DNA replication: David A. Boothman, Ph.D., DNA damage-induced gene expression, experimental therapeutics; Steven S. Clark, Ph.D., oncogenes and signal transduction, molecular pathogen onlogic and signal transductor, molecular particular esis of leukemia, developmental immunology; **Michael N. Gould, Ph.D.**, molecular biology of breast cancer, cancer prevention and therapy; Paul M. Harari, M.D., modulation of cell cycle kinetics in tumor models; Timothy J. Kinsella, M.D., modifiers of radiation damage in cells; Amy R. Moser, Ph.D., genetics of cancer susceptibility, experimental tumorigenesis; Shigcki Miyamoto, Ph.D., rel/NFκB transcription factors; R. Timothy Mulcahy, Ph.D., molecular mechanisms of drug resistance, molecular regulation of glutathione synthesis; Catherine A. Reznikoff, Ph.D., molecular carcinogenesis, cancer genetics; Mark A. Ritter, M.D., Ph.D., regulation of cell cycle kinetics in tumor cells; Paul M. Sondel, M.D., Ph.D., tumor immunology, molecular bioloof cytokine receptors, gene therapy; Ajit K. Verma, Ph.D., role of protein kinase C and retinoic acid nuclear receptors in carcinogenesis.

POSTDOCTORAL POSITION (NIH-funded) available immediately to study protein kinases, protein phosphatases, and phosphoproteins in extremophiles and other phylogenetically diverse organisms. Experience in one or more of the following areas required: protein chemistry, enzymology, molecular biology. To apply, send curriculum vitae and the names and telephone numbers of two references to: Peter J. Kennelly, Department of Biochemistry, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061-0308. Virginia Polytechnic is an Equal Employment Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available to study the structure, mechanism and regulation of the vacuolar (H+)-ATPases that function to acidify intracellular compartments in eukaryotic cells. Experience in protein chemistry or molecular biology necessary. Send curriculum vitae and the names of three references to: Dr. Michael Forgac, Department of Physiology, Tufts University School of Medicine, 136 Harrison Avenue, Boston, MA 02111. Email: mforgac@opal.tufts.edu/Eormore information and references see http://www.healthsci.tufts.edu/labs/mforgac/home.htm.

POSITIONS OPEN

POSTDOCTORAL FELLOWS/RESEARCH ASSISTANT PROFESSORS

The Department of Physiology and Cell Biology at University of Nevada School of Medicine is seeking POSTDOCTORAL FELLOWS/RESEARCH ASISTANT PROFESSORS to conduct investigations supported by federally funded and/or agency funded grants into the ionic basis of rhythmicity in smooth muscles, neural regulation of smooth muscles, endothe-lium-dependent regulation of smooth muscles, endotherlium-dependent regulation of vascular smooth muscles, ionic mechanisms in cardiac muscles, development of excitation and contraction mechanisms in smooth and cardiac muscles, and developmental neurobiology. Various molecular, biochemical, electrophysiological and imaging techniques are utilized in these studies. Requires Ph.D., M.D., or equivalent degree in medical sciences. Experience with smooth muscle physiology, molecular biology, biophysics, electrophysiology or morphological techniques.

Send curriculum vitae and three references to: Kenton Sanders, Ph.D., Department of Physiology and Cell Biology/352, University of Nevada School of Medicine, Reno, NV 89557. Review of applications will begin April 1, 1997. Applications will be accepted until September 15, 1997. Affinnative Action/Equal Opportunity Employer.

LABORATORY OF BIOCHEMISTRY THRESSA STADTMAN, PH.D.

A POSTDOCTORAL POSITION is available in the Laboratory of Biochemistry of the National Heart, Lung and Blood Institute in selenium biochemistry research group to investigate bacterial and eukaryotic selenoenzymes. Training and experience in molecular biology, microbiology, gene expression, and enzyme characterization essential. Applicants must have a Ph.D. and less than five years of postdoctoral experience. U.S. citizen or a permanent resident required. Submit curriculum vitae and references to: Thresas Stadtman, Ph.D., Laboratory of Biochemistry, 3 Center Drive, MSC 0320, Building 3, Room 108, Bethesda, MD 20892-0320.

COURSES AND TRAINING

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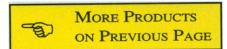
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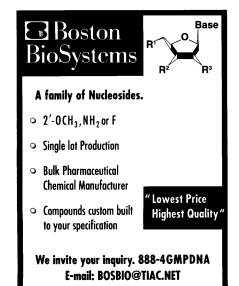
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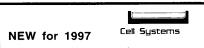




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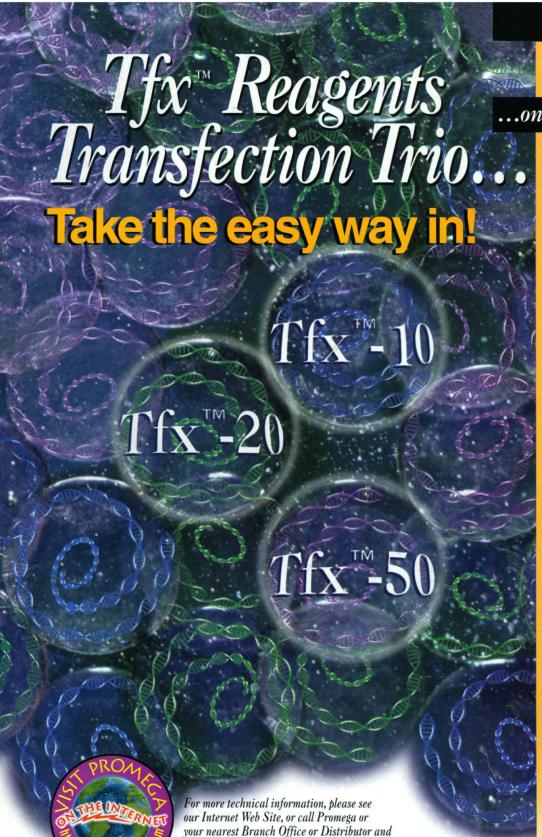
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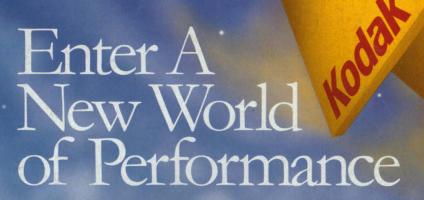
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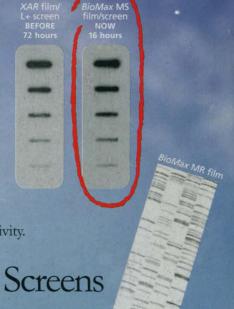
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