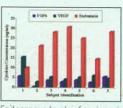
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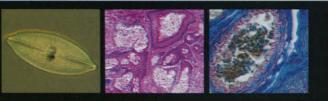
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This appointment is subject to the availability of funds. In accordance with Canadian immigration requirements, equally qualified Canadian citizens and permanent residents will be given first preference. The University of Waterloo encourages applications from all qualified individuals, including women, members of visible minorities, native peoples, and persons with disability.

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The School of Earth and Atmospheric Sciences at Georgia Tech is a dynamic and growing department with diverse research activities including geological-atmospheric-biological aspects of Planet Earth. The School has 21 tenure-track faculty and 22 research faculty and offers M.S. and Ph.D. degree programs in atmospheric chemistry, atmospheric sciences, and geochemistry and geophysics, and has a rapidly growing undergraduate program. We seek a Chair who can manage this growth effectively. For further information about faculty research interests see our website: http://www.eas.gatech.edu/.

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Nominations and applications should be sent to: Dr. Laren Tolbert, Chairman, Earth and Atmospheric Sciences Chair Search Committee, Dean's Office, College of Sciences, Georgia Institute of Technology, Atlanta, GA 30332-0365. The Search Committee anticipates beginning interviews in December 1998; however, applications will be accepted until the position is filled. Applications should include complete curriculum vitae and the names, addresses, and telephone numbers of at least five references.

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FACULTY POSITION ORGANIC CHEMISTRY

The Department of Chemistry at The University of Mississippi solicits applications for one or more tenuretrack positions at the level of **ASSISTANT PROFES-SOR**. Applicants must have a Ph.D. degree in chemistry, postdoctoral experience, the ability to establish an active and nationally competitive research program, and a commitment to undergraduate and graduate teaching excellence. Interests in all areas of organic chemistry will be considered; however, Investigators working in the areas of synthetic or structural organic chemistry are especially encouraged. The Department is ACS-certified and is located in north Mississippi in the attractive and historic town of Oxford. Applicants should submit a curriculum vitae and brief descriptions of ongoing and future research plans, and should request that three letters of recommendation be sent to: **Dr. Charles Hussey, Department of Chemistry, University of Mississippi, University, MS 38677. Closing date November 16, 1998. Equal** *Opportunity/Affiniative Action***.**

FACULTY POSITIONS DIVISION OF BASIC SCIENCES Fred Hutchinson Cancer Research Center

The Division of Basic Sciences of the Fred Hutchinson Cancer Research Center is soliciting applications at the **JUNIOR FACULITY** level. Applicants with outstanding accomplishments in any field of molecular, cellular, and/ or developmental biology will be considered. Candidates should send a curriculum viate, a concise statement of his/her research plans, and three letters of reference to:

> Basic Sciences Faculty Search Committee Fred Hutchinson Cancer Research Center Division of Basic Sciences Mailstop: A2M-015 1100 Fairview Avenue North P.O. Box 19024 Seattle, WA 98109-1024

Application deadline: October 15, 1998. FHCRC is an Equal Opportunity Employer committed to work force diversity and provides a smoke-free environment. We strongly encourage applications from women and minority groups.



I mmunology Shifts from Basic to Applied Research

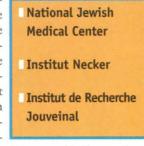


Immunology is undergoing a transition. Over recent years, a series of key advances in fundamental research has answered many basic questions, and has laid the groundwork for applications of the new understanding.

With as many as five percent of the population affected by autoimmune diseases, applications of

immunology hold particular promise in clinical medicine. Specific targets include arthritis, asthma, immune deficiencies, and

juvenile diabetes. Clinical researchers have also started to explore cancer immunology, based on the growing recognition that the immune system can have a protective effect against tumors. The pharmaceutical industry, meanwhile, has put increased resources into research on inflammation and other forms of immune response. That work has al-



ready led to drug formulations designed to control inflammation. Opportunities to carry out high-quality work in immunology exist throughout the country. Several major pharmaceutical companies have research teams that concentrate on immunology, while smaller companies such as DNAX devote their entire resources to the discipline. Academic centers for basic and applied research can be found in most regions—Boston, Chicago, California's Bay area, San Diego, and Seattle, among others. Here, a leading researcher from another center of immunological expertise discusses the type of studies that immunologists can expect to undertake, and the skills that they require.

DENVER: Current demand for immunologists is stable, but the focus of their work is changing, says Philippa Marrack, an immunologist at the National Jewish Medical Center who has gained worldwide renown for her pioneering studies of T-cells. "I would think we're about right in numbers, as a lot of theoretical questions have been answered," she says. "We're now looking more at applications."

Basic research has opened the way for those applications. The

past eight years, for example, have seen a growth of interest in tumor immunology. "The change has to do with realization of how T-cells work, and the discovery of peptides on the surface of

tumor cells that recognize T-cells," explains Marrack. "There's also the discovery that we can use T-cells to attack tumors, certainly in melanomas."

Tumor immunology is just one of several hot topics in the discipline today. "Infectious diseases are not going to go away," says Marrack. "Autoimmunity is important if you have a good idea. There's increased interest in the general processes of inflammation and how they contribute to other



Philippa Marrack

diseases, such as atherosclerosis. And some basic questions remain on how the immune system works." Those basic questions won't be easy to solve. Many fall into a category of questions to which there are multiple answers—such as how to make a good vaccine.

Another area of fundamental research relies on the fact that, in appropriate environments, animals can live without immune systems. Study of the immune system will also be of increasing interest to cell biologists because of recent advances in knockout gene tech-

"They should remember that they are biologists. I think all biologists need to remember the whole of biology, and have some grasp of chemistry and physics." nology. Genetic knockout gene teen nology. Genetic knockouts are often lethal to the embryo; however, their effects on the lymphoid cells can still be examined with mice that lack lymphoid cells but contain lymphocytes that express the genetic deficiency, a technology developed in Dr. Fred Alt's laboratory at Harvard Medical School.

What type of background does Marrack seek in immunologists who apply to work in her laboratory? "Nothing different from that of any other biologist," she says. "They should remember

that they are biologists. I think all biologists need to remember the whole of biology, and have some grasp of chemistry and physics." Immunologists, she adds, "need to be up to date on genetics, and know how to do knockouts. That's quite a lot, but the best ones have those skills. It's quite frightening, but it's exciting."

Marrack gives one more piece of advice to individuals seeking a career in immunology. "It's like any other part of your life," she says. "Have a passion for it. And be well-rounded."

Continued >

Peter Gwynne writes on a wide range of scientific and technological topics.

Modern Biology Opportunities

The Oak Ridge National Laboratory's biological research program, with a 50-year history of contributions to mammalian genetics, biochemistry and molecular biology, is seeking researchers to lead ORNL's programs into the next decade. Adjunct or collaborative appointments with the University of Tennessee may be arranged.

FUNCTIONAL GENOMICS

ORNL provides a stimulating interdisciplinary research environment with resources to conduct leading research and development in life sciences.

DIRECTOR, SENIOR SCIENTIST

Functional Genomics Program Director and Senior Scientist will provide scientific and programmatic leadership and will integrate the special mouse genetics facility with established competencies in biological, chemical, physical, and computational sciences. Will manage existing collaborations and develop new relationships with academic, federal agency, and commercial partners.

Successful candidate should have a PhD in biological sciences or an MD. Strong record of scientific accomplishment, demonstrated ability to secure funding, and proven leadership of scientific programs required. Significant cross-disciplinary expertise desired. Job Code: GEN-DSS

FUNCTIONAL GENOMICS RESEARCH SCIENTISTS

Functional Genomics Research Scientist will contribute to established and new research in mammalian genetics including mouse mutagenesis, phenotype-screening, and biotechnology. Will interact with other research groups at ORNL and collaborating institutions in a variety of disciplines including chemistry, engineering, and physics.

Successful candidates should have a PhD in the biomedical sciences with experience in genetics, molecular biology, embryonic stem-cell biology, and the art of assay for mouse mutant phenotypes. Experience in behavioral/molecular neuroscience or in protein biochemistry preferred. Excellent communications skills and a desire to work in a team environment are essential. Job Code: GEN-RS

BIOINFORMATICS

State-of-the-art computing and information processing facilities support bioinformatics and computational biology research programs. Current projects include understanding protein structure, gene structure, biological function, and their relationships.

BIOINFORMATICS SENIOR SCIENTIST

Bioinformatics Senior Scientist will join the Computational Biosciences Section leadership team in providing analysis tools and information access and processing in support of large-scale genome sequencing. Measures of success will include published technical articles and demonstrated impact of research results on applications.

Successful candidate should have a PhD in the biological or computational sciences with a strong record of significant accomplishments and demonstrated project leadership. Excellent communications skills and a desire to work in a team environment are essential. **Job Code: BIO-SS**

BIOINFORMATICS RESEARCH SCIENTISTS

Bioinformatics Research Scientists will be members of the interdisciplinary team of biologists, computer scientists, mathematicians, and engineers. Projects include computational methods for DNA feature recognition, protein structure prediction, and distributed systems for large-scale genomic information processing.

Successful candidates should have an MS or PhD in the computational sciences with expertise in molecular biology and genomics, or an MS or PhD in the biological sciences with hands-on experience in computer science. Job Code: BIO-RS

Qualified applicants are invited to send a current resume and a list of 3 or more references to: **Reinhold Mann, Director,** Life Sciences Division, Oak Ridge National Laboratory, PO Box 2008, Dept Sci-[insert appropriate job code from above], Oak Ridge, TN 37831-6124 or e-mail mnn@ornl.gov.

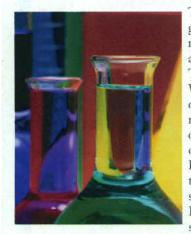
More information about the Oak Ridge National Laboratory and the Life Sciences Division is available on the Internet at:

http://www.ornl.gov and http://lsd.ornl.gov

ORNL, a multipurpose research facility managed by Lockbeed Martin Energy Research Corp. for the U.S. Department of Energy, is an equal opportunity employer committed to building and maintaining a diverse work force.

OMI - Bringing Science to Life

European Immunologists Think in Global Terms



Three decades ago, immunology had footholds in Scandinavia, the United Kingdom, and, to a lesser extent, France. Today, almost every nation in Western Europe boasts at least one immunological center. European observers regard some of the continent's top immunology centers—among them the Basel Institute for Immunology, the Luminy Center in Marseille, Stockholm's Karolinska Institute, and the National Institute of Medical Research at

Mill Hill, London—as equal to the world's best. And while the growth of Europe's immunological institutions has stabilized, plenty of employment opportunities exist for well-trained immunologists.

The nature of those opportunities differs from one country to the next. In immunology, as in other scientific disciplines, Europe is far from monolithic. More than half of the immunologists in Switzerland, for example, work for pharmaceutical companies. In the Netherlands, by contrast, significantly more individuals work in academe than for industry.

In the past, such differences made for significant mobility. The need to cross borders in pursuit of an immunological career has lessened as communications have improved and European Union grants have encouraged multinational collaborative projects. Nevertheless, several European immunologists willingly travel between nations to acquire new techniques and build up networks of colleagues.

One near-constant in European immunology laboratories is the use of English. It is the language of most seminars across the continent. And English ability makes possible one rite of passage common to European immunologists: a postdoctoral spell in the United States. In the past, most of those ended in permanent emigration. Today, however, the majority of Europeans return to work in Europe.

To understand European opportunities for immunologists, *Science* talked to leaders of two Parisian centers. The Institut Necker is part of an old public hospital whose faculty members' interests have recently expanded from clinically oriented research to basic research. The Institut de Recherche Jouveinal forms part of Parke-Davis, the pharmaceutical arm of Morris Plains, New Jersey drug company Warner Lambert.

PARIS: Harald von Boehmer, professor of immunology at the Institut Necker, has lived a mobile professional life. A dual German and Swiss national with experience in Australia and the United States, he moved full time to the Institut Necker three years ago, from the Basel Institute for Immunology. In Paris, as in Basel, he frequently recruits individuals "with relatively little experience but great desire from underprivileged countries such as Poland, Rumania, and other East European nations." He also seeks "experienced postdocs with experience in techniques of molecular biology and one or two pa-

pers under their belts." Individuals with fellowships are particularly valuable, he adds, because in France it is often difficult to create additional faculty positions.

When considering applicants, von Boehmer looks for initiative. "It's good if they have an idea of what the lab is doing, and can propose a research project," he explains. "It's always good to have a background in the work done in the lab, and to put some thought into your project."



Harald von Boehmer

PARIS: "We are in a hiring phase at present and this is likely to continue over the next few years," says Annette Doherty, vice president of research at the Institut de Recherche Jouveinal, Parke-Davis, France. "We are a small and growing research center and we plan to double in size in the next three to five years." The institute plans to build expertise in a number of areas including immunology. "Like other pharmaceutical companies," adds Doherty, "we are interested in autoimmune diseases, particularly in the fields of gastroenterology and inflammation."

What skills does the institute seek? "I'm looking for peo-

Success Strategies for European Immunology

European recruiters of immunologists expect candidates' curricula vitae to contain some specific items. These include:

- Some research experience, in Europe and/or the United States.
- Inventive ideas for research projects.
- High-quality publications
- Familiarity with English.
- Readiness to accept challenges.

ple with broad training in immunology but specific skills in molecular biology," says Janet Allen, the institute's director of cellular and molecular biology. Geert Mudde, the director of allergy and inflammation, wants individuals who are "original and team-oriented, and who dare to take challenges. It is not important to me where they come from but what they publish must be of high enough quality to get into a good immunology journal."

Broad geographic experience also appeals. "We tend to look with interest at work experience in more than one country," says

Doherty. Familiarity with English helps, as it does in European immunology generally. "We are a multinational company," says Doherty. "We speak both English and French in the workplace. If necessary, we'll train candidates in English or French, depending on their needs."

Finally, the institute looks for flexibility. "There's going to be a lot of change," explains Doherty. "People will have to be adaptable. It's exciting, but it will be challenging."

New scientific discoveries are based on innovation, sharing knowledge and synergy of skills. This philosophy is a priority for the Institut de Recherche Jouveinal, one of the European pharmaceutical research centres of Parke-Davis, located in the southern region of Paris. In our Research centres in Ann Arbor (US), Cambridge (GB) and Paris (Fr), scientists are working on a broad range of mechanistic approaches to discover and develop new drugs for important human diseases.

l'alliance ouvre les portes de la découverte

By diversifying our agreements with academic and industrial partners, the research of Parke-Davis / Jouveinal paves the way for new fields of experimentation, explores new concepts and gives the definition of future therapeutic axis.

We are currently strengthening our teams for an unprecedented program of investment in technology and human resources. These teams will implement highly innovative programs covering our principal R&D axes (gastroenterology, immunology, allergy-inflammation and pain) in close collaboration with the group's international teams.

We are currently recruiting various researchers and technicians who, working with the latest technology, will join one of the following departments : chemistry, biochemistry, cellular and molecular biology, pharmacology...

Together, we can make the new scientific discoveries of tomorrow by contributing to therapeutic innovation.

For consideration, please mail or fax a resume to Institut de Recherche Jouveinal/Parke Davis, Human Resources Department, 3-9 rue de la Loge, BP 100, 94265 Fresnes Cedex, France. Fax : (33) 01.40.96.77.32.

PARKE-DAVIS RHARMACEUTICAL RESEARCH



FACULTY POSITIONS

Cancer Genetics & Biology

he UNC Lineberger Comprehensive Cancer Center is searching for individuals with promising or established research programs in the broad areas of cancer genetics and biology. Two to four tenure-track appointments at The University of North Carolina at Chapel Hill will be available. Primary department and rank will be determined by the applicant's qualifications. Laboratory space in the expanded Cancer Center building and generous start-up funds will be provided. Albert Baldwin, with Nancy Raub-Traub, Terry Van Dyke and Bernard Weissman, will coordinate the search. In addition, a parallel search in similar areas will be conducted by the UNC Program in Molecular Biology and Biotechnology.

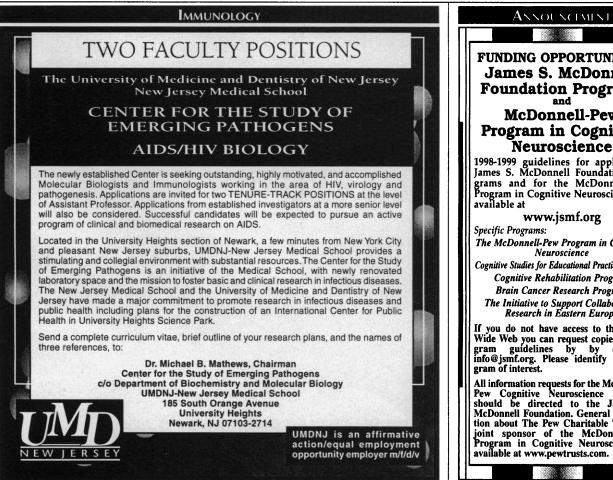
One to two positions in genetics will be filled with an emphasis on such areas as: the genetics of complex traits, genomics, informatics, predisposition to cancer (including the study of modifiers in both humans and mice), animal models, etc. A liaison to translational research, particularly with a strong population-based molecular epidemiology program, is anticipated.

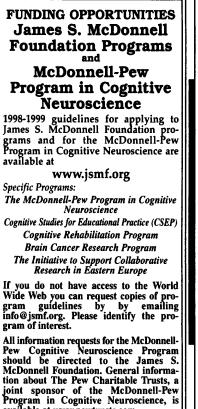
Other positions in cancer genetics and biology will be available. Areas of interest include but are not limited to: tumor virology, angiogenesis, metastasis, signal transduction, oncogenes, tumor suppressors, DNA recombination and repair, cell cycle, cell structure and signaling, gene expression, steroid hormones and receptors, cancer therapeutics, carcinogenesis, animal models of cancer, and developmental biology.

Applicants should send a curriculum vitae, a description of research plans, and three letters of reference to:

Ms. Lois Bouchard • UNC Lineberger Comprehensive Cancer Center • CB#7295 University of North Carolina at Chapel Hill • Chapel Hill, NC 27599-7295

••••• The Committee will begin reviewing applications November 1 •••••





MMUNOLOGY

MAYO CLINIC DEPARTMENT OF MEDICAL GENETICS



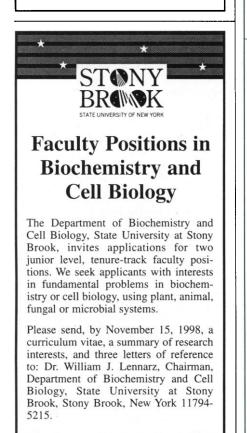
Senior Associate Consultant Position

Mayo Clinic, Department of Medical Genetics, is seeking a clinical geneticist for its expanding clinical genetics program. All applicants must have a M.D. degree and be Board-certified or Board-eligible for certification in clinical genetics by the American Board of Medical Genetics. In addition to participating in existing clinical programs, we seek an individual to expand collaborative initiatives with the Mayo Cancer Center and/or the Molecular Medicine Program. A successful candidate will be expected to participate in education and research activities. Academic rank and salary will be commensurate with experience. Applications should be received prior to October 1, 1998.

Curriculum vitae, a cover letter detailing experience, future interests, and names of three individuals who can provide letters of recommendation should be sent to:

Gerard Vockley, M.D., Ph.D., Chair Search Committee for the Department of Medical Genetics, Mayo Clinic, 200 First Street S.W., Rochester, MN 55905 FAX: 507/284-1067

Mayo Foundation is an Affirmative Action and Equal Opportunity Employer Educator.



State University at Stony Brook is an affirmative action/equal opportunity educator and employer.

New scientific discoveries are based on innovation, sharing knowledge and synergy of skills. This philosophy is a priority for the Institut de Recherche Jouveinal/Parke-Davis, one

l'alliance ouvre les portes de la découverte

of the European Pharmaceutical Research Centres of Parke-Davis located in the southern region of Paris. In our research centres, in Ann Arbor (USA), Cambridge (UK) and Fresnes (FR), scientists are working on a broad range of mechanistic approaches to discover and develop new drugs for important human diseases. Our present goal is to expand and build new teams in France, and work closely with our international teams. We are currently looking to recruit in the following area :

Allergy-inflammation Senior Scientist

We are looking for an in vivo immunologist with experience in skin disorders, and/or with experience in surgical techniques to set up a new in vivo model for skin allergy. Experience in state of the art histological techniques and chemokine research would be useful. The candidate should have a PhD with 2/4 years postdoctoral experience.

Strong communication skills and ability to work independently in a team environment are essential.

For confidential consideration, please send your resume and your references to Marie-Aude Julien, **Institut de Recherche Jouveinal/Parke-Davis**, Human Resources Department, 3/9 rue de la Loge, BP 100, 94265 Fresnes Cedex, France. Fax : (33.1) 40 96 77 32

PARKE-DAVIS PHARMACEUTICAL RESEARCH

Procter&Gamble

MOLECULAR BIOLOGY

The Procter & Gamble Company has an opening for a Ph.D. with a speciality in molecular biology, biochemistry, or microbiology. This position will be located at our new. state-of-the-art Health Care Research Center in Cincinnati, Ohio, in Procter & Gamble Pharmaceuticals' Antiinfectives Research Biology Section.



No agency referrals, please Applicants must be presently authorized to work in the U.S. on a full-time basis. Equal Opportunity Employer

· Ph.D. Molecular Biologist

We seek an individual with demonstrated expertise in biochemical, molecular biology and/or bioinformatics investigations with emphasis in the area of infectious diseases. The successful candidate will conduct research activities to identify and develop antibacterial therapeutics and will provide technical input to support business objectives. A strong background in biochemistry and molecular biology is required, and knowledge of bacterial physiology is essential. Both the ability to provide individual technical leadership and to interact well in team settings are critical to success. Good organizational, interpersonal, general computer, and communication skills are required. Experience beyond graduate school is not necessary, although post-doctoral experience is preferred.

Procter & Gamble is a Fortune 20 company that has been consistently rated as one of the "most admired" corporations in the U.S. Our support for research and development has increased substantially in recent years, with growing emphasis being placed in expanding the Health Care area. This is evidenced by P&G's recent construction of a world-class Health Care R&D facility outside of Cincinnati, Ohio, that is capable of housing 2,000-2,500 researchers by the end of the decade. In addition, our top-rated benefits package serves to support the company's commitment to obtain and retain the best qualified scientists. If you meet the qualifications for this position, please send a letter of introduction, resume, and list of publications via e-mail or by regular mail to:

to: Dr. G. D. Owens The Procter & Gamble Company Doctoral Recruiting, Dept. LG • P.O. Box 538707 Cincinnati, OH • 45253-8707 doctoral.im@pg.com

THREE FACULTY POSITIONS RESEARCH DEPARTMENT PORTLAND SHRINERS HOSPITAL

Applications are invited for three faculty positions in the Research Department of the Portland Shriners Hospital. The Department is building a new program within the broad area of vertebrate limb development and seeks outstanding scientists who will establish independent and innovative research programs in this area. Applicants should have expertise and a strong record in developmental biology, developmental genetics, or a related field. Areas of interest may range from morphogenesis and patterning to cell-matrix interactions to gene regulation. Applicants for one of the positions must have expertise in transgenic and gene targeting technologies. The new program will complement existing departmental programs in matrix biology, structural biochemistry, molecular biology, and genetics. The Department occupies outstanding new research facilities and provides generous start-up packages. Both positions will carry full academic appointments in basic science departments at Oregon Health Sciences University, with which the Department is closely affiliated. For more information see: website: http://www.shcc.org/research.

Applicants should send CV, publications, statement of research plans, and three letters of reference to W. A. Horton, Director, Research Department, Portland Shriners Hospital, 3101 S.W. Sam Jackson Park Rd, Portland, OR 97201; Fax 503-221-3451; e-mail wah@shcc.org.

University of California — Santa Barbara Dean of the College of Engineering and Richard A. Auhll Professor

The University of California at Santa Barbara (UCSB) invites nominations and applications for the position of Dean of the College of Engineering and Richard A. Auhll Professor. We seek an individual with an outstanding record of scholarly achievement that is appropriate for appointment as a full Professor and holder of an endowed chair in the UC system.

We also seek an individual with vision and creative leadership abilities, demonstrated credentials in administration, and an established national and international reputation within the broader engineering community. The College of Engineering at UCSB has grown rapidly, both in the size and stature of our academic programs, and the successful applicant will be expected to provide the direction, inspiration, and administrative ability to continue and expand upon these developments. In addition to the attributes mentioned above, important qualifications should include a broad appreciation and perspective for all fields of engineering and the physical sciences, and a demonstrated ability to interface effectively with industrial, governmental, and educational institutions, including philanthropic foundations.

The College contains five academic departments: Chemical Engineering, Mechanical and Environmental Engineering, Materials, Electrical and Computer Engineering, and Computer Science. There are about 400 Ph.D., 100 M.S., and 1,100 undergraduate students. Of the 107 faculty members, 13 are members of the National Academy of Engineering and 2 are Fellows of the Royal Society. The College is renowned for its high level of collaborative activity, as exemplified by the large number of multidisciplinary research centers including the Materials Research Laboratory, the Digital Library, and the centers in Quantized Electronic Structures, Compound Semiconductor Research, and Control Engineering and Computation. Total annual extramural funding for research in the College has grown four-fold since the mid-80's years to about \$40 million in 1997/98. All inquiries, nominations, and applications will be held in strictest confidence. Applications should include a letter of interest, curriculum vitae, and the addresses and telephone numbers of three references. Screening will begin October 15, 1998, and will continue until the position is filled. Inquiries, nominations, and expressions of interest should be submitted to: Professor Petar Kokotovic, Chair, Search Committee for the Dean of the College of Engineering, c/o Patricia Sheppard, Office of Academic Personnel Cheadle Hall 5109, University of California-Santa Barbara, Santa Barbara, CA 93106.

UCSB is an Equal Opportunity and Affirmative Action Employer and Educator.

UK

FACULTY POSITIONS MICROBIOLOGY & IMMUNOLOGY

The Department of Microbiology and Immunology, College of Medicine, University of Kentucky, seeks candidates for four full-time tenure-track faculty positions available January 1999.

Full or Associate Professor and Assistant Professor (two positions) in molecular viral pathogenesis, viral-host interactions, or the host immune response to viral infections. Search Committee Chair: Dr. Jerold Woodward

Assistant Professor in molecular genetics/genomics, including genetic markers of cancer, experimental models of gene expression or bioinfomatics, with an emphasis in tumor biology. Search Committee Chair: Dr. Brett Spear

Associate or Assistant Professor in microbial pathogenesis/hostparasite interactions with special emphasis in parasitology, mycology, or the host immune response to microbial infections. Search Committee Chair: Dr. Carol Pickett

Applicants should have a Ph.D. and/or M.D., or equivalent degree, and postdoctoral experience. Successful candidates are expected to develop/maintain innovative, externally funded research programs as well as participate in graduate and medical student teaching. This is an excellent opportunity to join an established group of faculty with a strong predoctoral and postdoctoral training program and research programs in microbial pathogenesis, eukaryotic molecular biology, molecular and cellular immunology, molecular virology, and tumor biology.

Excellent start-up funds, state-funded salary commensurate with experience, and modern research facilities will be provided. Applications should include curriculum vitae, representative reprints, a summary of past experience, a statement regarding research interests and future plans, as well as three letters of recommendation. All material should be sent to the appropriate committee chair, Faculty Search Committee, Department of Microbiology and Immunology, MS415 Medical Center, University of Kentucky, Lexington, KY 40536-0298. Telephone: 800-462-5257; FAX: 606-257-8994. The University of Kentucky is an Equal Opportunity/Affirmative Action Employer and has an affirmative duty to reasonably accommodate otherwise qualified individuals with a disability.

IMPACT THE WORLD AROUND YOU!

At PE Biosystems, we're making some of the biggest breakthroughs in science happen. We're creating products that change the way researchers identify and analyze the building blocks of life. In just the last year, genes for breast cancer, skin cancer, Alzheimer's disease and hypertension have been identified by dedicated professionals using PE Biosystems instrumentation, reagents and software. If you too are interested in positively contributing to breakthroughs in human disease research, come join us as we continue to impact the world of science. Consider the following challenging career opportunities available at PE Biosystems!

SCIENTIST II/III/SR.

You will be responsible for creating new multiplex vector cloning systems, optimizing multiplex sequencing chemistries, and evaluating solid support hybridization materials, devices, and protocols. Additionally, you will contribute to and support our existing fluorescent sequencing chemistries and instrumentation. Requires a PhD or MS in Biochemistry with 3-5 years related experience in an industrial or university setting, including experience in DNA sequencing. BS with extensive industrial and/or academic experience are also encouraged to apply. Excellent analytical chemistry and communication skills and the ability to develop new solutions to complex problems are essential. REF: 9816.

POSTDOCTORAL RESEARCHER

We seek an individual to design and implement experiments to optimize single cell bacterial capture on micro-fabricated devices. Requires a PhD and experience in bacteriology, biochemistry, DNA extraction and PCR techniques. Expertise in any of the following would be desirable: building prototypes, fluidics, biochip technology, cell biology, analytical chemistry and DNA sequencing. Ability to interact well in a team setting is a must. REF: 7854.

ARRAY PROGRAM MANAGER

We seek an experienced leader to manage a team of instrument, software and reagent developers in the design, development and successful release of a DNA microarray system. You will drive the process for writing product specifications and development plans, as well as maintain program timelines and documentation. Requires a minimum of a BS in Physics, Biophysics, or Chemistry with at least 10+ years technical experience in an R&D environment with emphasis on project management. Excellent planning, documentation, project management and communication skills are essential. In-depth technical knowledge of DNA synthesis chemistry, surface chemistry and instrumentation experience would be a plus. Must have knowledge of ISO 9000 validation requirements. REF: 4048.

SR. SCIENTIST II/III

You will work as part of a team focused on the development of systems for automated fluorescent genotyping. Responsibilities include R&D of new reagents, instrument performance optimization for genotyping applications, writing and reviewing technical documentation. Extensive interaction with other R&D members, Marketing and Manufacturing is essential. Requires an MS or PhD in Genetics, Molecular Biology or related field with 3+ years industrial experience. Familiarity with PE Biosystems instrumentation and software is a plus. Knowledge of assay optimization procedures, biostatistics, and instrument validation is highly desirable. Excellent organizational, written and verbal communication skills are also required. REF: 1011.

FIELD APPLICATIONS SPECIALISTS

We will rely on you to provide pre- and post-sales support for our products. Duties include seminars, product demonstrations, in-lab customer training, applications development and troubleshooting. In addition, you will serve as liaison with the R&D and Marketing groups to represent the needs of the scientific community as well as our customers in the product development process. Positions are located throughout North America. Specific positions focus on Automated DNA Sequencing, Automated Fragment Analysis, Sequence Detection (Real Time Quantitative PCR), PCR, and Bioinformatics. Requires a BS in Molecular Biology or related discipline along with 5+ years research experience. Advanced degree, strong communication skills, and experience with Applied Biosystems instrumentation are preferred. Overnight travel required and varies depending on geographic territory. REF: FAS.

CHANNEL MANAGER

Work to reduce the sales costs and time-to-market for Genetic Analysis software and reagent products by researching alternative sales and distribution channels worldwide. Responsibilities include developing a sales strategy, investigating new technologies, and maintaining the site licensing program. Requires a BS in Biological Science, Computer Science, or equivalent, plus 1-3 years experience selling or marketing software products. Excellent written and verbal communication skills, strong project management skills, attention to detail, and consensus building skills are also essential. Ref: 5219.

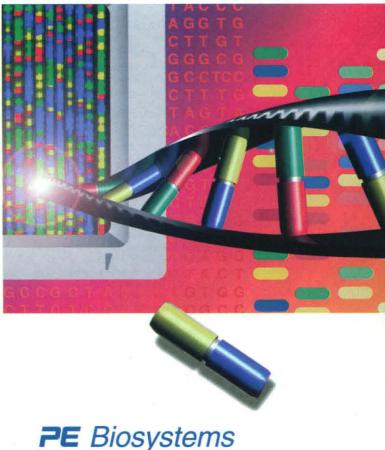
MARKET MANAGER

You will develop and support strategic marketing plans for genetic analysis products in the pharmaceutical/commercial markets, including interacting regularly with customers to understand their needs and to identify product and application opportunities. You will also track market size, growth and share of all competitors, as well as develop/implement coordinated marketing communications programs aimed at increasing market share and/or profitability. REF: 8460.

To learn more about PE Biosystems, stop by booths 400-403 at the 10th International Genome Sequencing and Analysis Conference on September 17-20 in Miami Beach, FL.

www.perkin-elmer.com/ab

In exchange for your talents, we offer a competitive salary and benefits package with advancement potential for your career. For consideration, please send your resume, noting appropriate reference #, to PE Biosystems, Human Resources Department, REF: _____, 850 Lincoln Centre Drive, Foster City, CA 94404. You may also fax to 650/638-5874 or email us at biocareer@perkin-elmer.com. PE Biosystems is an equal opportunity employer.



A DIVISION OF PERKIN-ELMER

The following positions are available at the Parke-Davis Laboratories for Molecular Genetics (PDLMG) located in the San Francisco Bay area. PDLMG Scientists use advanced genetic approaches to identify pharmaceutical targets.

Senior Statistical Geneticist

The successful candidate will play a lead role in the genetic mapping of complex traits in humans and model organisms and will be responsible for building a collaborative program that will interface with project teams and departments both inside and outside of PDLMG. A Ph.D. and at least five years' postdoctoral experience in statistical genetics are required. A proven track record of management and project integration is required. Experience in, study design, power assessment, segregation analysis, parametric and non-parametric linkage analysis, and linkage disequilibrium analysis is highly desirable. Job Code: 98340

Bioinformatics Group Leader

The chosen candidate will integrate information technologies with scientific research at PDLMG; manage a group of IS and Database Specialists as well as Computational Biologists; and guide development of workflow data management systems and general support of genetic and genomic target discovery. A Ph.D. in biological sciences (preferably in genetics); training in statistical methods, computational science, and a demonstrated ability to lead a small support group are required. A minimum 2 years of bioinformatic experience is required, including experience in programming and database technology. Experience in mammalian genetics and molecular biology is highly desirable. Job Code: 98405

Database Administrator

The successful candidate will provide support for scientific programs in mouse and human genetics with relational database development and delivery. This will include automating data collection and development of analytical tools. Candidates should have a BS or MS in Computer Science and a strong background in relational databases. Experience with Oracle is essential, and experience with Sybase, Gemstone and 4D are highly desirable. Familiarity with biological sciences, especially genetics or statistics is a must. Programming skills in PERL, Java, JavaScript, C++ and related languages are also desired. Job Code: 98406

Qualified candidates please mail or fax your resume, indicating the Job Code of interest, to: Parke-Davis Laboratory for Molecular Genetics, Human Resources Dept., 1501 Harbor Bay Parkway, Alameda, CA 94502. Fax: (510) 749-4294.

Protein Expression and Molecular Resources Core Facility Group Leader

-The following position is available at our Ann Arbor, MI facility:

This individual will play a key role in shaping the future direction of our Protein Expression and Molecular Resources Core Facility within the Molecular Biology Department of Preclinical Therapeutics. This team will establish/evaluate new state-of-the-art technologies in molecular cloning and protein expression, including innovative uses of bacterial, baculoviral, insect cell and mammalian cell expression systems. This team will also support internal drug discovery programs by supplying molecular resources and proteins for company-wide use, including the generation of transfected cell lines suitable for high-throughput screening. A Ph.D. with 8+ years' postdoctoral in protein expression, protein purification and DNA sequencing is required. Familiarity with databases, web-based communications and LIMS systems, a good understanding of the pharmaceutical drug discovery process, a proven expertise in providing proteins suitable for mass screens, crystallography and NMR are also required. An extensive skill base in molecular, cell biology and protein purification with managerial experience is essential.

For the above position please mail, fax or e-mail your resume, indicating Job Code: CJM-98373 to: Parke-Davis Resume Processing Center, PO. Box 92242, Los Angeles, CA 90009-2242. Fax: (310) 337-3367. E-mail: parkedavis@isearch.com

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WE ARE A VITAL GLOBAL FORCE. A cogent synergy of science and technology, focused on one thing—controlling disease. Combining diagnostic, vaccine and therapeutic strategies, we wield our core expertise over some of the world's deadliest diseases, including HIV, hepatitis, cardiovascular disease and cancers. We invite you to join our diversified scientific team in the beautiful San Francisco Bay Area as we exert our shared power to take on disease and transform the practice of medicine around the world.

ASSOCIATE DIRECTOR-R&D Oncology Research

Spearheading our lung cancer program, you will provide expertise in the areas of cell imaging and oncology research, especially in diagnostics. You will act as a technical manager to ensure the appropriate technical decisions, drive experimental design functions and review technical data, while managing a staff of R&D personnel. Your PhD degree in Life Sciences (Biochemistry, Immunology, etc.) must be supported by 5+ years project management experience in an industrial setting with demonstrated expertise in lung cancer diagnostics, cytology and cell image analysis. In addition, you will need 5 years of management experience, including the ability to manage budgets, confidently present ideas to peers and senior management, and interact effectively with academic and industrial collaborators. Your background must also demonstrate proven product development and product launch skills, along with a solid knowledge of assay development, including clinical study design and regulatory requirements.

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Located on four continents, Chiron offers a culturally blended environment that promotes courage, candor and creative exchange. For consideration, please send your resume to: Chiron Corporation, Human Resources, **Job Code: 3438**, 4560 Horton Street, Emeryville, CA 94608. As an equal opportunity employer, Chiron honors diversity in every respect.

Howard Hughes Medical Institute

Fellowships for Biological and Biomedical Sciences

The Howard Hughes Medical Institute announces the 1999 competitions for fellowship programs that support training in fundamental biological and biomedical research. Awards, based on international competitions, focus on research directed to understanding basic biological processes or disease mechanisms. Fellowships may be held at academic or nonprofit research institutions.

Predoctoral Fellowships in Biological Sciences

Up to five years of support for full-time graduate study toward a Ph.D. degree in cell or developmental biology, genetics or molecular biology, immunology or microbiology, mathematical biology or epidemiology, neuroscience or physiology, structural biology or biochemistry, or related fields. Applicants must not have completed the first year of postbaccalaureate graduate study in biology. *Application deadline: mid-November*.

Postdoctoral Research Fellowships for Physicians

Three years of support for training in fundamental research subsequent to at least two years of postgraduate clinical training and no more than two years of postdoctoral research training. *Application deadline: early December*.

Research Training Fellowships for Medical Students

An opportunity for medical students in the United States to explore a burgeoning interest in fundamental research. Support is awarded for one year of full-time fundamental research in a laboratory at the student's medical school or another institution (except NIH in Bethesda, Maryland). *Application deadline: early December*.

Research Scholars at the National Institutes of Health

Under this joint HHMI–NIH program, medical students in the United States spend an intensive year in research in the intramural program at NIH in Bethesda, Maryland. Residence is provided at the Cloister on the NIH campus. *Application deadline: early January*.

1999 Program Announcements and Applications

For Predoctoral Fellowships: Hughes Fellowship Program Fellowship Programs Unit National Research Council 2101 Constitution Avenue Washington, DC 20418 United States of America Telephone (202) 334-2872 Fax (202) 334-3419 E-mail infofell@nas.edu http://fellowships.nas.edu

For Other Programs:

Howard Hughes Medical Institute Office of Grants and Special Programs Department AO99 4000 Jones Bridge Road Chevy Chase MD 20815-6789 United States of America Telephone (301) 215-8889 Fax (301) 215-8888 E-mail fellows@hhmi.org www.hhmi.org/fellowships

The Howard Hughes Medical Institute, an Equal Opportunity Employer, welcomes applications from all qualified candidates and encourages women and members of minority groups to apply.

Extraordinary People. Extraordinary Science.

Since 1990, the Whitehead Institute for Biomedical Research has ranked among the top three research institutions in the world in genetics and molecular biology. Our Center for Genome Research has become a top leader in functional genomics, genome mapping, sequencing, and informatics. As an integral part of the MIT teaching community, we attract the brightest scientists with promising research agendas, and then give them the freedom to pursue their own dreams. The results are nothing short of extraordinary. Join us.

SCIENTIFIC PROGRAMMER

To work on the Genome Center's Automation/Development teams assisting in the development and design of software and hardware which support robotic workstations in a high-throughput sequencing environment. Requires BA/BS, C, C++, and Perl programming languages, and knowledge of Windows and Unix operating systems. Must be able to work on a multi-disciplinary team of biologists, engineers, and technicians in a high pressure, fast-paced environment. Database application and visual C++/Windows software development experience and experience writing and interfacing robotic/hardware drivers is desired.

SOFTWARE ENGINEER/ **DATABASE APPLICATION** DESIGNER

Responsible for shaping the systems that manage the very latest high-throughput laboratory genomics and DNA sequencing environments and translating requirements into robust, high-performing application and database designs at Genome Center. Requires a BA/BS/MS in Biology/Computer Science or related field, at least 2 years' professional software development experience including experience with a commercial relational DBMS, and ability to lead complex application and database design efforts. Sybase or Oracle is preferred. Must have some knowledge of intranet/internet development tools, for example Perl, CGI, HTML, Java, JavaScript.

RESEARCH TECHNICIANS

· Will assist with the investigation of the molecular basis of normal and leukemic blood cell development using animal and cell culture models. Requires significant laboratory experience in molecular biology and cell culture. MS degree in Biology or Biochemistry preferred.

· To work on the Genome Center's development team optimizing protocol and troubleshooting problems. Requires BS & molecular biology experience with emphasis on DNA sequencing and ability to work independently performing and evaluating experiments. Experience with DNA purifications, ligations, transformations, and PCR is preferred.

We offer excellent salaries, generous benefits (including tuition reimbursement), interaction with MIT community, opportunity to attend scientific lectures, state-of-the-art research facilities, and a convenient location.

Please send resumes to: Whitehead Institute for Biomedical Research, Human Resources Dept. Ref. SCI:911, Nine Cambridge Center, Cambridge, MA 02142.

We have many other Bioinformatics, Computing, and Research Technician positions available.

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WHITEHEAD INSTITUTE

TWO ENDOWED CHAIRS in SIGNAL TRANSDUCTION JUNIOR AND SENIOR FACULTY

Applications for two tenure track positions are invited from outstanding Ph.D. or M.D. scientists whose research focuses on mechanisms of signal generation and transduction in normal and malignant cells.

The senior investigator, at the level of associate or full professor, will be a nationally recognized leader in the field and will occupy the Cowan-Blum Chair in Cancer Research. This person will play a leadership role in the expansion of this area within the Cancer Center and University communities.

The second appointee, at the level of assistant professor, will occupy the Pardee-Gerstacker Chair in Cancer Research. This individual will be an exceptional young scientist whose predoctoral and postdoctoral accomplishments show promise for an outstanding career in cancer research. Each position will have a primary appointment in an appropriate basic science department of CWRU School of Medicine.

Please send a Curriculum Vitae, a brief research statement, and the names of three references to either:

> Ed Stavnezer, Ph.D. or Dennis J. Templeton, M.D./Ph.D. Co-Chairs, Cancer Center Search Committee c/o Ireland Cancer Center, Wearn 152 Case Western Reserve University 10900 Euclid Avenue Cleveland, Ohio 44106-5065 E-Mail exs44@po.cwru.edu or djt2@po.cwru.edu





CWRU is an AA/EEO/ADA employer and encourages applications from women and minor

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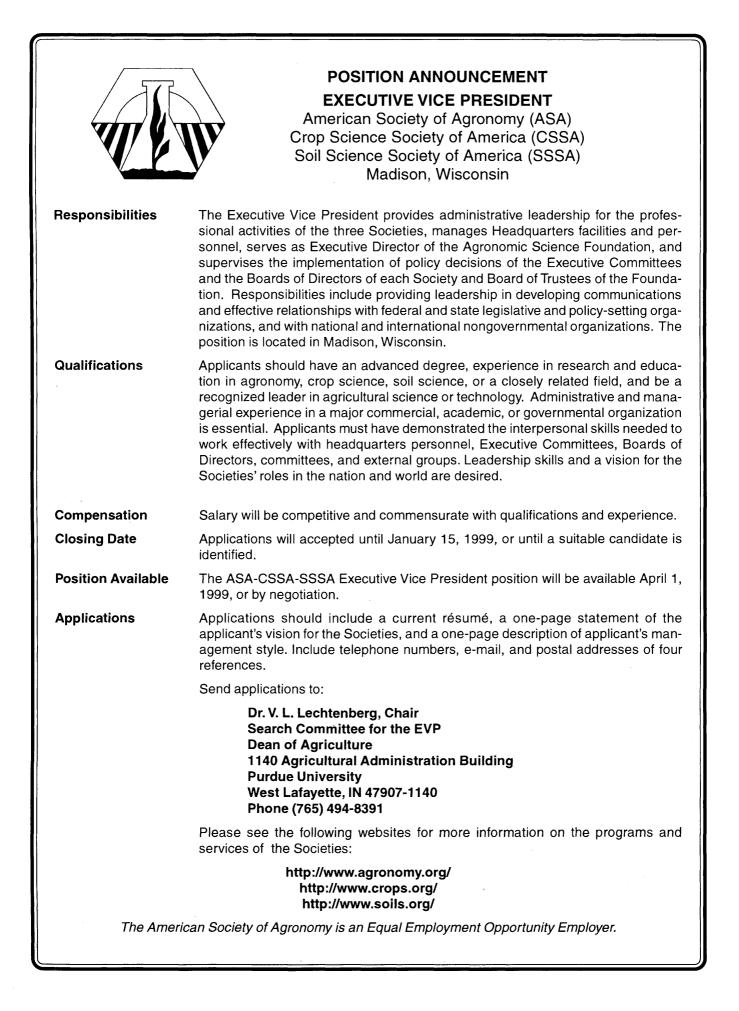
As a global biotechnology company with revenues in excess of \$300 million, Genencor International develops and markets innovative enzymes and biochemicals that are highly efficient, cost-effective and environmentally sound. Our investment in the future can be seen in our R&D facility in Palo Alto, California, which combines basic research, pilot plant development and robotics under one roof.

POSTDOCTORAL SCIENTIST

As a key member of our Fungal Expression group, you will collaborate with other Scientists involved in our growing functional genomics program. Specifically, you will establish techniques required to develop gene tagging tools for filamentous fungi. We require a PhD with strong molecular biology skills; experience in fungal/yeast genetics and an interest in genomics desired.

We are proud to offer our employees a competitive compensation and benefits package, including 3 weeks of paid vacation and a generous 401(k) matching plan plus a retirement plan. For consideration, submit your resume to: Genencor International, Inc., Job Number SCI46, 925 Page Mill Road, Palo Alto, CA 94304, fax: 650-845-6503, or e-mail: hr@genencor.com. Background checks will be conducted. An equal opportunity employer M/F/D/V. For more details, visit our website at: www.genencor.com.







ACADIA Pharmaceuticals Inc. San Diego Copenhagen

ACADIA Pharmaceuticals is an integrated drug discovery company that utilizes proprietary high-throughput genomic

technologies to accelerate the identification of novel lead compounds. Initial preclinical programs are directed toward neuropsychiatric and neurodegenerative disease. Corporate headquarters and biological research are located in San Diego, California; chemistry research facilities are located in Copenhagen. **Vice President. Director of Pharmacology:**

Will be a key member of ACADIA's management team and will direct all pharmacology research efforts. Together with the Chief Scientific Officer and the Director of Chemistry, this individual will lead ACADIA's drug discovery efforts. This individual will have a strong background in molecular pharmacology, molecular genetics, high-throughput screening and pharmacology, CNS pharmacology, and extensive industrial experience.

Senior Scientist. Molecular Genetics:

Will lead a group focused on molecular genetic analysis of patient populations. Experience with high-throughput mutational analysis and neuropsychiatric disease is desirable.

Senior Scientist, Molecular Pharmacology:

Will lead a group that supports preclinical programs focused on neuropsychiatric disease. Experience in molecular genetics, molecular pharmacology, and CNS drug targets is essential.

Scientist, Cell Biology:

Coordinate development and scale-up of high-throughput assays of new genederived targets. Postdoctoral experience in cell and molecular biology required. Postdoctoral/Graduate Students:

Training opportunities in molecular genetics, molecular pharmacology, highthroughput screening, and functional genomics are available with senior ACADIA scientists.

ACADIA Pharmaceuticals Inc.: Attn: Human Resources 3911 Sorrento Valley Boulevard San Diego, CA 92121 hr@acadia-pharm.com www.acadia-pharm.com

Vanderbilt University Medical Center Mechanisms of Vascular Disease Training Program

Predoctoral positions and postdoctoral fellowships are available in the following areas:

Vascular cell biology: MdP. Aguinaga, Ph.D. (Obstetrics & Gynecology-Meharry Medical College), J. Corbin, Ph.D. (Molecular Physiology & Biophysics), V. Kon, M.D. (Pediatrics), R. Haselton, Ph.D. (Biomedical Engineering), R. Hoover, Ph.D. (Pathology), V. Sheperd, Ph.D. (Medicine & Pathology)

Growth factors in vascular biology: J. Barnett, Ph.D. (Medicine & Cell Biology), T. Daniel, M.D. (Medicine & Cell Biology), J. Staros, Ph.D. (Molecular Biology)

Molecular biology of the vascular system: R. Briggs, Ph.D. (Pathology), B. Meyrick, Ph.D. (Pathology), J. Patton, Ph.D. (Molecular Biology)

Biology of the extracellular matrix of vascular cells: J. Davidson, Ph.D. (Pathology), L. Matrisian, Ph.D. (Cell Biology), G. Sephel, Ph.D. (Pathology), S. Russell, Ph.D. (Microbiology-Meharry Medical College)

Chemistry and enzymology of blood proteins: J. Beechem, Ph.D. (Molecular Physiology & Biophysics), A. Beth, Ph.D. (Molecular Physiology & Biophysics), P. Bock, Ph.D. (Pathology), D. Gailani, M.D. (Pathology), D. Vaughan, M.D. (Medicine & Pharmacology)

Lipid metabolism and lipoproteins: D. Graham, M.D., Ph.D. (Pathology), S. Fazio, M.D., Ph.D. (Medicine & Pathology), M. Linton, M.D. (Medicine), L. Swift, Ph.D. (Pathology)

Clinical research related to vascular disease: J. Atkinson, M.D., Ph.D. (Pathology), P. Browning, M.D. (Medical Oncology), D. Robertson, M.D. (Medicine & Pharmacology)

Funding through NIH NRSA: only U.S. citizens and permanent residents are eligible. Contact: Richard Hoover, Vanderbilt University School of Medicine, Department of Pathology, Nashville, TN 37232-2561 (615) 322-2102; Fax: (615) 343-7023.

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Agouron, a fully integrated pharmaceutical company in La Jolla, CA, is a recognized leader in the field of rational drug design. Building upon the success of our first product, an HIV protease inhibitor, Agouron continues on the forefront of research and development of therapeutic products in the fields of oncology, virology, ophthalmology and other serious diseases. Join us in the challenge of great science in the following opportunity.

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Selected candidates will support our clinical research group; provide pharmacokinetic and pharmacodynamic support in all phases of clinical drug development for anti-viral and anti-cancer compounds; and perform study design and protocol writing, data analysis, report writing and assembly of pharmacokinetic sections for New Drug Applications. Qualified candidates will have a PharmD or PhD in pharmacological sciences with an emphasis on training in pharmacokinetics. Prior experience will ideally include 3-6 years' experience in a clinical research or similar environment.

Agouron offers competitive salaries and benefits. Please send a detailed resume and salary history refer-

encing code to: Human Resources, Code 410/BK2, Agouron Pharmaceuticals, Inc., 3301 N. Torrey Pines Court, La Jolla, CA 92037; email: jobs@agouron.com; web site: www.agouron.com. EOE.

EOE



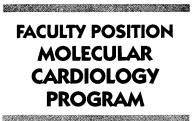
THE UNIVERSITY OF TEXAS MD ANDERSON CANCER CENTER FACULTY POSITIONS **Department of Biochemistry & Molecular Biology** Applications are invited for tenure track positions at the Assistant and Associate Professor level. The present focus of the Department is on molecular aspects of cell and developmental biology emphasizing vertebrate and invertebrate animal models. Current strengths include transcriptional regulation, developmental genetics, chromatin structure and gene expression, cellular and membrane-cytoskeletal interactions, and intracellular signaling. Applications are encouraged from outstanding individuals who will bring diverse experimental systems to complement these and related areas within the overall scope of the Department. The MDACC is located in the Texas

Medical Center, offering an unusually rich scientific and training atmosphere. Please send a curriculum vitae, a description of research interests, and the names, addresses and telephone numbers of three references to: William Klein, Ph.D., Chairman Dept. of Biochemistry & Molecular Biology, Box 117, The

University of Texas M.D. Anderson Cancer Center, 1515 Holcombe Blvd., Houston, TX 77030 Deadline for applications, Dec 15, 1998.

MDACC is a smoke free environment. An Equal Opportunity Employer Women & minorities are encouraged to apply Environmental Council Professor -Geomicrobiology. The Department of Geology, University of Illinois at Urbana-Champaign, invites applications for a full-time (9-month) tenure-track or tenured faculty position beginning Fall semester, 1999. We seek an outstanding candidate in the area of environmental microbiology or biomineralogy, emphasizing the interaction of microbes with fluids and minerals of the Earth's crust. The candidate is expected to develop and maintain an active program of research and teaching at the graduate and undergraduate levels. We expect to fill this position at the Assistant or Associate Professor level. Salary will be commensurate with qualifications. An earned Ph.D. degree is required.

The University of Illinois maintains a broad and active program in geomicrobiology through the Departments of Microbiology, Civil and Environmental Engineering, and Geology; the College of Agricultural, Consumer, and Environmental Sciences; and the State Geological, Water, and Natural History Surveys. Fully staffed analytical and sequencing facilities exist on campus. For equal consideration, an interested individual should by December 1, 1998, submit his or her curriculum vitae, list of publications, and statement of research and teaching interests; and arrange for three letters of reference to be sent directly to the Search Committee. All materials should be addressed to Prof. Craig Bethke, Search Committee Chair, Department of Geology, University of Illinois, 1301 West Green Street, Urbana, IL 61801 USA (tel.: 217-333-3369; e-mail: c-bethke@uiuc.edu). Women and minority candidates are encouraged to apply. University of Illinois is an Equal Opportunity/ Affirmative Action Employer.



The Molecular Cardiology Program at the University of Chicago invites applications for a tenure-track position at the Assistant or Associate Professor level. The successful candidate has an M.D. and/or Ph.D with research experience in the areas of molecular and cellular biology, developmental biology and/or human and mouse genetics. Applicants should submit a curriculum vitae, summary of research accomplishments, and three letters of recommendation to: Jeffrey M. Leiden, M.D., Ph.D, **Molecular Cardiology Search** Committee, The University of Chicago, 5841 S. Maryland, MC 6080, Room B608, Chicago, IL 60637.



developing proprietary DNA-based diagnostic products for blood and plasma screening and for clinical testing research markets. To add to their team, they are looking for: Sr. Scientist/Scientist - Assay Development A PhD with 2+ yrs. or BS/MS with 5+ yrs. industry exp. in nucleic acid probe assay development. Broad exp. in molecular biology, biochemistry, protein chemistry, or nucleic acid chemistry desirable. Knowledge of DOE/SPC, GMP, and enzyme: oligonucleotide conjugations a plus. Must be team-oriented and have

ie Many faces

supervisory exp. Code: SJ61 Sr. Molecular Microbiologist

A PhD or MS microbiologist with 2-5 yrs. exp. Should be familiar with conventional microbiology as well as molecular genetic probes. Nucleic acid sample prep exp. a plus. Code: SJG2

osaic Technologies, Inc., a start-up biotechnology company located in Boston, is

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Candidates may also call our Job Hotline at:

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Fax: 901-495-3123

Resumes should be sent to:

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E-mail: human.resources@stjude.org

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Human Resources Dept. SC825

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Tennessee, is one of the world's premier research centers for

research and treatment of catastrophic diseases in children,

offering professional growth and diversity for the research

Analytical Chemist

PhD with 2+ yrs. or BS/MS with 5+ yrs of industry exp. with multiple analytical methods used for protein and/or nucleic acid characterization. Must have understanding of test method characterization and validation. Exp. with enzyme: nucleic acid conjugate characterization a plus. **Code: SJG3**

Medical Device Engineer

Sr. level biomedical engineer with broad exp. in medical device engineering, including mechanical, electrical, and materials engineering and familiarity with FDA GS regulations. Will coordinate activities of engineering consultants working on pre-production design through instrument validation in clinical trials. Familiarity with plastics manufacturing and optical detection systems desirable. **Code: \$J64**

Sr. Scientist, Nucleic Acids Chemist

PhD with demonstrated creative ability in development of new technologies for detection and analysis of nucleic acids. Broad background in molecular biology and biochemistry required. Exp. with hybridization of modified nucleic acids, optical detection methods and electrophoresis highly desired. **Code: CB5**

Research Associate - Assay Development

BS/MS level scientist with 1-3+ yrs. industry exp. in nucleic acid probe diagnostics. Strong statistical background a plus. **Code: SJ66**



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ZymeTx, Inc. The Viral Disease Management Company

ZymeTx, Inc. is an emerging biotechnology company engaged in the development of unique products for the diagnosis and treatment of viral diseases such as influenza, herpes simplex virus and HIV. We are located in Oklahoma City, characterized by small-town friendliness but having all the amenities of our nation's biggest cities, while offering the advantage of the lowest cost-of-living in the nation. ZymeTx is located in a new research park adjacent to the Oklahoma University Health Sciences Center.

Research Scientist Positions

Antiviral Studies Section

Responsibilities include design and conduct of experiments, skilled data analysis and participation in various R&D research teams. Candidate must be able to work independently, be a team player, and be able to accomplish tasks within an expected timeframe. Minimum Requirements: Ph.D. in Microbiology/Virology or related discipline and 0-3 years of postdoctoral experience. Background must include sterile culture techniques, development of viral assays, experience in handling viruses such as herpes simplex, hepatitis, influenza, RSV, HIV or CMV. Excellent organizational and communication skills are essential.

Protein Biochemistry Section

Preference will be given to candidates with research background in proteinprotein interactions, macromolecular assembly, viral assembly, enzymology or analytical biochemistry. Skills will include protein purification and HPLC small molecule separation. Minimum Requirements: Ph.D. in Biochemistry or related fields and at least 2 additional years of highly productive research experience. Some industrial and supervisory experience is preferred. Excullent problem solving, written and presentation skills are essential.

Enzyme Studies Section

Background in immunochemical techniques and/or Peptide Chemistry required. Skills include characterization of enzymes, development of new enzyme assays and screening for enzyme inhibitors. Minimum Requirements: MS in Chemistry or Biochemistry with 3-5 years experience or Ph.D. in Biochemistry with experience in Protein Biochemistry and Enzymology. Candidate should have good verbal and written communication skills as well as a good record of publications in peer-reviewed journals.

Synthetic Organic Chemistry Section

Newly developed products in this section will provide the basis for innovative and exciting technologies related to diagnostics and therapeutics of viral diseases. This position offers a challenging and rewarding position to a highly motivated scientist. Minimum Requirements: Ph.D. degree in Chemistry with at least two years of postdoctoral experience in synthetic carbohydrate chemistry (including NMR technology), and knowledge of molecular modeling.

Hybridoma Development and Viral Studies Section

Proficiency required in all aspects of mouse-mouse hybridoma development for production of monoclonal antibodies, including animal inoculation, cell fusion/cloning techniques, and development of immunoassays. Minimum Requirements: BS/MS in one of the biological sciences with 3-5 years lab experience, or Ph.D. with 2-3 years lab experience; experience in mammalian cell culture, hybridoma technology, and immunoassays. Candidate should have skills in virus culture techniques and viral assays.

Director of Diagnostic Product Development

Director will have responsibility for the reduction of developed diagnostic technologies to commercial practice and will design and implement diagnostic product development studies with focus on physician point-of-care and OTC applications. Minimum Requirements: MS or Ph.D. in technical discipline, preferably Biochemistry or Organic Chemistry. Minimum of 5 years experience in a product development capacity with emphasis in medical device applications. Specific areas of experience require CLIA '88 Requirements, cGMP and ISO 9000 as applicable to medical devices.

Human Relations Contact: Tari Hamman, ZymeTx, Inc., 800 Research Parkway, Suite 100, Oklahoma City, OK 73104. Fax: (405) 271-1944. E-mail: hammant@zymetx.com

Neuroscience

Developmental Neurobiologists University of Colorado Health Sciences Center School of Medicine Denver, Colorado

The Neuroscience Program and Center at the University of Colorado Health Sciences Center seeks two developmental neurobiologists at the Assistant Professor level in tenure-eligible positions. Successful candidates will have a strong record of pre- and postdoctoral research using molecular and genetic approaches to neural development. Model systems may be vertebrate or invertebrate.

The Neuroscience Program has 29 faculty in four basic science and four clinical departments. The Program awards a Ph.D. in Neuroscience. There are currently 17 students in the graduate program. Please see our web page: http://www.uchsc.edu/sm/neuroscience.

Appointment will be in a department appropriate for the background and interests of the candidates and participating departments. The Department of Cellular and Structural Biology and the Department of Biochemistry and Molecular Genetics are particularly interested in these recruitments. Candidates will be expected to develop an independent research program with peer-reviewed funding and to participate in teaching of graduate students and medical students.

Application review will begin October 1, 1998. Candidates should send curriculum vitae, names of references, and a one-page summary of research goals to: Curt R. Freed, M.D., Director, Neuroscience Program and Center, University of Colorado Health Sciences Center, Box B138, 4200 E. Ninth Ave., Denver, CO 80262.

The University of Colorado is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.



U.S. Department of Agriculture (USDA) Agricultural Research Service (ARS) **RESEARCH LEADER/ BIOLOGIST** National Center for Cool and Cold Water Aquaculture

USDA Agricultural Research Service is seeking a Supervisory Research Biologist with a background in aquaculture to be Research Leader of the National Center for Cool and Cold Water Aquaculture in Leetown, West Virginia. This unique National facility is co-located with the Leetown Science Center of the U.S. Geological Survey. The successful candidate will be responsible for conducting and administering basic and applied research that meets the needs of the Center's Mission to support and enhance the Nation's cool and cold water aquaculture production. The incumbent will also serve as Research Program Representative during the design and construction of the Center with a program of applied genetics and breeding, fish health, physiology and nutrition culture and production management, aquaculture engineering, and product quality of cool and cold water species including, but not limited to, rainbow trout, Arctic Char, salmon, and hybrid striped bass. Experience in leading a diverse program related to aquaculture production, protection, and breeding is preferred. A Ph.D. is desirable and research qualifications are determinant in the salary range of GS-14: \$66,138 to \$85,928; GS-15: \$77,798 to \$90,767.

Candidate must be a U.S. citizen. For additional information on the position contact Wilda Martinez at 215-233-6593 or email at wmartinez@ars.usda.gov. Applicants must review the vacancy announcement prior to application submittal. See Website: www.ars.usda.gov/afm/ hrd/resjobs. For application information/instructions contact Maryanne Cage at 304-725-3451, Extension 332.

Applications must be postmarked by October 15, 1998. USDA/ARS is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

DEPARTMENT OF AGRICULTURE (USDA) AGRICULTURAL RESEARCH SERVICE (ARS)

Supervisory Research Agronomist/Supervisory Soil Scientist/Supervisory Agricultural Engineer, Pacific West Area, Vegetable & Forage Crop Production Research, Prosser, WA.

ARS is seeking an agronomist/soil scientist/agricultural engineer to serve as the Research Leader for the Vegetable & Forage Crop Production Research Unit at Prosser, Washington. The incumbent will be responsible for planning, coordination, implementation, and evaluation of a multidisciplinary research program in genetic improvement of legumes, a multidisciplinary approach to soilborne, foliar, and other diseases of legumes, potatoes, and development of sustainable farming systems for eastern Oregon and Washington, and Idaho. Conducts a personal research program in new or improved cropping practices for legumes, potatoes, and farming systems. Serves as research scientist in the cropping systems group and is a member of the ARS/WSU/Industry Site-specific Management research team. Responsible for maintaining and enhancing the creativity and productivity of the management unit; hiring personnel and managing the human, fiscal, and physical resources assigned to the unit; providing technical information to ARS and Department policymakers, to other scientists, and to land managers through scientific publication and talks to professional societies and stakeholders. The objective of the team is to develop, test, and transfer integrated, site-specific prescriptions for crop management that achieve yield and quality goals while maintaining environmental health and grower profitability.

A Ph.D. in agronomy, soil science, or professional engineering is highly desirable. Must have one year of specialized experience in a related field that has equipped the applicant with the knowledge of methodologies for laboratory, greenhouse, small plot, and large plot on-farm research. Salary is commensurate with experience (salary range is \$64K to 84K). For further information on the position contact **Dr. John M. Kraft, Vegetable & Forage Crop Production Unit in Prosser, (509)786-9257.** For application procedures and forms contact **Carolyn Yager,** (509)786-9213. Applications in response to the advertisement should be marked **ARS-X8W-0241** and must be postmarked by November 2, 1998. USDA/ARS is an Equal Opportunity Employer.

Women and minorities are encouraged to apply.

AviGenics, inc.

AviGenics, inc. is an early-stage, privately held company utilizing avian transgenesis for high-volume, low-cost production of pharmaceutical and industrial proteins, and for improving poultry agronomic traits. The Company's laboratories are located in Georgia, the #1 state in broiler production.

Director of Research

We are seeking a Director of Research to manage and build the Company's ongoing research programs in avian transgenesis. Qualifications include 5–10 years of corporate experience, including research management, as well as an advanced degree in molecular, cellular, or developmental biology. Ideal candidates will have prior experience in animal transgenesis.

As Director of Research, you will be responsible for planning, allocating resources, and coordinating and managing the Company's technology development and applications. AviGenics' research effort will expand rapidly over the next few years and you will be expected to recruit research scientists and technicians continually. Multiple programs applying avian transgenesis in novel commercial applications require that you interact effectively with our corporate partners. You must, therefore, be able to work with a diverse group of scientific and business personnel, and to provide effective leadership in an exciting commercial research environment with strong academic ties.

Georgia's "Classic City," Athens is a prospering community, one that still reflects the charm of the Old South while pursuing innovative cultural and industrial initiatives. As part of a university community, Athens is a progressive, forward-thinking small city, located approximately 70 miles east-northeast of Atlanta.

AviGenics is proud to offer competitive wages and equity to the successful candidate. This is an exceptional ground-floor opportunity for you to play a major role in shaping the Company's future.

AviGenics, inc., c/o Taraval Associates 845 Oak Grove Avenue, Suite 220 Menlo Park, CA 94025 Fax: (650) 329-1043



Cereon Genomics offers the flexibility, excitement, and open environment of a start-up, plus the security and stability provided by the resources and commitment of two strong, respected industry leaders: Monsanto and Millennium Pharmaceuticals. We're working to apply genomics technology in the discovery and development of plant and agriculture products that can help us realize the age-old dream of improving the quality and quantity of the world's food supply. Join us and advance our important work.

STATISTICAL GENETICS

We are seeking Ph.D. scientists with strong training in both statistics and genetics to work on quantitative trait locus (QTL) analyses and other statistical problems in genomics, such as mapping and transcriptional profiling. Two or three years of postdoctoral experience is desirable.

DEVELOPMENTAL GENETICS

Opportunities exist at both junior and senior levels for Ph.D. scientists to work on understanding and manipulating various aspects of plant reproduction, including meiosis. A strong background in developmental genetics and/or the genetics of meiosis/mitosis is required. Plant experience is desirable, but not essential.

LIBRARY CONSTRUCTION

Several openings are available for BS/MS or Ph.D. level scientists with extensive hands-on molecular biology experience. Demonstrated competence in one or more of the following is required: BAC, PAC, YAC, Cosmid, lambda, small insert genomic, or cDNA library construction. A solid background in genetics, biochemistry or a related discipline preferred. Supervisory and/or exceptional organizational skills are advantages.



Please send your resume, indicating position of interest, to: Joan Curtice, Cereon Genomics, LLC, One Kendall Square, Building 300, Cambridge, MA 02139. Fax: (617)577-3562 E-mail: Joan.Curtice@Cereon.Com. Immigration assistance furnished.

Cereon Genomics is an Equal Opportunity Employer, proudly reflecting the natural diversity of the world around us.



The UMDNJ-New Jersey Medical School seeks to fill an endowed Chair for the Study of Emerging and Re-emerging Pathogens. The New Jersey Medical School has established a Center for the Study of Emerging Pathogens and in addition to this chair is recruiting two additional faculty, a molecular biologist and immunologist working in the area of HIV virology and pathogenesis. The individual who fills this chair would be expected to bring resources to support an active research program in the area of emerging and re-emerging infectious diseases and should qualify for a tenured professorship in one of the School's academic departments.

Located in the University Heights section of Newark, a few minutes from New York City and pleasant New Jersey suburbs, UMDNJ-New Jersey Medical School provides a stimulating and collegial environment with substantial resources. The Center for the Study of Emerging Pathogens has been established as a priority initiative of the Medical School. It is housed in newly renovated laboratory space and has the mission of fostering basic and clinical research in infectious diseases. The New Jersey Medical School and the University of Medicine and Dentistry of New Jersey have made other major commitments to promote research in infectious diseases and public health including the construction of an International Center for Public Health in University Heights Science Park.

To apply, please send your curriculum vitae, a brief outline of your research plans and the names of three references to:

Linda C. Reich, MBA Director of Special Projects NJMS-Office of the Dean UMDNJ-New Jersey Medical School 185 South Orange Avenue MSB C662 University Heights Newark, New Jersey 07103-2714

The UMDNJ is an Affirmative Action/Equal Employment Opportunity Employer M/F/D/V and is a member of the University Health System of New Jersey.

Announcement



THE DEPARMENT OF MEDICAL PATHOLOGY UNIVERSITY OF CALIFORNIA, DAVIS

STOWELL CHAIR IN EXPERIMENTAL PATHOLOGY

The Department of Pathology in the School of Medicine at the University of California, Davis, announces the search for the endowed Stowell Chair of Medical Pathology. The Stowell Chair will provide prominent leadership in the establishment and development of a basic research program in experimental pathology. The incumbent will be a nationally and internationally recognized physician scientist at the Associate or Full Professor level, with an established track record of successful extramural funding. The successful candidate must possess an M.D. or M.D.-Ph.D. degree and an outstanding record in experimental pathology. The position includes an FTE in the School of Medicine, research, office space, and start-up funds to be negotiated with the Department Chair. Please forward (1) letter of interest describing research, teaching, and administrative background; (2) curriculum vitae including reprints of three (3) selected recent publications; and (3) five references (including name, address, and phone number) to:

> Ralph Green, M.D. Chair, Department of Pathology Tupper Hall, Rm 3453 University of California Davis, CA 95616

This position is open until filled. Applications must be received by December 31, 1998, for full consideration.

The University of California, Davis is an Affirmative Action/ Equal Opportunity Employer.



PROFESSOR AND CHAIR Department of Biological Sciences

The University at Albany invites applications and nominations for the position of PROFESSOR and CHAIR of the Department of Biological Sciences. The Department has 30 full-time faculty and well-established M.S. and Ph.D. programs. The Department has recently embarked on a major research initiative in Comparative Functional Genomics. This initiative has strong support from the University, and the Department has been targeted for substantial resources including a number of tenure-track appointments. The new chair will have an instrumental role in the planning and design of a new, state-of-the-art research facility for the Department of Biological Sciences, which will be located in the new (200,000 sq. ft.) Life Sciences Building. There are ample opportunities for collaborative interactions with faculty of neighboring scientific institutions including Albany Medical College, Rensselaer Polytechnic Institute, and the Wadsworth Center for Laboratories and Research of the New York State Department of Health.

The successful candidate will have a distinguished record of scholarly activity, an internationally recognized program of sponsored research, a commitment to excellence in education, and leadership skills.

The recruitment package and resources are very competitive. Applications will be reviewed as they are received. A letter of application, curriculum vitae, and names of three references should be submitted to:

Biological Sciences Chairperson Search Committee Office of the Provost, ADM 201 University at Albany, State University of New York Albany, NY 12222

The University at Albany is an Equal Opportunity/Affirmative Action Employer.



UNIVERSITY OF VERMONT ASSISTANT/ASSOCIATE PROFESSORS

ENVIRONMENTAL MICROBIOLOGIST/MICROBIAL GENETICIST EUKARYOTIC VIROLOGIST

The Department of Microbiology and Molecular Genetics invites applications for two tenure-track faculty positions. We are soliciting applicants who have demonstrated superior productivity in their respective areas. Applicants must hold a doctoral degree, have had postdoctoral research experience, and are expected to establish a vigorous, independent research program as well as contribute to the Department's teaching responsibilities. Details about the Department and the University may be accessed at: http://salus.med.uvm.edu/mmg/mmg.html.

- Environmental Microbiologist-The successful candidate will have demonstrated expertise in microbial physiology and molecular genetics. Potential research areas include molecular approaches to bioremediation, biofilm formation, soil, subsurface and aquatic microbiology. Opportunities for collaborative research exist in the Departments of Plant and Soil Science, Botany, Civil Engineering, and the School of Natural Resources.
- Eukaryotic Virologist–Potential research areas include molecular genetic approaches to pathogenesis, virus-host cell interactions, and gene regulation. Opportunities for collaborative research exist both within and outside of the Department in the areas of signal transduction, pathogenesis, and nucleic acid transactions.

Each applicant should submit a letter of interest, a curriculum vitae with a description of research interests, and have three letters of reference sent to: Dr. Warren I. Schaeffer, Environmental Microbiologist Search Committee Chair, or Dr. Gregory M. Gilmartin, Eukaryotic Virologist Search Committee Chair, Department of Microbiology and Molecular Genetics, Stafford Hall, University of Vermont, Burlington, VT 05405. Review of applications will begin immediately and continue until the Deadline for submission of applications, October 31, 1998. The University of Vermont is an Equal Opportunity, Affirmative Action Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL AND PREDOCTORAL TRAINING PROGRAMS

Research Programs Genome Organization **Developmental Biology** Metabolic Diseases Neurogenetics Genetics of Complex Traits Cancer Genetics Immunology/Hematology Bioinformatics Heart Disease/Obesity

The Jackson Laboratory: a unique research environment with unparalleled mouse resources.

Letters of inquiry should include: curriculum vitae, statement of research interests, list of publications, and names of three references. (Predoctoral program is in conjunction with the University of Maine.) To apply or request further information, contact: Suzanne Serreze, The Jackson Laboratory, 600 Main St., Bar Harbor, ME 04609-1500. Phone: 207/ 288-6420; FAX: 207/288-6079; e-mail: sbs@jax.org; website: http://www. jax.org. EE/AA Employer.



Applications are invited to compete for available positions to investigate molecular/genetic mechanisms of birth defects. Successful candidates will join a research team active in the investigation of signal transduction, regulation of gene expression, embryotoxicity, and genetic determinants of abnormal development of the craniofacial region. Opportunities exist to collaborate with existing research programs in the University of Louisville Birth Defects Center. The candidate will be expected to develop an independent research program and successfully compete for external funding in an area related to molecular craniofacial biology. Applicants should submit (1) curriculum vitae, (2) a statement of current research activities and future research plans, and (3) names of three references to: Dr. Robert Greene, Department of Biological & Biophysical Sciences, ULSD, University of Louisville, Louisville, KY 40292. The University of Louisville is an EEO/AA Employer. Women and minorities are encouraged to apply.

Working at the molecular level to conquer, treat or prevent debilitating diseases.

Drug Discovery Research AT SCHERING-PLOUGH

At Schering-Plough Research Institute, scientists are discovering innovative therapeutic agents that challenge humankind's most debilitating diseases. Our continuing, unprecedented growth creates excellent opportunities for innovative, organized and highly motivated scientists. If you are seeking an opportunity to be on the cutting edge of pharmaceutical discovery, become part of an expanding multidisciplinary group focused on one of the following therapeutic areas:

Associate Scientist/Scientist

Allergy

We seek a highly motivated and innovative Scientist to assume responsiblity for conducting in vivo pharmacology studies for the purpose of developing novel antiallergy therapeutic agents. Requires an MS in Pharmacology, Physiology or Animal Sciences and 0-4 years of laboratory experience or a BS with 4-7 years of laboratory experience. Knowledge of computer applications and strong interpersonal skills are desired. For consideration, respond to Dept. HB-DD8183-RM.

POSTDOCTORAL FELLOW Oncology/Tumor Biology

We seek a highly motivated and innovative individual with a strong interest in the tumor biology area to conduct exploratory research in the areas of RAS and P13K, Akt/Pkb signaling pathways. Requires a PhD in Tumor Biology or a related discipline along with experience in cloning, protein expression and enzymology. For consideration, respond to Dept. HB-TM9886-CK.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to forward a resume which MUST include the specific Dept. Code for your position of interest and salary requirements to: Human Resources-HB, Schering-Plough Research Institute, 2015 Galloping Hill Road, K-15, Kenilworth, NJ 07033-0539. Please visit our web site at http://www.sp-research.com for additional information. 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

HEAD OF CLINICAL SOFTWARE SYSTEMS DEVELOPMENT

Axys Pharmaceuticals, Inc. is a leader in the integration of drug discovery technologies from gene identification through clinical development. Genetic information will soon be used to predict drug efficacy, safety and utility. Axys is a front-runner in developing this new and exciting field of pharmacogenomics.

We currently have an opening for a person who will design and implement the databases and software tools which will enable our pharmacogenomics program to be the premier platform for the integration of clinical and genetic information. In this challenging position, you will be responsible for the system design and management of the bioinformatics platform for a pharmacogenomics database that enables the use of genetic information in clinical trial design. In addition, you will supervise software engineers and participate in meetings with outside collaborators concerning the design and function of the database platform. Prefer a PhD or MD in Clinical Medicine, Pharmacology, Genetics or Biology with experience in clinical trial data management and analysis. Familiarity with Java, web interfaces and experience with C and Oracle/Sybase databases are highly desirable.

As a publicly held corporation, Axys is proud to offer a stimulating scientific setting along with a highly competitive salary and benefits package. Please mail or fax your resume to: Axys Pharmaceuticals, Inc., Attn: HR/SCI98-117, 11099 N. Torrey Pines Rd. #160, La Jolla, CA 92037. Fax: (619) 452-6653. Visit our website at www.axyspharm.com. EOE.



HARVARD MEDICAL SCHOOL HARVARD SCHOOL OF DENEAL MEDICINE

PROFESSOR OF CRANIOFACIAL/ORAL BIOLOGY

Harvard School of Dental Medicine and the Forsyth Dental Center are jointly recruiting a Professor to the new Harvard-Forsyth Department of Oral Biology (Chairman Bjorn Reino Olsen, M.D., Ph.D.). Renovated laboratory space is available at the Forsyth Dental Center. The successful candidate should have an outstanding research program in craniofacial development, neural crest biology, skeletal biology or extracellular matrix biology. He/she will join a growing department and be responsible for organizing and supervising a graduate/postdoctoral program in craniofacial biology. The Professor is also expected to partici-pate in the teaching of medical/dental students, graduate students, and postdoctoral fellows and work with the Chairman of the Harvard-Forsyth Department of Oral Biology to develop a Harvard-Forsyth Craniofacial Research Center.

Candidates with a Ph.D. and/or M.D. and D.M.D. and an outstanding record of research productivity and quality should submit before September 30, 1998, a curriculum vitae, summary of research accomplishments (including copies of up to ten key publications) and description of future research plans to:

Bjorn R. Olsen, M.D., Ph.D. Chair, Search Committee Harvard-Forsyth Department of Oral Biology Forsyth Dental Center 140 The Fenway Boston, MA 02115 Harrard University and the Forsyth Dental Center are Affirmative Action/Equal Opportunity Employers. Women and minorities are encouraged to apply.

A Chance to Make a

erence

PENNSTATE College of Medicine

ASSISTANT PROFESSOR, INSTRUCTOR, POSTDOCTORAL FELLOW CARDIAC CELL GROWTH

Positions available to investigate the molecular control of cardiac cellular growth in the Laboratory of Dr. Kenneth M. Baker. The successful candidate should have a Ph.D. and/or M.D., and a strong background in molecular and cellular biology and biochemistry with commensurate experience.

The Weis Center for Research in Danville, PA is part of the Penn State College of Medicine, and provides modern research facilities. This location is a pleasant, semi-rural living environment, with convenient access to the metropolitan areas of New York, Baltimore, and Washington, D.C.

Interested individuals should send their curriculum vitae and the names of three references to:

Mrs. Barbara A. Brown Administrative Assistant Henry Hood Research Program (KMB) Sigfried and Janet Weis Center for Research 100 North Academy Avenue Danville, PA 17822-2601

For your health, the Weis Center for Research of the Pennsylvania State University is a smoke-free campus. An Affirmative Action/Equal Opportunity Employer. Women and Minorities Encouraged to Apply. At the New York Blood Center, we find new ways to make a difference everyday. As the nation's pre-eminent independent blood research, collection and distribution organization, we're committed to using our ground-breaking research to develop life-saving products.

<u>POSTDOCTURAL</u> <u>RESEARCH</u> <u>FELLOW</u>

Immunochemistry Laboratory - Dr. Marion Reid

Currently we seek an individual to become part of our Lindsley F. Kimball Research Institute, and take part in an NIH-SCOR fundmolecular basis of blood group antigens. Requires PhD and expertise in molecular biology, biochemistry and cell culture. Preference will be given to candidates with knowledge of immunology and glycobiology. We offer a competitive salary and comprehensive benefits package. For consideration, please fax (212)721-2752, or forward your CV, to: New York Blood Center, HR Dept-MK, 150 Amsterdam Avenue, New York, NY 10023. EOE.

ed research program studying the



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www.nybloodcenter.org

University of Nebraska Lincoln

VICE CHANCELLOR FOR RESEARCH UNIVERSITY of NEBRASKA-LINCOLN

Applications and nominations are invited for the position of Vice Chancellor for Research. The Vice Chancellor is the chief research officer for the campus, responsible for encouraging, organizing, advocating for, and leading the University's research activities. The Vice Chancellor for Research reports through the Senior Vice Chancellor for Academic Affairs to the Chancellor. Other responsibilities include oversight for the University of Nebraska State Museum, the University of Nebraska Press, and technology transfer.

It is expected that the successful candidate will hold an earned doctorate and have a substantial record of scholarly research and extramural funding, qualifications meriting appointment as a tenured full professor, proven administrative experience, and the potential for providing dynamic and successful research leadership.

The University of Nebraska–Lincoln is an AAU, Research I, land-grant institution with a distinguished tradition of research in all the major disciplines. It is designated as the principal research and graduate institution in the state.

Applications and nominations will be accepted until the position is filled. Candidates are encouraged to complete applications (including letter of interest, vitae, and list of references) by October 1, 1998, when the Search Committee will begin reviewing applications. Women and minority group members are especially encouraged to apply. A full position description and instructions for the option of submitting applications on-line are available at www.unl.edu/svcaa/Activities/vcr.html or may be requested in hardcopy from the address below. Applications and nominations should be sent to:

Professor David Sellmyer, Chair Vice Chancellor, Research Search Committee 208 Canfield Administration Building University of Nebraska Lincoln, NE 68588-0420 (402) 472-7886 E-mail: jgude1@unl.edu

The University of Nebraska is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity and is responsive to the needs of dual career couples. We assure reasonable accommodation under the Americans with Disabilities Act. If you require an accommodation please contact Evelyn Jacobson at (402) 472-3751.

SENIOR VICE PRESIDENT FOR HEALTH SCIENCES AND DEAN OF THE SCHOOL OF MEDICINE UNIVERSITY OF UTAH Salt Lake City, Utah

The University of Utah seeks a visionary academic health sciences leader to serve as Senior Vice President for Health Sciences and Dean of the School of Medicine.

The University of Utah is a public research University. The University has an enrollment of approximately 26,000 students in the following academic units: Architecture, Education, Engineering, Fine Arts, Health, Humanities, Law, Medicine, Mines/Earth Sciences, Nursing, Pharmacy, Science, Social Work, Social and Behavioral Science.

The Senior Vice President for Health Sciences and Dean of the School of Medicine is one of two Senior Vice Presidents reporting directly to the President. As Senior Vice President for Health Sciences, this individual serves as chief executive officer of the Health Sciences Center of the University and is responsible for the academic, clinical, and research enterprises of the following units: School of Medicine; College of Pharmacy; College of Nursing; College of Health; University of Utah Health Network, including the University Hospitals and Clinics and the University of Utah Health System; Associated Regional and University Pathologists (ARUP); Faculty Practice Organization; Huntsman Cancer Institute; and Eccles Medical Library. As Dean of the School of Medicine, this individual is also responsible for the organization and direction of the preclinical, clinical postgraduate medical, and continuing medical education as well as the oversight of graduate programs administered by the School. Additionally, the Senior Vice President/Dean of Medicine represents the Health Sciences Center internally and externally with the University academic community, healthcare professionals in Utah and the surrounding intermountain states, and federal and state legislators.

The ideal candidate will be an accomplished academic health sciences leader with experience that demonstrates the ability to lead and serve as spokesperson for this large, complex, and diverse academic health sciences center and will possess the following: an M.D. degree; demonstrated leadership and administrative capabilities; astuteness in human relations; strong financial acumen; a broad understanding of health-care economics and the changes in health-care delivery; demonstrated commitment to academic, clinical, and research excellence; a strong interdisciplinary orientation; and a collegial, consultative management/leadership style allied with the ability to be decisive. A candidate should be qualified to receive a tenured faculty appointment in one of the departments of the University.

Edward B. Clark, M.D., Wilma T. Gibson Professor and Chairman of Pediatrics and Chair of the Search Committee, requests that nominations, curricula vitae, and requests for information be directed to the University's consultant: Paula Carabelli

Educational Management Network: A Division of Witt/Kieffer 1920 Main street, Suite 310 Irvine, CA 92614 949/851-5070 949/851-2412 (FAX)

University of Utah is an EEO/AA Employer and strongly encourages all to apply. Reasonable accommodations are made to the known disabilities of applicants and employees. **RESEARCH POST-DOCTORAL POSITIONS**

The Children's Hospital of Philadelphia, the nation's first hospital dedicated solely to pediatric care, currently has openings available in research for Post-Doctoral Fellows under the direction of the following faculty:

JOHN MARIS, MD: Take on molecular genetic research in the Division of Oncology. You will design and execute experiments to identify gene mutation in human neuroblastomas.

LYNN RUTOWSKI, PH.D.: Be a part of biochemistry/molecular biology research in the Division of Neurology. You will study transcriptional regulation of nervous system differentiation.

DIMITRI MONOS, PH.D.: Take on molecular research in the Division of Immunology. Two positions are available. One will focus on structural and functional aspects of histocompatibility molecules (HLA). The second will investigate the problem of autoantigen in multiple sclerosis patients using random phage peptide libraries.

PETER PHILIPS, MD: Be a part of biochemistry research in the Division of Neuro-Oncology. You will isolate and study the role of growth factors and signal transduction pathways in brain tumors.

Candidates for any position must have a Ph.D. and/or MD with a strong background in one or more of the following areas: molecular biology, protein purification and analysis, protein chemistry, and/or immunology.

Applicants should send a cover letter with a brief description of research interest, career goals, and the position(s) desired, a current C.V., and the names and addresses of three references to: Denise Williams, Human Resources-Career Services, The Children's Hospital of Philadelphia, 34th & Center Civic Blvd, Philadelphia, PA 19104. EOE/M/F/D/V.

The Children's Hospital of Philadelphia Known around the world

HARVARD MEDICAL SCHOOL DEPARTMENT OF DERMATOLOGY

The Department of Dermatology, Harvard Medical School is accepting applications for clinical and research postdoctoral fellowship positions, and for entry-level faculty positions.

Basic research fellowship opportunities exist within the Wellman Laboratories of Photomedicine and the Harvard/MGH Cutaneous Biology Research Center at Massachusetts General Hospital, as well as at our Dermatology Research Laboratories of the Brigham and Women's Hospital located at the Harvard Institutes of Medicine, which includes the Harvard Skin Diseases Research Center.

We offer clinical fellowship programs including laser, dermatologic surgery, clinical trials, and photomedicine. These programs begin on July 1st of each year and some may require completion of residency training in dermatology.

Additionally, the department is a recipient of an NIH Training Grant, which provides salary support for two years of directed research. Funds are currently available for April 1, 1999. We will aid interested candidates in identifying mentors and projects within the department. To be eligible for this support, candidates must be U.S. citizens or permanent residents of the United States. Interested candidates should send a letter of inquiry specifying research interests and CV by January 1, 1999.

We are also currently accepting applications for our Residency Training Program beginning July 1, 1999. The application deadline for this program is November 15, 1998. Interested candidates should call or write for an application.

The Department of Dermatology, Harvard Medical School is a joint multiinstitutional teaching and training program with cooperative clinical and research activities at the Beth Israel Deaconess Medical Center, Brigham and Women's Hospital, Children's Hospital Medical Center, Massachusetts General Hospital, Lahey Clinic, and Brockton/W. Roxbury VA Medical Centers. We are an Equal Opportunity/Affirmative Action Employer; minorities, women, disabled, and veterans are encouraged to apply.

Interested candidates should send a letter of inquiry and CV to: John A. Parrish, M.D., Department of Dermatology, Harvard Medical School, Massachusetts General Hospital, 32 Fruit Street, Bartlett 616, Boston, MA 02114 (617-726-5254).



Junior Faculty Positions Department of Chemistry The Ohio State University

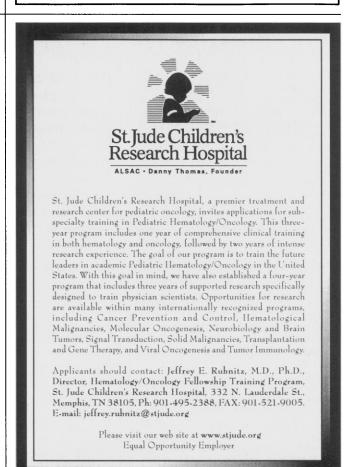
The Department of Chemistry at The Ohio State University seeks to recruit assistant professors to its faculty, to begin during the summer or autumn of 1999. Although the department strongly prefers junior faculty applications, we will accept materials from any gualified candidate.

Candidates in the area of bioanalytical chemistry, environmental chemistry, chemical sensors, and mass spectrometry will be considered.

Applications received before October 23, 1998, will be given full consideration. Candidates should submit a curriculum vitae, undergraduate and graduate transcripts, and a statement of research and teaching interests. In addition, candidates should arrange for three letters of recommendation to be sent directly to the search committee.

Chair, Bio/Analytical Faculty Search Committee c/o Mrs. Susan Krumm Department of Chemistry The Ohio State University 100 W. 18th Avenue Columbus, OH 43210 (614) 292-6172; Fax (614) 292-1685 E-mail: skrumm@chemistry.ohio-state.edu Visit our website at: http://www.chemistry.ohio-state.edu

The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Women, minorities, Vietnam-era veterans, disabled veterans, and individuals with disabilities are encouraged to apply.



Symposium

International Symposium at the National Institutes of Health:

"TOWARD A MOLECULAR UNDERSTANDING OF CRANIOFACIAL MORPHOGENESIS"

November 22–24, 1998 Natcher Conference Center, NIH, Bethesda, MD

Topics will include: • Molecular genetics • Genomics •
• Signaling networks that control patterning •
• Cell-cell and cell-matrix interactions •
• Cell lineage determination and differentiation •
• Environmental effects • Animal models •
• Human craniofacial syndromes •

Speakers include: M. Bronner-Fraser, M. Capecchi, I. Dawid, S. Fraser, E. Jabs, R. Krumlauf, A. Lumsden, R. Maas, G. Martin, R. Maxson, M. Muenke, J. Murray, B. Olsen, I. Thesleff

Major invited poster session

Further information and registration by Internet: http://KEVRIC.com/nidrwa21.htm or contact The KEVRIC Company, Inc., Attention: EAL/WA21,8401 Colesville Road, Suite 610, Silver Spring, MD 20910 Phone: (301) 588-6000; Fax (301) 588-1777.

Symposium

4th National Symposium BASIC ASPECTS OF IMMUNOLOGY

> 21-23 October, 1998 BETHESDA, MARYLAND

COMPLEMENT Una S. Ryan, *Chair* Henry C. Marsh Andrea J. Tenner Anne Nicholson-Weller Michael Carroll

> NK CELLS Eric O. Long,*Chair* David H. Raulet Lewis L. Lanier Christine A. Biron

CYTOKINES AND CHEMOKINES Abul K. Abbas, Chair Thomas Schall Paul Rothman Jeffrey Browning

TOLERANCE Polly Matzinger, Chair Wendy Havran Albert S. Bendelac Howard L. Weiner

TRANSPLANTATION Carl H. June, Chair Hugh Auchincloss Jeff A. Bluestone Allan D. Kirk Charles G. Orosz Kathryn J. Wood

FEATURED SPEAKER: Ellen S. Vitetta

For information, tel: 202-782-0002; fax: 202-782-0721 EM: symposium@wrair-emh1.army.mil http://wrair-www.army.mil/symposia/dmbsym.htm

DISCOVER A WORLD OF OPPORTUNITY

Abbott Laboratories is a \$12-billion health care leader with 54,000 associates throughout the world. Our achievements are known globally and are the result of talented professionals like you. Join a company with a history of innovation. Our growth has created exciting opportunities for individuals who will be able to thrive in a dynamic environment. Learn how success and progress come together by joining our Abbott International team.

MEDICAL DIRECTOR/ ASSOCIATE MEDICAL DIRECTOR

The ideal candidate will apply their Medical and Scientific expertise to an extremely broad range of activities within Abbott International's Scientific Affairs group. These activities range from the planning and oversight of clinical trials to providing clinical and scientific input to the marketing and business development teams.

Current positions exist in the Pharmaceutical Products group, Hospital Products group and New Product Evaluation group. Each of these positions requires a strong clinical background, including board certification in a major medical specialty. Previous experience in the pharmaceutical industry and/or Ph.D. training is preferred, but not necessary. Excellent communication skills, the desire to work in a team setting, and the ability to discuss sometimes complex scientific and medical issues with a diverse group of colleagues will be pivotal to success in these positions.

At Abbott Laboratories, your contribution will be vital to our mission of improving lives. In return for your expertise, we offer a competitive compensation package, including full benefits. For immediate consideration, apply online at: www.abbott.com/ad and enter ad code 98-SLP2001. Or by mail to: Abbott Laboratories, Ad Code: 98- SLP2001, Dept. 6PP, Bldg. AP30, 200 Abbott Park Road, Abbott Park, IL 60064. Fax: 847-938-8325. E-mail: susan.pipenhagen@abbott.com An EOE, we are as committed to employee diversity as we are to our broad range of products and services.



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U.S. Department of Agriculture (USDA) Agricultural Research Service (ARS)

Agricultural Research Service

SUPERVISORY MICROBIOLOGIST (RESEARCH LEADER) Eastern Regional Research Center

The Eastern Regional Research Center (ERRC), ARS, USDA, has a challenging position for a permanent full-time Supervisory Microbiologist. This individual will serve as Research Leader of the prestigious Microbial Food Safety Research Unit. ERRC is located on an attractive 27-acre campus just outside Philadelphia, in Wyndmoor, Montgomery County, Pennsylvania. Employees enjoy a flexible work schedule and have access to public transportation. Research facilities include sophisticated and well-equipped labs, pi lot plants, computer unit, and library. The scientist will be responsible for conducting and administering a program of basic and ap plied research pertaining to the microbiological safety of foods and will support the research needs of stakeholders including regulatory agencies and the food industry. Candidates must have knowledge of food safety microbiology and molecular biology; skill in developing, coordinating, and managing a multimillion-dollar research program; skill in supervising and providing technical leadership to a strong multidisciplinary science staff at multiple work sites; and ability to plan and conduct research on detection methods, intervention strategies, risk assessment, and computer-based predictive models. U.S. citizenship is required. Salary commensurate with experience, GS-14; \$66,385 to \$86,299; GS-15; \$78,088 to \$101,519 per year. For more information on the position, call Dr. John P. Cherry at 215-233-6595 or E-mail at jcherry@ars. usda.gov. Visit the ARS Vacancy website: www.ars.usda.gov/ afm/hrd/resjobs. For application, call Mary Ann Byrne at 215-233-6571. Applications must be marked ARS-X8N-8238, be complete, and postmarked by October 23, 1998.

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

FALL 1999 FACULTY POSITIONS CHEMISTRY & BIOCHEMISTRY WPI

Applications are invited for 2 full-time tenure-track positions in the Department of Chemistry and Biochemistry at Worcester Polytechnic Institute. WPI, situated in Worcester, MA, is an innovative technological university of engineering, science, management, the humanities and arts, and the social sciences with an enrollement of 2,600 undergraduate and approximately 1,000 full- and part-time graduate students.

The Department of Chemistry and Biochemistry has undergone considerable growth in the past few years with the appointment of a new Head, two new faculty in Biochemistry, extensive renovation of facilities, acquisition of new equipment and procurement of significant external funding. In addition, undergraduate and graduate enrollments have more than doubled. We seek to continue our growth with the appointment of two faculty in the focus areas of Synthesis and Biochemistry.

BIOCHEMISTRY

The Department of Chemistry and Biochemistry solicits applications for a tenure-track appointment in biochemistry at the assistant professor level. Applications are invited from candidates in all areas of biochemistry. However, we seek individuals who will complement existing areas of expertise in the department. Applicants should have a Ph.D. degree and will be expected to develop strong teaching and externally-funded research programs at the undergraduate and graduate levels.

SYNTHESIS

The Department of Chemistry and Biochemistry solicits applications for a tenuretrack appointment in synthesis at the assistant professor level. Applications are invited from candidates in all areas of synthesis. However, we seek individuals who will complement existing areas of expertise in the department. Applications should have a Ph.D. degree and will be expected to develop strong teaching and externally-funded research programs at the undergraduate and graduate levels.

To apply, please submit a letter indicating which position you are interested in. Enclose a complete resume, a statement of research plans (no more than three pages) and a statement of teaching interests. Also please arrange to have three letters of recommendation sent to: Professor J.P. Dittami, Head, Department of Chemistry and Biochemistry, WPI, 100 Institute Road, Worcester, MA 01609-2280 by October 15, 1998.

WPI offers a smoke-free environment. To enrich education through diversity, WPI is an affirmative action, equal opportunity employer.

Associate Dean For Cultural Enhancement and Diversity University of Kansas School of Medicine

University of Kansas School of Medicine has initiated a national search for the Associate Dean for the Office of Cultural Enhancement and Diversity. Nominations and applications are invited. Nominees must have attained an M.D. or other relevant doctoral degree. In addition, candidates should have a proven track record of excellence in academics. This may include research, teaching, and clinical medicine. An academic appointment will be commensurate with credentials and experience. This appointment reports directly to the Executive Dean of the School of Medicine.

Preference will be given to candidates experienced and committed in the issues and concerns affecting diverse student groups and community populations and to candidates who have demonstrated the appropriate levels of maturity, leadership ability, and sensitivity to enable this institution to develop educational programs and grant proposals. The incumbent will be capable of taking a firm leadership role in encouraging and maintaining a diverse campus environment and in providing quality support programs consistent with the mission of the institution. Responsibilities will include the recruitment and retention of minority medical students through the development of educational programs and faculty enrichment activities to achieve appropriate diversity sensitivity at the University of Kansas.

> A cover letter and curriculum vitae should be submitted to: Search Committee Chair Associate Dean for Cultural Enhancement and Diversity c/o: Office of the Executive Dean 3015 Murphy Administration Building University of Kansas School of Medicine 3901 Rainbow Boulevard Kansas City, KS 66160-7300 The deadline for receipt of applications and nominations is November 15, 1998. The University of Kansas is an Equal Opportunity and Affirmative Action Employer.

Postdoctoral Fellowships

The UNC Lineberger Comprehensive Cancer Center of the University of North Carolina at Chapel Hill will have openings in 1997–98 in its training program, now in its 23rd year, for persons completing graduate studies to train with excellent investigators in basic research in tumor virology, molecular carcinogenesis, molecular therapeutics, cancer cell biology, genetics, tumor immunology, and research that interfaces with clinical and physical sciences. Training is available in DNA repair, replication, and mutagenesis; regulation of cellular proliferation and differentiation including growth factors, signal transduction pathways, and intercellular communication; molecular immunology; molecular genetics and epidemiology of cancer; and human disease models and gene therapy. Unique training resources and core facilities are supported by the NCI-designated UNC Lineberger Comprehensive Cancer Center.

Preceptors are: Steven Bachenheimer, Albert Baldwin, Victoria Bautch, David Brenner, Keith Burridge, Sharon Campbell, Stephen Chaney, David Clemmons, Edward Collins, Marila Cordeiro-Stone, Channing Der, Robert Duronio, H. Shelton Earp, Jeffrey Freilnger, Frank French, Jack Griffith, Stephen Haskill, Brian Herman, Eng-Shang Huang, Clyde Hutchinson III, Kenneth Jacobson, Rudolph Juliano, David Kaufman, Shannon Kenney, Ryszard Kole, Steven Leadon, David Lee, Patricia Maness-Tidwell, William Marzluff, Beverly Mitchell, Joseph Pagano, Tom Petes, Mark Peifer, Nancy Raab-Traub, James Raleigh, R. Jude Samulski, Aziz Sancar, Ronald Swanstorm, Lishan Su, Jenny Ting, Ronald Thurman, Michael Topal, Terry Van Dyke, Jean-Michel Vos, Kevin Weeks, Bernard Weissman, Elizabeth Wilson, and Yue Xiong.

Candidates must be U.S. citizens or permanent residents. For an informational brochure or to apply (include curriculum vitae, three letters of recommendation, a statement of research interests, and graduate school records) write to:

Joseph S. Pagano, M.D. CB# 7295 UNC Lineberger Comprehensive Cancer Center School of Medicine University of North Carolina at Chapel Hill Chapel Hill, NC 27599-7295

UNC's Comprehensive Cancer Center is an Affirmative Action/Equal Opportunity Employer. Minority applicants are encouraged to identify themselves voluntarily.

University of Rochester Medical Center

Center for Vaccine Biology and Immunology University of Rochester Institute for Biomedical Sciences



The University of Rochester School of Medicine and Dentistry announces the opening of a Center for Vaccine Biology and Immunology in the new University of Rochester Institute for Biomedical Sciences. The Center will occupy 31,500 square feet of research space on the top floor of a new research building attached to the University of Rochester Medical Center, which accommodates the existing strong programs in Immunology, Microbiology and Vaccine Biology at the University of Rochester. This is an exciting time to apply recent advances in our understanding of immune regulation to the design of new vaccines for "difficult" infectious diseases such as tuberculosis, malaria and AIDS, and also to create new types of vaccines for treating cancer, allergy and autoimmunity. The Center will have a strongly interactive environment and will focus on basic research in immunology that will contribute to the understanding and design of vaccines.

Tenure-track faculty positions

Faculty positions: We are now recruiting eight to ten assistant, associate or full professors with proven abilities in research. Generous start-up packages will be provided, including support for equipment, supplies and personnel. Investigators will have tenure-track appointments in the Center, and cross-appointments in one of the departments in the School of Medicine and Dentistry. Applications including a curriculum vita, a statement of research interests, and the names of three referees should be addressed to:

Dr. Tim Mosmann

Director, Center for Vaccine Biology and Immunology University of Rochester Institute for Biomedical Sciences 601 Elmwood Avenue, Box 609 Rochester, NY 14642 FAX: (716) 756-5614 For further information: www.urmc.rochester.edu/ribs/vaccbio Or contact Tim Mosmann, (403) 492-0702, Tim_Mosmann@urmc.rochester.edu

Post-doctoral positions: Information on the research programs of Center members can be found on our website. Applications should be sent to the investigator.

POSTDOCTORAL TRAINING Cellular and Molecular Endocrinology

Mount Sinai School of Medicine, in conjunction with a distinguished faculty of principal investigators, is offering MD and PhD training in cellular and molecular endocrinology. Fellowships, which include support for a graduate student program, are provided by an NIH-supported training program. Research areas include:



PRL gene transcription factors Genetics of Thyroid Autoimmunity Thyroid Hormone Receptors Biology of GnRH secreting neurons Signal transduction/G protein characterization Modeling of hormone receptor binding sites Transcriptional control of pituitary hormones Hypothalamic hormone receptors Peptidase regulation of hormone action

Carter Bancroft, PhD, Professor Terry Davies, MD, Professor Douglas Forrest, PhD, Asst. Professor Marie Gibson, PhD, Professor Ravi Iyengar, PhD, Professor Roman Osman, PhD, Assoc. Professor James Roberts, PhD, Professor Stuart Sealfon, MD, Assoc. Professor Sherwin Wilk, PhD, Professor

Mount Sinai School of Medicine, located on the Upper East Side of Manhattan, overlooking Central Park, provides excellent modern research facilities and an outstanding scientific environment for pre and postdoctoral training. Applicants must be US citizens or permanent residents. Applications from women and minorities are encouraged. Please forward curriculum vitae along with names and addresses of three references to: Principal Investigator, c/o: Dr. T.F. Davies, Endocrinology Training Program, Box 1055, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. We are an equal opportunity employer fostering diversity in the workplace.

Mount Sinai School of Medicine

TENURE-TRACK FACULTY POSITIONS IN NEUROBIOLOGY University of Maryland School of Medicine Department of Anatomy and Neurobiology

The Department of Anatomy and Neurobiology is recruiting two new faculty positions in neurobiology. Our facilities include state-of-the-art core laboratories in imaging, neurophysiology, neuroanatomy, neurosurgery, and molecular neurobiology. We offer a collaborative environment with competitive salary and start-up packages. The department has an NIH Program Project Grant and a newly awarded Training Grant. Departmental faculty are members of the new interdisciplinary Neuroscience Program (website: http://neuroscience.umaryland. edu). Appointments at the ASSISTANT PROFESSOR level are preferred, but especially qualified applicants at all ranks will be considered.

Successful candidates must have a Ph.D. or equivalent, evidence of productivity, and the potential to establish an independent research program capable of attracting extramural funding. We are seeking candidates whose interests complement our strengths in developmental, cellular, and molecular neurobiology, and who can establish collaborative research programs. Of particular interest are candidates using molecular approaches to understand development/plasticity or organization/function of manimalian central nervous system circuits, especially in mammals.

Faculty participate for three to five weeks in a teamtaught medical school course. For best consideration, applications should be received before November 1, 1998. Candidates should submit a detailed curriculum vitae, a statement of research interests and goals, and the names and addresses of three to five references to:

Dr. Linda Richards and Dr. Frank Margolis Faculty Search Committee Department of Anatomy and Neurobiology University of Maryland School of Medicine 685 West Baltimore Street Baltimore, MD 21201

We are cager to diversify our faculty. Women and minorities are encouraged to apply. The University of Maryland is an Affirmative Action/Equal Opportunity Employment/ADA Employer.

BIOLOGY FACULTY POSITIONS

The Biology Department of the University of Redlands invites applications for two tenure-track faculty positions in (1) plant biology and (2) neurobiology or inmunology at the ASSISTANT PROFESSOR level beginning fall 1999. These two positions will provide introductory courses in genetics and physiology as well as advanced courses in the areas of specialty. A Ph.D., evidence of excellence in undergraduate teaching, and a commitment to undergraduate research are required. Please send letter of application, curriculum vitae, a description of research plans, and a statement of no more than two pages providing your philosophy of teaching with a list of potential course offerings. In addition, please arrange for three letters of recommendation to be sent. Address materials to: Chair of Biology Search Committee, Department of Biology, University of Redlands, P.O. Box 3080, Redlands, CA 92373-0999 postmarked by October 13, 1998. The University of Redlands is an Equal Opportunity Employer. We actively seek applications from women, minorities and members of underrepresented populations.

SENIOR FACULTY POSITION IN MEDICAL GENETICS

The Medical Genetics and Pediatrics Department at the University of Wisconsin–Madison seeks to hire a tenured **ASSOCIATE** or **FULL PROFESSOR** with research and clinical credentials to direct the Clinical Genetics Program. Applicants should have a vigorous independent research program. Responsibilities include directing clinical activities, fostering interdepartmental initiatives in human genetics, and teaching and training. Candidates must have an M.D. or M.D.-Ph.D. with Board certification in medical genetics.

Please send a letter of interest and curriculum vitae to: Medical Genetics Search Committee, c/o Dr. Millard Susman, 118 Genetics, 445 Henry Mall, Madison, WI 53706. Application deadline is December 31, 1998.

The University of Wisconsin–Madison is an Affirmative Action/ Equal Opportunity Employer. Women and minority scientists are encouraged to apply. Unless confidentiality is requested in writing, information regarding the applicants must be released upon request. Finalists cannot be guaranteed confidentiality.

POSITIONS OPEN

FACULTY POSITIONS SKIRBALL INSTITUTE OF BIOMOLECULAR MEDICINE New York University Medical Center

The Molecular Neurobiology and Molecular Pathoenesis Programs at the Skirball Institute of Biomolecular Medicine and New York University (NYU) Medical Center have tenure-track positions available at the ASSIST-ANT and ASSOCIATE PROFESSOR levels. We are seeking to build strong interdisciplinary programs, and are interested in outstanding individuals whose research interests and experience are based in biochemistry, genetics, cellular biology, or molecular biology. The Molecular Neurobiology Program also wishes to encourage applications from System Neurobiologists who have a strong interest in using cellular and molecular approaches to study the nervous system. Research interests of the Molecular Pathogenesis Program include immunology, microbial pathogenesis, basic cell biology, and the regula-tion of cell growth and differentiation. The Skirball Institute, directed by Dr. Joseph Schlessinger, is a new initiative at NYU Medical Center, consisting of programs in developmental genetics (coordinated by Alex Joyner and Ruth Lehmann), structural biology (coordinated by Joel Belasco), molecular neurobiology (coordinated by Steve Burden and Moses Chao) and molecular pathogenesis (coordinated by Dan Littman). Applicants should submit by November 1998 a curriculum vitae, a statement of research interests, and the names and addresses of three references to: Lisa Moritz, Skirball Institute of Biomolecular Medicine, New York University Medical Center, 540 First Avenue, New York, NY 10016.

FACULTY POSITION IN IMMUNOLOGY

Western University of Health Sciences College of Pharmacy invites applications for a **TENURE-TRACK** position in immunology. Candidates should possess a Ph.D. in immunology. Preference will be given to those with postdoctoral experience. Western University is committed to excellence in teaching. The successful candidate will participate in teaching in the professional program and will be expected to establish an extramurally funded research program. Salary and rank are negotiable and commensurate with qualifications and experience. Applicants should submit a letter of interest describing teaching and research activities/goals, a curriculum vitae, and the names and contact information of three references. Review of application materials will continue until the position is filled. Complete applications should be sent to:

Ed Soltis, Ph.D., Chair, Search Committee Western University of Health Sciences College of Pharmacy College Plaza, 309 East Second Street Pomona, CA 91766-1854 Telephone: 909-469-5679 FAX: 909-469-5539 E-mail: esoltis@westernu.edu

Western University of Health Sciences is an Affinnative Action/ Equal Opportunity Employer and actively seeks applications from women and minorities.

FACULTY POSITION DEPARTMENT OF BIOLOGY UNIVERSITY OF PENNSYLVANIA

The Biology Department of the University of Pennsylvania invites applications for a tenure-track position at the level of **ASSISTANT PROFESSOR**. We are particularly interested in Neurobiologists/Physiologists taking an integrative approach to understanding behavior, cognition, or other higher order processes such as vision and motor control. Suitable experimental approaches include biophysics, cellular imaging, electrophysiology, or molecular biology. Candidates are expected to have demonstrated excellence and productivity in research and to participate in undergraduate and graduate teaching. The successful candidate will be part of a strong research community in the School of Arts and Sciences and the Professional Schools, including Medicine. The Biology Department is broadly based in animal and plant molecular, cellular, developmental, and evolutionary biology and in ecology. Interested candidates should submit a curriculum vitae, statement of research and teaching interests, and three letters of recommendation to: Search Committee, Department of Biology, University of Pennsylvania, Philadelphia, PA 19104-6018. Review of applications will begin in November 1998. The University of Pennsylvania is an Equal Opportunity Employer. Women and minorities are encouraged to apply

POSITIONS OPEN

UNIVERSITY OF CALIFORNIA, DAVIS

Position #2206. The Department of Psychiatry at the University of California, Davis is seeking applications for a full-time ASSOCIATE/FULL PROFESSOR in the Ladder Rank series with research expertise in the area of neuroimaging. The candidate must hold an M.D. and/or Ph.D. degree and have a demonstrated record of solid academic accomplishment including ability to compete for extramural research support. The candidate will preferably have expertise in structural and/or functional magnetic resonance imaging and will be interested in developing a neuroimaging research program. UC Davis has made a major commitment to neuroscience research and the Department of Psychiatry will expand its neuroimaging program in coordination with the overall growth of clinical neuroscience research. The new faculty member will be tenured in the School of Medicine. He/she will be expected to collaborate in the development of a larger functional neuroimaging research facility at UC Davis Medical Center that will serve not only his/her own research program but also the research of other clinical and basic neuroscience and medical investigators. Please send curriculum vitae, a letter summarizing past and future research directions, and the names of three references to: Dr. David Amaral, Chair, Neuroimaging Search Committee, Department of Psychiatry, University of California, Davis Medical Center, 4430 V Street, Sacramento, CA 95817. Applications will be accepted until the position is filled, but not later than December 31, 1998. The University of California, Davis is an Equal Opportunity Employer.

FACULTY POSITIONS IN MICROBIOLOGY AND IMMUNOLOGY University of California, Los Angeles

UCLA seeks tenure-track ASSISTANT PROFES-SORS and/or tenured ASSOCIATE PROFESSORS engaged in cutting-edge research in the areas of microbiology (including microbial physiology, biochemistry and regulation, virology, mycology, and parasitology) and immunology (including molecular and cellular immunology). These openings follow the recent merger of the Department of Microbiology and Molecular Genetics (College of Letters and Science) and the Department of Microbiology and Immunology (School of Medicine). The merged department provides a unique opportunity for productive interactions and collaborations, and for the development of innovative approaches toward the education of undergraduate, graduate, and medical students. Competitive start-up funds, generous space, and access to a large number of core facilities in the UCLA campus will be provided. Applicants with appropriate experience and intent should submit a curriculum vitae, brief statement of future research plans, and three letters of recommendation to: Robert Gunsalus, Chair, Microbiology Search Committee, or Stephen Smale, Chair, Immunology Search Committee, Department of Microbiology and Molecular Genetics, 1602 Molecular Sciences Building, UCLA, Los Angeles, CA 90095-1489. All applications and recommendation letters should be received by October 31, 1998. UCLA is an Equal Opportunity Employer

TENURE-TRACK FACULTY POSITION DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY

SUNY Health Science Center at Syracuse

The Department of Microbiology and Immunology at the SUNY Health Science Center at Syracuse invites applications for two tenure-track, full-time positions at the ASSISTANT PROFESSOR level. Candidates must have potential to establish an independent research program using contemporary approaches to the study of mi-crobiology or immunology. Competitive applicants will have a Ph.D. degree or equivalent, postdoctoral experience, and a record of innovative research productivity. Salary, space, and start-up funds are competitive with national levels. More information about our program can be obtained from our website: http://www2.ec.hscsyr. edu/microb/. Applications including a statement of research interests and goals, a curriculum vitae, and names and three letters of reference should be sent to: Steven M. Taffet, Ph.D., Chair of the Search Committee, Department of Microbiology and Immunology, SUNY Health Science Center at Syracuse, 750 East Adams Avenue, Syracuse, NY 13210. The deadline for applications is October 1, 1998.

The SUNY Health Science Center at Syracuse is an Equal Opportunity/Affirmative Action Employer.

Proteinix Company,

an emerging biotechnology company in **Gaithersburg**, **MD**, develops products for human and animal health, has immediate positions available:

Protein Expression Scientist

Seeking talented microbial geneticist to drive the research and development of a novel expression system. The efforts will consist of both vector and E.coli strain improvements. A key element of the research will be the improvement of our current E.coli host for large-scale fermentation (>1 Kliter) and will also include the evaluation of other commercially important microbial hosts. Experience with chemostat and bench scale fermentations a plus. Minimum two years post doctoral experience.

RESEARCH ASSOCIATE

Seeking molecular biologist with at least a B.Sc. & 3-4 years experience with vector construction, E. coli transformation & bacterial expression systems. Studies will involve construction of expression vectors for the production of novel proteins. The candidate needs to be familiar with gene construction using synthetic oligonucleotides & polymerase chain reaction methods. Experience with fermentation and/or cell biology a plus.

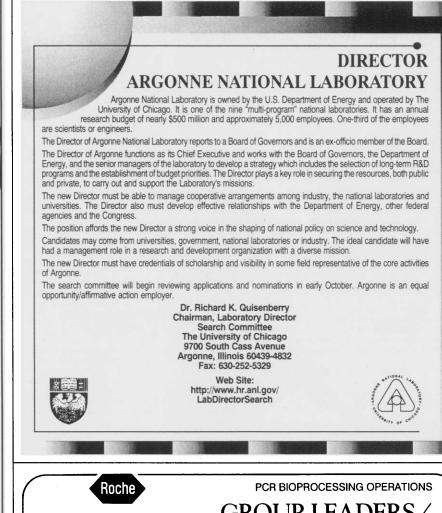
Vaccine Research Scientists

Seeking scientists in cellular immunology to drive a novel vaccine research project. Minimum two years post doctoral experience.

PROTEINIX,

an equal oppportunity employer, offers an excellent salary & benefits package.

Send resume to: Proteinix Company, 16020 Industrial Dr., Gaithersburg, MD 20877, Attn: HR/JK, or fax to **301/947-6998.**



GROUP LEADERS/ PRINCIPAL SCIENTISTS/ SENIOR SCIENTISTS

Roche Molecular Systems, Inc, a Business Unit of the world's largest diagnostics company, is a leader in research, development and manufacturing of molecular diagnostic reagents. We have exceptional opportunities for Group Leaders/Principal Scientists/Senior Scientists in our PCR Manufacturing Operations area. You will participate in the purification and characterization of r-DNA derived enzymes or nucleic acid controls for use in our products, facilitate the transfer of new products and processes from Research to a manufacturing environment and contribute to our operations in a fast-paced, team-oriented environment.

The successful candidate will have a BS or MS in Biochemistry, Molecular Biology, or equivalent with 3-5 years of experience, or a Ph.D. with 1-2 years of experience in a biotechnology production area. Expert knowledge of all phases and strategies for enzyme purification and characterization is required. Working knowledge of cGMPs, QSRs and ISO requirements is essential. Familiarity and experience with production planning and project management is preferred. Ability to prepare manufacturing documents and coordinate/implement production schedules is necessary. Experience in OEM vendor start-ups is desired. Strong problem-solving, verbal/written communication skills and self-starting attitude are required.

We offer a competitive salary and a state-of-the-art environment that is conducive to professional success. For consideration, please forward your resume to: Roche Molecular Systems Inc., Human Resources Dept., SMP1, Branchburg Township, 1080 U.S. Highway 202, Somerville, New Jersey 08876-3771. We are an equal opportunity employer m/f/d/v.

Roche Roche Molecular Systems Inc.

A Member of the Roche Group

FACULTY POSITION IN ECOLOGY-BIODIVERSITY UNIVERSITY AT ALBANY State University of New York

The Department of Biological Sciences is recruiting a tenure-track faculty member at the level of advanced AS-SISTANT or ASSOCIATE PROFESSOR. Applicants should have backgrounds in fields that complement the department's current strengths in conservation biology, behavioral and community ecology, and molecular evolution. The successful candidate is expected to have a demonstrated record of teaching at the undergraduate and graduate levels, of training M.S. and Ph.D. students in field and laboratory research, and of having an externally funded research program. We seek a person with a strong commitment to biological conservation. The selected candidate will have the opportunity to play a leading role in the continuing development of our new interdisciplinary Mas-ter's program in biodiversity, conservation and policy, in conjunction with the Rockefeller College of Public Policy and Administration. Research interests in the Department are broad and include ecology and animal behavior; molecular, cell, and developmental biology; and neurobiolo-. See our website for details (website: http://www. albany.edu/biology/index.html). Position begins fall 1999. The University at Albany,

Position begins fall 1999. The University at Albany, located in the capital of New York State, is one of four Research Centers in the State University of New York system.

Send curriculum vitae, statements of teaching and research interests, and arrange to have three (3) letters of reference sent to: Chair of BioDiversity Search Committee, University at Albany, Department of Biological Sciences, 1400 Washington Avenue, Albany, NY 12222.

Deadline for applications is November 1, 1998.

FACULTY POSITION CELL CYCLE REGULATION

The Department of Pharmacology at the University of Tennesce, Memphis is enlarging its research programs and invites applications for a tenure-track **ASSISTANT** PROFESSOR position in the area of cell cycle regulation. Candidates with a Ph.D. in pharmacology or related discipline, and/or M.D. degree, with excellent and pro-ductive postdoctoral training are sought. Applicants employing contemporary approaches to investigate molecular mechanisms involved in cell cycle regulation will be given preference. The successful candidate will have the opportunity to interact with faculty who have established programs in growth factor signaling, regulation of gene transcription, G protein coupled receptors, and tumor cell biology within the University's Department of Pharmacology and at St. Jude Children's Research Hospital. An excellent start-up package and competitive salary will be provided, and participation in departmental teaching pro-grams will be expected. Applications should include a curriculum vitae, statement of research interests, two representative publications, and at least three letters of reference. Send complete application by October 31, 1998, to: Dr. Burt M. Sharp, Van Vleet Professor and Chair, Department of Pharmacology, University of Tennes-commenties 974 University of Tennessee, Memphis, 874 Union Avenue, Memphis, TN **38163.** UT is an Equal Employment Opportunity/Affirmative Action/Title VI/Title IX/Section 504/ADA/ADEA Employer. Minorities and women are especially encouraged to apply.

FACULTY POSITION YALE UNIVERSITY Department of Molecular Biophysics and Biochemistry

The Department of Molecular Biophysics and Biochemistry seeks applicants for an opening at the level of tenured FULL PROFESSOR in the fields of biochemistry, molecular biology, or molecular genetics. Our department spans a broad range of areas from structural to molecular biology, and is located in both the Faculty of Arts and Sciences and the School of Medicine of the University. Applicants should include a curriculum vitae, a statement of research interests, and selected reprints or preprints. Applications should be sent to: Faculty Search Committee, Department of Molecular Biophysics and Biochemistry, Yale University, 260 Whitney Avenue, P.O. Box 208114, New Haven, CT 06520-8114. Telephone: 203-432-5593. Application deadline: December 1, 1998.

Yale University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN



FACULTY POSITION DEPARTMENT OF MEDICAL BIOCHEMISTRY AND GENETICS

The Department of Medical Biochemistry and Genetics invites applications for a tenure-track ASSISTANT **PROFESSOR**. Appointment at a higher rank will be considered for qualified candidates. Candidates are expected to maintain a vigorous research program and participate in medical and graduate instruction. Applications from individuals with research interests in any area of biochemistry, molecular biology, or molecular genetics are encouraged. Review of applications will begin November 1, 1998, and continue until the position is filled. Submit curriculum vitae, description of research interests, and have three letters of reference sent to: Chair, Search Committee, Department of Medical Biochemistry and Genetics, Texas A&M University Health Science Center, College Station, TX 77843-1114. E-mail: mbchjob@medicine.tamu.edu. Find out more about Texas A&M University at website: www.tamu.edu, find out more about our department at website: pauling. tamu.edu. Equal Opportunity through Affinnative Action.

TWO FACULTY POSITIONS IN THE BIOLOGY DEPARTMENT RENSSELAER POLYTECHNIC INSTITUTE

We invite applications for two tenure-track positions at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level. Candidates must have a Ph.D. and a minimum of two years of postdoctoral experience. The successful individuals will establish strong extramurally funded research programs and participate in undergraduate and/or graduate-level teaching. We seek individuals with a research interest in

(1) Bioinformatics/molecular biology (can start in January or May 1999). The applicant should be experienced in a core area of bioinformatics/computational biology. Knowledge of algorithm construction, programming capability, and a background in molecular biology are desirable. Areas of interest include genomics, sequence and functional analysis, data mining, and modeling.

(2) Environmental biochemistry. Requirements are a research background that utilizes biochemistry and molecular genetics to study health-related environmental problems.

Review of applications will begin on October 15, 1998. Later applications will be considered. Send curriculum vitae, statement of research-plans and teaching interests, publication list, and names of three references to: Jan MacDonald, Assistant to the Chair, Biology Department, MRC 307, Rensselaer Polytechnic Institute, Troy, NY 12180-3590.

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

MOLECULAR, CELLULAR, AND DEVELOPMENTAL BIOLOGY UNIVERSITY OF SOUTH CAROLINA

The Department of Biological Sciences at the University of South Carolina invites applications for a **TEN-URE-TRACK FACULTY POSITION** at any rank in molecular, cellular, and developmental biology. Research interests include, but are not limited to, signal transduction, cancer biology, DNA repair/recombination, mammalian genetics, membrane biochemistry, plant molecular biology, and molecular evolution. Candidates for a junior position are expected to show promise of developing a vigorous, nationally funded research program, senior candidates must have a well-established record of extramurally funded research. The successful candidate must be committed to excellence in the teaching of undergraduate and graduate students. Additional information about the Department is available at website: http://www.

The Search Committee will begin reviewing applications on November 1, 1998. Interested individualsshould send curriculum vitae, a description of research interests, and three letters of recommendation to: Dr. Alan S. Waldman, Search Committee Chair, Department of Biological Sciences, University of South Carolina, Columbia, SC 29208. The University of South Carolina is an Equal Opportunity/Affirmative Action Employer.

The

POSITIONS OPEN TENURE-TRACK POSITION

IN IMMUNOLOGY

The State University of New York at Buffalo invites applications for a tenure-track **ASSISTANT** or **ASSO-CIATE PROFESSOR**-level faculty position in immunology related to cytokines and other inflammatory mediators. The individual chosen for this position may have appointments in the Departments of Oral Biology and Microbiology of the Schools of Dental Medicine and Medicine and Biomedical Sciences. He/she will be expected to establish or continue independent and collaborative research programs, participate in courses taught to professional and graduate students, and serve as a mentor in our active Ph.D. programs. Participation in ongoing collaborations among Dental, Medical, Pharmacy, and Engineering School faculty will be strongly supported.

Requirements for Assistant Professor include a Ph.D., D.D.S., M.D., or other doctoral degree in the appropriate field of interest, at least two years of postdoctoral research experience resulting in publication in peer-reviewed journals. Associate Professor (tenured) may be appropriate for candidates who have made significant contributions in published research, have continued external research funding, and who have attained professional distinction in teaching, mentoring, and service. Appointment to these ranks requires meeting standards established by SUNY at Buffalo.

Applicants should send a curriculum vitae, copies of three to five important publications, a letter stating research plans for the near future, and the names of three references to: Dr. Ernesto De Nardin, Oral Biology Search Committee, University at Buffalo, 3435 Main Street, Foster Hall, Buffalo, NY 14214-3092. SUNY at Buffalo is an Affirmative Action/Equal Opportunity Employer with an interest in identifying prospective minority and women candidates.

FACULTY POSITION IN CELLULAR BIOCHEMISTRY COLORADO STATE UNIVERSITY

The Department of Biochemistry and Molecular Biology seeks applications for a TENURE-TRACK position at any academic level from individuals trained in cellular biochemistry who use modern molecular approaches in studying kinase/phosphatase pathways in the regulation of development, differentiation, cell cycle, or apoptosis. The department has considerable expertise in the areas of gene expression, neurobiology, and structural biology. It occupies a modern building with excellent core facilities, including a light microscopy image analysis center. Fur-ther information is available on our **website: http:// mmr.bmb.colostate.edu/bmb/**. Candidates must have Ph.D., postdoctoral experience, the ability to sustain an independent and productive research program, and the desire to participate effectively in undergraduate and graduate teaching. Complete applications consisting of a curriculum vitae, a statement of research interest, and three reference letters must be received by October 31, 1998. Send to: Dr. J. R. Bamburg, 316 MRB, Colorado State University, Fort Collins, CO 80523-1870. CSU is Equal Employer Opportunity/Affirmative Action Employ-er. Equal Opportunity Office: 101 Student Services.

FACULTY POSITION PATHOGENESIS OF BACTERIAL AND FUNGAL INFECTIONS

The Department of Microbiology and Immunology at the University of Arkansas for Medical Sciences seeks to fill a 12-month, tenure-track, state-supported faculty position at the ASSISTANT PROFESSOR level. Research interests should emphasize molecular approaches to the study of the pathogenesis and/or cell biology of bacterial or fungal organisms. Increased consideration will be given to individuals studying organisms responsible for opportunistic infections. The applicant must have a Ph.D., M.D., D.V.M., or equivalent with postdoctoral experience. The individual will be expected to develop an independent research program and participate in teaching activities within the department's graduate and medical student programs. Generous start-up funds and laboratory space will be provided. Address inquiries, along with curriculum vitae, statement of present and future research interests, and the names of three references to: Roger G. Rank, Ph.D., Department of Microbiology and Immunology, University of Arkansas for Medical Sciences, 4301 West Markham, Little Rock, AR 72205. The University of Arkansas for Medical Sciences is an Equal Opportunity Employer.



CHIEF, TUMOR BIOLOGY BRANCH **DIVISION OF CANCER BIOLOGY** NATIONAL CANCER INSTITUTE, NIH



The Division of Cancer Biology (DCB), National Cancer Institute, National Institutes of Health, is seeking a scientist with experience in research and research program administration for this challenging leadership position in the newly created Tumor Biology Branch. The Tumor Biology Branch plans, develops, directs, and supports an extramural program of basic research in tumor biology, focusing on the interaction of the tumor with its local environment, the mechanisms of acquisition of aggressive malignant behavior, and the influence of horn onal factors on tumor progression.

The DCB is seeking an individual with 1) broad current knowledge of science relevant to basic tumor biology; 2) ability to plan, implement, and lead scientific programs; and 3) experience and skill in working collaboratively with scientific and administrative staff. This position is ideal for someone wishing to participate in promoting a national program of basic tumor biology research to accelerate research progress in this field.

The salary range is \$77,798-101,142 at the GS-15 level. Selection for this position will be based solely on merit, with no discrimination for nonmerit reasons such as race, color, religion, gender, national origin, politics, marital status, physical or mental disability, age, sexual orientation, membership or nonmembership in an employee organization. U.S. citizenship required. For further information, please contact Norka Ruiz Bravo, Ph.D., at 301-435-5225 or nb9b@nih.gov.

Send letter of interest and C.V. by October 13, 1998, to:

Norka Ruiz Bravo, Ph.D. **Deputy Director Division of Cancer Biology National Cancer Institute** National Institutes of Health 6130 Executive Boulevard Rockville, MD 20892

Visit the DCB website at http://www.nci.nih.gov/dcb/dcbhom.htm

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Protein Chemist: Lead a group developing DNA protein conjugates. Requires PhD and 2-5 years industry experience with bioconjugation.

Pharmaceutical Chemist: Initiate and develop the DNA delivery program. We seek expertise in design of delivery vehicles for novel DNA (oligonucleotides) compounds, liposomes, microparticles, and vaccines. PhD in Pharmaceutical Chemistry or Chemical Engineering required.

BioOrganic Chemist: Lead program to discover, develop and optimize novel immunostimulatory DNA sequences and analogues. PhD in BioOrganic or Medicinal Chemistry and expertise in SARs required.

Formulation Researcher: Use your expertise in protein, nucleic acids and stability programs. BS/MS with industry experience, including IND exposure, required.

IMMUNOLOGY RESEARCH

Scientist/Allergist: Develop animal models of allergic responses and evaluate novel immunotherapy products. PhD in Immunology required; experience in allergy research desirable.

Cellular Immunologist: Study delivery of novel immunomodulatory compounds and immune responses in preclinical models (including primates) and in clinical studies. Requires a PhD in Immunology and postdoctoral experience with macrophage/dendritic cell, T cell, or cvtokine research.

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> **Dynavax Technologies Corporation** 717 Potter Street, Suite 100 Berkeley, CA 94710 Fax: (510) 848-5694. Email: aprice@dvax.com EOE

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Serving as laboratory head, the selected individual would join a dynamic team of molecular biology-oriented scientists and be focused on identifying targets for modulating red blood cell and myeloid differentiation and proliferation.

Qualifications include Ph.D. with 2 years' post doctoral work, molecular biology experience and strong communication skills. Experience in retrovirus gene expression, signal transduction, myelopoiesis or hematopoiesis is a plus.

We also have BS/MS level opportunities in Molecular Biology.



STANFORD UNIVERSITY DEPARTMENT OF ELECTRICAL ENGINEERING Digital Image and Video Systems

The Stanford University Department of Electrical Engineering (website: http://ce.stanford.edu) seeks candidates for a faculty position in the general area of digital image and video systems. The successful applicant will possess broad talents in both theoretical fundamentals and modern applications, including but not limited to specializations such as image and video signal processing, content extraction, capture, analysis, interpretation, modeling, segmentation, enhancement, motion estimation, compression, coding, storage, transmission, display, printing, and rendering. Applications of interest include medical and multispectral image processing, document processing, World Wide Web–based images, streaming video, and digital photography. An earned Ph.D., evidence of the ability to pursue independent research, and a strong commitment to both graduate and undergraduate teaching are required.

The search is open at all levels, from tenure-track AS-SISTANT PROFESSOR to tenured FULL PROFES-SOR. The successful candidate will be expected to build and maintain a high-quality research and teaching program in cooperation with the interdisciplinary Image Systems Engineering Program (website: http://isep. stanford.edu). Specific teaching duties include a graduate class on digital image processing, and undergraduate introductory class on signal processing, and possibly a new class on image, video, and multimedia systems.

Applications should include a résumé with a publication list (and academic transcripts for recent graduates), a brief research and teaching plan, and the names of at least five references. Applications should be mailed to: Professor Robert M. Gray, Search Committee Chair, Department of Electrical Engineering, 127 Durand Building, Stanford, CA 94305-9510. The deadline for receipt of applications is 1 December 1998.

Stanford University is an Affirmative Action Employer seeking to increase representation of minorities and women among its faculty.

MACROMOLECULAR X-RAY CRYSTALLOGRAPHER INDIANA UNIVERSITY, BLOOMINGTON

The Department of Chemistry invites applications for an open tenure-track position in biochemistry to commence in fall of 1999. Candidates with significant postdoctoral experience and a strong record of research accomplishment in X-ray crystallography of biological macromolecules will be considered. Successful candidates will be expected to develop a vigorous, independent research program and contribute to teaching. While we anticipate filling this position at the level of **ASSISTANT PRO-FESSOR**, outstanding candidates at any level will be considered.

Applications should include a curriculum vitae and a summary of future research plans. Candidates at the Assistant Professor level should arrange to have four letters of recommendation forwarded to the Department. Applications received by November 1, 1998, will be assured of consideration. Send applications to: **Professor John P. Richardson, Department of Chemistry, Indiana University, Bloomington, IN 47405. FAX: 812-855-8300; e-mail: richardj@indiana.edu.** Indiana University is an Affirmative Action/Equal Employment Opportunity Employer and especially encourages applications from women and members of minority groups.

BIOCHEMISTRY FACULTY POSITIONS

The Department of Chemistry at Purdue University invites applications for up to three tenure-track faculty positions in biochemistry beginning in fall 1999. One position requires demonstrated expertise in biological NMR and research interests that complement ongoing work at Purdue. At least one position will be in an area of cancer-related research and involve participation in the Purdue Cancer Center Program. Applicants must have a Ph.D. and postdoctoral experience. Expectations are that successful candidates will obtain extramural funding and excel at teaching and research. Further details are available at website: http://www.chem.purdue.edu. Applicants should submit a curriculum vitae, a descrip-

Applicants should submit a curriculum vitae, a description of proposed research, and three letters of recommendation by October 15, 1998, to: Prof. R. A. Walton, Head, Department of Chemistry, Purdue University, West Lafayette, IN 47907-1393. Purdue University is an Affirmative Action/Equal Opportunity Educator and Employer.

POSITIONS OPEN

FACULTY POSITION UNIVERSITY OF MINNESOTA RENAL DIVISION Department of Medicine

The University of Minnesota Department of Medicine, Renal Division seeks a faculty member at the **ASSOCI**-**ATE/ASSISTANT PROFESSOR** level (depending on qualifications) for a position in the regular tenure track. This position will emphasize basic investigation but will include educational activity and limited participation in the clinical work of the Division. The successful applicant will be Board-certified in nephrology and will have demonstrated skill in basic investigation including publications and prior successful funding efforts. The successful applicant will also have a demonstrated ability to teach trainees and provide care to patients with renal disease.

Qualifications: M.D. plus three years of internal medicine, two years of Fellowship in nephrology. Demonstrated experience and ability in research. Evidence of commitment to education and provision of renal care is also required.

Last day for receipt of applications: applications will begin to be reviewed October 15, 1998, and will be accepted until position is filled.

Start date: negotiable.

Applications (including curriculum vitae) should be sent to:

Thomas H. Hostetter, M.D. Professor of Medicine Director, Renal Division Box 736 University of Minnesota Health Center 420 Delaware Street S.E. Minneapolis, MN 55455

The University of Minnesota is an Equal Opportunity Educator and Employer.

FACULTY POSITIONS AVAILABLE IMMUNOLOGY

The University of Tennessee (UT) Department of Microbiology and Immunology is continuing a multipleyear expansion of its immunology group and invites applications for tenure-track positions at the level of **AS-SISTANT PROFESSOR**. We are seeking Investigators whose research interests are directed to molecular and/or cellular analyses of contemporary problems in immunology. Candidates will be expected to develop independent, high-quality, extramurally funded research programs with long-term growth potential. Teaching responsibilities, which emphasize quality rather than quantity, include medical, dental, and graduate students. The Department offers a highly interactive intellectual environment with strong extramural research support. The UT Molecular Resource Center also provides cutting-edge research support services and reagents.

The review of applications will begin September 20, 1998, and will continue until the positions are filled. Applications should consist of curriculum vitae, copies of several recent publications, a brief statement of future research goals, and three letters of reference to be sent to:

Dr. Terrance G. Cooper Department of Microbiology and Immunology The University of Tennessee, Memphis 858 Madison Avenue, Room 801 Memphis, TN 38163

Detailed information about the Department may be obtained on the World Wide Web at website: http://microbiology.utmem.edu.

The University of Tennessee, Memphis is an Equal Employment Opportunity/Affirmative Action/Title VI/Title IX/Section 504/ ADA/ADEA Employer.

UNIVERSITY OF COLORADO AT BOULDER Molecular, Cellular, and Developmental Biology

We are recruiting a MOLECULAR BIOLOGIST or BIOCHEMIST studying transcription, DNA synthesis, recombination, or repair in any system. Applications are sought for an ASSISTANT PROFESSOR tenure-track position that begins in summer or fall 1999. Complete applications include curriculum vitae, publications, brief research description and prospectus, and at least three evaluative letters from scientific referees, solicited by the applicant and sent directly to Boulder. All materials must be postmarked by November 1, 1998, and sent to: Faculty Search, Molecular, Cellular, and Developmental Biology, University of Colorado, Boulder, CO 80309-0347. The University of Colorado at Boulder is committed to diversity and equality in education and employment.

FACULTY OPENING BIOMATERIALS SCIENCE AND ENGINEERING

POSITIONS OPEN

Applications are sought for a tenure-track ASSIST-ANT PROFESSORSHIP position in the field of biomaterials science and engineering at the McCormick School of Engineering, Northwestern University. The field of biomaterials is defined broadly to include the science and engineering of materials suitable for human tissue repair through advanced medical practice, the use of materials in therapies for human diseases, biotechnology of materials, and materials science and engineering of interfaces between devices and biological systems. The successful candidate should be eligible for appointment in one of three engineering departments of the McCormick School: biomedical engineering, chemical engineering, or materials science and engineering. Applicants should have a doctoral degree in any of these fields of engineering, or in the physical sciences or biological sciences, and must also have a demonstrated ability to undertake interdisciplinary research. Postdoctoral experience is highly desirable. Candidates should send a letter and their curriculum vitae to the Chairperson of one of these departments (biomedical engineering, chemical engineering, or materials science and engineering), by December 1, 1998

Send letter and curriculum vitae by December 1, 1998, to:

Chairperson (Department of choice) McCormick School of Engineering Northwestern University 2145 Sheridan Road Evanston, IL 60208

Northwestern University is an Equal Opportunity Employer. Women and minority candidates are especially encouraged to apply for this position.

FACULTY POSITIONS HUMAN GENETICS Fox Chase Cancer Center

Fox Chase Cancer Center (website: www.fcc.edu), an NCI-designated Comprehensive Cancer Center, seeks applicants from outstanding Investigators to fill two AS-SISTANT or ASSOCIATE PROFESSOR-level positions in human genetics. Human genetics is a targeted area of growth at Fox Chase Cancer Center. We are particularly interested in Investigators in the fields of cancer genetics, genetic epidemiology, bioinformatics, and functional genomics.

Fox Chase Cancer Center has a very active clinical service and 70 independent research laboratories with wideranging interests that include human genetics, cellular and developmental biology, chemoprevention, pharmacology, molecular oncology, structural biology, virology, and immunology. We also have outstanding shared core facilities, including a tumor bank, tissue culture, cell sorting, electron and confocal microscopy, DNA sequencing, and a transgenic animal facility.

As a new faculty member, you will receive a generous start-up package, including funds for equipment, technical assistance, and operating expenses, and laboratory space in a brand new research building.

Interested candidates should send a curriculum vitae, summary of research interests, and at least three letters of reference to:

Dr. Elizabeth Henske Chair, Human Genetics Search Committee Fox Chase Cancer Center 7701 Burholme Avenue Philadelphia, PA 19111

We are an Equal Opportunity Employer.

The University of California, San Francisco (UCSF) seeks an ASSOCIATE or FULL PROFESSOR of psychology to be appointed with tenure. Area of research is open, but candidate's interests should be relevant to health psychology and cognitive or behavioral neuroscience. In addition to his/her own research and scholarship, the appointee will participate in teaching medical students and in collaborative work within the Center for Social, Behavioral, and Policy Sciences at UCSF and will take a leadership role in the development of a joint graduate program involving UCSF and UC-Berkeley. Position will remain open until filled, but applications should be received by November 1, 1998, to ensure full consideration. Send curriculum vitae and letter of interest to: Nancy Adler, Ph.D., c/o Wanda Matsubayashi, University of California, San Francisco, Box 0984, San Francisco, ICA 94143-0984. E-mail: wandam@itsa. ucsf.edu. UCSF is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

Str<u>essGen</u> **BIOTECHNOLOGIES CORP.**

STRESSGEN Biotechnologies is а growing biopharmaceutical company developing medical applications of the cellular stress response. STRESSGEN's R&D programs focus on utilizing stress proteins as immunomodulatory agents in therapeutic applications.

VISITING SCIENTISTS

STRESSGEN has immediate openings for experienced, technically qualified personnel to join our research team. We are seeking Research Scientists to study heat shock proteins and their effects on the immune system. Several years postdoctoral research experience expected, though not necessarily, with immune systems. Competence in protein biochemistry or recombinant DNA technology is expected. Research will be carried out as a visiting scientist at the Massachusetts Institute of Technology. Visiting Scientists will be employed by StressGen Biotechnologies Inc.

Please send C.V. and references c/o:

Human Resources - Job #82-U/R&D STRESSGEN Biotechnologies Corp. #350 - 4243 Glanford Avenue Victoria, BC V8Z 4B9 Fx: (250) 744-2877 www.stressgen.com We thank all candidates for applying. Only those under consideration will be contacted.

 ${\tt STRESSGEN} \ {\tt Biotechnologies} \ {\tt is} \ {\tt an} \ {\tt equal}$ opportunity employer.

CONFERENCE

Cold Spring Harbor's First Online Workshop on Emerging Technologies for Cancer Research Leading Strand

Conditional Genetic Technologies in the Mouse Scientific Organizers: Allan Bradley, HHMI/Baylor College of Medicine Klaus Rajewsky, Institute for Genetics. Germany Janet Rossant. Mt. Sinai Hospital, Toronto

opens September 10 Visit and subscribe at: www.leadingstrand.org

This workshop was held from August 31 through September 2, 1998, at Cold Spring Harbor Laboratory, New York. To access the available talks via the web, you will need to subscribe to the workshop and obtain RealNetworks' free RealPlayer software.

Supported by the National Cancer Institute

Postdoctoral Positions in Biochemistry University of Missouri-Columbia

Dr. Lesa Beamer Protein x-ray crystallography protein-lipid interactions Dr. Susan Deutscher Antibody engineering, nucleic acid protein interactions Dr. David Eide Metal ion transporters and their regulation Dr. David Emerich Symbiotic nitrogen fixation Dr. William Folk Animal cell DNA replication; plant tRNA expression Dr. Tom Guilfoyle Auxin-regulated transcription **Dr. Mark Hannink** Oncogenes and signal transduction; embryotoxicity by pollutants Dr. Dennis Lubahn Estrogen receptors and environmental estrogens Dr. Mark Martin Transcription factors and gene therapy vectors Dr. Bruce McClure Pollination biology **Dr. Roy Morris** Cytokinin biosynthesis and control

Dr. Beryl Ortwerth Protein glycation; oxygen free radicals and cataract formation **Dr. Charlotte Phillips** Inherited connective tissue disorders; collagen structure and function Dr. Joe Polacco Nitrogen and nickel metabolism in plants/genomics Dr. Tom Quinn Synthesis of radiolabeled peptides and proteins; phage display Dr. Frank Schmidt RNA structure and function Dr. Krishna Sharma Structure-function of lens crystallins Dr. Grace Sun Signal transduction and gene expression in the nervous system Dr. Roger Sunde Selenium and nutrient regulation of gene expression/Boron transporters Dr. John Tanner Protein crystallography; enzyme thermostability Dr. Judy Wall Genetics and energy generation of sulfate-reducing bacteria Dr. Shuqun Zhang Functions of MAP kinases in plant stress responses

Additional information is available at: www.biochem.missouri.edu. Applicants should send CV and names of two references to: Postdoctoral Application, Department of Biochemistry, 117 Schweitzer Hall, University of Missouri, Columbia, MO 65211. Please specify research interest.

The University of Missouri is an Equal Opportunity Institution

NEUROSCIENCE POSTDOCTORAL RESEARCH AT THE WADSWORTH CENTER

The Wadsworth Center (www.wadsworth.org) of the New York State Department of Health and the State University of New York at Albany invites postdoctoral applications in the following areas

Genetics of learning and behavior in the mouse; genetics of complex traits (Nature Genetics 17:335-337). Two positions available to (1) develop new paradigms for behavior and map genes influencing complex traits, (2) identify and clone mouse genes influencing complex neurological functions. Reply to L. Flaherty.

Neuroimmunology. Projects include CNS cytokine effects on peripheral immune reactivities, brain cytokine expression after peripheral immune responses to proteins and pathogens, brain asymmetry and the hypothalamic-pituitary-adrenal axis, pathophysiological processes associated with CNS lupus, altered neuroendocrine immune interactions with aging. Reply to D. A. Lawrence.

Gene therapies for neurological and neuropsychiatric diseases. Projects include degeneration due to trinucleotide repeats and developmental disorders of cerebellum, and use both cell cultures and mouse models. Reply to A. Messer.

Neurochemical effects of developmental exposure to environmental toxicants (Toxicol. Appl. Pharmacol. 146:95-103, 1997). Projects include in vivo (microdialysis) and in vitro (cell culture and flow cytometric) determination of neurotransmitters and intracellular changes in neural function. Reply to R. F. Seegal.

Development of neuroprostheses and methods for analysis of simple neuron circuits on patterned surfaces. Projects include characterization of cell responses to trauma (Exp. Neurol. 1998), patterning of bioinstructive materials to direct cell function (J. Neurosci. Meth. 1997), assessment of simple neuron networks using physiological recording and imaging. Reply to W. Shain.

Formation of the striatal patch/matrix organization and the effects of ethanol and cocaine. Approaches include organotypic cultures and staining of brain sections with cell birth-dating, tract-tracing, and immunocytochemical techniques. Reply to A. M. Snyder-Keller.

EEG-based communication as a new communication technology for disabled individuals (Electroencephalogr. Clin. Neurophysiol. 90:444-449, 1994; Trans. Rehab. Engin. 4:425-430, 1996). Projects include EEG signal analysis methods, user training protocols, prototype applications. Reply to J. R. Wolpaw

Spinal cord plasticity associated with operant conditioning of H-reflex (Trends Neurosci. 20:588-594, 1997). Projects include single motor unit behavior in behaving rats and reduced preps, role of descending spinal cord tracts, anatomy and physiology of la terminals on motoneurons and their presynaptic inputs. Reply to J. R. Wolpaw.

Applicants should send a C.V. and three letters of reference to the appropriate faculty member, Wadsworth Center, New York State Department of Health, P.O. Box 509, Albany, NY 12201-0509. Employment through Health Research, Inc. Excellent medical and dental benefits. AA/EOE.

FACULTY POSITION IN MICROBIOLOGY WASHINGTON STATE UNIVERSITY

The Department of Microbiology at Washington State University invites applications for a tenure-track faculty position as an **ASSISTANT** or **ASSOCIATE PROFES-SOR.** Applicants should have research interests and experience in the molecular basis of bacterial pathogenesis. Candidates should have a Ph.D. in microbiology or related discipline, postdoctoral training, ability to communicate effectively with students and colleagues, and a record indicating outstanding abilities and potential in research and teaching. The successful candidate will be expected to develop and maintain an externally funded research program and participate in graduate and undergraduate teaching in the areas of general and pathogenic microbiology. Send letter of application, curriculum vitae, statement of current and long-term research interests, and arrange for three letters of reference addressing research potential, teaching and communication skills to be sent to: Dr. Kathleen Postle, Search Committee Chair, Department of Microbiology, Washington State Univer-sity, P.O. Box 644233, Pullman, WA 99164-4233. Review of applications begins December 7, 1998, and continues until the position is filled. Washington State University employs only U.S. citizens and laufully authorized non-U.S. citizens. Washington State University is an Equal Opportunity/Affirmative Action Educator and Employer. Members of ethnic minorities, women, Vietnam-era or disabled veterans, persons of disability, and/or persons age 40 or over are encouraged to apply.

TENURE-TRACK FACULTY POSITION MASSACHUSETTS INSTITUTE OF TECHNOLOGY Department of Biology

MIT is seeking an outstanding scientist for a tenuretrack position as an **ASSISTANT PROFESSOR**. We are interested in candidates with important research contributions, the energy and ability to develop a significant research program, and a commitment to excellence in undergraduate and graduate education.

The applicant's research program could involve any area of modern biology, including molecular, cellular, or genetic approaches. Research in genomics or informatics also is highly appropriate for this position.

Applicants should submit a curriculum vitae, a summary of current and proposed research programs, and should arrange for three letters of recommendation to be sent to:

Dr. Carol O. Pabo Chair, Biology Search Committee Room 68-132 Department of Biology Massachusetts Institute of Technology Cambridge, MA 02139

Applications will only be considered when they are complete and letters of recommendation have been received. MIT is an Affirmative Action/Equal Opportunity Employer. Qualified women and minority candidates are especially encouraged to apply.

The Department of Chemistry at The University of Toledo invites applications or nominations for a tenuretrack faculty position in analytical chemistry beginning August 1999. The appointment is expected to be at the ASSISTANT PROFESSOR level. Applicants should have a Ph.D. degree in chemistry or a related discipline, and preferably postdoctoral experience. The successful and preteriory posterior a experience in a superience in a superience of a vigorous, exter-nally funded research program at the doctoral level and to have a commitment to excellence in teaching at both the undergraduate and graduate levels. Research interests should be relevant to biological chemistry or materials science. The University is a comprehensive state institution located in a suburban community with an enrollment of approximately 20,000 students. The University offers competitive salaries and an excellent package of benefits to its faculty. Further information on the position, the new research facilities for chemistry (Wolfe Hall), and the Instrumentation Center at The University of Toledo can be found on the departmental website: http://www. chem.utoledo.edu. Interested candidates should send their curriculum vitae, a research plan, and three letters of recommendation to: Chair, Analytical Faculty Search Committee, Department of Chemistry, University of Toledo, 2801 West Bancroft Street, Toledo, OH 43606. Review of applicants will begin after October 22, 1998. The Department encourages applications from minorities, women, and persons with disability. The University of Toledo is an Affirmative Action/Equal Opportunity Employer/Minorities/Females / Disabled / Veterans.

POSITIONS OPEN

The Department of Biological Sciences at the University of Missouri–Rolla invites applications from qualified, energetic individuals for three tenure-track positions at the rank of **ASSISTANT PROFESSOR** to commence fall semester, 1999, in the following areas:

Environmental microbiology (Position #R-52824). Preference given to applicants with expertise in molecular approaches to microbial biodiversity, ecology, evolution, physiology, or population genetics. Toxicology (Position #R-52825). Research expertise in

Toxicology (Position #R-52825). Research expertise in the cellular/molecular mechanisms of toxicology. Preference given to applicants using *in vitre* or *in vive* mammalian model systems.

Plant physiology/biochemistry (Position #R-52826). Research expertise in plant physiology, plant molecular biology, or plant biochemistry. Preference given to applicants with background in phytoremediation, plant gene expression, phytotoxicity, or plant-based human nutrition.

Qualifications for each position include a doctoral degree and a minimum of one to two years of postdoctoral experience in the respective area of specialization, evidence of excellence in teaching, and a strong record of research. Successful applicants will be expected to teach at the undergraduate level, participate in the development of a new graduate program, and establish an externally funded research program involving both undergraduate and graduate students. Opportunities available for collaborations. Additional information on the positions available at website: www.umr.edu/~lifesci. Send complete application including curriculum vitae, statements of research objectives and teaching interests, and names of three references to: Human Resources Services, Position # (insert appropriate number), University of Missouri-Rolla, 1202 North Bishop, 1870 Miner Circle, Rolla, MO 65409-1050. Deadline is December 1, 1998. UM-Rolla is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

TENURE-TRACK ASSISTANT PROFESSOR POSITION DEPARTMENT OF BIOCHEMISTRY Emory University School of Medicine

The Department of Biochemistry, Emory University School of Medicine invites applications for a tenure-track faculty position at the Assistant Professor level. The department has 18 faculty with a breadth of research interests and over \$6.5 million of annual research support. The successful candidate will establish a rigorous, well-funded, and nationally recognized research program and will participate in medical and interdisciplinary graduate training. Outstanding candidates in any area of modern biochemical investigation are encouraged to apply. Applications should include a current curriculum vitae with list of publications and a two-page description of research plans. The applicant should also arrange to have three letters of recommendation sent to: Michelle Demain, Search Coordinator, Department of Biochemistry, 1510 Clifton Road, Emory University, Atlanta, GA 30322. Applications will be coviewed starting in mid-November 1998 and will be considered until the position is filled.

Visit our website: http://www.biochem.emory.

Emory University is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR BIOCHEMISTRY/MOLECULAR BIOLOGY

The Department of Biochemistry and Molecular Biology at the F. Edward Hebert School of Medicine, Uniformed Services University (USU) in Bethesda, Maryland, invites applications for two tenure-track faculty positions at the ASSISTANT/ASSOCIATE level available in 1999. Outstanding candidates in the areas of biochem istry, molecular and cell biology are encouraged to apply Candidates must have postdoctoral experience and will be expected to develop a vigorous, independent basic research program. The successful candidates will participate in the training of medical and graduate students. Please send a curriculum vitae, reprints of three to five recent publications, a one-page statement of future research plans, and the names of at least three preferred references by November 18, 1998, to: Mr. Jim Carpenter, Depart² ment of Biochemistry and Molecular Biology Search Committee, Uniformed Services University, F. Edward Hebert School of Medicine, 4301 Jones Bridge Road, Bethesda, MD 20814-4799. USU is an Equal Opportunity Employer with a strong commitment to racial, cultural, and ethnic diversity.

POSITIONS OPEN

ASSISTANT PROFESSOR BIOLOGY

Mercer University seeks a tenure-track Assistant Professor with a Ph.D. in biological sciences, broad training in genetics or molecular biology, and promise of excellence in teaching and scholarly activity. We are interested in candidates able to contribute to general science education and/or the University's interdisciplinary studies programs. Membership in Phi Beta Kappa considered an advantage. Duties will consist of teaching five courses per academic year to include introductory biology, genetics, and one or more of the following: microbiology and immunology. Research involving undergraduates is encouraged. Salary is commensurate with experience and qualifications.

Send letter of application, current curriculum vitae, statements of teaching philosophy and professional interests, and arrange to have official undergraduate and graduate transcripts and three confidential letters of reference sent to: Thomas A. Huber, Chair, Department of Biology, Mercer University, 1400 Coleman Avenue, Macon, GA 31207. Review of applications will begin on October 12, 1998, and will continue until position is filled.

Mercer University is a comprehensive institution of 6,800 students enrolled in eight colleges and schools. The historic core of the University, the College of Liberal Arts is a selective, residential institution serving nearly 1,900 students and enrolling 1,450 undergraduate majors. The University and College associate with a rich Baptist heritage with education programs distinguished by their rigor and their commitment to academic freedom. An Affinnative Action/Equal Opportunity Employment/ADA Employer, Mercer strongly encourages applications from females and members of minority groups.

ASSISTANT CHAIRPERSON. The Department of Biochemistry, Molecular Biology, and Cell Biology, Northwestern University, invites applications for the position of Assistant Chairperson. The successful candidate for this challenging and highly visible position will have responsibility for organizing the submission of grant proposals for shared instrumentation, facilities, and training programs; overseeing renovations and the design and construction of the Department's new research building; strategic planning analyses; supervision of office staff; and management of the day-to-day operations of the Depart-ment. Candidates must have a Ph.D. in life sciences, excellent verbal and written communication skills, some administrative experience, and must enjoy working with people. The Department has a highly collegial atmosphere and is internationally recognized for its innovative research and training programs. This is a non-tenure-track position at the rank of Lecturer. It offers an outstanding opportunity to have major and lasting impact on life sciences research, and for personal advancement. Candidates should send a curriculum vitae and arrange for three letters of recommendation to be sent to: Chair, Department of Biochemistry, Molecular Biology, and Cell Biology, Northwestern University, Evanston, IL 60208-3500. Deadline for receipt of completed applications: September 30, 1998. Affirmative Action/Equal Opportunity Employer. We encourage applications from women and members of minority groups.

FACULTY POSITION IN CANCER RESEARCH

The Eppley Institute for Research in Cancer of the University of Nebraska Medical Center (UNMC) is seeking candidates for a tenure-track position at the ASSIST-ANT/ASSOCIATE/PROFESSOR rank. Outstanding candidates working in all areas of molecular, structural, and cellular biology of cancer, and cancer genetics are encouraged to apply. The Eppley Institute has 25 faculty who are involved in multidisciplinary efforts focused on basic research in cancer. The Eppley is an academic unit of UNMC and an integral component in the NCI-designated UNMC/Eppley Cancer Center. In addition to directing an independent research program, the successful applicant is expected to interact with other faculty, and be involved in the training of graduate students and Postdoctoral Fellows through Eppley's NCI-supported Cancer Research Training Program.

Applicants should send their résumé, three reference letters, and a letter detailing their research goals to: Dr. Barry Gold, Interim Director, Eppley Institute, University of Nebraska Medical Center, 600 South 42 Street, Omaha, NE 68198-6805.

The University of Nebraska Medical Center is an Equal Opportunity/Affirmative Action Employer.



Help Define Funding Opportunities for the National Cancer Institute

THE NATIONAL CANCER

INSTITUTE (NCI) supports more than \$2 billion in cancer research annually, as the foundation of the nation's investment in cancer research.

As part of this endeavor, NCI announces the Unconventional Innovations Program (UIP) to fund development of high impact, long-range technologies to support cancer research. Initial five-year plans target \$48 million for technology platforms integrating:

- non-invasive sensing of molecular alterations *in vivo*
- transmission of information to an external monitor

- controlled intervention specific for the molecular profile
- monitoring of intervention

We are soliciting input from the research community about technologies that could fundamentally change the approach to the detection, diagnosis, and treatment of cancer. This information will help define the scope of a Broad Agency Announcement, to be issued by early 1999, to fund this research. Submit your input in the form of white papers that discuss:

- nature of the technological opportunity
- current capability of the technology

- technological barriers to meeting the defined goal
- contribution of the opportunity to a common technology platform for the non-intrusive sensing, signaling, and intervention for cancer based on tumor specific molecular or physiological profiles
- potential impact on the detection, diagnosis, and treatment of cancer

For more information and guidance, see: http://amb.nci.nih.gov/uip.htm or

Carol Dahl, Ph.D. Carol_Dahl@nih.gov or 301-496-1550



The University of Texas at Austin

Faculty Positions in Animal Virology & Gene Therapy

The Institute for Cellular and Molecular Biology and the Department of Microbiology at the University of Texas at Austin invite applications for faculty positions in Animal Virology and Gene Therapy. Outstanding candidates in all areas of Animal Virology and Gene Therapy are encouraged to apply. Positions are available at the Assistant, Associate, or Full Professor levels, depending on qualifications. Successful applicants will be expected to establish/maintain a dynamic, extramurally-funded research program and participate in teaching undergraduate and graduate students. Applicants must possess a Ph.D. and/or M.D. degree and have a record of research productivity.

Attractive start-up packages are available and include laboratory space in the newly dedicated Moffett Molecular Biology Building.

Nestled in the hill country of Texas, Austin is widely recognized as one of America's most beautiful and livable cities.

Please send curriculum vitae, summary of research interests, and three letters of reference to:

Henry R. Bose, Jr. or Jaquelin P. Dudley Search Committee Co-chairs Department of Microbiology The University of Texas at Austin Austin, TX 78712-1095

The application should be received by November 15, 1998.

Visit the The University of Texas at Austin Homepage http://www.utexas.edu/ The University of Texas at Austin is an Equal Opportunity Employer. Qualified women and minorities are encouraged to apply.

Faculty opening. Kalamazoo College invites applications for a tenure-track faculty appointment as ASSIS-TANT PROFESSOR or ASSOCIATE PROFESSOR in biochemistry beginning September 1999. Applicants must have a Ph.D. in biochemistry or related fields, including bioorganic, bioanalytical, biophysical, or bioinorganic chemistry, at time of appointment. The principal responsibilities include teaching courses in biochemistry and in ancillary areas such as organic or introductory chemistry, developing an active research program emphasizing undergraduate student participation, and continuing development of a biochemistry program. Candidates are expected to have high aptitude for and interest in undergraduate teaching. Kalamazoo College is a selective liberal arts school of 1,200 students in a metropolitan area of over 150,000 located midway between Chicago and Detroit. The College has a long and distinguished record in undergraduate science education. Since 1992 the Chemistry and Biology Departments have occupied the Dow Science Center, which features individual studentfaculty research laboratorics. The Chemistry Department has five full-time faculty members and maintains an extensive array of modern instrumentation. Applicants should submit a résumé, two- to three-page statements of teaching and research plans, undergraduate and graduate transcripts (for those applying at the Assistant Professor level, unofficial accepted), and three letters of recommendation to: Dr. Thomas J. Smith, Department of Chemistry, Kalamazoo College, 1200 Academy Street, Kalama-zoo, MI 49006-3295. Review of applicant files will begin October 19, 1998, and continue until the position is filled. Information about the College can be found at website: http://www.kzoo.edu. Kalamazoo College encourages candidates who will contribute to the cultural diversity of the College to apply and to identify themselves if they wish. Equal Opportunity Employer.

TENURE-TRACK ASSISTANT PROFESSOR

The Department of Physiology, College of Medicine, invites applications for a full-time tenure-track Assistant Professor position. The successful candidate will be a Mammalian Physiologist who will develop an extramurally funded independent research program in the area of vascular biology and/or stroke. Initial support will be provided by the Howard Hughes Medical Research Resources Program for Medical Schools. Applicants must have a Ph.D., M.D., or equivalent, and postdoctoral experience in cellular/molecular approaches to physiological problems. The primary appointment will be in the Department of Physiology, with extensive interaction en-couraged across departments of the Interdisciplinary Graduate Program in Biomedical Sciences at the Health Science Center. The candidate may complement current departmental and college strengths in the areas of hypertension, signal transduction, fetal/maternal physiology, neuroendocrinology, membrane transport and ion channels, developmental genetics, and other interests described at our website: http://www.med.ufl.edu/phys/index. **html**. Responsibilities will include participation in departmental teaching and educational programs. Submit a curriculum vitae, including a statement of research plans, and have three letters of reference sent to: Dr. Bruce R. Stevens, Search Committee Chair, Department of Physiology, College of Medicine, University of Flori-da, P.O. Box 100274, Gainesville, FL 32610-0274. Salary is negotiable. Application deadline is November 1, 1998, and anticipated start date is April 1, 1999. Equal Employment Opportunity/Affirmative Action Employer.

Cornell University. The Department of Chemistry and Chemical Biology is searching for a tenure-track faculty member at the ASSISTANT PROFESSOR level. We wish to consider outstanding candidates with research interests in any field of chemistry/chemical biology that complements rather than duplicates our existing strengths. The successful applicant will be expected to carry out an effective research program and to teach introductory chemistry as well as advanced undergraduate and graduate courses in his or her field. A Ph.D. degree is required, and postdoctoral experience preferred. Applicants should submit a graduate transcript, curriculum vitac, publication list, and separate summaries of research experience and research plans. These materials and three letters of recommendation should be sent to: Chair, Faculty Search Committee, Department of Chemistry and Chemical Biology, Baker Laboratory, Cornell University, Ithaca, NY 14853-1301 and be received no later than November 1, 1998. Cornell University is an Affirmative Action/Equal Opportunity Employer and Educator.

POSITIONS OPEN

TWO POSITIONS

INVERTEBRATE ZOOLOGIST. Tenure-track position, ASSISTANT PROFESSOR beginning August 1999. Ph.D. in invertebrate zoology required. Demonstrable commitment to the teacher/scholar model, public and University service, and a culturally diverse learning environment required. Preference given to applicants with university/college teaching and/or postdoctoral experience, record of publication and external funding, active research program in entomology, and expertise in systematics and development of a regional invertebrate collection. Teaching responsibilities will include general zoology and advanced courses and may include introductory, non-majors courses. The successful candidate will be expected to develop a research program involving undergraduates and Master's-level students.

graduates and Master Stever structure. ICHTHYOLOGIST. Tenure-track position, AS-SISTANT PROFESSOR beginning August 1999. Ph.D. in ichthyology/fish biology required. Demonstrable commitment to the teacher/scholar model, public and University service, and a culturally diverse learning environment required. Preference given to applicants with university teaching or postdoctoral experience, record of publication and external funding, and active research program in freshwater toxicology. Teaching responsibilities include upper-level courses such as biology of fishes, limnology, and aquatic toxicology. An active research program is expected. Successful candidate may participate in introductory and service courses.

Applicants should send a letter of application, curriculum vitae, transcripts, three reference letters, and statements of teaching philosophy and research interests to: Dr. C. T. Train, Department of Biology, Southeast Missouri State University, Cape Girardeau, MO 63701 by October 30, 1998. An Equal Opportunity/Minoritics/Fenales/Affirmative Action Employer.

The Department of Chemistry at The University of Toledo invites applications or nominations for a tenure-track faculty position in biological chemistry beginning August 1999. The appointment is expected to be at the ASSISTANT PROFESSOR level. Applicants should have a Ph.D. degree in chemistry or a related discipline and preferably postdoctoral experience. The successful candidate will be expected to develop a vigorous, externally funded research program at the doctoral level and to have a commitment to excellence in teaching at both the undergraduate and graduate levels. Applicants with research interests in protein chemistry, structure, and function are particularly encouraged to apply. The University is a comprehensive state institution located in a suburban community with an enrollment of approximately 20,000 students. The University offers competitive salaries and an excellent package of benefits to its faculty. Further information on the position, the new research facilities for chemistry (Wolfe Hall), and the Instrumentation Center at The University of Toledo can be found on the departmental website: http://www.chem.utoledo.edu. In-terested candidates should send their curriculum vitae, a research plan, and three letters of recommendation to: Chair, Biological Chemistry Faculty Search Commit-tee, Department of Chemistry, University of Toledo, 2801 West Bancroft Street, Toledo, OH 43606. Review of applicants will begin after October 22, 1998. The Department encourages applications from minorities, women, and persons with disability. The University of Toledo is an Affirmative Action/Equal Opportunity Employer/Minorities/Females/Disabled / Veteraus

Faculty position, neuroscience. The Florida State University invites applications for a tenure-track ASSISTANT PROFESSOR to join our neuroscience group. The applicant's appointment will be in the Department of Psychol-ogy. Applicants in all areas of psychobiology-neuroscience are encouraged to apply. Some preference will be given to candidates with expertise in development, plasticity, sensory processes, energy regulation, or genetics. Experience with some molecular biology techniques would be desir-able. Candidates should have the potential for developing a funded independent research program and have the ability to teach undergraduate and graduate courses in neuroscience, physiological psychology, or related topics. A curriculum vitae, a statement of research goals, a brief statement of teaching interests, and three letters of reference should be sent by December 1, 1998, to: Neuroscience Search Committee, Department of Psychology, Flori-da State University, Tallahassee, FL 32306-1270. For information about the Department and the Neuroscience Program, see website: http://www.psy.fsu.edu. Affir-mative Action/Equal Opportunity Employer.

POSITIONS OPEN

CALIFORNIA STATE UNIVERSITY, LONG BEACH

The Department of Biological Sciences invites applications for two tenure-track faculty positions, beginning fall 1999.

Insect biology. **ASSISTANT PROFESSOR.** Candidate must have a Ph.D. in the biological sciences with training and research in insect biology. Field-oriented research expertise with coordinated laboratory research in insect ecology or physiology necessary. Teaching responsibilities include general entomology, insect ecology, and an advanced specialty course.

Marine microbiology. ASSISTANT/ASSOCIATE PROFESSOR. Candidate must have a Ph.D. in the biological sciences with training and research in the area of marine microbiology. Primary teaching responsibilities include marine microbiology, general microbiology, and an advanced specialty course.

Candidate must have a strong commitment to teaching at the undergraduate and M.S. levels and participate in introductory courses in an ethnically and culturally diverse campus community. Must have a record of published research and show potential for developing and sustaining an independent, externally funded research program involving students. Postdoctoral or other professional research experience preferred. Research start-up funds are available. Submit a letter of application, curriculum vitae, a detailed statement of research and teaching interests, and three letters of recommendation to: Dr. Laura Kingsford, Chair, Attn: Marine Microbiology Search or Insect Biology Search, Department of Biological Sciences, California State University, Long Beach, CA 90840-3702. Telephone: 562-985-4807; FAX: 562-985-8878. Screening will commence October 15, 1998. California State University, Long Beach is an Equal Opportunity/Affinative Action/Title IX Employer.

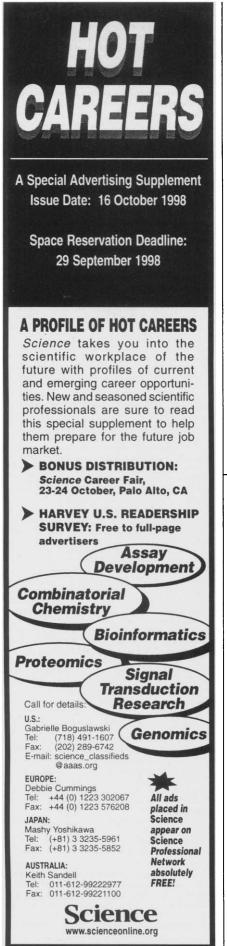
ASSISTANT PROFESSOR OF NEUROPHARMACOLOGY UNIVERSITY OF WASHINGTON

Applications are invited for a tenure-track appointment in the Department of Pharmacology, joint with the Department of Psychiatry and Behavioral Sciences. A Ph.D. or M.D. degree and two years of postdoctoral research experience are required. All areas of neuropharmacology will be considered, but individuals integrating molecular/ genetic methods with behavioral studies are particularly encouraged to apply. The successful candidate will be expected to develop an outstanding independent research program, teach an undergraduate neuropharmacology course, and participate in graduate student training in the Department of Pharmacology and the Graduate Program in Neurobiology and Behavior. Additional information may be obtained at website: http://weber.u.washington.edu/~phcol/. Applicants should send their curriculum vitae and a specific statement of research plans, and should arrange for three letters of recommendation to be submitted before December 15, 1998, to: The Neuropharmacology, Search Committee, Department of Pharmacology, Box 357280, University of Washington, Seattle, WA 98195.

The University of Washington is building a culturally diverse faculty and strongly encourages applications from female and minority candidates. The University is an Equal Opportunity/Affirmative Action Employer.

SOIL ECOLOGIST

The Department of Environmental Studies at the University of California, Santa Cruz seeks a Soil Ecologist for a tenure-track appointment at the ASSISTANT PRO-FESSOR level (\$41,200 to \$45,900). We seek applicants who will contribute to the departmental goal of address-ing global environmental problems from an interdisciplinary perspective, while providing specific strength in the field of soil ecology, particularly in the areas of soil-plant interactions, nutrient cycling, agroecology, and/or soil conservation and restoration. Candidates are expected to possess a Ph.D. in a relevant science field and are expected to show evidence of teaching ability and an established research program. Applicants should submit a letter discussing research agendas and teaching interests, three to five publications, three confidential letters of recommendation and a curriculum vitae to: Chair, Search Committee, Environmental Studies Department, Univer-sity of California, Santa Cruz, CA 95064 postmarked by October 15, 1998. Refer to position #44. For a full description see website: http://zzyx.ucsc.edu/ES/ es.html. UCSC is an Affirmative Action/Equal Opportunity Employer.



Molecular Microbiologist & Virologist

The Hospital for Sick Children is a world renowned leader in health care, research and teaching. We are an integral part of an exciting research community which encompasses the University of Toronto and affiliated hospital research institutes which are home to an established group of scientists and clinical scientists working in the areas of infectious disease, immunology, transplantation and gene therapy.

The Infection, Immunity, Injury & Repair Program of the Research Institute is seeking accomplished scientists to take on the role of Assistant/Associate Professor in either Virology or Molecular Microbiology. In addition to a Ph.D. or M.D., you must have expertise in either 1) vector design, gene therapy and viral genome; OR 2) microbial-host interaction, bacterial genome, human receptors for microbial ligands and vaccine design.

We offer an environment that is both professionally challenging and personally rewarding. Please forward your curriculum vitæ outlining your current and long-term research objectives along with three letters of reference, no later than December 1, 1998, to: Dr. Chaim Roifman, Head, I.I.I.R. Program, Research Institute, Head, Division of Immunology/Allergy, Department of Paediatrics, The Hospital for Sick Children, 555 University Avenue, Toronto, Ontario, M5G 1X8 Canada http:// www.sickkids.on.ca The University of Toronto encourages applications from qualified women and men, members of visible minorities, aboriginal peoples and persons with disabilities. In accordance with Canadian immigration requirements, this advertisement is directed firstly to Canadian Citizens and permanent residents.

A health care, teaching, and research centre dedicated exclusively to children; affiliated with the University of Toronto.



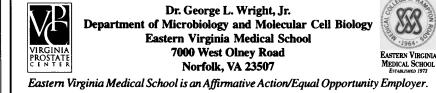


MOLECULAR CELL BIOLOGIST VIRGINIA PROSTATE CENTER

Eastern Virginia Medical School seeks applications for a Program Leader at the rank of Associate Professor/Professor (tenure-track) for its Prostate Cancer Research Focal Group. Although areas of specialization desirable include 1) preclinical and clinical vaccine/gene therapy development, 2) early detection and molecular biomarkers, or 3) molecular mechanisms of action of cancer genes, individuals with a demonstrated record of productivity in molecular and/or cell biology of prostate cancer are also encouraged to apply.

Qualifications: Ph.D. and/or M.D. degree, minimum of 5 years of productivity as an Assistant Professor, national reputation in prostate cancer research, vigorous publication record in quality journals, current record of extramurally funded research projects, and demonstrated leadership abilities. The successful candidate is expected to interact with investigators in the Virginia Prostate Center with strengths in cell biology, molecular biology, immunology, virology, urology, and pathology; and to develop strong extramurally funded research programs(s) to enhance existing strengths within the prostate cancer research focal group and other programs throughout the medical school. Collaborative interactions between disciplines, and between basic and clinical faculty with an emphasis on translational research is encouraged. Although most of the responsibilities will be devoted to research, the successful candidate is expected to participate in medical and graduate student teaching. Appointment will be in the Department of Microbiology and Molecular Cell Biology or a mutually agreed upon basic science department, with a joint appointment in the Department of Urology. Faculty rank and salary commensurate with qualifications and experience. Excellent laboratory and clinical facilities and an attractive start-up package are available.

Interested individuals should send their curriculum vitae, brief statement of major academic/ research interests, and three letters of recommendation to:



PHYSIOLOGIST/ANATOMIST

The Department of Biological Sciences at California Polytechnic State University, San Luis Obispo, is seeking applicants for a tenure-track position at the **ASSISTANT PROFESSOR** level available September 1999. Salary is commensurate with qualifications and experience. Primary teaching responsibilities will be in human anatomy/ physiology (including cadaver anatomy) and upper-division physiology courses. Applicants should have research experience in cellular physiology, such as electrophysiology. Other duties will include student advising and directing students in undergraduate and graduate (M.S. level) research. Applicants must have a Ph.D. at time of hiring. A strong commitment to teaching and to productive professional development are essential.

To obtain an application refer to recruitment code 93008 and send a letter of interest to: Dr. V. L. Holland, Chair, Biological Sciences Department, California Polytechnic State University, San Luis Obispo, CA 93407.

Applicant files must be completed by November 15, 1998. A completed file will contain the following: (1) application form; (2) curriculum vitae; (3) statement of interest with respect to teaching and research; (4) three letters of recommendation (submitted directly by references); (5) official graduate transcripts. All materials are to be sent to the address above. Refer to recruitment code 93008 in all correspondence.

93008 in all correspondence. Cal Poly is strongly committed to achieving excellence through cultural diversity. The university actively encourages applications and nominations of uromen, persons of color, applicants with disability, and members of other underrepresented groups. Affirmative Action/ Equal Employment Opportunity.

MEDICAL COLLEGE OF VIRGINIA OF VIRGINIA COMMONWEALTH UNIVERSITY

The Massey Cancer Center and the Department of Human Genetics at Virginia Commonwealth University wish to expand and enhance their mutual and individual research programs through the joint recruitment of a Genetic Epidemiologist to a tenure-track position at the ASSISTANT or ASSOCIATE PROFESSOR level. The successful candidate will have the Ph.D. degree with training in genetic epidemiology and at least two years of postdoctoral experience are essential. He/she must demonstrate skills in teaching, good oral and written communication skills, ability to work in a collaborative environment, and the potential to develop externally funded research. The Mid-Atlantic Twin Registry is a unique research resource that has been developed at Virginia Commonwealth University. The Genetic Epidemiologist would be expected to capitalize upon this resource for molecular, genetic, and epidemiologic studies of common diseases, including cancer. Interested applicants should send a curriculum vitae, a two- to three-page description of current research interests, and three letters of recommendation by October 31, 1998, to: Lindon J. Eaves, D.Sc., Distinguished Professor, Department of Human Genetics, Virginia Commonwealth University, P.O. Box 980003, Richmond, VA 23298-0003. FAX: 804-828-8801; Telephone: 804-828-8155; email: eaves@hsc.vcu.edu.

Virginia Commonwealth University is an Affirmative Action/ Equal Opportunity Employer; women and members of minorities are encouraged to apply.

ASSISTANT PROFESSOR. Analytical chemistry, tenure-track, beginning fall 1999. The chemistry department at Lawrence University, a liberal arts college dedicated to excellence in undergraduate education, seeks an energetic and innovative teacher who will also develop a lively research program involving undergraduates. Teach ing responsibilities will include courses in chemical analysis emphasizing instrumental methods, introductory chemistry, and interdisciplinary courses such as a college wide first-year program. The department has five full-time faculty members, maintains an extensive array of instruments, and will occupy a new building in two years. Ph.D. in analytical chemistry or related field required, significant postdoctoral teaching and/or research preferred, computer expertise that enhances current department resources is desirable. Send curriculum vitae, statement of teaching philosophy, description of research plans, undergraduate and graduate transcripts, and three letters of recommendation by December 1, 1998, to: J. Lokensgard, Chair, Department of Chemistry, Lawrence University, Appleton, WI 54912-0599. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

TENURE-TRACK POSITION NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

A tenure-track position is available in the Laboratory of Allergic Diseases, National Institute of Allergy and Infec-(NIH), Public Health Service, for an M.D. or M.D.-Ph.D. scientist to develop an independent research program related to the exploration of the mechanisms of allergic inflammation and their treatment. Space, technical, and Postdoctoral Fellow support, supply budget, and salary are committed. Training in the techniques of molecular biology and/or in clinical research is desirable. Preference will be given to applicants who are Boardcertified in pediatrics, have training in allergy and immunology, and have studied eosinophil biology. Applicants must be U.S. citizens or permanent residents. A curriculum vitae, bibliography, three letters of reference, a detailed statement of research interest, and selected publications should be submitted to: Dr. Thomas Fleisher, Chairperson, c/o Cindy Pagonis, NIH/NIAID/Laboratory of Allergic Diseases, Twinbrook II Room 200E, 12441 Parklawn Drive, Rockville, MD 20852.

The NIH is an Equal Opportunity Employer.

ASSISTANT, ASSOCIATE, or FULL PROFES-SOR. The Infectious Disease Division of the Department of Medicine at the University of Pennsylvania is inviting applications from Board-certified or Board-eligible Infectious Disease Specialists with active research programs for a Physician Scientist position in the tenure or tenuretrack. We are particularly interested in research in the area of microbial pathogenesis. In addition to 80 percent protected research time, the successful candidate will be expected to participate in the clinical and educational programs of the Division/Department. Suitable candidates will be eligible for joint appointments in the Department of Microbiology. The position of Chief of Infectious Dis-ease at the Philadelphia Veterans Administration Hospital is currently available. We offer an excellent salary/benefits package and outstanding laboratory facilities. If interested, please indicate this in a cover letter to be submitted along with your curriculum vitae, a summary of research experience, future research plans, and three letters of recommendation to: Harvey Friedman, M.D., Chief, Infectious Diseases Division, 536 Johnson Pavilion, University of Pennsylvania, Philadelphia, PA 19104-6073.

Equal Opportunity/Affirmative Action/Females/Disabled/ Veterans.

BIOCHEMISTRY FACULTY POSITION

The Department of Chemistry and Biochemistry at San Francisco State University invites applications for a ten-ure-track position at the ASSISTANT PROFESSOR level in biochemistry beginning fall 1999. Applicants must have a Ph.D. in biochemistry and postdoctoral experience. Candidates must be committed to excellence in teaching and research and are expected to initiate an externally funded research program that will involve both undergraduate and Master's degree students. We are especially interested in candidates with research expertise in the physical characterization of biochemical macromolecules. Applicants should send a curriculum vitae, a detailed research proposal, a statement of teaching philosophy, and three letters of recommendation by October 26, 1998, to: Biochemistry Search Committee, Department of Chemistry and Biochemistry, San Francisco State University, 1600 Holloway Avenue, San Francisco, CA 94132-4163. San Francisco State University is an Equal Opportunity/Affirmative Action Employer.

California Institute of Technology invites applications for a tenure-track position as ASSISTANT PROFES-SOR in the field of organic chemistry. The initial appointment will be for four years. Exceptionally well-qualified applicants may also be considered at the ASSOCIATE or FULL PROFESSOR level. Outstanding candidates who have completed their Ph.D. and have a strong commitment to research and teaching excellence are encouraged to apply. Submit curriculum vitae, publication list, a description of proposed research, and three letters of recommendation to: Professor R. H. Grubbs, Organic Chemistry Search Committee, M/C 164-30CR, California Institute of Technology, Pasadena, CA 91125. Applications should be received by November 15, 1998. The California Instinute of Technology is an Equal Opportunity/ Affirmative Action Employer. Women, minorities, veterans, and disabled persons are encouraged to apply.

POSITIONS OPEN

ASSISTANT PROFESSOR DIVISION OF IMMUNOLOGY AND RHEUMATOLOGY University of Missouri, Columbia

Full-time, tenure-track position for a Physician Boardeligible/certified in rheumatology as Assistant Professor in the Division of Immunology and Rheumatology, Department of Internal Medicine, University of Missouri, Columbia. Responsibilities will include developing an independent research program, teaching, and care of rheumatic disease patients. Individuals sought with experience and interests in developing independent laboratory-based research program. Collaborative opportunities exist for basic and clinical research in a variety of fields, including autoimmunity, molecular biology, human cellular immunology, and animal models. Address inquiries and curriculum vitae to: Dr. Robert W. Hoffman, Director, Division of Immunology and Rheumatology, University of Missouri, Columbia, MA427 Health Sciences Cen-ter, Columbia, MO 65212. Telephone: 573-884-8792; e-mail: intmdrh@showme.missouri.edu UMC is an Affirmative Action/Equal Opportunity Employer, Females and minorities are encouraged to apply

Faculty position at Boston College. The Department of Chemistry invites applications for a tenure-track position in biochemistry or chemistry applied to the understanding of biological processes. Appointment effective September 1999. Applicants are sought at the ASSIST-ANT PROFESSOR level; outstanding applications for more SENIOR levels are also welcome. Applicants at the Assistant Professor level should send a résumé, a summary of research plans, and arrange to have three letters of recommendation transmitted. Established Investigators should send a letter of application and appropriate supporting materials. All materials should be sent to: Chair, Faculty Search Committee, Department of Chemistry, Boston College, Chestnut Hill, MA 02467. A commitment to a vigorous and internationally recognized research program, and the ability to teach biochemistry at both the graduate and undergraduate levels, are essential. The Chemistry Department is housed in a superb, awardwinning facility in a surburb of Boston, minutes from other major universities. Website: http://chemserv.bc. edu. Applications should be complete by November 1, 1998. Equal Opportunity Employer/Affirmative Action.

ASSISTANT PROFESSOR. Biochemistry. California State University, Los Angeles invites applications for a tenure-track position beginning September 1999. Applications must have a Ph.D. with research specialization in experimental biochemistry. Postdoctoral experience is required. Candidates must have a demonstrated potential for effective teaching and for developing an independent, vigorous research program involving undergraduate and Master's students. To apply, submit a letter of application, a detailed curriculum vitae, a statement of teaching interests and philosophy, a detailed research plan, and arrange to have three letters of recommendation sent independently to: Prof. Scott Grover, Chair, Department of Chemistry and Biochemistry, California State University, Los Angeles, CA 90032. Finalists will be required to send official transcripts from their doctoral institution. Review of applications will begin on November 9, 1998, and will continue until the position is filled. Cal State L.A. is an Equal Opportunity/Affirmative Action Institution and encourages applications from women and minorities.

MIDWESTERN UNIVERSITY

Applications are invited for a full-time tenure-track position at the level of **ASSISTANT** or **ASSOCIATE PROFESSOR** of physiology. We seek a committed Educator to join our quickly expanding Glendale, Arizona campus. Programs in medicine, allied health, and pharmacy are in place with additional programs planned. A strong research program capable of attracting extramural funding is highly encouraged. Submit résumé and statement of teaching and research interests to: John Burdick, Ph.D., Midwestern University, 19555 North 59th Avenue, Glendale, AZ 85308. Midwestem University is an Equal Opportunity Employer.

ASSISTANT/ASSOCIATE/FULL PROFESSOR of molecular muscle biology in the Department of Veterinary and Comparative Anatomy, Pharmacology, and Physiology (VCAPP), Washington State University seeks to fill a tenure-track position. See previous issue of *Science* for more details or e-mail: bmorton@vetmed.wsu.edu.



This symposium, consisting of international experts from academia and industry, will provide an interactive forum to discuss recent findings on several ion channel families, ranging from emerging molecular studies to clinical applications.

Session Topics:

Sodium Channels Calcium Channels Purinergic Channels Proton-sensitive Channels Glutamatergic Channels Clinical Application of Ion Channel Modulation Bill Catterall Stephen Heinemann John Hunter David Julius Michel Lazdunski Alan North Richard Tsien Stephen Waxman

Partial Speaker List:

For further information: Richard Eglen, Roche Bioscience Tel: (650) 855-5040 Fax: (650) 852-3111 e-mail: richard.eglen@roche.com

http://www.ionchannels.org

Scientist Nuclear Receptors

Tularik Inc. is a privately-held biopharmaceutical company committed to the discovery and development of novel small molecule drugs that act through the regulation of gene expression. We have ongoing research programs in the following areas: inflammation, obesity, hypercholesterolemia, viral diseases, bacterial diseases and cancer. In addition, Tularik has initiated an orphan nuclear receptor program aimed at the identification and characterization of novel nuclear receptors that are potential targets for therapeutic modulation.

We currently have an excellent opportunity in our South San Francisco facility for a Scientist to join our expanding multidisciplinary Research & Development team. The successful candidate will have a Ph.D. in molecular biology or a related field; at least 2 years of postdoctoral experience; a demonstrated record of scientific accomplishments; and a strong desire to exploit the opportunities offered by nuclear receptors for the discovery of new classes of drugs.

Tularik offers productive & experienced leadership, equity participation, a competitive salary & benefits package, and a collaborative, exciting research environment. For immediate consideration, please submit your CV to:

Tularik Inc., Human Resources Position Code# DG1 Two Corporate Drive South San Francisco, CA 94080 Fax: (650) 829-4303 email: resume@tularik.com

equal opportunity employer

www.tularik.com





Chiroscience R&D, Inc. (formerly Darwin Molecular Corp.) is a U.S. branch of Chiroscience Group plc, an emerging pharmaceutical company with facilities in Seattle, Washington and Cambridge, UK. Our research is aimed at the discovery and development of innovative, small-molecule drugs, with a therapeutic focus on autoimmune disease, cancer, inflammation, pain, and osteoporosis. Chiroscience research groups span the drug discovery process from genomics, informatics, biology, combinatorial chemistry, and medicinal chemistry to drug development. We are searching for motivated, highly qualified individuals to fill key research positions at our Seattle site.

GENE FUNCTION Job Code: S91198-1

We are actively seeking scientists at the B.S., M.S., and Ph.D. levels to help complete the staffing of our Gene Function and Target Validation department. These scientists will be working closely with other members of the department to develop methods that rapidly establish the roles of novel gene products through the combined use of genetics, biochemistry, molecular biology, and cell biological methods. In addition, these efforts will be directed at pin-pointing therapeutic intervention opportunities associated with these novel genes. The positions require strong experience in molecular biology that is supported by expertise in protein expression (prokaryotic and eukaryotic), protein-protein interaction, or phage-based *in vitro* selection methods. The desire to work in a team-oriented work environment along with strong oral and written communication skills are essential.

PHARMACOLOGIST Job Code: S91198-2

Working closely with a team of medicinal chemists and target validation biologists, this position will help establish pharmacology expertise within the Seattle site. This scientist will play a key role in evaluating the company's lead compounds in various cellular models of bone, inflammation, and immunemediated diseases. In addition, this position requires application of state-of-the-art technologies in evaluating drug/target interaction through screening assay construction, development, and implementation. Experience in receptor/ligand methods, in particular GPCRs, and associated secondary assays is desirable. Knowledge and experience of in vivo pharmacology is a plus. The position requires a Ph.D., 2 - 5 years of relevant postdoctoral and/or pharmaceutical drug discovery experience, and a broad background in cell biology. The desire to work in a team-oriented work environment along with strong oral and written communication skills are essential.

HUMAN AND MOUSE GENETICS Job Code: S91198-3

Our genomics team uses genetic screens, mapping, and positional cloning to isolate genes whose products are likely to aid in the design of new drugs. This position offers highly qualified candidates the chance to apply their skills in genetics and molecular biology to the identification of new drug targets. Drug targets are typically proteins whose inhibition leads to a medically desirable outcome—we are seeking scientists who have the creativity to design schemes for identifying targets genetically and the skills to carry these schemes to fruition rapidly. The position requires a Ph.D. and 3 years of postdoctoral experience (or the equivalent) and the ability to work well in a team. Experience in mammalian or model organism genetics, statistics, positional cloning, or the pharmaceutical industry is desirable.

Chiroscience R&D's team-oriented environment encompasses a wide range of scientific disciplines and is ideal for highly motivated and innovative employees. We are located just north of Seattle in a scenic community just minutes from downtown. We offer employees competitive salaries, excellent benefits, and an attractive stock option program. To apply, please send your CV & cover letter to: Chiroscience R&D Inc., Job Code, 1631 220th St. SE, Bothell, WA 98021. We are an Equal Opportunity Employer.

BIOLOGY

AQUATIC BIOLOGIST. The Department of Biology invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level, effective July 1, 1999 (subject to budgetary approval). Candidates must have a recent Ph.D., at least one year of postdoctoral experience, and a productive research record. The Department of Biology is actively developing two areas of strength, environmental biology and molecular biology, and is seeking, with respect to the former area, qualified candidates will be invited to use the department's excellent aquatic facilities. As well as establishing an externally funded research program, the successful applicant will be expected to participate in the teaching of undergraduate and graduate classes, including the development of an advanced course in his/her area of expertise. Start-up research funds will be provided. The new appointee can expect a reduced teaching load in the first two years.

Submit a letter of application, outlining research goals, a summary of teaching experience, and a curriculum vitae to: Dr. W. Chapco, Head, Department of Biology, University of Regina, Regina, Saskatchewan S4S 0A2 Canada. FAX: 306-585-4894; Telephone: 306-585-4231; e-mail: william.chapco@uregina.ca. Candidates should arrange to have at least three letters of reference sent to the address above. The closing date for applications is December 15, 1998. Further information on the department is available on the website: http://www. biol.uregina.ca.

In accordance with Canadian Immigration Regulations, preference will be given to citizens and permanent residents of Canada. The University of Regina is committed to the principle of Employment Equity.

ASSISTANT PROFESSOR. The Department of Physiology invites applications from outstanding scientists with Ph.D., M.D., or equivalent degrees for two tenure-track Assistant Professor positions. Of particular interest are candidates who will develop independent research programs in cellular, molecular, or biophysical aspects of contractility, motility, or cell signaling. Integrative biology research using cell and molecular biological approaches to investigate higher-order physiological systems is also of primary interest. However, the excellence of the successful candidates is more important than the particular area of research. These positions are part of the continuing growth of this dynamic department and will be supported by exceptional start-up packages. Applicants should submit a curriculum vitae, a brief statement of research plans, and arrange to have three letters of reference sent to: James T. Stull, Ph.D., Department of Physiology, The University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-9040. An Affirmative Action/Equal Opportunity Employer.

Tenure-track faculty positions. ASSISTANT PRO-FESSOR. Biological Sciences Department, University of Wisconsin–Whitewater. ANATOMIST/PHYSIOLO-GIST will teach human anatomy and physiology, introductory cell biology, and zoology. PLANT SYSTEM-ATIST will teach plant kingdom, plant taxonomy, and botany. Both positions will teach general studies courses. Ph.D. required. The University of Wisconsin–Whitewater is a premier public regional university, with emphasis on undergraduate research. Send cover letter; curriculum vitae; graduate transcripts; statement of teaching, research, and service interests; and three recommendation letters to: Anatomist/Physiologist or Botanist Search, Biological Sciences, University of Wisconsin–Whitewater, Whitewater, WI 53190. Deadline October 23, 1998.

ASSISTANT ATTENDING IN NUCLEAR MEDICINE

Memorial Sloan-Kettering Cancer Center is seeking a Board-certified Nuclear Medicine Physician for a position as Assistant Attending in nuclear medicine. The individual should have at least three years of experience in clinical nuclear medicine, demonstrated evidence of scholarly pursuits of clinical problems, and a commitment to teaching. PET experience is highly desirable. Please send inquiries to: Steven M. Larson, M.D., Chief, Nuclear Medicine Service, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. Memorial Sloan-Kettering Cancer Center is an Equal Opportunity Employer.

POSITIONS OPEN

DIRECTOR OF ENVIRONMENTAL QUALITY

The Massachusetts Water Resources Authority is seeking to fill a management position that coordinates the collection and analysis of all wastewater environmental quality data. The Director will define the responsibilities and scope of technical and environmental studies related to the Boston Harbor Cleanup project; provide broad technical assistance in environmental, technical, and scientific assessments, testing, and monitoring; and ensure quality assurance/quality control for internal and external Division laboratories. The successful candidate will pos-sess a doctoral degree and a graduate degree in chemistry, biology, environmental sciences, or related field; eight to 10 years of experience in environmental research including the development and evaluation of research programs, budgets, and proposals; five years in a supervisory capacity; and experience in applying technical information to wastewater treatment and pollution control. To apply, please send résumé to: **Massachusetts Water Resources** Authority, Human Resources Department, Charles town Navy Yard, 100 First Avenue, Boston, MA 02129.

We are committed to diversity. We encourage inquiries from all applicants. Equal Opportunity Employer/Minoritics/Females/Disabled/Veterans.

ASSISTANT PROFESSORSHIPS IN INORGANIC, ORGANIC, AND PHYSICAL CHEMISTRY Harvard University

Department of Chemistry and Chemical Biology

Applicants are invited to apply for Assistant Professorships in inorganic, organic, and physical chemistry. Applicants should arrange to have three letters of recommendation sent independently and should provide a curriculum vitae, a list of publications, and outlines of two future research projects. Applications and supporting materials should be sent to: Professor James Anderson, Chairman, Department of Chemistry and Chemical Biology, Harvard University, 12 Oxford Street, Cambridge, MA 02138-2902. Harvard University is an Affirmative Action/Equal Opportunity Employer and welcomes applications from women and minority group members.

The Department of Chemistry of The University of Chicago invites applications from outstanding individuals for the position of ASSISTANT PROFESSOR of chemistry. This search is in the areas broadly defined as inorganic and organic chemistry. Postdoctoral experience is preferred. Applications, and a succinct outline of their research plans. Candidates should arrange for three letters of recommendation to be sent directly to: James R. Norris, Jr., Chairman, Department of Chemistry, The University of Chicago, 5735 South Ellis Avenue, Chicago, IL 60637. Deadline for application materials is October 31, 1998. An Equal Opportunity/Affinnative Action Employer.

University of Florida seeks a **RESEARCH ASSIST-ANT PROFESSOR** in the Department of Medicine, Division of Endocrinology. Ph.D. degree with five (5) years of experience. Background in vascular cell biology, diabetes, lipoprotein, and lipid metabolism. Grant experience required. Salary and benefits commensurate with experience. Recruiting deadline, December 31, 1998. Anticipated starting date July 1, 1999. Please reply to: Desmond Schatz, M.D., Associate Professor, Division of Endocrinology, Box 100277 JHMHC, Gainesville, FL 32610. An Affimative Action/Equal Opportunity Employer.

Developmental neuroscience. The Department of Psychology, University of California, Santa Barbara, invites applications for a tenure-track ASSISTANT PROFES-SOR position effective July 1, 1999. Full details of the position can be found at our job website: http://www. psych.ucsb.edu/position/devneuroscifac.htm, in the September 1998 edition of the APS Observer, or can be requested by FAX: 805-893-7517. Deadline: December 1, 1998. Equal Opportunity/Affirmative Action Employer.

The University of Illinois at Urbana-Champaign, Department of Anthropology seeks to hire a **BIOAN-THROPOLOGIST** for a tenure-track **ASSISTANT PROFESSOR** position beginning August 21, 1999. Specialization in anthropological genetics is preferred. Application deadline is October 15, 1998. For a complete description see website: http://www.anthro.uiuc.edu; Telephone: 217-333-3616.

POSITIONS OPEN

CHEMIST MANAGER, ANALYTICAL CHEMISTRY

Neose Technologies, Inc. is a biotechnology company dedicated to the development of novel therapeutic oligosaccharides. We currently have an opening for an Analytical Chemistry Manager. Responsibilities will include managing the operation of

Responsibilities will include managing the operation of the analytical laboratory in compliance with cGMP and ICH guidelines, developing analytical methods to support research and development and quality control, performing method validation and transfers, coordinating project plans with other department Managers within the company to ensure delivery of analytical services, and interacting with outside research collaborators and contract service providers. This job also requires the preparation of analytical development reports, validation protocols, and validation reports.

This job requires a Ph.D. in analytical chemistry or related field with a minimum of five years of experience in a pharmaceutical/biotechnology industry, extensive experience with analytical instrumentation including HPLC, GC-MS, MS, and NMR, and in-depth experience with analytical method development and validation in compliance with cGMP and ICH guidelines. Successful candidate will possess exceptional communication and organizational skills.

Neose is located in Horsham, Pennsylvania. We offer a competitive compensation package in a dynamic atmosphere where employees have the opportunity to participate in and benefit from the company's success.

Please send résumé to: Human Resources, Department AC823, Job Code: SC, Neose Technologies, Inc., 102 Witmer Road, Horsham, PA 19044. Equal Opportunity Employer.

CHAIR

FEDERATED DEPARTMENT OF BIOLOGICAL SCIENCES

The Federated Department of Biological Sciences of Rutgers University and the New Jersey Institute of Technology is seeking a Chair. The position will be at the level of Full Professor at Rutgers University. The Federated Department serves the undergraduate and graduate programs of Rutgers University and the adjacent New Jersey Institute of Technology (NJIT).

The new Chair will continue our commitment to highquality undergraduate education and will contribute to the already strong graduate research program in cellular and molecular biology. The new Chair will help integrate the research and teaching interests of the Rutgers and NJIT faculties and develop collaborations when the Public Health Research Institute of New York completes its relocation to Newark.

The faculty is research-active with interests ranging from molecular genetics to landscape ecology. A detailed description of the department can be found at our website: http://biology-newark.rutgers.edu/.

Applications are encouraged from scientists with a record of externally funded research and administrative experience. Review of applications will begin October 15, 1998. Submit curriculum vitae and three letters of recommendation to: Chair Search Committee, Department of Biological Sciences, Rutgers University, Newark, NJ 07102-1811. *NJIT and Rutgers University are Affirmative Action/Equal Employment Opportunity.*

BIOORGANIC CHEMIST

The Laboratory of Bioorganic Chemistry, National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), invites application for a tenure-track position in bioorganic chemistry. The applicant must have a proven record of accomplishments in synthetic, bioorganic, and/or medicinal chemistry and will be expected to propose an independent research program that applies the principles of organic chemistry to biomedical challenges. The position offers unparalleled opportunities for interdisciplinary collaboration within NIDDK and throughout NIH. For online information see website: http:// ohrm.niddk.nih.gov/vac/online.html.

The Laboratory is located on the main intramural campus of the NIH in Bethesda, Maryland, a suburb of Washington, D.C. Applicants should send a curriculum vitae and list of publications, copies of major publications, a summary of research accomplishments, a plan for future research, and three letters of reference to: Dr. Kenner Rice, Chair, Search Committee, Laboratory of Bioorganic Chemistry, Building 8, Room B1-20, National Institutes of Health, Bethesda, MD 20892-0810. Closing date: September 30, 1998.

11 SEPTEMBER 1998 VOL 281 SCIENCE www.sciencemag.org



The University of Texas at Austin

Faculty Positions in Chemical and Structural Biology

The Institute for Cellular and Molecular Biology and the Department of Chemistry and Biochemistry invite applications for tenure track faculty positions. Researchers from all areas of Chemical and Structural Biology are welcome, but those with experience in X-ray crystallography are particularly encouraged to apply. The successful applicants will be expected to develop an aggressive research program, to participate in undergraduate and graduate education, and to contribute to a dynamic and interactive academic atmosphere. Chemical and Structural Biology is one area of emphasis within the new Institute for Cellular and Molecular Biology headed by Dr. Alan Lambowitz. The group is currently strong and will be augmented by vigorous growth, including fourteen new faculty hires at both the junior and senior level, over the next few years. Exceptional start-up packages are available.

Nestled in the Texas hill country, Austin is widely recognized as one of America's most beautiful and livable cities.

Candidates should submit a current curriculum vitae and a summary of research experience and future goals, together with at least three letters of recommendation. To assure full consideration applications should be received by November 1, 1998. Material should be sent to :

or

Dr. Jon Robertus Co-Chair of the Search Committee Department of Chemistry and Biochemistry The University of Texas Austin, TX 78712

Dr. Laurence Hurley Co-Chair of the Search Committee College of Pharmacy The University of Texas Austin, TX 78712

Visit The University of Texas at Austin Homepage http://www.utexas.edu/ The University of Texas at Austin is an Equal Opportunity Employer. Qualified women and minorities are encouraged to apply.

POSTDOCTORAL FELLOWSHIPS

DNAX Research Institute, located near Stanford University, carries out basic research in Immunology and Cancer Biology in an open, academic environment. Our Postdoctoral Fellowship Program is an important feature of the research program at DNAX, representing approximately 25 percent of the Institute's scientists. Fellows who come to DNAX are entirely supported by the Institute and are provided an environment conducive to conducting basic research. Specific postdoctoral positions are available in the following laboratories:

CELL SIGNALING/ONCOLOGY

Dr. Emma Lees has 2 postdoctoral openings available to investigate the molecular mechanisms of cell cycle regulation. Areas of interest include:

- Novel cyclin/CDK complexes and their role in cell cycle.
- CDK inhibitor and p19ARF/p53 pathways in cancer.

• Regulation of transcription and chromatin structure by the cell cycle machinery.

Candidates should have a strong background in molecular biology and biochemistry and a broad interest in cancer biology.

IMMUNOBIOLOGY

Dr. Yong-Jun Liu has a postdoctoral position available to focus on the developmental and functional studies of mouse dendritic cell subsets. Experience performing adoptive cell transfer and T and B cell *in vivo* functional assays is required. Experience working on mouse dendritic cells would be useful.

Dr. Leslie McEvoy has a position available to investigate the molecular mechanisms regulating monocyte and T lymphocyte recruitment in normal immune recirculation and inflammation. A strong background and a broad interest in vascular biology, inflammation and cell adhesion are required.

Dr. Jonathon Sedgwick is seeking a postdoctoral fellow with excellent molecular biological skills and a broad interest in vascular biology, inflammation and cell adhesion.

Dr. Albert Zlotnick has an opening for an individual to work on the biological characterization of novel chemokines and receptors. A strong background in immunology, *in vivo* and *in vitro* biological assays and FACS analysis experience preferred.

Qualified applicants should send a curriculum vitae, a one-page statement of research interests, and the names of 3 references to the Human Resources Department, DNAX Research Institute, 901 California Avenue, Palo Alto, CA 94304. DNAX is an equal opportunity employer, m/f/h/v.



RIGEL, INC.

Rigel, Inc. is a growing biotechnology company using revolutionary gene transfer technologies to identify and validate novel drug targets using high-throughput functional screens. Our research involves the integration of intracellular pathway mapping using proprietary retroviral technology and two-hybrid approaches.

SENIOR DIRECTOR OF BIOINFORMATICS

We have an opening for a Director/Senior Director of Bioinformatics to head the bioinformatics effort in this demanding and fast-paced start-up. The position will involve integrating relational databases of protein/protein interactions, functional genomics data, high-throughput cell biology assays, and functional genetic screens as part of our drug discovery effort.

Qualified candidates will have a Ph.D. in biological sciences or graduate degree in computer science, five to eight years of experience in related information systems, and a strong publication record in bioinformatics. Experience with advanced relational databases in the analysis of genomic information is essential. Management experience desired. Job Code# DBI-826-S.

POSTDOCTORAL POSITION

We are looking for several aggressive postdoctoral candidates who possess a strong publication record in the areas of molecular biology, cell biology, or protein chemistry. Skills in one of the following fields are desired: expression vector design, coimmunoprecipitation, flow cytometry, enzymatic assay development, mammalian cell culture, gene knockouts, and retroviral research. Prior experience with 2D-gels and mass spectrometry useful. Excellent motivation and teamwork skills are essential. Individuals are expected to work closely with Senior Scientists to analyze novel targets in Rigel's functional pathway database and will be encouraged to publish. Job Code# PD-827-S.

Rigel offers competitive salaries and benefits, attractive stock options, and the opportunity to make significant research contributions. Please send résumé to: Human Resources, Attention Job Code# DBI-826-S or PD-827-S, 772 Lucerne Drive, Sunnyvale, CA 94086. FAX: 408-736-1588; e-mail: jobs@rigel.com. Rigel will be relocating to South San Francisco in early 1999. Equal Opportunity Employer.

ANATOMIST

The Department of Anatomy at Mayo Medical School and Mayo Clinic/Foundation is seeking an Anatomist who is qualified to teach gross anatomy, microscopic anatomy, and embryology. Mayo Medical School is the smallest medical school in the United States with only 42 students per class. The candidate will be expected to share equally in the anatomy instruction to medical students, plus conduct review courses for residents. Teaching duties vary during the year, leaving some opportunities for research. The candidate will have access to state-of-the-art facilities and excellent opportunities for collaboration. A Ph.D. or comparable degree is required. Applicants are asked to submit a letter of interest along with their curriculum vitae and the names of three references to: **Stephen Carmichael, Ph.D., Chair, Anatomy Search Committee, Mayo Clinic, Rochester, MN 55905** by 1 November 1998. You may contact Dr. Carmichael at *e-mail: carmichael.stephen@mayo.edu. Mayo Foundation is an Affirmative Action and Equal Opportunity Employer and Educator.*

The University of California at Los Angeles is recruiting a **DIRECTOR** of the Dental Research Institute (DRI) available July 1, 1999. The Dirctor will also be appointed as a Professor with tenure in the School of Dentistry. A **MOLECULAR BIOLOGIST** with a research background in orofacial diseases or abnormalities is preferred. The candidate must have a Ph.D. or D.D.S. (D.M.D.)-Ph.D. and must be experienced in research administration, tenured at their present institution, and bring substantial extramural funding with him/her to UCLA. The objective of the DRI is to study the basic mechanisms of disease in the orofacial region through original research. Applicants should submit a curriculum vitae and the names of three references to: **Dr. Robert Lindemann**, **Associate Dean for Academic Programs and Personnel, UCLA School of Dentistry, Room 53-038 CHS, Box 951668, Los Angeles, CA 90095-1668. E-mail: robert@dent.ucla.edu**. The University of California is an Equal Opportunity/Affinative Action Employer. All qualified applicants are encouraged to apply, including women and minorities.

POSITIONS OPEN

SENIOR MICROBIOLOGIST MOLECULAR BIOLOGY

The VA Department of General Services, Division of Consolidated Laboratory Services (DCLS), is looking for an individual with extensive experience in microbiology and molecular biology techniques, nomenclature and laboratory equipment to implement molecular diagnostics for infectious diseases. Qualifications: B.S. degree (or equivalent training/experience) in molecular biology, microbiology, or related field combined with relevant laboratory experience. M.S. degree preferred. Experience with PCR, PFGE, nucleic acid isolation, bacterial and viral isolation, and hybridization procedures desired. Experience and/or knowledge of quality assurance/quality control, laboratory safety, and team leadership preferred. Ability to perform literature reviews, work well with others in a team atmosphere, and effective communication skills. Background security clearance check. Position# CL011. Salary range: \$29,083 to \$45,406.

Submit application to: Department of General Services-Human Resources, 805 East Broad Street, Room 117, Richmond, VA 23219 by September 30, 1998. Applications are available on the website: http:// www.cns.state.va.us/dpt or contact e-mail: rwebne@ dgs.state.va.us for additional information. Equal Opportunity Employer/Affirmative Action/Minority/Females/Disabled/ Veterans.

HEAD OF CEREBROVASCULAR RESEARCH

The Cleveland Clinic Foundation is seeking a Director of Cerebrovascular Research. The Director will be responsible for developing, coordinating, and expanding laboratory-based cerebrovascular disease research. Applicants should possess a Ph.D. or M.D. from an internationally recognized program along with the ability to coordinate clinically relevant basic science research. The new Research Director will interact closely with the Clinical Cerebrovascular Center and with scientists in the Departments of Cell Biology, Molecular Cardiology, and Neuroscience. Start-up funds and resources at The Cleveland Clinic Foundation are extremely competitive. Interested candidates should send a curriculum vitae and three references to: Douglas Chyatte, M.D., Chair, Cerebrovascular Search Committee/S80, The Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195 USA. Equal Opportunity Employer/Minorities/Females/Disabled/Vetrans.

CURATOR. The Department of Vertebrate Paleontology at the American Museum of Natural History is seeking to fill a curatorial position in the field of paleomammalogy. The successful applicant will be expected to develop a world-class research program, including ambitious field work. This position entails partial responsibility for the Museum's collection of fossil mammals, supervision of relevant support staff, as well as departmental and museum responsibilities. The Museum offers opportunities to teach and direct graduate students. Applicants of al levels will be entertained. Please forward a curriculum vitae and three letters of recommendation by October 23, 1998, to: American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024, Attn: Alejandra Lora. An Equal Opportunity Employer.

THE HEISER PROGRAM FOR RESEARCH IN LEPROSY AND TUBERCULOSIS

Beginning **POSTDOCTORAL RESEARCH FEL-LOWSHIPS** in leprosy and tuberculosis available in amounts up to \$28,000 per year, plus other allowances, and **RESEARCH GRANTS** in leprosy only in amounts up to \$30,000. Applicants should have M.D., Ph.D., or equivalent degree. Application deadline February 1, 1999, for awards to be activated July through December 1999. For information and forms write: **The Heiser Program**, **450** East 63rd Street, New York, NY 10021. FAX: 212-688-6794.

PREFERRED PROFESSIONAL RECRUITERS

We are a leading executive search firm specializing in the health care industry. We have positions open in discovery research, drug development, biostatistics, dáta management, statistical programming, preclinical/clinical research, medical affairs, project management, and QA/RA. Submit your résumé to: **4200 Green Cliffs Road, Austin, TX 78746. FAX: 512-327-1774; email: search@pprecruiters.com; website: http://**

POSITIONS OPEN POSTDOCTORAL POSITIONS PATIC AND EMBRYONIC STEN

IN HEPATIC AND EMBRYONIC STEM CELL TISSUE ENGINEERNG MIT Division of Bioengineering and Environmental Health and the Whitehead Institute Liver Cell Biology Stem Cell Biology Mammalian Cell Culture Reactor Design Biofluid/Tissue Mechanics Microfabrication/MEMS

Applicants are sought for a collaborative project involving eleven Investigators from MIT, the Whitehead Institute, and Harvard Medical School. Project focuses on *in vino* development of three-dimensional microvascularized tissue structures for application in hepatic and hematopoeitic tissue engineering. The project is ongoing and is now being expanded to examine development and functional differentiation of tissue structures, and application to stem cell biology, *in vitro* drug metabolism, viral infection, and gene therapy. Applicants for all areas should send a curriculum vitae and the names of three references to: Prof. Linda Griffith, MIT 66-466, Chemical Engineering, 77 Massachusetts Avenue, Cambridge, MA 02139. E-mail: griff@mit.edu. Applications for each area will be routed immediately to the appropriate Investigator. *MIT is an Affimative Action/Equal Opportunity Employer. MIT is a nosmoking environment.*

POSTDOCTORAL FELLOWS RESEARCH FACULTY

The Department of Physiology and Cell Biology at University of Nevada School of Medicine is seeking Postdoctoral Fellows/Research Faculty 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, endothelium-dependent regulation of vascular smooth muscles, biochemical and molecular biological studies of phosphatases and their substrates, ionic mechanisms in cardiac muscles, development of excitation and contraction mechanisms in smooth and cardiac muscles, or 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, biochemistry, biophysics, electrophysiology, or morphological techniques required.

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 October 1, 1998. Applications will be accepted until August 31, 1999. Affirmative Action/Equal Opportunity Employer.

CHIEF, DIVISION OF PULMONARY AND CRITICAL CARE MEDICINE. University of California, Los Angeles, Department of Medicine is seeking a Pulmonologist at the rank of Associate Professor of medicine or higher for this position. Candidates with a M.D. or M.D.-Ph.D. should have a proven track record of basic and/or clinical research or experience in health services research. Experience in the areas of academic and/or clinical administration would be helpful but not required. Candidates are invited to submit a curriculum vitae and references to: Search Committee, UCLA School of Medicine, Department of Medicine, 11-934 Factor Building, 10833 Le Conte Avenue, Los Angeles, CA 90095-1678, Attention: Judith Mitchell. UCLA is an Affirmative Action/Equal Opportunity Employer.

Inotek Corporation, located in Cincinnati, Ohio, is a rapidly growing pharmaceutical company focusing on new approaches in the treatment of inflammatory diseases. We have a position immediately available for a Ph.D., with one to two years of experience in different areas of molecular biology, including DNA/RNA isolation, PCR, Northern blotting, generation of deletional constructs to identify promoter elements, gel shift assays, and cell transfection. We provide competitive salaries and benefits. Interested persons should send curriculum vitae, list of publications, selected reprints, and names and addresses of three references to: Dr. George Hasko, Director of Pharmacology, Inotek Corporation, 3rd Floor, 3130 Highland Avenue, Cincinnati, OH 45219-2374. FAX: 513-221-1891.

NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION NATIONAL LIBRARY OF MEDICINE NATIONAL INSTITUTES OF HEALTH PUBLIC HEALTH SERVICE

RESEARCH BIOLOGIST

The Computational Biology Branch of the National Center for Biotechnology Information is seeking a tenure-track Computational Biologist with a Ph.D. or M.D. degree. The position is for a senior investigator addressing new challenges in fields including but not restricted to statistical or population genetics; structural biology of proteins; DNA, RNA, and their interactions; and comparative genomics. For an exceptionally well-qualified candidate, a tenured position may be considered. *Applicants need not necessarily be U.S. citizens*. Applications will be accepted if postmarked by November 10, 1998.

Candidates should send a letter of interest including a curriculum vitae and the names, addresses, and telephone numbers of three references to:

Chair Search Committee Stephen Altschul, Ph.D. National Center for Biotechnology Information National Library of Medicine NIH, Building 38A, Room 8N805 Bethesda, MD 20894 USA

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

NIH is an Equal Opportunity Employer.

LABORATORY CHIEF, IMMUNOLOGY OF PROSTATE CANCER

Robert W. Franz Cancer Research Center Earle A. Chiles Research Institute Providence Portland Medical Center Portland, Oregon

Excellent opportunity for scientist to join a team of outstanding investigators in the translation of important immunological principles to the treatment of cancer. Current research programs focus on the immunology of melanoma, renal cell, and breast cancer. Successful candidate should have a Ph.D. and/or M.D. with proven ability to develop an independent research program to study the immunology of prostate cancer. Applicant should have extensive experience in the cell biology of prostate cancer, preferably human and murine models, and/or in modern aspects of cellular and molecular immunology. Candidate will have the opportunity to interact with other scientists and/or clinical investigators interested in prostate cancer to establish a research program capable of translating laboratory concepts into novel therapies for men with prostate cancer. The successful applicant will be expected to develop an independent, extramurally-funded research program. Candidates should have a substantial number of quality, peer-reviewed published reports, and a proven track record in securing extramural funds

Generous start-up package with funds to support relocation of current laboratory activities is available. Applications, which should include curriculum vitae and letter of interest describing research goals, should be sent to:

Walter J. Urba, M.D., Ph.D. Director, Cancer Research Earle A. Chiles Research Institute Providence Portland Medical Center
4805 N.E. Glisan Street, 5F40 Portland, OR 97213 Fax (503) 215-6841

www.franzcancer.org

Providence Health System

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ffymetrix is a key player in the future of biomedical research, clinical diagnostics, and genomics. We are the creators of GeneChip® technology—a revolutionary system that is transforming how scientists acquire, analyze, and manage complex genetic information.

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Regional Sales Managers

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- Inside Sales Manager

Previous industry sales experience required. Technical background in Molecular Biology desired.

MARKETING PROFESSIONALS

Customer Service Representatives

- Product Managers
- Project Managers

Previous industry experience required. Positions require BS/MS in Life Science discipline.

TECHNICAL SUPPORT PROFESSIONALS

- Customer Support Supervisor
- Field Applications Specialists
- Software Systems Engineers
- Applications Specialists
 - Service Engineer
 - Call Coordinator

Previous industry or related experience required. Excellent computer operation skills, preferably in a PC environment, and strong verbal and written communication skills are a must. Bachelor's or advanced degree required for most positions.

Affymetrix provides attractive salaries, comprehensive benefits, and the exhilarating synergy of our world-class multidisciplinary team. For confidential consideration, please send or fax your resume to: Affymetrix, Human Resources, Job Code: SCI-911, 3380 Central Expressway, Santa Clara, CA 95051; Fax (408) 481-0422. Email: hr@affymetrix.com. We are an equal opportunity employer.

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THREE POSTDOCTORAL POSITIONS IN CELL BIOLOGY

Cellular/extracellular matrix biology (**Dr. William Larsen**): The laboratory studies cell-cell and cell-extracellular matrix interactions mediated by hyaluronic acidbinding serum glycoproteins in the ovary and other tissues. Cancer biology (**Dr. Erik Knudsen**): The laboratory studies the inhibition and regulation of cell cycle progression and tumorigenesis by the retinoblastoma tumor suppressor protein, RB. Neurobiology/neurooncology (**Dr. Larry Sherman**): This group studies the role of cell adhesion proteins in peripheral nerve development and tumorigenesis, with a focus on developing gene therapies for nervous system tumors.

Interested applicants should have a Ph.D. or M.D. and proficiency in protein biochemistry and separation, immunoassays, and molecular techniques. Please send résumé and three letters of recommendation, addressed to the laboratory of interest, to: Department of Cell Biology, Neurobiology, and Anatomy, University of Cincinnati College of Medicine, 231 Bethesda Avenue, Mail Location 0521, Cincinnati, OH 45267-0521. FAX: 513-558-4454. The University of Cinneinnati is an Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP

A Postdoctoral Fellowship is available to study genes involved in synaptic function in *C. elegans*. Current projects involve genetic analysis of adaptive behavioral responses and mechanisms of neurotransmitter packaging and release See: *Nature* **389**:870–876; *Nature* **364**:334– 337; *Nature* **364**:337–341.

Applicants should have a Ph.D. Experience in molecular biology, genetics, or cell biology is desirable. Please send a curriculum vitae, preprints of papers in

preparation or in press, and the names and addresses of three references who can provide recommendations to:

Steve McIntire, M.D., Ph.D. Department of Neurology Programs in Neuroscience and Biomedical Sciences Gallo Clinic and Research Center University of California, San Francisco Building 1, Room 101 1001 Potrero Avenue San Francisco, CA 94110 E-mail: sim@itsa.ucsf.edu FAX: 415-648-7116

An Equal Opportunity Employer.

POSTDOCTORAL POSITION

Postdoctoral position is available immediately to study the molecular mechanism of cell cycle progression induced by the Epstein-Barr virus EBNA-LP protein. Work in our laboratory is directed toward the characterization of cell cycle-related phosphorylation of EBNA-LP and the effect phosphorylation has on protein function. Candidates with experience in site-specific mutagenesis, *in vitro* and *in vivo* protein expression, and transcriptional analyses are encouraged to send their curriculum vitae, statement of research interests, and the names of three references to:

> Dr. David T. Rowe University of Pittsburgh A435 Crabtree Hall Infectious Disease and Microbiology Graduate School of Public Health Pittsburgh, PA 16261 E-mail: rowel+@pitt.edu

POSTDOCTORAL POSITIONS G-PROTEIN COUPLED RECEPTORS AND SIGNALING IN SKELETAL FUNCTION

Positions are available in a multidisciplinary laboratory in the following areas: (1) molecular mechanisms of parathyroid hormone receptor trafficking and desensitization; (2) transgenic models of G-protein function in bone; (3) apoptotic signaling by parathyroid hormone receptors. Requirements: Ph.D. or M.D. with experience in at least one of the following areas: molecular biology, hormone action, and/or skeletal biology. Send curriculum vitae with the names of three references to:

Robert A. Nissenson, Ph.D. University of California, San Francisco VA Medical Center (111 N) 4150 Clement Street San Francisco, CA 94121 FAX: 415-750-6929 E-mail: chicago@itsa.ucsf.edu

POSITIONS OPEN

POSTDOCTORAL POSITION available in molecular oncology to study function and regulation of novel tumor suppressor genes, TSC2 (*PNAS* 93:9154–59, 1996; *JBC* 272:6097–100, 1997). Candidates should have strong background in molecular, cellular biology and/or biochemistry. Applicants should have a Ph.D. and not more than three years of postdoctoral experience. Send curriculum vitae and references to: Dr. Raymond Yeung, Section of Surgical Oncology, University of Washington School of Medicine, Box 356410, Seattle, WA 98195. An Equal Opportunity Employer.

UNIVERSITY OF PENNSYLVANIA MEDICAL CENTER

POSTDOCTORAL POSITIONS available for twoto three-year research training in cellular and molecular biology. The multidisciplinary NIH-funded program is based in the Institute for Environmental Medicine. Research emphasis is on protein processing, transcriptional regulation, cell membrane receptors, endo/exocytosis, lipid metabolism, and oxidative lung injury. Applicants require Ph.D., M.D., or equivalent degree and U.S. citizenship or permanent residency. We offer an exciting environment and competitive stipends.

To apply, **Telephone: 215-898-9100; FAX: 215-898-0868**, or write to:

Education Officer Programs in Lung Cell and Molecular Biology Institute for Environmental Medicine University of Pennsylvania 1 John Morgan Building 3620 Hamilton Walk Philadelphia, PA 19104-6068 Website: http://www.med.upenn.edu/ifem

Applications may be submitted electronically, website: http://www.med.upenn.edu/ifem/nrsachoice.htm.

Qualified women and minority candidates are especially encouraged to apply. Affirmative Action/Equal Opportunity Employer.

TRAINING IN TRANSPLANTATION BIOLOGY MASSACHUSETTS GENERAL HOSPITAL AND HARVARD MEDICAL SCHOOL

POSTDOCTORAL POSITIONS available immediately for outstanding individuals interested in transplantation biology research. Successful candidates will participate in an NIH-funded training program consisting of a diverse group of faculty committed to providing training in transplantation biology. Research areas include tolerance induction, antigen processing, gene therapy, adhesion molecules, bone marrow transplantation, regulation of lymphocyte development, pathology of graft rejection, and xenotransplantation. Candidates must hold a Ph.D., M.D., or M.D.-Ph.D. and will be selected based on their potential and commitment to research in transplantation biology. *Applicants must be U.S. clitzens or pennaneut residents*. Please submit a curriculum vitae, statement of research interests, and three references to: Ms. Adrienne B. Sisco, Massachusetts General Hospital, Transplantation Biology Research Center, 149-9019 13th Street, Boston, MA 02129. FAX: 617-726-4067.

Massachusetts General Hospital and Harvard Medical School are Affirmative Action/Equal Opportunity Employers.

TISSUE-SPECIFIC TOLERANCE AND AUTOIMMUNITY NATIONAL INSTITUTES OF HEALTH Bethesda, Maryland

POSTDOCTORAL POSITIONS available to study mechanisms controlling tolerance and autoimmunity to immunologically privileged antigens and to develop approaches to immunotherapy in animal models of antiretinal autoimmunity. Approaches and conclusions are generalizable to other autoimmune diseases. For more information see website: http://www.nci.nih.gov/intramural/imm-reg.htm. Applicants must have a strong background in cellular and molecular immunology, less than five years of postdoctoral experience, and a U.S. ditizenship or pennancut residency status. Stipend range: \$25,000 to \$35,000 per year. Submit curriculum vitae/ bibliography and names of three references to: Dr. R. Caspi, Laboratory of Immunology, NEI, NIH, Building 10, Room 10N222, Bethesda, MD 20892-1857. Telephone: 301-435-4555; FAX: 301-480-6668; email: reaspi@helix.nih.gov.

11 SEPTEMBER 1998 VOL 281 SCIENCE www.sciencemag.org

POSITIONS OPEN

POSTDOCTORAL/RESEARCH ASSOCIATE MOLECULAR MECHANISMS OF VENTRICULAR ARRHYTHMIAS

A position is open immediately for a highly qualified individual to carry out studies on the molecular mechanisms of ventricular arrhythmias. The principal focus of the research is to investigate the role of somatic cell mutations in signal transduction proteins on electrophysiologic properties of myocardial cells (see: J. Clin. Invest. **101**:2162–2168). Approaches include analysis of the effects of mutations in signal transduction proteins on electrophysiologic properties of myocardial cells, the development of animal models of ventricular tachycardia through gene transfer, and the detection and analysis of mutations in biopsy samples. Applicants should have a Ph.D. or postdoctoral training in molecular genetics and a background in either animal or ion channel electrophysiology. Salary support commensurate with experience. Send curriculum vitae and reference list to: Bruce B. Lerman, M.D., Chief, Division of Cardiology, The New York Hospital, Cornell Medical Center, 525 East 68th Street, New York, NY 10021. FAX: 212-746-6951; e-mail: blerman@mail.med.cornell.edu. Connell University is an Equal Opportunity/Affinnative Action Employer.

RUSH-PRESBYTERIAN ST. LUKE'S MEDICAL CENTER Health Care Research Lung Disease

Join the Lung Cell Biology Laboratories at Rush–Presbyterian–St. Luke's Medical Center studying airway epithelial cell and matrix ultrastructure, biochemistry, and function in health and disease.

RESEARCH ASSOCIATE will have a Ph.D. in cell or molecular biology or the equivalent in advanced laboratory experience. Code: #GM7922. LABORATORY TECHNICIAN will have first-rate

LÁBORATORY TECHNICIAN will have first-rate laboratory support skills, as well as be fluent with database, word processing, and spread sheet programs. Code: #GM7921.

At Rush We See Tomorrow. We offer a competitive salary and an excellent benefits package. Please forward résumé with Code of interest to: Recruitment and Career Services, Rush-Presbyterian-St. Luke's Medical Center, 729 South Paulina, Chicago, IL 60612. Email: cmurlas@rush.edu. Equal Opportunity Employer/Minorities/Feundes/Disabled/Veterans.

RESEARCH TECHNICIAN

Howard Hughes Medical Institute at MIT/Whitehead Institute seeks a Research Technician to work with a dynamic group on studies of HIV viral membrane fusion proteins and their structure/function. The individual will participate in HIV research, in experiments involving tissue culture and handling of live HIV virus. In addition, the individual will have primary responsibility for setting up and maintaining vaccinia, baculovirus, and CHO protein expression systems of viral envelopes and other membrane-fusion proteins. Previous experience in tissue culture and working in an HIV research containment laboratory is required. B.S. plus five years or M.S. plus three years of relevant experience preferred. Send cover letter and curriculum vitae to: P. Dvorak, Howard Hughes Medical Institute/Whitehead Institute, 9 Cambridge Center, Room 667, Cambridge, MA 02142. E-mail: dvorak@wi.mit.edu. Equal Opportunity Employer.

POSTDOCTORAL POSITION IN IMMUNOLOGY UNIVERSITY OF COLORADO Health Sciences Center

The Clinical Immunology and Histocompatibility Laboratory has an opening for a Postdoctoral Fellow to assist in an NIH-funded project on the molecular mechanisms by which phenolic components of cigarette smoke suppress T cell activation and proliferation in humans (*Tox. Appl. Phannacol.* **150**:154, 1998). Clinical immunology training will also be provided to highly motivated candidates. Applicants should have a Ph.D. or M.D. degree with experience in molecular biology. Send résumé and names of three references to: Brian M. Freed, Ph.D., **University of Colorado Health Sciences Center, B164, 4200 East Ninth Avenue, Denver, CO 80262.** *The University of Colorado is committed to Equal Opportunity and Affirmative Action.*

PRICEWATERHOUSE COPERS 1

EXECUTIVE SEARCH & SELECTION

Environmental Opportunities in Abu Dhabi

COMPETITIVE EXPATRIATE PACKAGES

The Environmental Research and Wildlife Development Agency (ERWDA) in Abu Dhabi was established in 1996 to enhance the sustainable development of the environment and wildlife in the region. This has encompassed the establishment of projects to redress or eradicate the negative effects of industrial, agricultural, recreational and economic activities on the environment and wildlife of the Emirate of Abu Dhabi. By law, all Abu Dhabi organizations, businesses and government bodies need to co-ordinate with and gain license approval from the Agency for all projects relating to and impacting on the environment and wildlife.

The Environmental Research and Wildlife Development Agency's concerns cover a wide range of activities and they operate through a number of Centers, Units and Facilities. In line with their continued development, the ERWDA is seeking to appoint two individuals to head up two key Units within the Agency.

Head of Environmental Services Unit \$80,000 package

The Environmental Services Unit is responsible for providing advice and planning input to companies and the Government on environmental matters such as impact and risk assessment, analytical chemistry, land use analysis and waste minimization. It provides an essential support function to the other four Centres of the ERWDA, together with managing Graphical Information Systems, planning, forecasting and policy analysis.

As Head, you will be responsible for the overall conduct of the research and routine operations of the unit, reporting to the Secretary General of the Agency. In addition to the development of the research and operational plans, you will be responsible for managing the Unit's budget together with recruiting, training and directing your team.

To succeed in this challenging and rewarding role, you will have a PhD (or equivalent) with approximately five years' post qualification experience in one or more of the following: ecology, environmental science, environmental policy and assessment, ecosystem management or equivalent field. **Reference NH1466S**

Head of Terrestrial Research Center \$80,000 Package

The Terrestrial Research Centre conducts basic and applied research on arid land ecology, conservation biology,

environmental effects, ecosystem management and rehabilitation. This research focuses on an accurate characterization of the current environmental state of the Emirate, together with a critical assessment of the most pressing environmental problems.

As Head of the Center, you will be responsible for the overall conduct of the research and routine operations of the center, reporting to the Secretary General of the Agency. In addition to the development of the research and operational plans, you will be responsible for managing the Center's budget together with recruiting, training and directing your team.

In addition to your PhD (or equivalent) you will have approximately five years' experience in one or more of the following: terrestrial ecology, arid lands ecology, conservation biology, environmental science, ecosystems management or equivalent field. Ideally you will have previously led applied field research teams in harsh environments. **Reference: NH14675**

For both positions it is further expected that your research experience will be evident in relevant publications. You will need to demonstrate strong leadership skills and be able to build an effective multidisciplinary team. It is also a necessity that you are fluent in English, presenting clear and effective written and oral communication skills.

Abu Dhabi is a highly attractive location for expatriates. Salaries will be negotiable and are free from local taxes. An excellent benefits package is offered that includes fully expensed accommodation, car, school fees and medical expenses, annual return flights for self and family, together with a terminal gratuity. Minimum commitment is three years. To find out more about the aims of ERWDA, visit their website http://www.erwda.gov.ae

To apply, please send full personal and career details, including current remuneration level and daytime telephone number, quoting the reference of the position you are applying for, to:

Neil Holmes, PricewaterhouseCoopers, Executive Search & Selection, 1 Embankment Place, London WC2N 6NN, England Fax +44 171 213 5545, or c mail to neil.holmes@uk.pwcglobal.com

POSTDOCTORAL POSITION IMMUNOLOGY/CELLULAR IMMUNITY

Applicants with a M.D., Ph.D., or equivalent degree are invited to apply for a full-time position at The Research Institute in New Orleans, Louisiana. This appointment will be in the Departments of Pediatrics/Genetics at the Louisiana State University School of Medicine and will begin after September 1, 1998. Strong background in experimental immunology is expected, preferably with experience in both humans and mice. Ongoing studies involve human and murine autoimmunity and transplantation immunity, especially referable to diabetes mellitus and related diseases. Please send résumé with a list of references as soon as possible to: Dr. Noel Maclaren, Director, The Research Institute for Children, Children's Hospital, 200 Henry Clay Avenue, New Orleans, LA 70118.

LSUMC is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIPS IN FRESHWATER CONSERVATION

The Nature Conservancy (TNC) announces the David H. Smith Conservation Research Fellowship Program, which will provide two-year postdoctoral support in applied conservation biology. Each Fellow will carry out research with an institution selected by the Fellow and a TNC mentor. Research will focus on priority TNC sites or questions germane to them. First-round Fellowships (proposals due October 23, 1998) focus on the conservation of U.S. freshwater systems and begin January 1, 1998. Second-round Fellowships begin August 1999; RFPs available October 31, 1998, and due February 1999. To request RFPs e-mail or write: Smith Conservation Fellows Program, Conservation Science Division, The Nature Conservancy, 1815 North Lynn Street, Arlington, VA 22209. E-mail: postdoc@ tnc.org

POSTDOCTORAL POSITIONS UNIVERSITY OF CALIFORNIA, SAN DIEGO

Positions are available to study (1) the regulation and expression of the human Ah (dioxin) receptor and the role of signal transduction pathways on gene expression, (2) the genetic and regulatory events that control the expression of the human UDP-glucuronosyltransferase 1A locus in liver and extra-hepatic tissues, and (3) the role of specific glucuronidation events in the metabolism of cytochrome P450-generated dietary carcinogens. Research is being conducted at the cellular and molecular level and will also incorporate the use of transgenic mouse technology. All of the areas of investigation require training in the molecular sciences. If interested, please send a curriculum vitae and the names of three references to: **Dr. Robert Tukey, Department of Pharmacology, La Jolla, CA 92093-0636; e-mail: rtukey@ucsd.edu**.

DIRECTOR TECHNOLOGY COMMERCIALIZATION

Virginia Tech Intellectual Properties, Inc. is seeking an individual to transfer to industry University-owned inventions in the area of agriculture/biotechnology/ life sciences. Preferred candidates will have an advanced degree in a related science or equivalent business experience with strong emphasis on science. Preference is also given for an understanding of intellectual properties law. Salary range is \$50,000 to \$70,000. Application deadline is September 30, 1998, or until a suitable candidate is identified. Submit résumé to: Virginia Tech Intellectual Properties, Inc., 1900 Kraft Drive, Suite 107, Blacksburg, VA 24060. VTIP is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE/ YOUNG FACULITY POSITION(S) available in autoimmune arthritis research. Understanding of the relevant area and documented experience in molecular cell biology/immunology are absolute requirements. Research areas are (1) genome-wide screening and positional cloning of disease-responsible genes, (2) transgenic/knockout approaches, and (3) immunoregulation of autoimmune diseases. Applicants should send a curriculum vitae, brief summary of research experience, names and addresses of current preceptor, and at least two additional referees to: Tibor T. Glant, M.D., Ph.D., Professor, Section of Biochemistry and Molecular Biology, Department of Orthopedic Surgery, Rush University, 1653 West Congress Parkway, Chicago, IL 60612.

POSITIONS OPEN

POSTDOCTORAL RESEARCH FELLOW position is available immediately for a highly motivated individual to investigate the role of protein phosphorylation in blood coagulation (e.g., see: J. Biol. Chem. 273:8459– 8466). Ph.D. in biochemistry, cell biology, or related discipline required; expertise in molecular biology and cloning required; expertise in protein-protein interaction, phosphoproteins, and signal transduction desirable. Send curriculum vitae and bibliography, a brief statement of prior research experience, and names, telephone numbers, and e-mail addresses of four references to: Dr. Michael Kalafatis, Chemistry Department, Cleveland State University, 2351 Euclid Avenue, Cleveland, OH 44115. E-mail: m.kalafatis@popmail. csuohio.edu; FAX: 216-687-9298. Cleveland State University is an Affirmative Action/Equal Opportunity Employer committed to nondiscrimination. Minorities/Fenales/Disabled/ Veterans encouraged.

POSTDOCTORAL RESEARCH POSITIONS IN MICROBIOLOGY American Society for Microbiology/ National Center for Infectious Diseases

Positions are available for Postdoctoral Scientists to conduct novel research with the overall objective of developing practical applications of microbiology, immunology, and epidemiology for diagnosis and prevention of infectious diseases. Associates will perform research in residence at the National Center for Infectious Diseases, which is headquartered at the Centers for Diseases Control and Prevention in Atlanta, Georgia.

Deadline for applications is November 15, 1998. Website: http://www.asmusa.org/edusrc/edu23e.htm; e-mail: fellowships-careersinformation@asmusa.org.

POSTDOCTORAL POSITION

An NIH-funded position is available to study the signal transduction mechanisms related to the effect of nitric oxide on migration and proliferation of vascular smooth muscle cells. Preference will be given to candidates who have a recent Ph.D., and experience in the techniques of modern biochemistry, including molecular biology. Send curriculum vitae and the names of three references to: Dr. Aviv Hassid, Maury W. Bronstein Professor, Department of Physiology, The University of Tennessee, 894 Union Avenue, Memphis, TN 38163. E-mail: ahassid@physiol.utmem.edu; FAX: 901-448-7126. The University of Tennessee is an Equal Employment Opportunity/Affirmative Action/Title VI/TitleIX/Section 504/ADA/ ADEA Employer.

The Alfred P. Sloan Foundation and Department of Energy are supporting up to ten **POSTDOCTORAL FELLOWSHIPS** to catalyze career transitions into computational molecular biology from physics, mathematics, computer science, chemistry, and related fields. These Fellowships will give young scientists an intensive twoyear postdoctoral opportunity in an appropriate molecular biology laboratory. Selections will be announced in April 1999, and funding can begin any time after September 1, 1999. Application deadline: January 18, 1999. You can obtain the complete announcement from: Christine **Trance, Alfred P. Sloan Foundation, 630 Fifth Avenue, Suite 2550, New York, NY 10111. Telephone: 212-649-1649; FAX: 212-757-5117; e-mail: trance@ sloan.org.**

POSTDOCTORAL POSITION to study the function and structure of cyclic nucleotide-gated and hyperpolarization-activated pacemaker channels. Research involves patch clamp recordings of channels expressed in *Xenopus* socytes or mammalian cell lines. The role of pacemaker channels in neuronal firing patterns is also studied in hippocampal slices. Experience in patch clamp recording is required. Additional training in molecular biology or calcium imaging is desirable. Send curriculum vitae and names of three references to: Dr. Steven A. Siegelbaum, Center for Neurobiology and Behavior, Columbia University, 722 West 168 Street, New York, NY 10032. We take Affinnative Action toward Equal Employment Opportunity.

POSTDOCTORAL POSITIONS available immediately to study retinoid modulation of gene expression and regulation of retinoid gene expression. Experience in tissue culture and molecular biological techniques desirable. Please send curriculum vitae and names of three references to: Dr. Joseph A. Fontana or Dr. Arun K. Rishi, VA Medical Center, Research 151, 4646 John R, Detroit, MI 48201. FAX: 313-576-1112.

11 SEPTEMBER 1998 VOL 281 SCIENCE www.sciencemag.org

POSITIONS OPEN

POSTDOCTORAL POSITIONS

Two Postdoctoral positions are available to study (1) the role and interaction of signaling proteins in melanoma and its precursor lesions and (2) melanoma angiogenesis using tomographic and spectral imaging. Applicants interested in position (1) should have experience in molecular biology with emphasis on protein-protein interactions. Candidates applying for position (2) should have a strong background in biophysics and/or structural biology. Please submit curriculum vitae and the names and addresses of three references to: Dorothea Becker, Ph.D., Department of Pathology, University of Pittsburgh, BST E1050, 211 Lothrop Street, Pittsburgh, PA 15213.

CAREER IN OPTOMETRY, OPTOMETRIC RESEARCH, OR TEACHING

The New England College of Optometry offers a unique program for those with a doctorate in the sciences: biology, chemistry, physics, psychology, etc. Candidates have the opportunity to obtain the Doctor of Optometry (O.D.) degree in 27 months. The program begins annually in June. Employment opportunities exist in private practice, industry, education, and research. Contact: The Admissions Office, New England College of Optometry, 424 Beacon Street, Boston, MA 02115. Telephone: 800-824-5526; e-mail: admiss@ne-optometry.edu. Additional information, website: www.ne-optometry. edu.

POSTDOCTORAL POSITION IN GLIAL-SPECIFIC GENE EXPRESSION

Postdoctoral position available for analysis of the glialspecific JC virus early promoter. The major focus will be the mechanism of cell-specific regulation of the proximal JC virus early promoter by large T antigen. Familiarity with techniques such as transient transfection and DNase I footprinting will be helpful.

Please send a letter of interest and a curriculum vitae to:

Dr. John W. Henson Molecular Neuro-Oncology Laboratory Massachusetts General Hospital 149 13th Street Charlestown, MA 02129

Mayo Clinic **RESEARCH ASSOCIATE** position or **RESEARCH FACULTY** position is available in the Transplant Immunology Program. The candidate should hold a Ph.D. and have at least three years of postgraduate experience. Applicants should have a strong background in molecular biology or protein or carbohydrate biochemistry. Experience in immunology and cellular physiology is desirable. Send a current curriculum vitae, bibliography, a description of research experience, and three letters of recommendation to: Jeffrey L. Platt, M.D., Director of Transplantation Biology, Departments of Surgery, Immunology, and Pediatrics, Mayo Clinic, Medical Sciences Building 2-79, 200 First Street S.W., Rochester, MN 55905. Mayo Foundation is an Affiniative Action and Equal Opportunity Employer and Educator.

POSTDOCTORAL POSITIONS

Available immediately to work on the role of 200-gene family in the regulation of cell cycle and apoptosis (see: *EMBO J.* 15:5668; *J. Biol. Chem.* 271:27544; *Oncogene* 15:291). Please contact: Divaker Choubey, Ph.D., Department of Radiotherapy, Loyola University Chicago, 5th Avenue and Roosevelt Road (114-B), Hines, IL 60141. Telephone: 708-343-7200, ext. 3407; FAX: 708-216-2647; e-mail: dchoube@rdth2.rdth.luc.edu. Loyola University is an Equal Opportunity/Affinnative Action Employer/Educator.

POSTDOCTORAL/INSTRUCTOR POSITIONS HARVARD MEDICAL SCHOOL

To study the molecular and cellular immunology of autoimmune disease. Experience in immunology/cell and/or molecular biology. Send résumé and three references to: Dr. Vicki Rubin Kelley, Harvard Institutes of Medicine, 77 Avenue Louis Pasteur, Boston, MA 02115. FAX: 617-525-5830; c-mail: vicki@ bustoff.bwh.harvard.edu. HIM/BWH are Equal Opportunity Employers.

The Queen's University of Belfast Non-Clinical Lectureship in Haematology (Ref: 98/P055A)

School of Medicine

Applications are invited for a new Non Clinical Lectureship in Haematology within the School of Medicine funded by the Northern Ireland Leukaemia Research Fund. The successful candidate will be expected to initiate and develop research on the role of homeobox genes in haematopoiesis and leukaemogenesis.

Applicants must have at least a second class Honours degree, or equivalent, in Biochemistry, Biology or closely related discipline; a PhD, or equivalent in Developmental Biology, Molecular Biology, Biochemistry or closely related discipline; proven experience as evidenced by publications in prestigious journals; experience in the study of gene expression regulation or function and have a wide range of skills in molecular biology. Experience in homeobox gene research, teaching science and evidence of participation in successful grant applications would be desirable.

Informal enquiries may be made to Dr A E Irvine, Department of Haematology, Royal Victoria Hospital. Telephone 00 44 1232 240503 ext 2729.

E-mail: S.Irvine@qub.ac.uk

Salary Scale: Lecturer A: £16,655 - £21,815 per annum or Lecturer B: £22,726 - £29,048 per annum.

Closing date: 18 September 1998

Applicants quoting reference number 98/P055A may obtain further particulars from the Personnel Office, The Queen's University of Belfast, BT7 1NN. Telephone (01232) 273044 or 273864 (answering machine) or Fax (01232) 324944.

Committed to an Equal Opportunities policy and selection on merit, the University welcomes applications from all sections of the community. Under its affirmative action programme it particularly welcomes applications from women for academic posts.

GLOBAL OPPORTUNITIES

Project Leader Sustainable Forest Management

The Center for International Forestry Research (CIFOR) seeks an outstanding scientist to provide leadership to an interdisciplinary team developing policies and technologies to improve the management, utilization, and conservation of tropical forests. The post will be based at CIFOR's head office in Bogor, Indonesia.

CIFOR is one of 16 international research institutes supported by the Consultative Group on International Agricultural Research (CGIAR). It aims to improve forest conservation and management in tropical developing countries through problem-focused, strategic research. Our research is undertaken through collaborative arrangements with a global network of research partners.

The successful applicant will have a strategic, global vision of the problems associated with achieving sustainable, multiple-use forestry in the tropics. Extensive experience in the tropics, preferably in more than one region, and a comprehensive knowledge of current global initiatives aimed at achieving sustainable forest management is required. Proven ability to provide scientific leadership in an interdisciplinary, multicultural setting is of special importance. Excellent written and oral communication skills are important. Candidates must have an advanced degree and a significant publications record in forestry or a related natural resource discipline. Fluency in English is essential, and competence in one or more additional languages common in the tropics would be an important advantage.

CIFOR offers an internationally competitive salary, an excellent benefits package, and a stimulating work environment. We believe that diversity of staff contributes to excellence, and we therefore encourage women and developingcountry nationals to apply. Applicants should send a letter of interest and curriculum vitae, plus the names and contact information for three referees, to the address below. Evaluation of applications will begin in early November 1998. All applications will be acknowledged. To learn more about CIFOR and Bogor, visit our website at http://www.cgiar.org/cifor.

Human Resources Manager, Reference: SC10998, CIFOR, P.O. Box 6596 JKPWB Jakarta 10065 Indonesia. Fax: +62 251 622100; e-mail: m.paiement@cgnet.com.



The Nestlé Research Center has immediate openings for two 18–24 month Postdoctoral Fellowships

BIOCHEMICAL TOXICOLOGIST

Located near Lausanne, Switzerland, this position will involve performing fundamental research on dietary contaminants and their impact on human health through metabolism studies, enzymology, and establishment of biomarkers. A Ph.D. in Toxicology, Biological Organic Chemistry, Enzymology, or a related field is required. Prior experience with analytical chemistry, immunological methods, and equipment such as HPLC and GC-MS is also a requirement.

PLANT MOLECULAR BIOLOGIST

Located in Tours, France, this candidate will work with a team identifying and studying genes associated with various plant qualities and characteristics. A Ph.D. in biological sciences with research experience in plant molecular biology as evidenced by relevant publications is required. Experience with bioinformatics, plant transformation, and/or seed biochemistry is also a requirement.

Effective communication skills (both written and spoken) in English are required for both positions. Conversational and written French is used in the workplace at both locations and would be considered a plus.



EUROPEAN COURSES

The University of Nottingham



Virtual Courses from the VSMS in Molecular Sciences & Informatics

The VSMS offers modular virtual postgraduate courses covering a range of topics in molecular sciences and informatics. These courses can be combined in different ways to provide the precise skills and learning experience that individuals or groups require. Courses can be combined from the following subjects:

- Basic IT for scientists
- Programming in Java
- BioinformaticsProtein structure
- Protein sequences
- Molecular modelling
- Drug design

These modules (except programming in Java) form our 1 and 2 year part-time postgraduate Certificate/Diploma courses in "Structure-based Drug Design". These courses are sponsored by Glaxo Wellcome, SmithKline Beecham, Pfizer and Oxford Molecular.

Individual study packages of 1-6 modules are also available.

We create a virtual learning community and the self-paced courses are available to any scientist with a standard desktop connected to the Internet. The course is specifically designed for working scientists and can be taken from the workplace or from home, with guided learning and assessment provided over the Internet.

For further details visit our WWW site at:

http://www.vsms.nottingham.ac.uk/vsms or email to: vsms@nottingham.ac.uk or snail mail to: Structure-Based Drug Design/Virtual School of Molecular Sciences, School of Pharmaceutical Sciences, The University of Nottingham, University Park, Nottingham NG7 2RD, UK. Tel: 0115 951 5236.

POSTDOCTORAL POSITION HARVARD MEDICAL SCHOOL

Position available to study neurodegeneration genes and signal transduction mechanisms involved in Alzheimer's disease. Projects focus on basic molecular mechanisms of neuronal apoptosis and the biological function of the presenilin genes. For reference see: *JBC* 272:14505, 1997; *Neuron* 16:921, 1996; *Nature* 378:776, 1995; *Nature* 368:756, 1994. Experience in molecular and cell biology is required. Send curriculum vitae, a brief description of research experience, and names of three references to: Dr. Bruce Yankner, Children's Hospital, Enders 260, 300 Longwood Avenue, Boston, MA 02115. FAX: 617-738-1542. *Equal Opportunity Employer*.

UNIVERSITY OF MIAMI

POSTDOCTORAL POSITION funded by the NIH available to study nuclear-mitochondrial interactions and the molecular pathogenesis of mtDNA mutations (see website: http://chroma.med.miami.edu/cellbio/ Moraes/Moraes.html). Expertise in biochemistry, cell and molecular biology, as well as fluency in English required. Send curriculum vitae and names/telephone numbers of three references to: Carlos T. Moraes, Ph.D., Department of Neurology, University of Miami, 1501 N.W. 9th Avenue, Miami, FL 33136. Email: cmoraes@mednet.med.miami.edu.

POSTDOCTORAL FELLOWSHIP RESEARCH ASSOCIATE position. Funded studies of the gene transfer to photoreceptor cells. Requirements: Ph.D. or equivalent experience with laboratory experience in cell culture, immunocytochemical, confocal and electron microscopy. Stimulating environment in Eye Institute in high technology area of Oakland County in Southeastern Michigan. Salary is competitive. Applicants should submit curriculum vitae, description of research experience, and references to: Paulette Realy, Eye Research Institute, Oakland University, Rochester, MI 48309-4480. Oakland University is an Equal Opportunity/Affinnative Action Employer.

The Food and Drug Administration, Center for Biologics Evaluation and Research, has immediate positions for **POSTDOCTORAL FELLOWS** to work in areas such as molecular biology, immunology, cell biology, biochemistry, virology, and genetics. Requires Ph.D. and/or M.D. with less than five years of postdoctoral experience. *Must be U.S. ditzen or U.S. permanent resident*. Positions located on NIH campus, Bethesda, Maryland. Send curriculum vitae/résumé to: Recruitment Staff (98026), The Food and Drug Administration/Center for Biologics Evaluation and Research, 1401 Rockville Pike, Suite 200N/HFM-123, Rockville, MD 20852-1448.

POSTDOCTORAL RESEARCHER. Investigation of signal transduction pathways mediated by Src-family tyrosine kinases using mouse knockouts as a model. Relevant systems currently under study include T cells, kertinocytes, and brain. Highly motivated and independent individuals with experience in molecular biology/biochemistry preferred. Send curriculum vitae and three reference letters to: Human Resources Department, Attra: Dr. Paul L. Stein, The Wistar Institute, 3601 Spruce Street, Philadelphia, PA 19104. Equal Opportunity Employer/Affirmative Action/Minorities/Females/Disabled/Veterans.

SENIOR POSTDOCTORAL FELLOWSHIP opening in medical genetics research. Projects include clinical research in areas of musculoskeletal diseases, such as osteoporosis, a polygenic disorder. Experience with statistical design of case control, association, and linkage studies is essential. Salary, benefits competitive. Possibility of promotion to Research Assistant Professor in longterm position. Send cover letter, résumé, and names of three references to: Ms. Blackmer, Musculoskeletal Disease Center, Loma Linda University, P.O. Box 7210, Loma Linda, CA 92354.

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Postdoctoral Research opening to develop novel technology for high-resolution TEM of proteins. Send curriculum vitae and references to: Dr. William H. Massover, Department of Anatomy and Cell Biology, University of Medicine and Dentistry of New Jersey–New Jersey Medical School, 100 Bergen Street, Newark, NJ 07103.

POSITIONS OPEN

POSTDOCTORAL POSITION is available in **Jonathan Arias**' laboratory to investigate hormone and stress-responsive transcription factors that regulate gene expression in plants. Experience in molecular biology (especially quantitative PCR) and protein biochemistry is required. Please send letter of application, curriculum vitae, and addresses of three references by September 25. 1998, to: Rochelle Leathers, Center for Agricultural Biotechnology, 5115 Plant Sciences Building, University of Maryland Biotechnology Institute, College Park, MD 20742. FAX: 301-314-9075; e-mail: leathers@umbi.umd.edu.

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POSTDOCTORAL POSITION in computational neurobiology available November 1, 1998, to study olfactory processing in insects. Applicants must have a neural network background. Experience with genetic algorithms desirable. Send or e-mail by the deadline date of October 30, 1998, a statement of research interests, curriculum vitae, and names, telephone numbers, and e-mail addresses of at least three references to: Dr. Wayne M. Getz, Division of Insect Biology, 201 Wellman Hall, University of California, Berkeley, CA 94720-3112. FAX: 510-642-7428; e-mail: getz@ nature.berkeley.edu. The University of California is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS available immediately in theoretical/computational biophysical chemistry. Separate projects involve statistical mechanical approach es to polyelectrolyte (DNA) properties or quantum chemical studies of metal-DNA enzymatic mechanisms. Appointments are for one year with an additional one-year extension possible. Send applications including a current curriculum vitae and contact information for three references to: Dr. George R. Pack or Dr. Gene Lamm, Department of Chemistry, University of Louisville, Louisville, KY 40292. Equal Opportunity/Affinnative Action Employer.

POSTDOCTORAL POSITION available immediately, to study the molecular genetics of muscle development in *Drosophila*. Genes under investigation control specification, differentiation, and fusion of muscle precursors. Experience in molecular and cell biology is essential. Please send curriculum vitae and names of three references to: Dr. Susan M. Abmayr, Biochemistry and Molecular Biology, 459 North Frear Laboratory, The Pennsylvania State University, University Park, PA 16802. E-mail: smal@psu.edu. PSU is an Affinnative Action/Equal Opportunity Employer. Women/minorities are encouraged to apply.

Two **POSTDOCTORAL POSITIONS** available immediately to study the role of DNA repair during lymphocyte development and aging. Candidates must have a Ph.D. and/or M.D., and a strong background in molecular biology. Send curriculum vitae and names of three references to: Andre Nussenzweig, Ph.D., Experimental Immunology Branch, NIH, NCI, Building 10, Room 4B36, 10 Center Drive MSC1360, Bethesda, MD 20892–1360. FAX: 301-496-0887. NCI is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately. Investigation of cellular and molecular mechanisms of epithelial electrolyte transport. Major molecular biology experience required. *Proof of U.S. citizenship or equivalency required.* Send or FAX curriculum vitae and the names of three references to: Dr. Eugene B. Chang, Department of Medicine, University of Chicago, MC6084, 5841 South Maryland Avenue, Chicago, IL 60637. FAX: 773-702-2281. Affirmative Action/ Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP

Seeking Ph.D. with background in molecular biology to study factors that induce growth and differentiation of embryonic kidney. Salary negotiable. Send curriculum vitae and names of references to: Mr. Sean Kelly, Columbia University, Department of Medicine, 630 West 168th Street, Box 84, New York, NY 10032. Columbia University is an Equal Opportunity/Affinnative Action Employer.

AWARDS

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Promoting international research in gerontology, two Busse Research Awards will be given at the PanAmerican Conference in San Antonio, Texas, February 1999. Two Gerontologists (junior or mid-career) will be selected. One award will recognize a scientist from the social/behavioral sciences; the other from the biomedical sciences. Awards \$4,000 each, with up to \$3,000 provided for travel/living expenses. Awardees must present a lecture based on their research at the conference. Deadline for receipt of applications: November 1, 1998.

For information and application forms contact: Laurence G. Branch, Ph.D. Chair, Busse Research Awards 1999 Center for Aging, Box 3003 Duke University Medical Center Durham, NC 27710 USA Telephone: 919-416-5880, ext. 231 FAX: 919-416-5879 E-mail: ryan0017@mc.duke.edu

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Ms. Mary Rosenfeld or Prof. J. R. Lakowicz Center for Fluorescence Spectroscopy Department of Biochemistry and Molecular Biology 725 West Lombard Street Baltimore, MD 21201 Telephone: 410-706-8409 FAX: 410-706-8408 E-mail: cfs@cfs.umbi.umd.edu

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Deadline for enrollment is February 14, 1999, with later enrollment if space permits.

ANNOUNCEMENT

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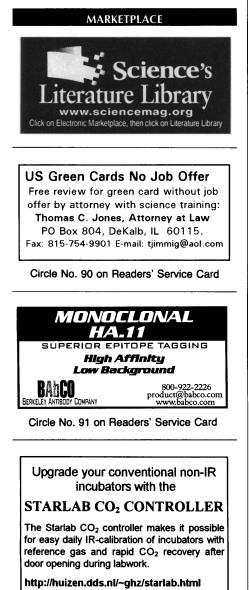
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MOLECULAR INTERACTION TECHNOLO-GIES 1998; October 19-20; Cathedral Hill Hotel, San Francisco. Organizers: S. Fields, R. Balint, J. Larrick. Sponsor: Palo Alto Institute of Molecular Medicine, 2462 Wyandotte Street, Mountain View, CA 94043. Telephone: 650-694-1420; FAX: 650-694-7717; email: paimm@netgate.net; website: www.pano.com/ paimm. See Science April 10, May 8, June 19, 1998, for speakers.



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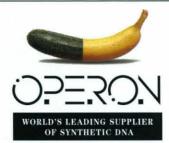


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