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- James Watson, Cold Spring Harb Lab
- Kari Stefánsson, de Code Genetics
- Gordon Cragg, NCI/NIH
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- Richard Moxon, Univ of Oxford
- Nancy Maizels, Yale Univ
- Chris Somerville. Carnegie Inst. of Wash.
- Barrie Hesp, Pfizer Inc.

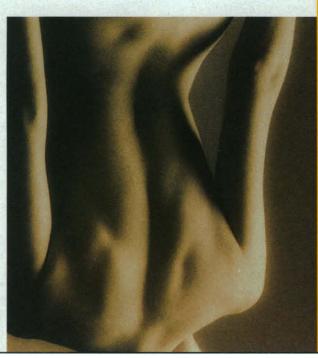
- Craig Venter, Celera Genomics Michael Blaese, Kimeragen, Inc.
 - Chris Sander, Millennium Predictive Med, Inc.
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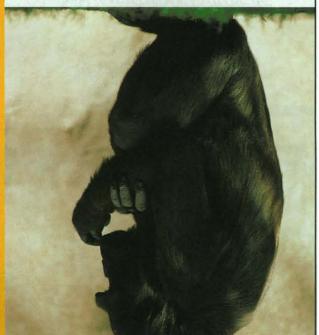


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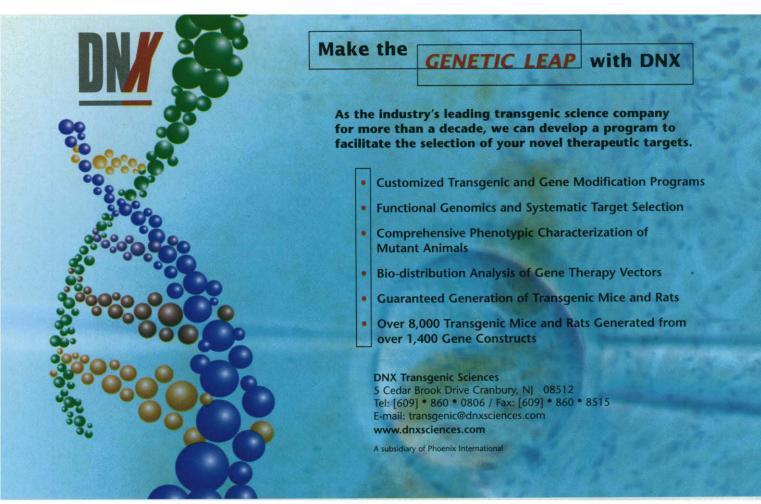
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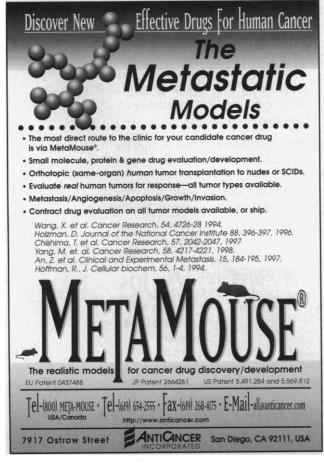
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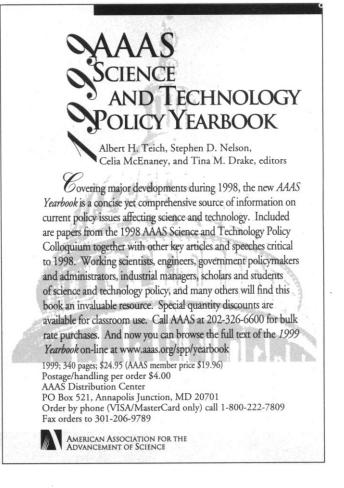
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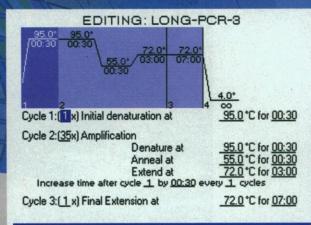
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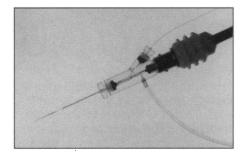
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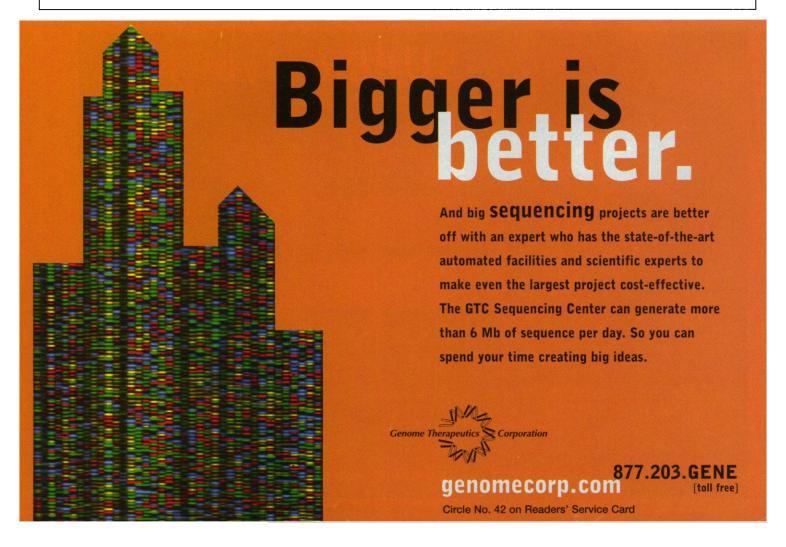
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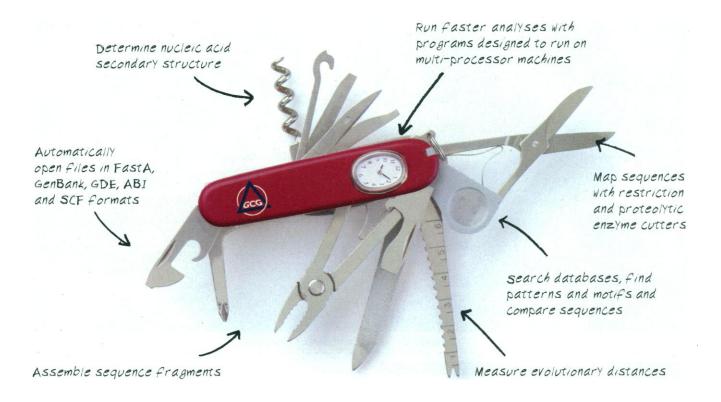
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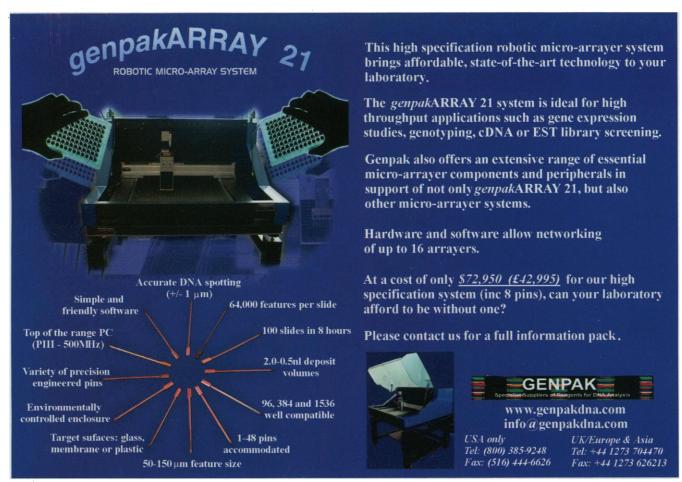
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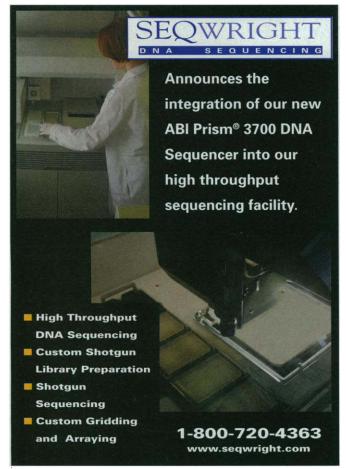




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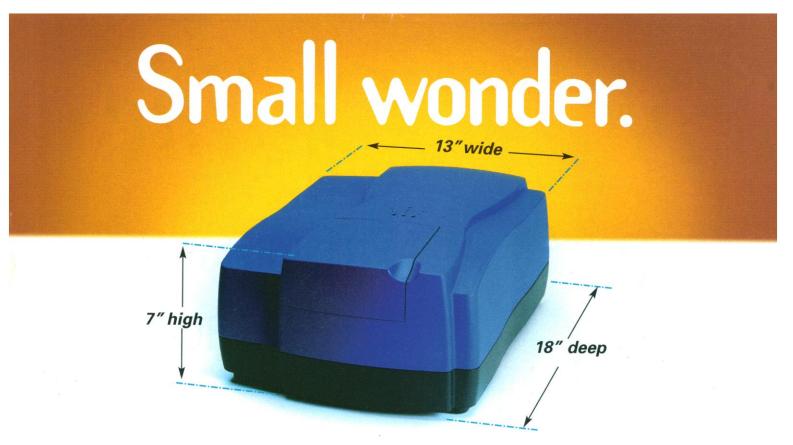
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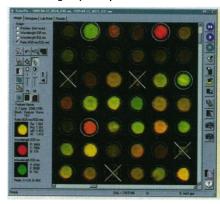


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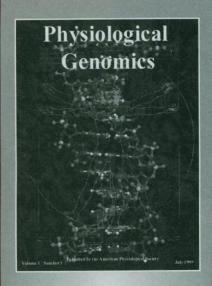
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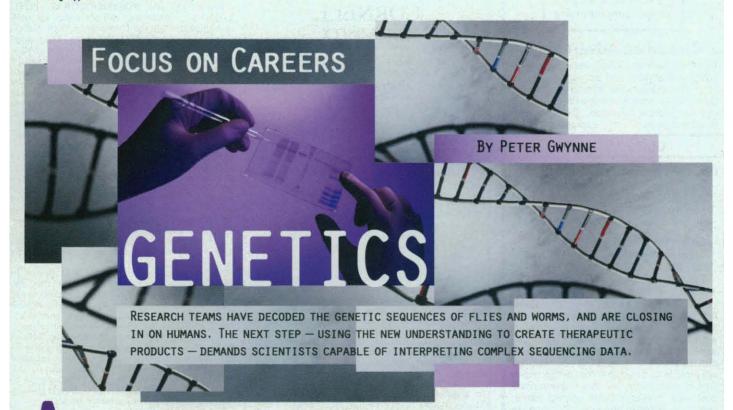
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The Digestive and Liver Diseases Section, University of Illinois at Chicago, is seeking a NIH-funded Ph.D. Investigator at the ASSOCIATE PROFES-SOR level. Individual should have experience in epithelial biology of the human gastrointestinal tract with particular interest in ion transport. Please send curriculum vitae to: Thomas J. Layden, M.D., Chief, Digestive and Liver Diseases, University of Illinois at Chicago, 840 South Wood (M/C 787), Chicago, IL 60612. The University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer.



few years ago, the idea of sequencing the genomes of entire creatures was an ambitious dream. Now, it has become an accomplished fact. Research teams have fully sequenced fruit flies and worms, and are well on the way to completing the human genome sequence. That work points the way to efficient new ways of identifying and producing new drugs, and matching them precisely to the patients who need them most.

Most major pharmaceutical companies have already set up ini-

tiatives to understand how best to apply to drug development the mass of information produced by gene sequencing. Research teams hope to identify the genes and pathways involved in multifactorial diseases. That will permit them ultimately to link diagnostics with treatments. Along the way to that achievement, scientists intend to discover how to stratify patients in clinical trials into responders and non-responders to specific drugs.

Gene sequencers have provided the raw data necessary to achieve those goals. What is missing so far is interpretation of that information. As a

result, the gene sequencing industry and the pharmaceutical companies that rely on its results are desperately seeking specialists in bioinformatics.

Here, we talk to Sugen, Inc., a biotechnology company recently acquired by pharmaceutical giant Pharmacia & Upjohn that specializes in target-driven drug discovery and development.

SOUTH SAN FRANCISCO, CALIFORNIA: "Sequencing has redefined what genetics is all about," says Greg Plowman, vice president of molecular biology at Sugen, Inc. "You still need the classical understanding and background, but the opportunities and

methods have changed." Specifically, the opportunities for improved diagnostics and treatment opened up by the successes of gene sequencing will rely on new methods of interpreting the data churned out by the sequencers. So Plowman's department, which specializes in cancer therapeutics and also studies kinases and other genes from lower organisms, is looking for individuals skilled in

bioinformatics. Because of the acquisition by Pharmacia & Upjohn, "our group will grow substantially," he says. "We're looking for several new hires in the next few months."

Plowman categorizes those individuals into three levels: scientists, programmers, and analysts. "Scientists," he says, "are usually Ph.D's in life science with expertise in pro-

gramming who have obtained specialist training in bioinformatics independently or through a software or pharmaceutical company. They are very hard people to find, and their jobs are very lucrative. Programmers sometimes come from the life sciences, but are usually trained in the computer sciences, which typically provide them with better skills in programming, creating Java visualization tools, man-





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In this position, you will prepare clinical development plans and protocols for complex projects, including the use of novel techniques for demonstrating efficacy and safety in new areas of research, as well as identify investigators, negotiate grant support, and draft letters of agreement for approval. You will also monitor conduct of clinical trials by making site visits, reviewing case report forms, and confirming that data is collected and recorded. Additional responsibilities include determining the severity of adverse drug reactions, representing clinical research on project teams-including pre-clinical discovery, and providing medical advice for licensing of candidate products, legal problems, and other medical questions.

MD with specialty training or certification and research or equivalent experience required. 3-5 years industry-based clinical research experience desired.

MEDICAL WRITERS

You will prepare integrated efficacy and safety reports for Phase II and Phase III clinical studies based on the integration of drug development objectives, medical information and statistical analyses in conjunction with the members of the clinical team. Responsibilities include preparing manuscripts for submission to peer-reviewed journals and presentations for national scientific meetings, managing medical writing activities for outsourced reports, and preparing and assisting with the preparation of regulatory documents as needed.

BS/BA in scientific discipline with two or more years in medical writing within the pharmaceutical industry or with a CRO or writing in the pharmaceutical industry within regulatory or clinical affairs departments required.

PUBLICATIONS SPECIALIST

Primary responsibilities include: developing and executing a publication plan of clinical trial results for peer-reviewed journals; managing and tracking the writing/review/submission/archiving of publications; performing medical editing; and assisting clinical team members in preparing background support for clinical development plans, slides, overheads, and lectures for investigator meetings, symposia, and conferences.

BA/BS in science with 2 or more years experience in medical writing or project management in a medical education/pharmaceutical/clinical affairs environment, experience developing manuscripts for peer-reviewed publications.

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aging relational databases, or statistical analysis. Analysts, who can have Master's degrees or Ph.D's, may be less fluent in programming or informatics, but have the ability to see the big picture. There's a real need for analysts, particularly with expertise in specific gene families, such as kinases, GPCRs, or proteases."

Plowman regards all three groups as essential. "Each one is a different breed," he says. "You can't have holes."

How does Sugen identify ability in bioinformatics? "It doesn't



just come from a CV," says Plowman. "You need people who interact and are communicative. We feel out people in telephone interviews first. References help, especially from certain labs. I am also impressed when postdocs working in the life sciences have taken formal courses in informatics at community colleges or other institutions." Overall, he continues, "candidates should show a basic level of success in their disciplines, through publications and references. And at the interview, they should demonstrate creative abilities that enable them to bridge disciplines in a way that others can't."

DRIVE FOR RESULTS

In Europe, as in the United States, the genomics revolution has transformed drug discovery and development. Pharmas and biotechnology companies that have overseen or funded gene sequencing efforts now face the challenge of turning the ever-increasing accumulation of genetic sequences into commercially useful products. They must do so with maximum efficiency, by avoiding as many as possible the bottlenecks that can delay the transition from research laboratory to market.

In particular, firms need to find ways to identify the very few sequences that can serve as the bases of future drugs and diagnostic products. That translates into a strong need for "quality filters," which pinpoint effective drug targets with maximum efficiency.

We discuss issues of efficiency and their effect on life scientists' employment with French company ExonHit Therapeutics. This two-year-old company has developed proprietary gene profiling technology that helps to create gene-based diagnostic and therapeutic products.

PARIS, FRANCE: "The biotechnology business has been, and will continue to be, the leader in scientific innovations," says Bruno Tocqué, CEO of ExonHit Therapeutics. "But the industry has realized that it's time to stop promising and deliver results. We believe that novel technologies involved in genomics are about to impact the market and help millions of people."

ExonHit itself is responsible for one of those technologies. Called DATAS, for differential analysis of transcripts with alternative splicing, it analyzes qualitative differences between expressed genes. According to the company, that enables the characterization of novel key genome information that other genomic technologies cannot detect.

The company will launch its first product shortly. Called SafeHit, it provides a technology that facilitates the selection of leads from compounds found via high-throughput screening, facilitates products' licensing-in, or rejuvenates a series of "me-too" compounds. The next

products are macroarrays for detection of metastatic and chemother-apy-resistant head and neck disorders. The company focuses on career and neurodegenerative disorders. It will exist in three different platforms. It intends its third platform for development to play a role in pharmacogenomics, permitting a drug-responsive set of sequenced genes to be set for polymorphism in as many patients as the investigator chooses. In addition, the company is performing R&D on a fourth platform. Devoted to lead generation, it will offer what ExonHit calls "development-ready" compounds. "We'll make the product available to several companies on non-exclusive licenses," says Tocqué.

To support its growth, ExonHit has brought in several life scientists. "We've recruited 23 scientists in the past year," says Tocqué. "Most

have extensive experience in molecular biology and cloning strategies. They came to us with Ph.D's and postdoctoral experience in biochemistry, microbiology, and molecular science." In future months, he adds, the company will seek scientists with backgrounds in pharmacology.

Tocqué seeks his recruits far afield. "We have five nationalities — Canadian, Dutch, British, German, and French," he

explains. "All our Ph.D's, and even those with Master's degrees, have experience abroad. It's essential to be able to work in a multicultural environment." A facility with spoken

French is not essential however. "The language of the laboratory is molecular biology!" declares Tocqué. Indeed, some of the recent recruits spoke no French at all when they joined the company.

What qualities does ExonHit require? "We're seeking opinionated scientists who want to take charge of their careers and their lives," Tocqué says. "We give them a lot of responsibility. If they accept such a challenge, it's a good sign that they want to take charge." A feel for commerce will also help. "Our growth will depend on their ability to deliver revenues," Tocqué concludes.

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Tocaué

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Scientist – Expression Databases

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and data analysis and standard assay development optimization methods to new processes, as well as develop robust algorithms to calibrate and normalize expression data. A PhD or equivalent in life or physical sciences and 1-5 years experience is required. REF: TB326SA

Scientist - Genotyping

Responsible for assisting in the development of a genotyping platform as well as developing sample preparation methods from genomic DNA samples, you will optimize prototype genotyping assays for multiplex SNP detection and evaluate SNP detection technology. Additional responsibilities will include organizing and conducting research directed at developing a genotyping platform capable of simultaneously detecting hundreds to thousands of SNPs. A PhD in Biology, Biochemistry or Molecular Biology is preferred. REF: TT216SA

Senior Scientist - Assay Development

You will characterize and improve GEM technology, assist in refining and improving assay formats, communicate improvements to technical support and provide supervision to a portion of the technical staff. In addition, you will refine and optimize assay formats, validate improvements, determine QC parameters and protocols, and interface with operations and manufacturing groups to assure transfer of all processes and controls. Requires a PhD or equivalent in Biology, Biochemistry or Molecular Biology and 5+ years experience in DNA probe assay development or a directly related field. REF: SE2269SA

Research Associate

We are looking for a creative, enthusiastic Research Associate to join our growing team. You will work with micro-array fabrication and fluorescence detection to help study gene expression. In addition to a degree or equivalent in Molecular Biology, Biology or equivalent life science, you must possess skills in a variety of molecular biology methods, such as plasmid purification, DNA amplification, RNA isolation, and reverse transcription of RNA and nucleic acid hybridization. REF: SE2535SA

Scientific Programmer

You will create and maintain Perl programs for processing sequence data for IP. You will also utilize experience with scientific data processing and bioinformatics tools to design, create and document error-free and maintainable code. Requires a BS/MS or equivalent in Computer Science with working knowledge in UNIX, Perl, and/or C programming, HTML and web design. Candidate must possess excellent organizational and communications skills. Experience with sequence analysis tools, including gene finding, and motif analysis tools desired. Experience with Oracle and SQL is a plus. REF: TY3311AR

Bioinformatics Scientist

You will focus on comparative genomics. Goals include identification of novel gene families and new classes of drug targets. You will analyze sequence data from model organisms for comparison to the human genome. A PhD or equivalent in Molecular Biology with experience in bioinformatics is required, as is experience with sequence analysis programs and bioinformatics tools. You must have a strong biology background with computer science knowledge (UNIX, Perl and/or C programming) and excellent communication and organizational skills. REF: TY3184JAY

Scientist - Database Discovery

As a member of the Database Discovery group, you will datamine for novel targets and therapeutic molecules. You will be responsible for the identification of pharmaceutically-relevant sequences for further development and characterization. A PhD or equivalent in Biology with expertise in a relevant gene family is required. Must have experience with sequence analysis programs and familiarity with UNIX, Perl and/or Shell programming. Good communication and organizational skill are required. REF: TY2761JA

Computational Biologist - Database Discovery

Candidate will coordinate dataflow for full length gene discovery. Responsibilities will include coordination of operations with Nucleotide discovery and closure, data management of shotgun and extension cloning, and bioinformatic analysis of full length gene nominations for customers and internal groups. Requires a BA/BS or equivalent in Biology with a strong aptitude for computer science, experience with sequence analysis, search tools and UNIX, as well as good organizational and communication skills. Familiarity with Perl programming is a plus. REF: TY2761JA

Competitive Intelligence

Perform CI gathering and analysis to support our strategic and tactical direction and decision making. This position requires a BA/BS or equivalent in Life Sciences, Computer Science or Business. One to three years of competitive intelligence experience is also needed. REF: 3093

Trade Show/Events Manager

We will rely on you to coordinate and manage various domestic and international events for our facilities in Palo Alto and Fremont, CA, St. Louis, MO and Cambridge, UK. You must have 7+ years coordinating national/international events and familiarity with the biotechnology/genomics industry. REF: 2139

Vice President of Corporate Communications

Responsible for fostering relationships with media and developing, implementing and coordinating internal and external public relations strategies. Requires 10 years corporate communications experience. Biotechnology experience is preferred. REF: 2785

Director - Client Business

You will be responsible for all sales and account management activities for large pharmaceutical clients and developing new opportunities within an assigned territory. Your BS or equivalent in Life Sciences, Bioinformatics or Engineering must be supported by 12 years large-account sales experience. Knowledge of the pharmaceutical/biotechnology industry is also required. REF: 2871

Director - Investor Relations

You will be responsible for managing our Investor Relations Group. This will involve establishing and implementing a strategic plan for investors and building strong relationships with buy-and-sell analysts, institutional investors and brokers. Requires 7+ years investor relations experience (healthcare or biotechnology experience a plus). REF: FL3246LB

Product Marketing Director

Utilize your proven leadership and product positioning skills to lead a team responsible for all product lines. You must have 7-10 years marketing management experience, preferably in information technology or the biotechnology/pharmaceutical industries. An advanced degree is preferred. REF: 2878

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The University of Tennessee, Knoxville-Oak Ridge National Laboratory

Genome Science and Technology Graduate Program

The new Genome Science and Technology (GST) Graduate Program is designed to focus on developments in the biological and computational sciences that stem from genome sequencing efforts. The knowledge of complete genomes is revolutionizing the biological sciences, leading to new discoveries in comparative genomics, the health sciences, and environmental biology. GST students will be trained in emerging areas of genomics, structural biology, proteomics, computational biology/bioinformatics, and bioanalytical technologies.

The GST program takes advantage of the faculty, facilities, and research programs at The University of Tennessee, Knoxville and the Oak Ridge National Laboratory. This novel program combines an academic environment with the team-oriented approach to large research initiatives at the national laboratory. Faculty members at the two campuses have expertise in cutting-edge research utilizing mammalian genetics and mutagenesis, spectroscopy, high field NMR, x-ray crystallography, computational modeling, mass spectrometry, neutron scattering, and microarray technology. Various biological model systems are investigated, featuring the Oak Ridge National Laboratory Mouse Genetics Research Facility, one of the world's largest resources for studies in mouse genetics and mutagenesis for functional genomics.

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The Canadian Science Centre for Human and Animal Health, located in Winnipeg, Manitoba, officially opened in May, 1999. This \$180 million centre, including a state-of-the-art, Level 4 containment facility, is the only facility of its kind in the world that houses both human and animal laboratories under one roof. The partners in this world-class facility are Health Canada's Laboratory Centre for Disease Control's Bureau of Microbiology and the Canadian Food Inspection Agency's National Centre for Foreign Animal Diseases. The Centre is located within minutes of the University of Manitoba's Faculty of Medicine, the Health Sciences Centre (the province's largest tertiary care and teaching hospital) and the Cadham Provincial Public Health Laboratory. To provide leadership and direction for this world-class facility, Health Canada is seeking a . . .

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Van Andel Research Institute





The Organizations

DeVos Children's Hospital (DVCH)

DVCH provides comprehensive primary through tertiary care services for children from 72 Michigan counties and from 42 states and operates 168 inpatient beds, with 7,000 admissions and more than 70,000 outpatient visits per year. As part of the Spectrum Health system and the only full-service

children's hospital in West Michigan, DeVos Children's Hospital offers nearly 50 sub-specialty care services, including:

- · A regional Neonatal Center
- · A 16-bed pediatric critical care unit
- · An open heart surgical program
- · An ECMO program
- Nearly all pediatric medical and surgical specialties

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Van Andel Research Institute is a new, independent research organization dedicated to improving human health through enhancing and expanding the frontiers of medical science. Conveniently located adjacent to DeVos Children's Hospital and Spectrum Health's downtown campus, VARI will fulfill its mission of becoming one of the world's pre-eminent private medical research institutes by building on the extraordinary discoveries in molecular biology and genetics and by recruiting world-class investigators to an exceptionally well designed facility with a substantial Institute commitment to funding.

The Joint Appointment

Primary Responsibilities and Duties

The successful candidate will be Research Director of DeVos Children's Hospital (with clinical opportunities and a clinical research program in pediatric oncology) and Principal Investigator at Van Andel Research Institute.

Responsibilities

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- Develop a world-class clinical research program at DVCH by creating an environment which:
 - · advances clinical research in pediatrics
 - · fosters clinical trials
 - integrates into the global and West Michigan medical and scientific communities
- Be responsible for the development of an ongoing program of education and outreach activities by organizing and hosting:
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 - · national/international research symposia
- Cultivate collaborations in clinical and basic research and enhance translational research between DVCH and VARI.
- Conduct both clinical research in pediatric oncology and investigator-initiated research as Principal Investigator at VARI.
- Build a pre-eminent pediatric clinical research program at DVCH through mentoring colleagues in their own clinical research endeavors. Duties include:
 - · recruitment of appropriate personnel
 - · development of the necessary DVCH programs
 - promotion of collaborative efforts between VARI and DVCH through training programs and fellowships
- Continue your own clinical research agenda at DVCH and participate in the expansion and development of world-class research programs of VARI.

Qualifications

MD/PhD or MD

The successful candidate will be an accomplished researcher with a history of peer reviewed publications and extramural funding. You must have a record of innovative basic and pediatric oncology clinical research as well as leadership experience in mentoring colleagues and championing their efforts.

Reporting Relationships

Approximately 50% time will be dedicated to the role of Research Director at DVCH, reporting to the Medical Director.

Approximately 50% time will be dedicated to the role of Principal Investigator at VARI, reporting to the Director of Research.

Resources

Resource allocation in support of salary, research space and benefits will be between DVCH and VARI.

DeVos Children's Hospital and Van Andel Research Institute are equal opportunity employers. All qualified and interested candidates should send their curriculum vitae and letter of interest by April 1, 2000 to:

> Dr. George Vande Woude c/o The Search Committee Van Andel Research Institute 201 Monroe Avenue NE Suite 400 Grand Rapids MI 49503

Members of the Search Committee:

Dr. James Fahner,

DeVos Children's Hospital

Dr. Michael Kastan,

St. Jude Children's Research Hospital

Dr. Sharon Murphy,

Children's Memorial Hospital, Northwestern University

Dr. Philip Pizzo.

Children's Hospital, Harvard University

Dr. Anthony Richtsmeier, DeVos Children's Hospital

Dr. Luis Tomatis,

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Applicants should have (or be about to receive) a doctoral degree in engineering, or the biological or physical sciences with a clear relationship to bioengineering. The academic and research programs seeking faculty are tissue bioengineering with cell and molecular biology emphases, and bioinformatics with functional genomics and computational biology emphases. The positions include opportunities for involvement in relevant programs at UCSF and the Lawrence Berkeley National Laboratory (LBNL). Principal requirements for these positions are demonstrated excellence in research, and potential for excellence in teaching and leadership. Successful applicants will be expected to establish a quality research program and to teach both graduate and undergraduate courses in their general area of bioengineering specialty.

Applicants should send, by November 30, 1999, a resume, a selected group of publication reprints (5 or less), a short description of past research, a two- to three-page statement of future research plans and interests, and the names of three references to the address below. APPLICANTS SHOULD REQUEST THEIR REFERENCES FORWARD LETTERS OF REFERENCE DIRECTLY TO THE SAME ADDRESS. These letters will NOT be requested directly by the department.

Send materials to: Thomas F. Budinger, M.D., Ph.D., Chair, Department of Bioengineering, 459 Evans Hall #1762, University of California, Berkeley, CA 94720-1762. Applications postmarked after the deadline will not be considered. The University of California is an Equal Opportunity, Affirmative Action Employer.



TEXAS A&M UNIVERSITY CARDIOVASCULAR RESEARCH INSTITUTE

Faculty Positions in Cell Signaling and Regulatory Biology.

The Division of Molecular Cardiology at the College of Medicine, Texas A&M University System Health Science Center, has multiple tenure track faculty positions in the newly established Cardiovascular Research Institute. Appointments may be at the Assistant Professor level for candidates completing a postdoctoral fellowship or at the Associate Professor level for candidates with independent, funded programs. Applicants with a Ph.D. and/or M.D., with research experience in molecular and cellular biology, developmental biology, and/or human or mouse genetics will be given preference, though a broad spectrum of research interests will be considered. Attractive startup packages and competitive salaries and benefits will be provided. Applicants should submit a curriculum vitae, description of research accomplishments and future plan and at least three letters of reference to:

Kenneth M. Baker, M.D., Molecular Cardiology Search Committee, College of Medicine, Texas A&M University System Health Science Center, 1901 South First Street, Building 162, Temple, Texas 76504.

Postdoctoral Positions in Cell Signaling and Gene Expression.

The Division of Molecular Cardiology at the College of Medicine, Texas A&M University System Health Science Center, has multiple postdoctoral positions to work in the areas of gene expression and cellular signaling, in the newly established Cardiovascular Research Institute. The position will provide the opportunity to learn appropriate techniques and other skills, needed to develop an independent research career. Applicants with a Ph.D. and/or M.D., with research experience in molecular and cellular biology, developmental biology, and/or human or mouse genetics will be given preference, though a broad spectrum of research interests will be considered. Competitive salaries and benefits will be provided. Applicants should submit a curriculum vitae, description of research interests, and three letters of reference to:

Kenneth M. Baker, M.D., Molecular Cardiology Search Committee, College of Medicine, Texas A&M University System Health Science Center, 1901 South First Street, Building 162, Temple, Texas 76504.

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

Tenure Track Faculty Positions

As part of our ongoing expansion, the Department of Molecular Genetics, Biochemistry and Microbiology invites applications for tenure track positions at the Assistant/ Associate Professor. We are especially interested in candidates with the capability to utilize new technologies in Genomics, Proteomics or Bioinformatics, applied to **BACTERIAL PATHOGENESIS or VIROLOGY and other** areas which complement our existing strengths in STRUC-TURAL BIOLOGY (X-RAY CRYSTALLOGRAPHY); MOLECULAR AND CELLULAR IMMUNOLOGY; TRANSCRIPTION: DEVELOPMENTAL AND CANCER **BIOLOGY: HUMAN GENETICS: and ION TRANSPORT.** The College is completing a new state-of-the-art BL 3 containment facility for work with pathogenic organisms and we support an active graduate program and maintain core facilities for production of transgenic and knockout mice and DNA synthesis, sequencing and genotyping and mouse physiology and pathology services are available in other departments. The Barrett Cancer Center and the Cardiovascular Center provide a breadth of research opportunities unparalleled at most research institutions. Our program can be visited through our home page http:// ucmg65.med. uc.edu/. Applicants should submit a curriculum vitae, brief description of research program, and the names of three qualified references to: Jerry B. Lingrel, Ph.D., Professor and Chair, Department of Molecular Genetics, Biochemistry and Microbiology, University of Cincinnati College of Medicine, 231 Bethesda Avenue, Cincinnati, Ohio 45267-0524.

Affirmative Action/Equal Opportunity Employer



Genetics Institute, Inc.,

a unit of Wyeth-Ayerst -

the pharmaceutical division

of American Home

Products Corporation - was

founded in December 1980

with a promising initial

concept: assemble a first

class team of scientists and

business professionals to

develop and commercialize

protein-based therapeutic

products through genetic

engineering.

Throughout our history,

we have demonstrated our

commitment to providing

our dedicated professionals

with everything it takes to

meet the challenges that

make our environment

unique.

Genetics Institute is

uniquely positioned to

continue its success and growth well into the next

millennium. You'll find it's

a great organization for

building a rewarding

career.

GENOMICS AND BIOINFORMATICS

Genetics Institute and Wyeth-Ayerst Research organizations have created a new department merging two key areas, Genomics and Bioinformatics, forming an integrated scientific strategy and technology platform for drug discovery. The department has the following core science and technology groups:

Bioinformatics

Genomic technologies generate a flood of experimental data that can only be stored, accessed, manipulated and analyzed by computational machines. Within the Genomics department and the entire Drug Discovery division, Bioinformatics has a central role linking diverse technologies and sciences such as genomic and cDNA sequence, classical genetics, gene expression profiling to cellular enzymatic and metabolic pathways and protein expression.

Bioinformatics is comprised of groups in DNA sequence analysis, protein structure modeling, database assembly, curation and mining, DNA sequence analysis pipelines, gene expression profiling analytical tools development and application, software development and research computing hardware design. In addition, bioinformatics provides service and support for Wyeth-Ayerst scientists in training, collaborating and troubleshooting DNA sequence analysis and gene expression profiling tools.

Molecular Genetics

Housed in state-of-the-art animal facilities for transgenic animal production, the Molecular Genetics group is engaged in the generation of regulated heterologous gene expression in mice, rats and rabbits and standard ES cell gene targeting technologies for gene knock-outs and knock-ins.

Gene Expression Profiling Sciences

Borne from a collaboration between Affymetrix and Genetics Institute, which developed oligonucleotide microarrays for gene expression monitoring, the group is focused on the development and application of both spotted DNA and in situ synthesized oligonucleotide arrays for gene expression monitoring and other genomics related applications.

Molecular Medicine

This group applies genomic technologies including oligonucleotide and DNA microarrays toward revealing the molecular basis of drug action in human clinical trials.

Molecular Biology and Heterologous Gene Expression

This group applies a range of technologies to projects; from the isolation of novel gene family members by degenerative PCR, sequence analysis and mining, to functional biological screens, small scale heterologous expression of candidate protein, purification and target bioassay design and construction.

High Throughput DNA Sequencing

Is engaged in developing and applying state-of-the-art industrial scale robotics and automated fluid handling to DNA plasmid template production, sequencing reactions and capillary sequencers to the analysis of ESTs and genomic sequence from random and focused genetic screens.

Core Technical Services

Is responsible for supplying synthesized DNA oligonucleotides, peptides and finish quality DNA sequencing for research groups within all of Genetics Institute and Wyeth-Ayerst Research.

Large Scale Molecular Biology

Focuses on the development and application of genomic scale technologies to gene, sequence and function discovery.

These groups constitute our core technical competencies and are engaged in drug discovery extramurally in direct collaboration with Wyeth-Ayerst Research therapeutic areas and intramurally in matrix managed genomics based drug discovery projects. As we continue to build our scientific capabilities in our Cambridge and Andover, MA; Pearl River, NY; Princeton, NJ; and Radnor, PA facilities, we seek talented scientists with experience in one or more of the above areas. If you are interested in expanding your career by joining an organization committed to the development of a world class Genomics and Bioinformatics organization, we invite you to take a closer look.

We have the following immediate opportunities in our Cambridge, Massachusetts facility.

◆ Large Scale Molecular Biology

Project Leader/Scientific Staff

Project leader role for a matrix organized Genomics department gene and function discovery project is available. Applicants must possess a recent Ph.D. or equivalent with 3 plus years of postdoctoral or industrial experience with training in any of the following: molecular or classical genetics, molecular biology, cell biology and interest in genomics technologies, retroviral gene delivery systems and computational biology. The candidate should have had a demonstrated scientific research record, extensive bench level experimental skills, excellent communication skills and ability to troubleshoot novel strategies and technologies. Lab management experience and leadership potential are essential.

Job Code: SCI10-JFR-1; Emall: Recruiter013@genetics.com

♦ DNA Sequencing

Group Leader/Scientific Staff

The qualified candidate will be a highly motivated individual to lead an existing DNA sequencing group that provides support for Discovery Research activities at our Cambridge, Massachusetts research facility. Minimum requirements include a BS degree with several years of direct experience in DNA sequencing and/or Molecular Biology, and extensive knowledge of current automated DNA sequencing methodologies on ABD 373/377 and/or capillary electrophoresis units and advanced degree is a plus. Demonstrated supervisory experience, especially in a DNA sequencing lab, and proficiency with Sequencher software and database structures preferred. Job Code: SCI10-JFR-2; Email: Recruiter013@genetics.com

Please forward cover letter and resume, Including Job Code, to: Genetics Institute, 87 CambridgePark Drive, Cambridge, MA 02140. Or Email to appropriate address, Including Job code in subject field. NO FAXES PLEASE.

Scannable copies should be forwarded on plain white bond paper, using standard types and fonts, with no bold or italic print.

Genetics institute offers competitive salaries and benefits, including comprehensive health care, dental and life insurance, three weeks paid vacation, 401(k), pension plan, relocation assistance, and dependent care subsidy.

Genetics Institute is proud to be an equal opportunity employer.

For more information on exciting job opportunities at Genetics institute, visit our website at: www.genetics.com

GENETICS INSTITUTE

Harnessing the Body's Power to Heal ™





PROFESSOR AND HEAD, DEPARTMENT OF ENTOMOLOGY, COLLEGE OF AGRICULTURAL SCIENCES

The individual filling this position is the departmental administrative officer and program leader, and reports directly to the Dean of the College of Agricultural Sciences. Duties involve: (1) academic program leadership in resident education, research, cooperative extension and outreach; (2) administrative responsibility for academic affairs, departmental personnel, financial matters, and physical facilities; and (3) leadership in providing effective liaison and confination of departmental relations within the University, and with students, the agricultural and urban community, entomology and related professions, government, industry, and other citizens of Pennsylvania.

All candidates must have a Ph.D. in Entomology, or a closely related field, plus the following attributes: (1) a significant period of professional and/or academic experience with a strong record of scholarly activities, including a record of professional accomplishments to qualify as a tenured professor in the Department; (2) understanding of the land-grant university system; (3) experience with or in-depth knowledge of university teaching, research, and cooperative extension/outreach functions; and (4) strong evidence of potential for administrative leadership and ability to work effectively with others as indicated above.

The Department of Entomology has 18 faculty, 10 adjunct/courtesy faculty, 9 post-docs, 36 graduate students, and 26 supporting staff. The instruction program includes a graduate curricula in entomology leading to the M.S., M.Agr., and Ph.D. degrees. In addition, the department participates in the new Agroecosystems Sciences undergraduate major. Active fields of study in the department include insect physiology/biochemistry, biodiversity/systematics/phylogeny, precision agriculture, integrated pest management, insect/plant interactions, chemical ecology, pesticide residue analysis and resistance management, and biotechnology. Faculty are affiliated in intercollege programs in genetics, ecology, and plant physiology. Strong ties exist with national/international basic and applied research programs and state/national cooperative extension programs. A complete description of departmental programs and facilities is available at the Web site http://www.ento.psu.edu, including an expanded Position Vacancy Announcement.

Availability of the position is July 1, 2000. Salary is commensurate with qualifications and experience. An excellent benefits package is provided. Applications will be accepted until December 31, 1999, or until the position is filled. Nominations and inquiries are invited. Interested persons meeting the qualifications for this position are invited to submit: (1) a complete resume with documentation of teaching, research, cooperative extension/outreach, administrative, and leadership experience; (2) a statement that reflects the candidate's personal philosophy of administration and leadership; and (3) the names, addresses, telephone numbers, and e-mail addresses of five individuals who may be contacted as professional references. Submit applications and nominations to:

Dr. Paul R. Heller
Chair, Advisory Search Committee
Department of Entomology
The Pennsylvania State University
512 Agricultural Sciences and Industries Building, Box SCI
University Park, PA 16802
(814) 865-3008
E-mail: prh@psu.edu

Penn State is committed to affirmative action, equal opportunity and the diversity of its workforce.

IRCM

Institut de recherches cliniques de Montréal

Laboratory Director Immunology

The Institut de recherches cliniques de Montréal (IRCM) invites applications for the Directorship of a Laboratory in the field of Immunology Expertise is sought in the areas of T cell activation and development, antigen processing and presentation, mucosal immunity or homeostasis of the immune response. Collaboration with other IRCM laboratories involved in immunology or cancer research will be valued for the better fostering of a multidisciplinary approach to understanding human disease.

Qualifications must include an M.D. or Ph.D. degree with significant postdoctoral experience. Scientists with an established research program will be favored and are strongly encouraged to apply.

The IRCM is an independent biomedical research centre affiliated with the Université de Montréal. Along with state-of-the-art resources, the IRCM possesses a large animal facility as well as transgenesis, cytofluorometry, and histology services. Located in the centre of Montreal, the IRCM offers a vibrant scientific environment and is an equal opportunity employer.

Please send your application including a curriculum vitæ, the names and addresses of three references, and an outline of your research program to:

Academic Affairs Department
Institut de recherches cliniques de Montréal
110, avenue des Pins Ouest
Montréal (Québec) H2W 1R7
Fax: (514) 987-5803

For more information on the IRCM, visit our website at www.ircm.qc.ca

PRIZES



POTAMKIN PRIZE FOR RESEARCH IN PICK'S, ALZHEIMER'S AND RELATED DISEASES

A prize of \$100,000 will be awarded by the American Academy of Neurology to a person(s) in recognition of major contributions to the understanding of the causes and the prevention, treatment, and ultimately the cure for Pick's, Alzheimer's and related diseases.

Candidates may be nominated on a world-wide basis from any of the biological disciplines including bio-chemistry, molecular biology, molecular genetics, pharmacology, immunology, physiology, cell biology, neuropathology or epidemiology.

A nomination application, nominating letter citing the scientific accomplishments of the candidate in detail, two supporting nominating letters, a curriculum vitae, and up to six (6) selected reprints in twelve (12) complete sets are required.

The deadline for receipt of materials is **December 1, 1999**. No nomination will be considered unless it is complete. The standardee(s) must be present at the AAN Presidential Plenary Session on Tuesday, May 2, 2000 held during the AAN Annual Meeting in San Diego, California.

REQUEST APPLICATION AND SUBMIT NOMINATION TO:

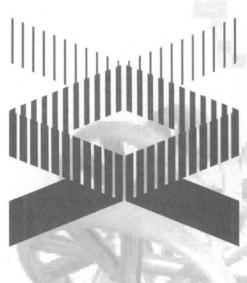
American Academy of Neurology

Potamkin Prize for Research In Pick's, Alzheimer's and Related Diseases 1080 Montreal Avenue St. Paul, MN 55116 Phone: 800-879-1960

The Potamkin Prize is funded through the Potamkin Foundation.

Tenure-Track Investigator Positions in the National Human Genome Research Institute

The Intramural Research Program of the National Human Genome Research Institute (NHGRI) at the National Institutes of Health (NIH) in Bethesda, Maryland, announces an unparalleled opportunity to recruit a series of new tenure-track investigators. Five positions in four Branches are available for tenure-track scientists in any of the following broad areas of research:



- · Bench-to-bedside investigation of heritable disease
- · Bioinformatics
- · Developmental and regulatory pathways in the immune system
- Disease gene discovery among special and minority populations
- Genome analysis
- · Genomic approaches to development
- Genetic analysis of complex biological systems in model organisms
- · Molecular genetics of human disease
- Proteomics

Successful applicants will join one or more of the following Branches:

- · Genetic Diseases Research Branch (Robert Nussbaum, M.D., Chief)
- Genome Technology Branch (Eric Green, M.D., Ph.D., Chief)
- · Genetics and Molecular Biology Branch (Jennifer Puck, M.D., Chief)
- Cancer Genetics Branch (Jeffrey Trent, Ph.D., Chief)

We seek to recruit outstanding scientists who are ready to pursue independent and multidisciplinary research programs and can take advantage of interactions with the highly collegial group of scientists within the NHGRI, the NIH Clinical Center, and the NIH campus as a whole. Investigators will be given space and resources needed to pursue a vigorous research program and will have access to core facilities that provide support for transgenesis and gene-targeting in mice, DNA microarray studies, FACS, confocal microscopy, computational genomics, and large-scale DNA sequencing. Extensive opportunities for patient-oriented research are also available.

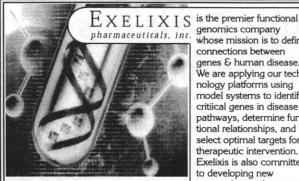
Candidates must have a Ph.D. and/or M.D. or V.M.D. as well as comprehensive, advanced training and accomplishment in one of the targeted areas listed. Competitive salary and benefit packages are available. To initiate the application process, please send your curriculum vitae and an outline of your future research plans. Your application will not be considered complete until we also receive three letters of reference.

All materials should be sent to:

NHGRI Joint Search Committee c/o Ms. Dana Jordan NHGRI/NIH 49 Convent Drive, MSC 4431 Building 49, Room 2C72 Bethesda, MD 20892 Closing Date: December 1, 1999
NIH is an equal opportunity employer



For more information, see: http://www.nhgri.nih.gov/Intramural_research



Research Scientist, Manager DNA Sequencing Lab

You will supervise the daily operations of our high throughput sequencing lab while participating in all aspects of the

high throughput sequencing process. Requires MS /PhD with 2-4 years of demonstrated supervisory experience in a high volume lab. Experience with automated DNA sequencers is preferred. Familiarity with all aspects of DNA sequence analysis, automation, and troubleshooting for large-scale sequencing projects a plus. (#SCI99-104a)

genomics company

whose mission is to define connections between genes & human disease. We are applying our tech-

nology platforms using model systems to identify

critical genes in disease

tional relationships, and

select optimal targets for

therapeutic intervention.

to developing new

of agricultural pest

positions available:

the following research

Exelixis is also committed

approaches to the control

species. We currently have

pathways, determine func-

Research Scientist,

DNA Sequencing Technology Development

You will be responsible for all aspects of technology development related to the high throughput sequencing process. Requires a MS/PhD with 2-4 years of prior molecular biology experience. Experience with automated DNA sequencers is preferred. Familiarity with all aspects of DNA sequence analysis, automation, and troubleshooting for large-scale sequencing projects a plus.

Assistant/Associate Research Scientist, Drosophila Genetics

You will use Drosophila genetics and molecular biology to characterize therapeutically important biochemical pathways. Requires a BA/BS, MA/MS or recent PhD with 2+ years experience in the genetic manipulation of Drosophila and a thorough understanding of genetic principals. Experience with basic molecular biology techniques, microinjection, polytene chromosome analysis, or immunohistochemistry is desirable. (#SCI99-101/102)

Research Scientist,

C. elegans Genetics

You will join our C. elegans group to study human disease-related signal transduction pathways. Requires a PhD, or equivalent, and an in-depth knowledge of *C. elegans*. Excellent communication skills and a desire to work in a group atmosphere are also required. (#SCI99-99)

Associate Research Scientist, C.elegans Genetics

You will utilize C.elegans genetics to identify the molecular targets for human pharmaceuitcal or pesticide development. The ideal candidate will have broad biological interests and use a variety of techniques, such as molecular biology, genetics and microscopy. Requires a BS/MS with prior experience in a research lab required. Preference will be given to applicants with molecular biology and/or genetics experience. Excellent communication skills and a desire to work in a group atomosphere are also required. Experience using the model organism C. elegans is desirable, but not necessary. (#SCI99-90)

We offer an excellent compensation and benefits package including 401(k), stock options and tuition reimbursement. Send your resume (w/ Job #) and salary history to; fax: (650) 825-4226; or email: careers@exelixis.com. PRINCIPALS ONLY PLEASE. EOE



www.exelixis .com =

INNOVATING AT THE SPEED OF LIGHT

Ground Floor R&D Opportunities

The ability to create new science and new businesses has been a hallmark of innovation management at Corning for decades. Today's revolution in life science research is creating new opportunities for drug discovery and testing technologies. These technologies build on Corning strengths in polymers and surface chemistry allowing us to apply new developments in molecular biology to produce a growing range of tools for genomics, combinatorial chemistry and highthroughput screening.

Today, Corning is a leading producer of advanced microplates to support the high-speed automated testing of potential drug candidates. An extensive stream of new products targets additional DNA analysis and drug discovery markets expected to grow dramatically by 2005. For example, Corning's new CMT-GAPS coated slides are just the first of many innovations to come from Corning Microarray Technology, an innovative new family of advanced research tools.

If you enjoy the challenge of product development research and the collegial atmosphere of a scientific discovery environment, we invite

Applications Support Scientists

(Job Code: AD/SCIENCE/993328)

We have several opportunities for individuals who have strong customer relations skills and experience involving customer training, needs assessment and sales/marketing. These positions will support the product development, sales and marketing groups in Corning Microarray Technology. 20-50% travel is involved

- Ph.D. in Molecular Biology or equivalent experience
- · Experience in RNA, cDNA desired
- · Experience in microarrays preferred

Molecular Biologists

(Job Code: AD/SCIENCE/980598)

- RNA, gene expression, cDNA background essential
- · Ph.D. in Molecular Biology, Genetics or Cell Biology
- · Statistical analysis experience highly desired
- · Post-doctoral experience desirable
- · Ability to work across chemistry, materials science and molecular biology disciplines required

Biochemists

(Job Code: AD/SCIENCE/993503)

- · Ph.D. Biochemistry with strong Chemistry and Biology
- · Experience in biochemistry, protein chemistry preferred
- · Array experience a plus
- · Ability to work across chemistry, materials science and molecular biology disciplines required

Corning offers a rich infrastructure of world-class materials research, development and manufacturing expertise, enabling wide-ranging support for innovative approaches to product development. Projects generally are customer driven and are for near-term commercial application. Location is Corning, NY. Some travel will be required.

We invite you to learn more about us at www.corning.com. All resumes must reference the associated Position Title and #, and should be submitted in MS WORD format via e-mail to: corning@aon-hros.com. Mail to: Corning, Attn: Ad Code # ______ PO Box 1262, Findlay, OH 45840 Corning is an equal opportunity employer with a strong commitment to workforce diversity.





The University of California at Riverside is in a major phase of growth and development. The following tenure-track positions are available in the physical, biological, biomedical and agricultural sciences. For open-level positions, we are looking for outstanding hires at the professor or associate professor levels. Please contact the web sites listed below for information about the individual positions. The College of Natural and Agricultural Sciences web site is found at http://cnas.ucr.edu.

Tenure-Track Faculty Positions in the Sciences

BIOCHEMISTRY—2 POSITIONS

http://www.biochemistry.ucr.edu/
Eukaryotic Molecular Biology/Signal
Transduction—Assistant Professor
Plant Molecular Biology/Biochemistry—
Assistant Professor

BIOCHEMISTRY/CHEMISTRY—1 POSITION

http://cnas.ucr.edu/~cnas/structural-biology.html

X-ray Protein Crystallography—Open Level

BIOLOGY—3 POSITIONS

http://cnas.ucr.edu/~bio/facultypositions.html

Evolutionary Biology—Level to be Determined

Evolutionary Genetics—Assistant Professor

Population Ecology—Open Level

BIOMEDICAL SCIENCES—4 POSITIONS

http://biomed.ucr.edu/faculty/faculty-framer.html

Molecular Basis of Disease/Molecular Mechanisms
of Cellular Stress—Open Level and Assistant Professor

BOTANY—2 POSITIONS

http://cnas.ucr.edu/~bps/hposition.htm

Environmental Horticulture—Assistant Level of
Cooperative Extension
Plant Systematics—Assistant Professor

CELL BIOLOGY AND NEUROSCIENCE—2 POSITIONS

http://cnas.ucr.edu/~neuro.home.litml

Cell Biology—Assistant Professor

Neuroscience/Cell/Molecular/Genetics—

Assistant Professor

CHEMISTRY—6 POSITIONS

http://www.chem.ucr.edu/faculty/search.html
Analytical Chemistry—Open Level and
Assistant Professor
Inorganic Chemistry—Open Level and
Assistant Professor
Physical Chemistry—Assistant Professor

EARTH SCIENCES—1 POSITION

http://cnas.ucr.edu/~earth/jobs/index.htm

Global Sedimentary Systems—Assistant Professor

Entomology—2 Positions

http://cnas.ucr.edu/~ento/index.html

Molecular Biologist/Insect Physiologist—

Level to be Determined

Molecular Population Geneticist—Level to be Determined

Environmental Sciences—2 Positions

http://envisci.ucr.edu/about_newposition.html

Land Resources—Assistant Professor

Aquatic Toxicologist—Open Level

MATHEMATICS—3 POSITIONS

http://math.ucr.edu/
Algebra/Analysis—Open Level
Analysis/Geometry—Assistant Professor
Topology—Open position for the F. Burton Jones Chair

NEMATOLOGY—1 POSITION

http://cnas.ucr.edu/~nem/announce.html

Rhizosphere/Ecology—Assistant Professor

PHYSICS—2 POSITIONS

http://cnas.ucr.edu/~physics/physics/Oppsdat/
ucrcmp1.html

http://cnas.ucr.edu/~physics/physics/Oppsdat/
ucrhep1.html

Theoretical Condensed Matter Physics—Open Level
Experimental High Energy Physics—Open Level

PLANT PATHOLOGY—2 POSITIONS

http://cnas.ucr.edu/~ppath/jobs.html

Plant Virology—Assistant Professor

Plant Disease Resistance—Open Level

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

WE'VE ISOLATED REMARKABLE **OPPORTUNITIES**



SyStemix, a Novartis Company, is committed to using modern methods of gene technologies for the treatment of diseases for which current therapies are inadequate. A type of genetic engineering, gene therapy combats disease by replacing missing or defective genes or by conferring a new function on treated cells. SyStemix has done pioneering work based on its patented human hematopoietic stem cell and is using this extensive expertise to focus on cell therapy and cell-based gene therapy for a variety of diseases, including cancer, AIDS, and genetic diseases. We are seeking individuals for the following positions:

CELL THERAPY RESEARCH

Research Scientist/Program Head

Responsible for a new program in angiogenesis, leading an experienced group of BS and PhD level scientists to achieve a highly competitive research program. Requires a PhD in Biochemistry/ Molecular Biology and no less than 5 years of relevant experience with cardiovascular biology, angiogenesis, receptor structure/ function, endothelial cell biology, growth factor/cytokine biology, intracellular signalling cascade and in vivo vascular modelling. Also requires proven excellent verbal presentation and written communication skills. Job Code 993047

CORE TECHNOLOGIES/ANALYTICAL

Development Scientist

Responsible for methods development and technical R&D support in flow cytometry, bioanalytics, tissue culture, histology, molecular biology and clinical biosafety testing. Requires PhD in biological sciences as well as at least 3 years relevant experience in cell and gene therapy, preferably as applied to therapeutic areas. Also requires strong analytical skills and a demonstrated ability to apply these principles to cell- and analyte-based assay development. The successful candidate will be well versed in flow cytometric method development and analysis, as well as general gene therapy methods, T and B cell biology and immunology. Job Code 991006

As a wholly owned subsidiary of Novartis, SyStemix is in a unique position to leverage the resources of the world's largest pharmaceutical company while retaining its character and culture as a fast, flexible and focused biotechnology company. Our compensation package includes 3 weeks of vacation annually, a 401(k) plan with company match, bonus programs, educational assistance, a choice of medical plans, tax-deferred dependent/health care option, life insurance, and disability protection. To apply, mail, fax, or email your resume, indicating Job #, to: SyStemix, Inc., Human Resources, Dept. SCI1099, 3155 Porter Drive, Palo Alto, CA 94304; fax (650) 813-4121; email hr.systemix@pharma.novartis.com. EOE.

> Visit our website at www.stem.com to learn more.





Post-Doctoral and **Research Technician Positions**

SCHOOL OF

MOUNT SINAI Mount Sinai School of Medicine is a leader in medical education and research. Post-doctoral and Research MEDICINE Technician positions are immediately available for highly motivated individuals to study molecular mechanisms

regulating the establishment of cell polarity, and formation of intercellular junctions during development. Candidates for post-doctoral positions should have prior experience in biochemistry, molecular biology or genetics. Selected candidates will have the choice of working on one or more of the following projects:

Drosophila:

- 1. Role of Discs Lost in establishing cell polarity during cellular blastoderm formation.
- 2. Identification and characterization of Neurexin IV interacting proteins and their role in the blood-brain barrier formation.

Mouse:

The role of mouse NRX IV in the formation and function of paranodal junctions. Candidates are referred to the following publications: Cell 96, 833-845 (1999); TINS 10, 444-449 (1998); Cell 87, 1059-1068 and 1103-1114 (1996).

For consideration, please reply with a cover letter stating career goals, C.V., with the names and addresses of three references to: Manzoor A. Bhat, Ph.D., Cardiovascular Research Institute, Department of Medicine, Box 1269, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574; Fax: 212-828-4178; E-mail: bhatm01@doc.mssm.edu We are an equal opportunity employer fostering diversity in the workplace.

APPLICATIONS SCIENTIST

EG&G Wallac, a leader in providing products and services for bioanalytical and endocrinology laboratories, has an opportunity available within our Time Resolved Fluorescence (TRF) Business Development group for an Applications Scientist.

The successful candidate will provide support for customers including training and assay development. Will also participate in Marketing plan development and implementation and interact with field sales and product managers as well as marketing and applications personnel in Finland.

Applicants must possess a Ph.D. in Cell Biology, or like with knowledge of functional genomics and HTS assay development and techniques. Previous industrial experience preferred. Travel and oral presentation required.

This position offers a very attractive compensation and benefits package. For consideration, send your resume with salary history to: Human Resources, Dept. AS-SCI, EG&G Wallac, 9238 Gaither Road, Gaithersburg, MD 20877. FAX: (301) 869-5803. Equal Opportunity Employer M/F/D/V.



fellowships

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

AAAS Science + Technology >>> Policy Fellowships 2000:01

Contribute scientific and technical information and external perspectives to federal decisionmaking, while learning how government works. The AAAS fellowship programs provide a unique participatory public policy experience for scientists and engineers, through one-year assignments involving domestic and international science policy issues in the Congress and several executive branch agencies. Stipends typically begin at \$48,000 to \$50,000.

who >>> Applicants must have a Ph.D. in any physical, biological or social science, any field of engineering, or any relevant interdisciplinary field. Engineers with a master's degree and three years of post-degree experience also may apply. U.S. citizenship is required. Federal employees are not eligible. Approximately 40 fellowships are awarded each year, in eight different programs.

When >>> The fellowship year begins September 1, 2000. Fellows attend a two-week orientation before beginning their assignments, and participate in a yearlong seminar series on topics relevant to science, technology, and public policy. Application deadline is January 15, 2000.

Where >>> Fellows are placed in the Congress, the National Science Foundation, the Department of State, the Department of Defense, the Agency for International Development, the Environmental Protection Agency, the Department of Agriculture, the Food and Drug Administration, and other federal offices.

why >>> AAAS sponsors these programs to provide the opportunity for accomplished and societally aware scientists and engineers to participate in and contribute to the public policymaking process of the federal government. The programs include:

- Congressional Science and Engineering Fellowship Program
- + Roger Revelle Fellowship in Global Stewardship
- + Science, Engineering, and Diplomacy Fellowship Program
- + Risk Policy Science and Engineering Fellowship Program
- + Defense Policy Science and Engineering Fellowship Program
- + Technology Policy Science and Engineering Fellowship Program
- Environmental Science and Engineering Fellowship Program
- + AAAS/NSF Science and Engineering Fellowship Program

How >>> For application instructions and further information: fellowships.aaas.org.

AAAS Science and Engineering Fellowship Programs, 1200 New York Avenue, NW,

Washington, DC 20005 • Phone 202/326-6700 • E-mail science_policy@aaas.org

Underrepresented minorities and persons with disabilities are encouraged to apply.

AAAS

fellowships.aaas.org

Bioinformatics and Computational Biology The University of Michigan



The University of Michigan is seeking applications from outstanding candidates for faculty positions at all levels and for staff positions at the Ph.D. level in our new Bioinformatics Program. We interpret the field of bioinformatics broadly to include microarray expression technologies, automated analysis of sequence data, large-scale systemic modeling, and management of evolving biological databases.

Michigan's Investments in the Life Sciences—This recruitment is part of a major expansion of bioinformatics in the Medical School and of an interdisciplinary Bioinformatics Program at the University level. The Program, which has \$10 million in start-up funds, an initial allotment of 5,000 sq. ft. of dedicated, contiguous space, and long-term institutional support, draws upon a broad base of established strength at Michigan in both the biomedical and computational sciences. The Bioinformatics Program also will benefit from and contribute to two important developments at Michigan. As part of a \$200 million Life Sciences Initiative, the University of Michigan is expanding faculty, buildings and infrastructure in the life sciences. As part of the Life Sciences Research Corridor Initiative, the State of Michigan is investing substantial resources in a new program that will benefit the universities, industries and research foundations within Michigan. Bioinformatics will be a major component in each of these initiatives.

Professor and Director of the Bioinformatics Program—This position will be filled by an outstanding senior investigator with an internationally recognized research program and demonstrated leadership in bioinformatics or computational biology. The Parke-Davis Pharmaceutical Division of Warner-Lambert Company has provided generous support for this position. Departmental affiliation(s) will be determined by the successful candidate and the participating departments. Major responsibilities include (1) recruiting at least four junior tenure-track faculty members, (2) guiding and developing the Program's research and curriculum, (3) awarding pilot research grants to stimulate collaborations, and (4) developing interactions within the University of Michigan and with other universities, government agencies, foundations, and industrial partners.

Assistant Professor Positions—Initially four tenure-track positions in bioinformatics or computational biology will be available, based in the Medical School. Appointments will be made in departments providing the best academic match for each individual faculty member, and joint appointments are encouraged. The successful candidates will be expected to develop a vigorous externally-funded research program and to participate in the teaching of the bioinformatics core courses. It is anticipated that additional positions will become available as part of recruitments in the College of Engineering, School of Public Health, and College of Science, Literature and the Arts. These faculty will also become part of the interdisciplinary Bioinformatics Program.

Head of the Core Facility—The research and educational functions of the Bioinformatics Program will have the technical support of a Bioinformatics Core Facility. The Head of the Facility will be responsible for (1) managing the sophisticated computer hardware, software and networking capabilities of the Facility, (2) providing liaison with the Medical Center Information Technology staff, (3) developing and testing alternative computational technologies for bioinformatics, and (4) providing computer support for computational biology courses being offered by the Program.

Applicants for all of these positions should send their current curriculum vitae, bibliography, names of three potential references, and a brief summary of future research plans to: Michael Savageau, Ph.D., Chair of the Bioinformatics Search Committee, 5641 Medical Science Building II, University of Michigan Medical School, Ann Arbor, Michigan 48109-0620. Review of applications will begin on November 1, 1999 and continue until the positions are filled.

The University of Michigan Medical School is an Affirmative Action/ Equal Opportunity Employer.

The Future is Here!

ffymetrix is dedicated to developing state-of-the-art technology for acquiring, analyzing and managing complex genetic information for use in genomics, clinical research, disease management and pharmacogenomic studies. As the creators of GeneChip® technology, Affymetrix represents an exciting future in expression monitoring, polymorphism screening and disease management.

SR. SCIENTIST/MANAGER

In this management role, you will develop genome mapping, gene expression monitoring, and general DNA analysis methods using high density oligonucleotide probe arrays, as well as methods of sample preparation, probe design and data analysis. You will also drive programs to support the conception/development of technologies for new applications of DNA probe arrays. Requires a PhD in Biophysics, Biochemistry, Genetics, Molecular Biology or related field, and a minimum 8 years experience in DNA/RNA and standard molecular biology procedures/concepts. Experience in diagnostic assay development is preferred. Experience with mammalian genetics, especially mapping and linkage analysis methods, and with cancer, tissue typing, and/or pharmacology are highly desirable. Excellent communication skills are crucial. Job Code SCI-ATR246

STAFF SCIENTIST

Take responsibility for the development of new methodologies for the detection of nucleic acid target molecules bound to the array, with the goal of improving sensitivity, speed of data acquisition, and/or reduction of instrumentation cost. You will also develop instrumentation and methodologies to characterize the synthesis of probe arrays. Requires a PhD in Chemistry, Physics, or closely related discipline and a minimum 2 years related experience in optical spectroscopy and microscopy. Experience in the construction of spectroscopic and other optical instrumentation, including data acquisition and interfacing, is a must. Working knowledge of biophysical chemistry is essential. Job Code SCI-AMT298

For consideration, please mail, fax, or email your resume, indicating Job Code, to: Affymetrix, Human Resources, 3380 Central Expressway, Santa Clara, CA 95051. Fax: (408) 481-0422. Email: hr@affymetrix.com. We are an equal opportunity employer. See our website at www.affymetrix.com.



FELLOWSHIPS

THE DIRECTORS OF THE FANNIE AND JOHN HERTZ FOUNDATION extend their congratulations to

THE '99-'00 COHORT OF HERTZ FOUNDATION FELLOWS:

	Study Area	School Chosen
David Andre	Computer Science/Algorithms	UCB
Scott Andrews	Materials Science/Electronic Materials	Stanford
Gregory Balco	Earth Science/Quantitative Geomorphology	U.Washington
Joshua Bloom	Applied Physics/Astrophysics	Caltech
Edward Boyden	EE/Quantum Computation	Stanford
Mung Chiang	EE/Communications & Signal Processing	Stanford
Lydia Finney	Chemistry/Bioinorganic	Northwestern
Dennis Geels	Computer Science/Computer Architectures	UCB
Arthur Goldsipe	Chemical Engineering/Bioengineering	MIT
Jeffrey Gore	Applied Physics/Condensed Matter	UCB
Shawn Grannell	Physics/Optics	U.Michigan
James Henderson	ME/Biomechanical	Stanford
David Kaplan	Astrophysics/Radio Astronomy	Caltech
Scott Kennedy	Geophysics/Solid Mechanics	Harvard
David Kent	Chemistry/Protein Bioinorganic	Caltech
Andrew Levin	ME/BioMEMS	MIT
Kevin Lin	Applied Math/Scientific Computation	UCB
Vincenzo Lordi	Materials Science/New Materials	Stanford
Dmitriy Panasenko	Applied Physics & Optics/Photonics	UCSD
Lisa Poyneer	Computer Science	MIT
Omar Saleh	Physics/Condensed Matter & Biophysics	Princeton
Michael Shirts	Chemistry/Biomacromolecular Modeling	Stanford
Valentin Spitkovsky	Computer Science/Computational Biology	MIT
John Waterston	EE/Communications Systems	Stanford

each one of whom will receive an annual stipend of \$25,000 and cost-of-education defrayment during their Ph.D. program, and to

THE '98-'99 HERTZ DOCTORAL THESIS PRIZE WINNERS AND THEIR GRADUATE ADVISORS AND UNDERGRADUATE MENTORS:

- **Dr. Derek Linden**, MIT; Automated Design and Optimization of Wire Antennas Using Genetic Algorithms; Profs. Frederick E. Morgenthaler & Mark J. Jakiela (grad); Prof. Terry Orlando (UG);
- **Dr. Deirdre L. Olynick**, UIUC; In Situ Studies of Copper Nano-Particles Using a Novel Tandem Ultra-High Vacuum Particle Production Chamber Transmission Electron Microscope; Prof. J. Murray Gibson (grad); Prof. Dennis Mahler (UG);
- **Dr. Adam T. Woolley**, UCB; *Microfabricated DNA Analysis Systems*; Prof. Richard A. Matheis (grad); Prof. J. Bevan Ott (UG)

each of whom was tendered an honorarium of \$1,000

Applications for Hertz Fellowships for Ph.D.-directed graduate study in applications of the physical sciences, including modern biology, for tenure commencing in academic year '00-'01 are currently available at http://www.hertzfoundation.org and are due in completed form not later than 5 November 1999.

UCDAVIS New initiatives—new opportunities

The University of California, Davis, announces three initiatives in the sciences that will create opportunities to recruit new faculty members over the next five years.

Center for Genomics

UC Davis will recruit a substantial number of new faculty members in genomics and bioinformatics, many of whom will have research laboratories in a newly constructed center building on campus. These scientists will be affiliated with academic units in human and veterinary medicine, engineering, agriculture, and physical and biological sciences. The new building will also house core facilities for research and training in genomic technologies, core resources in bioinformatics, and the campus's growing research program in biomedical engineering. For further information, contact Dr. Larry Hjelmeland, School of Medicine Dean's Office, One Shields Ave., University of California, Davis, CA 95616; lmhjelmeland@ucdavis.edu.

Center for Genetics and Development

The center will be a physical and intellectual focal point for research in advanced molecular genetics and development across the five sections of the Division of Biological Sciences and in related campus units. The center will recruit 10 new faculty members at the assistant, associate, and full professor levels. The campus has allocated substantial start-up funds for these positions and has secured a grant from the National Institutes of Health for laboratory remodeling. For further information, contact Dean Mark McNamee, Division of Biological Sciences, One Shields Ave., University of California, Davis, CA 95616; mgmcnamee@ucdavis.edu.

Nanophases in the Environment, Agriculture, and Technology (NEAT)

This multidisciplinary research initiative will support the study of small particles and will bring 12 new faculty members to the campus in interdisciplinary areas of materials science, chemistry, physics, environmental science, and related fields. A new five-year training grant from the National Science Foundation will help support the initiative. The campus has also allocated substantial funds to buy equipment, such as an analytical scanning electron microscope. For further information, contact Dr. Alexandra Navrotsky, Department of Chemistry, One Shields Ave., University of California, Davis, CA 95616; anavrotsky@ucdavis.edu.

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

Postdoctoral Fellowship

Two post-doctoral positions are available studying the molecular mechanism of chromatin structure alteration and the effects of this alteration on gene expression, cellular proliferation and cancer. Research will focus on the mechanistic and biological function of the Sin3 and the NuRD complexes (see Zhang et al., Cell 1997, 89:357; Cell 1998, 95:279; Mol Cell 1998, 1:1021; Genes & Dev 1999, 13, 1924). A Ph.D. with a background in biochemistry, molecular biology or mouse genetics is required. For more information, please visit our web site: www.med.unc.edu/~zhangyi/lab.htm

Interested candidates should send a CV and names of three references to:

Yi Zhang, Ph.D. UNC Lineberger Comprehensive Cancer Center, University of North Carolina at Chapel Hill, Campus Box 7295

Chapel Hill, NC 27599-7295 e-mail: yi zhang@med.unc.edu

UNIVERSITY OF CHICAGO Department of Human Genetics

POSTDOCTORAL POSITIONS MAMMALIANGENETICS

Seeking highly motivated individuals to embark on innovative projects in mammalian genetics. Potential projects include: 1) uncovering the genetic basis for the evolution of human intelligence; 2) building tools to allow mouse genetics to be practiced on a large scale; 3) devising novel approaches for monitoring gene expression in mice throughout development; 4) developing methods for surveying whole genomes for deletions, and correlating such deletions with human genetic diseases; 5) studying the function of several histone acetyltransferases in mammals.

Candidates should be highly ambitious, and have completed several years of training in the US or Europe. Interested candidates may send CV and three letters of reference to: Dr. Bruce Lahn, Department of Human Genetics, University of Chicago, 924 East 57th Street, Rm. R118, Chicago, IL 60637; or FAX (773) 834-0505; or E-mail to blahn@genetics.uchicago.edu.



PRE- & POSTDOCTORAL TRAINING IN MAMMALIAN GENETICS

The Jackson Laboratory, a non-profit research center, provides a unique research environment with unparalleled resources for training animal models of development & disease.

Areas of expertise include:
Cancer, Developmental Biology/Aging,
Genetics of Complex Traits, Genomics,
Immunology/Hematology,
Metabolic Diseases, Neurobiology,
Bioinformatics/Statistical Genetics
Cryopreservation/Assisted
Reproduction

Letters of application 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 and is limited to US citizens or permanent residents.

To apply contact: Suzanne Serreze, The Jackson Laboratory, 600 Main Street, Bar Harbor, ME 04609 Phone: 207-288-6420; FAX: 207-288-6079; e-mail sbs@jax.org; http://www.jax.org *EO/AA Employer*

Faculty Position

Clinical Cancer Genetics



The Division of Human Cancer Genetics seeks applications for a tenured or tenure-eligible clinical faculty position at the assistant or associate professor level. The Ohio State University has recently launched a major initiative in Human Cancer Genetics Re-

search. This new program, under the leadership of Dr. Albert de la Chapelle, is within The Ohio State University Comprehensive Cancer Center. The two components of the cancer genetics program are the laboratories within the Comprehensive Cancer Center, which focus on basic research, and a clinical cancer genetics unit within the Arthur G. James Cancer Hospital and Richard Solove Research Institute, which focuses on translational and clinical research. Interdisciplinary clinical research teams will be encouraged and supported. Generous new laboratory resources are equipped to provide high through-put genotyping and sequencing, in addition to conventional equipment.

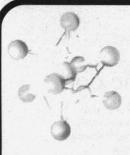
A highly competitive recruitment package is available and a Clinical Cancer Genetics position is available immediately. The successful applicant must be an M.D. who is board-certified (or eligible) in medical oncology who has a strong background in genetics or a board-certified (or eligible) adult clinical geneticist with a strong background in adult oncology and is dedicated to innovative cancer research. Dedication to the pursuit of excellence in patient care and research in human cancer genetics is essential.

Interested applicants should send, fax or e-mail CV and research plan to:

Charis Eng, M.D., Ph.D.
Director
Clinical Cancer Genetics Program
The Ohio State University
690 Medical Research Facility
420 W. 12th Avenue
Columbus, OH 43210
Tel: 614/293-7775
Fay: 614/698, 4245

Fax: 614/688-4245 E-mail: eng-l@medctr.osu.edu

The Ohio State University is an equal opportunity/affirmative action employer. Qualified women, minorities, Vietnam era veterans and individuals with disabilities are encouraged to apply.



GENOMICS-DRIVEN DISCOVERY OF THERAPEUTIC PROTEINS: THE CHALLENGE IS BIOLOGY

ZymoGenetics, Inc. is a biotechnology company located in Seattle's historic Lake Union Steam Plant. As a subsidiary of NOVO NORDISK, the world's largest producer of industrial enzymes, ZymoGenetic's mission is to identify protein therapeutic opportunities and to take selected projects as far as clinical proof of concept studies. We offer intellectual challenge, state-of-the-art facilities and a generous benefits package. We are currently seeking qualified candidates for the following positions:

SCIENTIST/SR. SCIENTIST, #32N199

Our Protein Expression group is seeking a Scientist/Sr. Scientist to form a team responsible for the expression of therapeutic proteins in E. coli. Responsibilities include development and analysis of vectors and strains, optimization of expression levels for production of material for clinical trials. The successful candidate will have 5+ years of experience in protein expression in microbes. Good supervisory, communication and project management skills as well as good interpersonal and team-building skills required. A Ph.D. in Molecular Biology/Biochemistry or related field or equivalent industrial experience required.

SCIENTIST/SR. SCIENTIST, #32R699

Our Protein Expression group is seeking a Scientist/Sr. Scientist to lead a team responsible for yeast expression. The successful candidate will have a minimum of 2 years of experience in yeast technology and yeast research applying yeast genetics and protein expression techniques. Good supervisory, communication and project management skills as well as good interpersonal and team-building skills required. Qualified candidates will have a Ph.D. in Microbiology, Biochemistry or related field.

SCIENTIST/SR. SCIENTIST, #34R399

The successful candidate will assist in the purification of recombinant proteins at levels of up gram amounts; upstream processing of conditioned culture media for research purposes; develop methods and documentation suitable for transfer of purification processes to development; and facilitate transfer of predevelopment projects to GMP qualified development organizations. A minimum of 2+ years of experience utilizing industrial lab techniques is required. Qualified candidates will have a BS in Biochemistry with a Ph.D. preferred.

SCIENTIST/SR. SCIENTIST, #35N498

We are seeking an in vivo biologist to join our team testing novel proteins in animals to determine their functions and possible therapeutic utility. Responsibilities include design, performance and analysis therapeutic utility. Additional duties include design, performance and analysis of animal experiments to identify biologic activities of protein agents, as well as identification and use of appropriate animal models for evaluation of therapeutic potential. Strong written and verbal communication skills are required. Versatility and flexibility are essential; must be able to work in multidisciplinary teams. Expertise in one or more of the following areas useful: evaluation of Transgenic and knockout phenotypes, inflammation, tumor cell growth and metastasis, developmental biology. Applicants should have a Ph.D., DVM, or MD and 2–6 years of academic or industrial experience in physiology, pharmacology, or pathology.

Job description and salary are commensurate upon experience. For confidential consideration, forward your resume and cover letter noting Job Reference # to: ZymoGenetics, Inc., Attn: Human Resources, 1201 Eastlake Avenue East, Seattle, WA 98102. Fax: (206) 442-6658. E-mail: jobs@zgi.com. Equal Opportunity Employer.

ZYMO GENETICS .

Every day, we defy the odds.

SmithKline Beecham, a world class leader in Research and Development, continues to pioneer innovative pharmaceutical and healthcare products and services. We have the following opportunities available at our state-of-the-art suburban Philadelphia, PA facility.

Postdoctoral Scientist - Cardiovascular Biology

Working in our Cardiovascular Biology department you will investigate the mechanisms of neuroprotection produced by steroid and other hormones following thrombo-embolic stroke, and other available animal models. Establishing relevant cellular and/or biochemical assays in *ex vivo* brain tissue from experimental stroke models to investigate signalling and transcriptional pathways post brain injury is also a responsibility. We require a background in ischemic stroke, significant animal surgery skills and strong basic cellular biochemical research training/experience. Interests in nuclear hormone receptor regulation and/or signalling pathways regulating cellular metabolism are highly desirable. (Ad Code: 991682A)

PhD Scientist - Cardiovascular Pharmacology

Working in our Cardiovascular Pharmacology department you will establish exploratory research project to integrate novel mechanisms of heart failure and vascular disease, and provide expertise necessary to examine the cell biology of cardiovascular disease and stroke. The ability to examine gene and protein expression, RT/PCR, Northern analysis, Southern analysis, Western analysis, Taqman, immunohistochemistry, fluorescence microscopy, and establish preliminary screening assays and relevant in vivo animal models is also necessary. We require a theoretical and practical knowledge of Pharmacology with emphasis on Cell Biology, Molecular Biology and Cardiovascular Disease equivalent to a PhD (postdoctoral experience - industry preferred). The ability to establish a multidisciplinary research team, proven publication record in peer-reviewed journals, and record of active participation at national and international scientific meetings is also desired. (Ad Code: 991535D)

SmithKline Beecham is dedicated to an innovative workplace and supports you with career long opportunities and learning. We offer a competitive benefits and compensation package. To be considered for these suburban Philadelphia, PA opportunities, please forward your scannable resume to: SmithKline Beecham, c/o National Resume Processing, (Ad Code), P.O. Box 1070, Burlington, MA 01803. Indicating Ad Code is essential.

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BEHAVIORAL or EVOLUTIONARY ECOLOGIST

The Department of Organismic Biology, Ecology and Evolution at UCLA invites applications for an OPEN RANK, TENURE TRACK, FACULTY POSITION in Behavioral or Evolutionary Ecology, broadly defined. The Department of OBEE has 23 faculty, with strengths ranging from cellular to evolutionary biology, including strong research programs in animal behavior and ecology. UCLA has outstanding academic support for faculty, including access to the UC Natural Reserve System, participation in the campus-wide Institute of the Environment and attractive startup packages. Successful candidates are expected to develop a vigorous research program and to contribute to undergraduate and graduate teaching. Senior-level candidates also would be expected to actively participate in enhancing inter-departmental programs focusing on behavior. Junior-level candidates should have postdoctoral experience and a strong research record. No research area or taxonomic specialization is excluded, but a field-oriented research program combining theory and experimentation is desirable. Send CV, statements of research and teaching interests, and the names and addresses of three references to Dr. Peter Nonacs, Chair, Behavioral Ecology Search, Department of Organismic Biology, Ecology and Evolution, University of California, Los Angeles, CA 90095-1606. E-Mail: pnonacs@ biology.ucla.edu. Consideration of applications will begin on November 15, 1999. The University of California is an Equal Opportunity Employer committed to excellence through diversity.

Faculty Position Institute for Genetic Medicine Department of Biochemistry and Molecular Biology

The Institute for Genetic Medicine (IGM) and the Department of Biochemistry and Molecular Biology at the University of Southern California seeks applications for a tenure-track position at the Assistant or Associate Professor level. The IGM is a multi-disciplinary institute with a focus on translational research in the areas of cancer, muscle differentiation, heart disease, aging, and bone development. Candidates for this position will be considered who have a Ph.D., M.D., or equivalent degree in Human Genetics, Molecular Biology, or a related field and have demonstrated success in an area of research pertinent to human genetics. We are particularly interested in individuals who are performing research aimed at dissecting quantitative traits in either humans or animal models, or focused upon using innovative technologies to further dissect the functions of known genetic disease genes. The appointed individual will be provided with a generous startup package from the Keck School of Medicine. Applicants should submit a cover letter, curriculum vitae, and document describing their research accomplishments and future research goals, as well as solicit three letters of recommendation All materials should be received at the address below by November 17, 1999.

> Human Genetics Search Committee c/o Dr. Laurence H. Kedes Institute for Genetic Medicine University of Southern California 2250 Alcazar St., CSC/IGM240 Los Angeles, CA 90033

Microarray Technology



8th International Workshop on Chromosomes in Solid Tumors January 30 - February 1, 2000 Tucson, Arizona

This workshop is designed to assess the current state of progress in the field of cancer genetics and cytogenetics. The scientific program will include plenary lectures, proffered papers, and poster sessions. The major emphasis of the Eighth Workshop will focus on using array-based technologies to assess both altered gene expression, and DNA sequence copy number change.

Featured Speakers

Michael Bittner, Ph.D. Thomas Cremer, M.D. Ronald A. Depinho M.D. Jonathan A. Fletcher M.D. Joe Gray, Ph.D. Connie Griffin, M.D. Sverre Heim, Ph.D. Olli Kallioniemi, M.D., Ph.D. Ilan R. Kirsch, M.D. Richard Klausner*, M.D. Peter Lichter, Ph.D. Paul Meltzer, M.D., Ph.D. Felix Mitelman, M.D. Uwe Müller, Ph.D. Cynthia Morton, Ph.D. Dan Pinkel, Ph.D. Thomas Ried, M.D. Guido Sauter, M.D. Alejandro A. Schaffer Evelin Schrock, M.D. Michael Speicher, M.D. * not yet confirmed

Complete Workshop Information: http://www.nhgri.nih.gov/IWCST/

Contact: gpp@nhgri.nih.gov

Abstract Deadline: December 1, 1999

the new face in p H a R m a c e u t i c a L s



Millennium has a new vision for the future of medicine. That drug development be perfectly precise. That all patient therapies be totally individualized. That all disease be targeted at its core. We will succeed in realizing this vision for eight hundred reasons—our people. Expertise, insight, synergy, and above all, passion unite us in creating a better way to cure disease and allow us to have fun while doing it. The face of the future never looked brighter.

SENIOR DIRECTOR, PROTEIN SCIENCES

Manage a team of seven finishers and two technicians and coordinate research efforts to improve existing laboratory protocols related to the finishing work process. A PhD and experience in scale-up protein production required. To apply for this position, you must submit your resume in confidence to Christine Savage via email: cmsava@aol.com or fax: 781-444-8077.

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DIRECTOR, SCIENCE/

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Join us in building the biopharmaceutical company of the future at our Cambridge facilities. Send your resume to: Millennium Pharmaceuticals, Resume Processing Center, Source Code SC1099, PO Box 798, Burlington, MA 01803. Email: millennium@webhire.com. Fax: 1-800-370-6925. A Source Code must be included with all submissions. We are an equal opportunity employer committed to discovering the individual in everyone.

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Transcending the limits of medicine^{5M}

Dean **College of Engineering**

The University of Delaware invites applications and nominations for the position of Dean of the College of Engineering. A major state-assisted research institution with a total enrollment of about 20,000 students, the University has been on an accelerated climb to national and international prominence

The College of Engineering offers programs in chemical, civil, computer, electrical, environmental, mechanical engineering and materials science. Six centers provide research foci in biomechanical engineering, catalysis, coastal engineering, composite materials, engineering and molecular thermodynamics, and nanomachined semiconductor surfaces. Current research expenditures total about \$20M per annum.

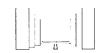
The Dean provides leadership for the college's 89 faculty and approximately 400 graduate and 1000 under-graduate students. Along with the six other deans, the Dean of Engineering reports directly to the Provost and is a crucial component of the central management team, including active participation in University development activities. The Dean is responsible for overall faculty and program development and general financial management of the College. S/he is charged with providing the vision and strategic planning necessary to develop and enhance the quality of the College's undergraduate, graduate, and research programs, and undergraduate, graduate, and research programs, and to facilitate collaborations with other colleges, and industrial, governmental, and philanthropic organizations. During the tenure of the next Dean, an additional 60,000 square foot engineering building is scheduled for construction and about 20 faculty hires are anticipated. The Delaware Institute of Biotechnology has been formed with several named Professors and major research responsibilities

The candidate must meet the requirements for appointment to the rank of professor in one of the departments in the College. In addition, the successful candidate must have experience in attracting and managing sponsored research and demonstrate an appreciation for the administrative support needed to maintain a vigorous research program. Qualifications include an earned doctoral degree, a distinguished scholarly record, management experience and the ability to lead the College in its academic responsibilities.

Applications should include a letter of interest, curriculum vitae, and names of four references. Nominations and applications will be accepted until the position is filled. The Dean will assume office, on July 1, 2000. Nominations and expressions of interest will be held in confidence. Candidates should submit will be need in Confidence. Candidates should submit materials to Dean Daniel Rich, Chair, Engineering Search Committee, Graham Hall, University of Delaware, Newark, DE 19716. More information regarding this search and the College of Engineering is available at http://www.udel.edu/engg

The UNIVERSITY OF DELAWARE is an Equal Opportunity Employer which encourages applications from Minority Group Members and Women.





THE SALK INSTITUTE

POSTDOCTORAL FELLOW

Working with a team of scientists, this individual will investigate the biological foundations of cognitive functions and their representation in the brain. Studies encompass the development of language, spatial cognition, social skills, and brain structure. The incumbent will also participate in and supervise neuropsychological testing, data analysis, manuscript preparation, database, and coordination of studies across levels. Requires a Ph.D. with research experience in cognitive neuroscience, neuropsychology, experimental psychology or related fields. The ideal candidate will possess database and Macintosh experience, along with solid leadership qualities. Publications preferred. Salary commensurate with background and research experience.

Please email resume, letter of interest and three letters of reference to: lai@salk.edu, include "job opening" in the subject line; or mail attn: Dr. Zona Lai or Dr. Ursula Bellugi, Laboratory for Cognitive Neuroscience, The Salk Institute for Biological Studies, 10010 North Torrey Pines Rd., La Jolla, CA 92037. http://bvox.salk.edu

The Salk Institute is an Equal Opportunity Employer

PLANT AND ANIMAL MOLECULAR GENETICS Two Assistant Professors

The Department of Molecular Biology and Genetics at the University of Guelph is seeking applications for two tenure-track faculty positions. The appointments will be made at the Assistant Professor level with a start date of July 1, 2000 (negotiable). Guelph is one of Canada's most research-intensive universities and provides unique facilities and collaborative opportunities to faculty pursuing biological research. Particularly noteworthy are the resources available to apply contemporary molecular-genetic approaches to current problems in biology and agriculture. These facilities include transgenic greenhouses, animal isolation facilities, integrated field stations, a transgenic animal laboratory, and advanced diagnostic, instrumental and analytical services. The campus is located in the city of Guelph, an attractive community of 100,000 people located 70 km west of Toronto in rural southern Ontario.

We require a Ph.D. and appropriate postdoctoral training, a research record reflected by publications of high quality, the proven ability to work well with others, an aptitude for teaching, and the enthusiasm needed to excite and inspire students. Applicants should be using current molecular-genetic, biochemical, and/or genomic methods to investigate important problems related to the biology of plants (1 position) or of vertebrate/invertebrate animals (1 position). The successful candidates will be expected to develop and sustain a competitive research programme, supported by external funding, and participate in the department's graduate and undergraduate teaching. Appointees will also have an opportunity to join the University's newly-established Food System Biotechnology Centre.

The University of Guelph is committed to an employment equity programme that includes special measures to achieve diversity among its faculty and staff. We, therefore, particularly encourage applications from qualified aboriginal Canadians, persons with disabilities, members of visible minorities and women.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. These appointments are subject to final budgetary appro.val.

Applications should include a curriculum vitae, an outline of research interests, and the names and phone numbers of three individuals willing to provide references. Please direct them to **Dr. David**

Evans, Chair, Department of Molecular Biology and Genetics, College of Biological Science, University of Guelph, Guelph, Ontario, CANADA, N1G 2W1 by December 15, 1999.



Harvard University Faculty of Arts and Sciences

Associate Director

Center for Imaging and Mesoscale Structures

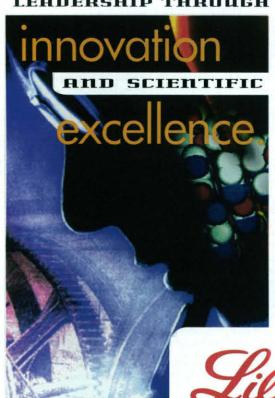
Harvard University seeks an Associate Director for a newly created multidisciplinary Center to promote forefront research and education in the area of imaging and mesoscale structures, bridging the disciplines of chemistry, physics, engineering, materials science, biology, and medicine. Initial projects will include mesoscale electronics, mesoscale mechanical systems, functional nanoscale materials, and the interface between biológical and physical systems, including the application of novel molecular scale imaging techniques to biological and medical problems.

Reporting to the faculty Director, the Associate Director will assist the Director and a faculty Executive Committee in strategic planning and policy matters and will have primary responsibility for the administration and day-to-day operations of the Center including financial management, human resources, and facilities. He/she will serve as liaison to the university administration and coordinate cooperative arrangements with academic departments and other research centers; assure compliance with all requirements imposed by university, government, or Center policies including financial, human resource, and environmental health and safety; collaborate with faculty members to identify new sources of funding and in the preparation of proposals for support from government agencies, corporations, foundations, or private donors.

Requirements: Strong scientific background, preferably a Ph.D. or equivalent in Physical Science or Engineering. Experience in industry, academia, or government entities, in areas related to the Center's program. Experience in submicron imaging or fabrication is highly desirable. Excellent written and oral communication skills. Ability to communicate with scientific and lay audiences, strong general administrative skills; experience in financial planning and financial, human resource, and grant administration; and a demonstrated ability to manage the start-up of a new program of this scope.

Please send cover letter and resume to Mr. Christopher Kruegler, Human Resources Officer, Harvard University, Resume Processing Center, Req. #2281, 11 Holyoke Street, Cambridge, MA 02138.

Harvard University is an Affirmative Action/Equal Opportunity Employer.



LEADERSHIP THROUGH Eli Lilly & Company is a global research-based pharmaceutical corporation dedicated to creating and delivering innovative pharmaceutical-based healthcare solutions that enable people to live longer, healthier and more active lives. Eli Lilly & Company is focusing research in five major areas: endocrinology, oncology, neuroscience, cardiology and infectious diseases. In diabetes there apy, Lilly was the first to start industrial insulin production in 1923, first to manufacture human insulin with DNA-technology in the early 80's and the first to introduce an insulin analogue (insulin lispro or Humalog®) with specific pharmacokinetic characteristics for meal-time therapy of diabetic patients. The company has over 31,000 employees worldwide. Out of them, 18% are engaged in the Research and Development activities.

> Lilly Research Laboratories in Hamburg are focusing on the beta cell research with a goal to develop compounds, which improve insulin secretion and beta cell survival. Our research group consists of over 40 biologists, chemists, pharmacologists and molecular biologists. In addition, we are working closely with Lilly Research Laboratories in Indianapolis, and collaborating on beta cell research with leading European academic centers. In October 1999 we will move to new, fully equipped laboratory facilities.

> > Join us today.

Experienced B-cell Expert

We will establish a new laboratory with a focus on insulin signalling in beta cell. To lead this laboratory, we are looking for a highly qualified scientist (Ph.D., M.D. or both) with at least 5 years experience on beta cell research and capability for leadership.

Signal Transduction Scientist

In addition, we are in the process of building an insulin signalling team. We are looking for a Sr. Scientist, who - as a member of this team - will be involved in the development of ideas and their practical conversion using in vivo and in vitro assays. This Scientist will work with technicians and interact with scientists from the Pharmacology and Medicinal Chemistry Department. We are looking for a highly motivated Ph.D. or M.D., with comprehensive experience in the areas of cell biology, molecular biology and signal transduction. Particular knowledge about diabetes/beta cell function is not required but would be beneficial.

We offer a stimulating work environment with good opportunities, a competitive salary and other benefits.

Please send your CV and reprints of your 5 most relevant publications to:

We are an equal opportunity employer dedicated to diversity and the strength it brings to the workplace. To learn more about Eli Lilly and Company, please visit our website at:

www.lilly.com.



The National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH) is recruiting for the position of Director, Division of Acquired Immunodeficiency Syndrome (DAIDS). The individual in this position has responsibility for a global biomedical research effort focused on HIV/AIDS, including basic sciences, therapeutics, vaccines, and other prevention strategies. He or she will provide scientific leadership to the research community, oversee a staff of approximately 120 employees in three major scientific programs, and administer an annual budget of over \$665 million. Salary negotiable. Applicants must hold either an M.D. or Ph.D. degree with research management experience in the biological, clinical and/or epidemiological aspects of infectious diseases. U.S. citizenship is required. Persons interested in this position may e-mail Dr. Tom Kindt, Chair of the Search Committee at tk9c@nih.gov. For more information on the application process, please contact Ms. Lynn C. Hellinger (see below). Applications should be submitted and postmarked no later than December 10, 1999 to:

> Ms. Lynn C. Hellinger Director, Office of Human Resources Management, NIAID Building 31, Room 7A20 31 Center Drive MSC-2520 Bethesda, Maryland 20892-2520

Phone: 301-496-9686

NIH is an Equal Opportunity Employer

Director, GM/CA CAT Sector Biomedical Sciences Argonne National Laboratory

Argonne National Laboratory invites resumes for the position of Director of the National Institute of General Medical Sciences/ National Cancer Institute (GM/CA)-Collaborative Access Team (CAT) at Argonne's Advanced Photon Source (APS), Argonne National Laboratory. The GM/CA-CAT intends to provide a modern, streamlined synchrotron laboratory for macromolecular crystallography occupying one sector at the APS with one or two undulator stations and a bending magnet station. The project is sponsored by the National Institute of General Medical Sciences (NIGMS) and the National Cancer Institute (NCI) of the National Institutes of Health. The facility will emphasize optimal throughput of a broad range of experiments that represent the cutting edge of structural biology research sponsored by NIGMS and NCI.

The Director of the GM/CA-CAT will

- provide R&D and administrative leadership for design, construction, operation, and continued improvement of the sector
- conduct basic research in structural biology and/or technology development relevant to improving the operation and capabilities of the beamlines
- supervise the work of subordinates and evaluate their performance
- report regularly to and confer with NIGMS and NCI staff on progress toward establishing and maintaining a world class user facility for synchrotron based experiments in structural biology
- interact with the Science Advisory Board of the GM/CA-CAT in making major development and operation decisions
- act as liaison between the NIGMS and NCI staff and the Argonne National Laboratory staff
- interact with the Argonne division director in areas involving personnel administration, development of local policies and procedures, long-range planning, and preparation of proposals and grants.

The knowledge, skill, and experience of the director should normally include (a) the successful completion of all requirements for a Ph.D. (or equivalent doctoral degree) in an accredited college or university, including acceptance of a dissertation in an academic field in biomedical sciences, or an equivalent combination of education and experience, (b) considerable knowledge and skill in the application of molecular and structural biology techniques for the study of macromolecular crystallography, (c) knowledge of the instrumentation and methods used for the study of macromolecules and the design and construction of synchrotron beamlines and (d) demonstrated capability or strong potential for effective leadership in the successful completion of a complex project.

Argonne is one of the preeminent multidisciplinary research facilities in the country and is operated by the University of Chicago for the U.S. Department of Energy. Interested candidates should submit curriculum vitae, at least three reference names and addresses, and a short statement of their qualifications with particular relevance to the knowledge, skill and experience requirements cited above by November 1, 1999 to: Susan Walker, Employment and Placement,

Box-BIO-206453-43, Argonne National Laboratory, 9700 S. Cass Avenue, Argonne, IL 60439. Argonne is an affirmative action/equal opportunity employer.

For additional information or to submit your resume, please visit our website at http://www.hr.anl.gov/employment.htm



Department of Biology Assistant Professor Tenure Track Positions

Positions for three biologists available, to begin in August 2000:

Mammalogist/Orinthologist—We seek a broadly-trained verterbrate biologist with expertise in the ecology, behavior, physiology, systematics and/or population genetics of mammals or birds. Successful candidate is expected to teach Mammalogy and Avian Ecology; other possible teaching responsibilities include Vertebrate Biology, Comparative Anatomy, Human Anatomy, Human Physiology, graduate-level seminars, and basic biology courses.

Vertebrate Biologist/Herpetologist—We seek a broadly-trained vertebrate biologist with expertise in the ecology, behavior, physiology, systematics and/or population genetics of amphibians and/or reptiles. Successful candidate is expected to teach Herpetology and Vertebrate Biology; other possible teaching responsibilities include Comparative Anatomy, Human Anatomy, Human Physiology, graduate-level seminars, and basic biology courses.

Biologist—Teaching responsibilities include: (1) coordination of the nonmajor's introductory biology laboratories; (2) development of an introductory lecture/lab course designed for prospective teachers; and (3) teaching upper division courses and graduate-level seminars in area of biological research specialty. Service responsibilities will include the initiation of partnerships with K-12 community.

For all positions a Ph.D. in the biological sciences or related field is required and post-doctoral work is preferred. Successful candidate is expected to develop a strong research program involving undergraduate and graduate (MS) students, to seek external funding for his or her research programs, and to exhibit potential for excellence in teaching. Committee work and other functions usually associated with University faculty are expected.

Applicants should send a curriculum vitae, including a summary of teaching experience, statements of teaching philosophy and research interests, reprints of up to five publications, and names and full addresses (including email) of three references to Dr. Jim Dole, Chair, Department of Biology, California State University, Northridge, CA 91330-8303. Applications must be received by 1 December 1999.

California State University, Northridge is an Equal Opportunity Employer committed to excellence through diversity.



MOUNT SINAL SCHOOL OF

Assistant/ Associate Professor

Mount Sinai School of Medicine, a leader in medical education and research, has established an Institute

for Gene Therapy and Molecular Medicine which is now inviting applicants with M.D. and/or Ph.D. degrees for a tenure-track assistant or associate professorship. We seek candidates with expertise in basic molecular and cellular immunology. In particular, individuals with strong accomplishments and research interests in antigen processing and presentation that relate to costimulation, tolerance, or anergy would be most desirable. The individual will be expected to develop a strong independent research program and to interact with ongoing programs in the Institute, including those in diabetes, cancer, transplantation, and stem cells.

Mount Sinai is located on the Upper East Side of New York City and convenient to the many cultural attractions of the city. For consideration, please send a letter of interest and a two page statement of research interests and future goals, a C.V., and the names, addresses, and telephone numbers of three references to: Jonathan S. Bromberg, M.D., Ph.D., Box 1496, 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.









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Lilly: Leading the Technology Forefront with Excellence and Innovation into the Future.

Eli Lilly and Company, a premier pharmaceutical corporation is utilizing scientific excellence and innovation to develop therapeutic solutions for the world. Lilly is a 120-year-old pharmaceutical visionary currently seeking the best, most diverse scientists to head the charge in the race to discover drug therapeutics.

Postdoctoral Fellowship Opening
We are seeking a postdoctoral fellow to join our Neuroscience research team looking at microdialysis studies measuring the effects of uptake inhibitors and antipsychotics on extracellular levels of monoamines. Experience in microdialysis is desired, or at minimum electrochemical detection or other analytical techniques- any similar or equivalent experience is preferred with a reasonable amount of training expected. Candidates should develop skills in animal handling, surgery and analytical methodologies. The fellow will gain experience in pharmacology, while learning an extremely valuable and transferable technique in addition to gaining pharmaceutical experience.

Behavioral Pharmacology Associate

Lilly is seeking BS/MS level scientists to assist in identifying functional properties of drug molecules using animal behavioral models. Successful candidates will have expertise in behavioral neuroscience or behavioral pharmacology and will participate in all phases of experimental design, execution and analysis. The scientist will be involved in setting up standard behavioral models (with an emphasis on learning and memory), improving existing paradigms and assisting in developing new models for testing a compound's potential effect in CNS-related therapeutic areas. Successful use of animal behavioral models in the laboratory is required with an emphasis on behavioral pharmacology. All scientists perform in cross-functional team environments and should have proven abilities in this type of environment with high motivation and creativity to present and develop new methodologies.

For confidential consideration, please send your resume and cover letter indicating the position of interest to: Eli Lilly and Company, ADSCMBI10, DC 1818, Lilly Corporate Center, Indianapolis, IN 46285.



We are an equal opportunity employer dedicated to diversity and the strength it brings in the workplace.

Chief, Laboratory of Pulmonary Pathobiology (LPP) National Institute of Environmental Health Sciences (NIEHS) National Institutes of Health (NIH)

The NIEHS (http://www.niehs.nih.gov) in Research Triangle Park, North Carolina, is seeking a senior tenured investigator to direct the Laboratory of Pulmonary Pathobiology within the Division of Intramural Research, NIEHS.

The Challenge:

To develop and maintain a strong personal research effort in the general area of pulmonary pathobiology, particularly as it relates to interactions of the pulmonary system with the environment.

To provide overall leadership for the existing principle investigators within the LPP, who study airway cell biology, airway inflammation,

To recruit talented investigators to the LPP, and to provide a focus for collaborations within the NIEHS.

The Opportunity exists for an outstanding senior scientist to establish a cutting edge intramural research program in pulmonary pathobiology, and to direct and expand the efforts of the LPP in this critical area of environmental medicine. Excellent space and research support are available. Clinical appointments and access to patients are possible at neighboring medical centers and at the NIH Clinical Center in Bethesda. Levels of appointment, salary and research support will be commensurate with the experience and qualifications of the candidate.

The Candidate should be a senior investigator with an international reputation in a specific area within the broad context of pulmonary pathobiology and its relationship to the environment. Investigators with clinical qualifications and translational research activity are particularly encouraged to apply. Possible specialized research areas include but are not limited to signal transduction mechanisms, receptor biology, immunology-hypersensitivity, inflammatory cell biology, extracellular matrix signaling, and developmental biology. The successful candidate will have an outstanding publications record and proven history of research leadership.

Applicants will require a M.D. and/or Ph.D. degree. Applications from women and members of minority groups are particularly welcome. Applicants should submit a curriculum vitae and list of publications, a plan for future research, and the names of three individuals who can write reference letters on the candidates' behalf. These materials should be mailed by 12/31/99 to:

> Ms. Naomi Teasley, Human Resource Management Branch, (HNV99-34) National Institute of Environmental Health Sciences P.O. Box 12233, Research Triangle Park, NC 27709, (919)541-5151

NIEHS/NIH is an Equal Opportunity Employer

Illinois Institute of Technology (IIT), a Ph.D.granting university located near Chicago's Loop, invites applications and nominations for the position of DEPARTMENT CHAIR for the interdisciplinary Department of Biological, Chemical and Physical Sciences (BCPS). The position is for fall 2000 at the rank of Professor with tenure. A candidate must hold a Ph.D. degree in chemistry, biology, physics, or a related area, must possess a distinguished record of professional accomplishment, and demonstrated leadership and administrative ability.

The BCPS Department at IIT offers degree programs at the B.S., M.S., and Ph.D. levels in biology, chemistry, physics, molecular biochemistry, and biophysics. Currently, the department has 33 tenured and tenure-track faculty members, and has averaged more than \$6 million in research funding annually in recent years. The department has particular research strengths in the interdisciplinary areas of synchrotron radiation, molecular biochemistry and biophysics, biotechnology, sensors and instrumentation. Traditional core research competencies include polymer chemistry, experimental particle physics, synthetic chemistry, superconductivity, semiconductors, and computational physics.

Applicants are asked to submit a brief description of current research interests and future plans, a detailed curriculum vitae, and the names, addresses, e-mail addresses, and telephone numbers of at least three references to:

Professor Hamid Arastoopour, Chair Search Committee for Chair of Biological, Chemical and Physical Sciences Department Illinois Institute of Technology 10 West 33rd Street Chicago, IL 60616 E-mail: arastoopour@iit.edu

For more information, see the BCPS Department website: www.iit.edu/departments.bcps.

IIT is an Equal Opportunity/Affirmative Action Employer

FACULTY POSITION PHARMACOLOGY AND TOXICOLOGY

A tenure-track faculty position at the ASSISTANT PROFESSOR level is available in the Department of Medical Pharmacology and Toxicology, College of Medicine, Texas A&M University System Health Science Center. The successful candidate is expected to develop a strong independent research program and participate in medical and graduate teaching. The position will be available in the spring of 2000. We invite candidates that can address tobacco-related problems, although all areas of pharmacology will be considered. Program strengths within the department include: ocular, neuropharmacology, as well as toxicology (website: http://medicine.tamu.edu/pharm). Applications should include curriculum vitae, selected reprints, statement of research interests and three letters of reference. Review of applications will begin February 1, 2000, and will continue until the position is filled. Please send your application to: Dr. William H. Griffith, Chair, Search Committee, Department of Medical Pharmacology and Toxicology, Texas A&M University System Health Science Center, College Station, TX 77843-1114. Equal Opportunity Employer.

FACULTY POSITION IN BIOINFORMATICS

The School of Biology at Georgia Tech invites applications for positions in bioinformatics at the level of **ASSISTANT** or **ASSOCIATE PROFESSOR**. Successful applicants are expected to establish an active program of funded research and to teach in the undergraduate and graduate programs. We seek candidates with a research interest in the analysis of protein sequence and structure, or comparative genomics.

Curriculum vitae, description of research and teaching interests, and three letters of reference should be mailed by November 15, 1999, to: Faculty Search Committee-Bioinformatics, School of Biology, Georgia Institute of Technology, Atlanta, GA 30332. Georgia Institute of Technology is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITION DIRECTOR-CHILD DEVELOPMENT UNIT

The Department of Pediatrics, University of Louisville School of Medicine, invites applications for Director of the Child Development Unit. This research section of the Department of Pediatrics includes the internationally recognized, longitudinal Louisville Twin Study, which has been supported continuously by extramural research funding since 1957 and has contributed significantly to the fields of child development and developmental behavioral genetics. The directorship is a 12-month, tenured Professor faculty position with salary negotiable and subject to administrative approval. Applicants must have a doctorate degree in psychology or related field as well as an outstanding record of past and current extramural research funding and publication in human behavioral development. Proven administrative ability and research interests complementary to those of currently funded faculty are particularly desired. Major research activities within the Child Development Unit currently include: (a) continuation of the long-term program to track behavioral development for a large number of twin-sib families from infancy to adulthood; (b) data analyses to determine the genetic and environmental origins of individual differences in behavioral development; (c) studies of twin neonates; and (d) a large, currently funded research program to map quantitative trait loci that contribute to developmental variability. The primary responsibilities of the Director include representing the Child Development Unit for university administrative activities and purposes, monitoring and coordinating operations within the unit, developing new research initiatives, and fostering collaborations with other research groups, including those within the Departments of Early Childhood Education, Psychology, and Psychiatry, and the Center for Genetics and Molecular Medicine. Applications will be accepted until the position is filled by a well-qualified candidate, and should include a curriculum vitae, names and addresses of three references, and a personal statement of professional goals. Send to: Child Development Search Committee Chair, Department of Pediatrics, School of Medicine, University of Louisville, Louisville, KY 40292-0001. The University of Louisville is an Equal Opportunity/ Affirmative Action Employer.

STRUCTURAL BIOLOGY DARTMOUTH COLLEGE

The Chemistry Department of Dartmouth College seeks an individual with a nationally recognized research program in structural biology to join its FAC-ULTY at an appropriate rank. This will be the first of three hires in this area in chemistry and, along with recent hires in biochemistry and the newly created Department of Genetics, will form the core of a structural biology and biophysical chemistry group at Dartmouth. Preference will be given to individuals who study the structural properties of biological macromolecules to understand their function. Expertise with atomic resolution methods, such as NMR spectroscopy or X-ray crystallography, as well as other spectroscopic, physical, and computational methods, will be particularly attractive. Teaching will be expected in upper-level courses of our biophysical chemistry major, graduate courses in one's specialty, and introductory courses in either general or organic chemistry. Applicants should submit a curriculum vitae, a statement of their scientific accomplishments and future research directions, and a statement about their teaching experience and interests. Applicants should also arrange to have three letters of recommendation sent on their behalf. All inquiries and applications will be treated confidentially. Application materials should be sent to: Professor Robert S. Cantor, Structural Biology Search Committee, Department of Chemistry, 6128 Burke Laboratory, Dartmouth College, Hanover, NH 03755-3564. The Committee will begin to consider completed applications on October 31, 1999. Dartmouth College is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITION REGENERATIVE DEVELOPMENTAL BIÓLOGY Department of Biology

Indiana University-Purdue University Indianapolis

We seek a highly qualified individual working on the developmental and cellular biology of vertebrate regeneration for a tenure-track position at the level of ASSISTANT or ASSOCIATE PROFESSOR beginning August 2000. Possible research areas might include developmental regulation of regeneration; stem cell biology; intercellular signaling; cell/matrix interactions; or tissue engineering. Postdoctoral training is essential. The successful candidate will be expected to establish an externally funded research program and demonstrate a strong commitment to undergraduate and graduate education. Start-up funds will be provided.

Indiana University-Purdue University Indianapolis (IUPUI) encompasses 18 schools including the Indiana University School of Medicine. Research interests in the Department of Biology (website: www. biology.iupui.edu) in the School of Science include cell, molecular, and developmental biology; ecology; immunology; membrane biochemistry; microbiology; oncology; plant biology; and regeneration. Opportunities for collaborations with other Departments and Schools are available and encouraged.

Applicants should send their curriculum vitae, a statement of research and teaching interests, and three letters of recommendation to: Chair, Search and Screen Committee, Department of Biology, Indiana University-Purdue University Indianap olis, 723 West Michigan Street, Indianapolis, IN 46202-5132 by November 1, 1999. IUPUI is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are particularly encouraged to apply.

FACULTY POSITIONS UNIVERSITY OF CHICAGO

The Department of Pediatrics at the University of Chicago invites applications for faculty positions in the section of Pediatric Hematology/Oncology and Stem Cell Transplantation. We are seeking outstanding candidates who hold either the M.D. or Ph.D. degrees with established research interest related to cancer or blood diseases. Academic rank will be commensurate with qualifications.

Successful candidates will be expected to develop an independent, extramurally funded research program. Excellent laboratory facilities will be provided. The selected faculty will participate in teaching of students, residents, and fellows. Appropriately trained physicians will participate in the clinical activities of the section.

Candidates should send letters of application, curriculum vitae, statement of research accomplishments and interests, and the names and addresses of three references to: Eric C. Beyer, M.D., Ph.D., Section Chief, Hematology/Oncology, Department of Pediatrics, University of Chicago, 5841 South Maryland Avenue, MC 4060, Chicago, IL 60637.

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

The M. D. Anderson CHAIR in Organic Chemistry at the University of Houston is open, and we are accepting applications from distinguished faculty with preference given to applicants with interests in chemical biology, medicinal chemistry, biotechnology, or biochemistry. The position is tenure-track in department with several active faculty in organic chemistry. Applicants for the chaired position should have an established reputation in scholarship to be considered. In addition the successful candidate will have a strong commitment to education at all levels. Preference will be given to applicants whose interests complement current strengths in organic chemistry at this department. Please send a curriculum vitae, research plans, and three letters of recommendation by November 1, 1999, to: Professor B. M. Pettitt, Department of Chemistry, University of Houston, Houston, TX 77204-5641. The University of Houston is an Equal Opportunity Employer. Women, minorities, and veterans are encouraged to apply.

Post-Doctoral Research Fellowship Positions The Pulmonary - Critical Care Medicine Branch (PCCMB), NHLBI

Post-doctoral research fellowship positions are available for individuals interested in basic cell molecular biology, as well as bench to beside translational research. Opportunities for post-doctoral research fellowships exist within intramural PCCMB laboratories investigating signal transduction, nitric oxide, G proteins, protein modification, vesicular trafficking and cyclic nucleotide phosphodiesterases. Translational research opportunities include asthma, bacterial virulence factors, cystic fibrosis, emphysema, intersititial lung disease, lymphangioleiomyomatosis, oxidative lung injury, sarcoidosis, and susceptibility genes in pulmonary disease. Positions are available for a minimum of 2 years and may be extended for additional training. Candidates should possess a PhD or MD degree or equivalent. Position are available immediately. Interested individuals should submit a letter of interest, curriculum vitae, and three letters of recommendation to: Joel Moss, MD, PhD, Chief, Pulmonary Critical Care Medicine Branch, NHLBI, NIH, Bldg 10, Rm 6D03, MSC 1590, Bethesda, MD, 20892-1590.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

DO SOME GOOD (science)

We seek experienced and motivated scientists with well-documented expertise in both molecular biology and microbiology to develop products that improve healthcare. With an emphasis on teamwork, creativity, and intellectual achievement (publishing encouraged), we are dedicated to providing a challenging and stimulating work environment, and a generous salary/benefits package.

You should be an energetic self-starter who enjoys the challenge of developing and applying new molecular biological technology. Well-documented productivity and integrity; strong organizational, interpersonal, and communication skills required.

SR. SCI. / SCIENTISTS (job code: SS999)

You should have strong skills in molecular biology and microbiology and proven abilities in conceptualizing, developing and troubleshooting new molecular biological assays. Sr. Scientists must have solid team leadership & project management abilities, and must have demonstrated excellence in product development for nucleic acid-based infectious disease diagnostics. Ph.D. + post-doc required; industry experience a plus.

Profiling
Systems
is an exciting,
well-financed Cam-

well-financed, Cambridge-based startup company with breakthrough genetic technology for producing a new generation of tools that promise to revolutionize infectious disease diagnostics.

Please submit a resume, one page cover letter, and contact information for 4 references (specifying relationship) to:

Job Code_____ Genomic Profiling Systems, Inc. 840 Memorial Drive, 4th FI Cambridge, MA, 02139

Or FAX to: 617 547-6060

Or email (text or attached MS Word file) to: jobs@genprosys.com

(include last name & job code in BOTH the subj. line of email AND attached filename)

TWO TENURED SENIOR INVESTIGATORS NATIONAL INSTITUTE OF MENTAL HEALTH NATIONAL INSTITUTES OF HEALTH

The National Institute of Mental Health Intramural Research Program invites applications for two tenured Senior Investigators in Genetics of Behavior and Mental Disorders. The candidates are expected to develop an independent research program to plan and conduct genetic research studies on the etiology of psychiatric disorders and/or behavior. They will be provided with resources to conduct this research. The candidates must have an M.D. and/or Ph.D. in genetics, psychiatry, neuroscience or related discipline with broad research experience, including a record of high scientific achievement as an independent investigator; experience in direct administration of a research program: and national and international recognition. Applicants should send their curriculum vitae, statement of research interests, and have three letters of recommendation sent by 10/31/99 to: Dr. Robert Desimone, Chair, Search Committee, National Institute of Mental Health, Bldg. 10, Room 4N-222, 9000 Rockville Pike, Bethesda, MD 20892.

NIH is an Equal Opportunity Employer

Director, Center for Human Genetics

The Aab Institute of Biomedical Sciences of the University of Rochester invites applicants to develop a new center for Human Genetics. The Director will recruit multiple scientists with complementary research interests in developmental genetics, animal models of human disease, and molecular genetics of human disease.

The Director must have a significant record of scientific achievement and a strong history of extramural funding. Substantial institutional resources will allow the successful candidate to recruit a critical mass of tenure-stream faculty to the Center. In addition, the Director will be expected to create a program that interfaces with the wide range of existing efforts within the University related to Genetics.

The Center for Human Genetics will be the sixth Center formed within the Aab Institute of Biomedical Sciences. Other Centers are actively recruiting scientists in the areas of aging, cancer biology, cardiovascular biology, oral biology, and vaccine biology and immunology. New research space is available within the Arthur Kornberg Medical Research Building (http://www.urmc.rochester.edu/Aab/). A robust set of institutional core facilities is also available.

Applicants should provide a brief summary of their individual research interests, a short précis of their view of the direction of this research Center, a copy of their curriculum vitae, and the names of three references to: Dr. Lawrence A. Tabak, Senior Associate Dean for Research, School of Medicine and Dentistry, Box 611, 601 Elmwood Avenue, Rochester, NY 14642.

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

Roswell Park Cancer Institute is seeking a **CHAIR** for the Department of Pharmacology and Therapeutics and Director of the Grace Cancer Drug Center. The candidate must hold a Ph.D. and/or M.D. degree with an established track record of peer-reviewed funding; have administrative experience in leading a large research group with a commitment to inter- and intradepartmental programmatic coordination. The major responsibility of the position is to promote the discovery and development of novel therapies for the treatment of cancer. The ideal candidate will have the exceptional vision necessary to continue development of a first rate Department of Pharmacology and Therapeutics.

Roswell Park Cancer Institute is a free-standing, NCI Comprehensive Cancer Center that completed a \$250 million major modernization construction project in June of 1998. The Institute has six basic research departments, 11 clinical departments, and a vibrant Graduate Studies Division within the State University of New York at Buffalo providing a highly interactive environment for collaborative research.

Interested individuals should submit their curriculum vitae (on disk if possible), names of three references, and a one or two page summary of current research interest to:

Soldano Ferrone, M.D., Ph.D.
Chair, Search Committee for the Chair of
Pharmacology and Therapeutics
Department of Immunology
Roswell Park Cancer Institute
Elm and Carlton Street
Buffalo, NY 14263

RPCI is an Equal Opportunity Employer.

FACULTY POSITION DEPARTMENT OF GEOLOGY AND GEOPHYSICS University of California at Berkeley

The Department of Geology and Geophysics invites applications for a Tenure-Track Professorship, effective July 1, 2000. Areas of interest identified by the department include: petrology and volcanic processes; aqueous and environmental geochemistry; sedimentary environments and processes; and biogeochemistry and geomicrobiology. Other fields of specialization will also be considered. We anticipate filling this position at the ASSISTANT PROFESSOR level, but appointment at higher levels may be considered for exceptional candidates. Applicants should send their curriculum vitae, statements of research and teaching interests, reprints or preprints of up to three publications, and contact information (including e-mail addresses) for at least three references to: Search Committee, Department of Geology and Geophysics, University of California at Berkeley, **307** McCone Hall, Berkeley, CA 94720-4767 no later than January 11, 2000. The University of California at Berkeley is an Equal Opportunity/Affirmative Action Employer

FACULTY POSITION

SUNY at Stony Brook invites applications for a new tenure-track ASSISTANT PROFESSOR position in the Department of Physiology and Biophysics in conjunction with the Institute of Molecular Cardiology. The institute contains biophysicists, cell biologists, molecular biologists, engineers, computer scientists, and clinicians focused on translational ion channel and transporter research. We are particularly interested in Investigators involved in gene regulation or expression, but we will consider outstanding candidates in related areas. The successful candidate would have a proven record of productivity, and will be expected to establish an independent, well-funded research program and to participate in departmental teaching activities. Applicants should submit a curriculum vitae, summary of research accomplishments, and three letters of recommendation by January 1. 2000, to: Search Committee Chair, Department of Physiology and Biophysics, State University of New York at Stony Brook, Stony Brook, NY 11794-8661. FAX: 516-444-3432. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

DIRECTOR OF THE INSTITUTE FOR ENERGY RESEARCH Department of Geology and Geophysics The University of Wyoming

The Department of Geology and Geophysics at The University of Wyoming is seeking a new Director for the Institute for Energy Research. The applicant must have a doctorate in a relevant field, experience working in a university or industrial research setting, and a record of active research, including obtaining financial support for major research programs. Also crucial are a demonstrated ability to lead an interdisciplinary research group, a commitment to work with the regional and state oil and gas industry, and credential suitable for appointment as Senior Faculty in the Department of Geology and Geophysics.

In the past seven years the institute has developed an outstanding reputation in oil and gas exploration and production research. Increased focus on enhanced oil-recovery research is an oncoming challenge. The Institute has a technical staff of 10 and a support staff of three, and is able to draw on strong departments in Geology and Geophysics and other disciplines.

Send a complete résumé, letter of interest, and names and addresses of at least three references to: Dr. Ronald Steel, Search Committee Chair, Department of Geology and Geophysics, University of Wyoming, Laramie, WY 82071. Further information can be obtained by e-mail: rsteel@uwyo.edu. Review of applications will begin December 1, 1999. Anticipated starting date is July 1, 2000. Salary is negotiable. The University of Wyoming is an Equal Opportunity/Affirmative Action Employer.

The University of New Mexico's Health Sciences Center School of Medicine requests applications for CHAIR of the Department of Internal Medicine. Candidates must have a M.D. degree or equivalent, be certified in internal medicine and eligible for New Mexico licensure, have evidence of teaching, scholarly activity, and service appropriate to the appointment of a Full Professor in a School of Medicine, and a minimum of three years of administrative and leadership experience. For best consideration, applications must be received by December 1, 1999. A complete application must include (1) a letter of interest relating personal qualifications to the desired qualifications of the job; (2) a résumé; and (3) the names, addresses, and telephone numbers of three references. To see a description of the position and a list of desired qualifications, go to the website: http://hsc.unm.edu/ jobs/ or write for a vacancy announcement. Please send applications and requests for complete information to: Chair, Internal Medicine Search Committee, c/o William Padilla, Office of Academic Affairs, Basic Medical Sciences Building, Room #180, Albuquerque, NM 87131-5116.

University of New Mexico is an Equal Opportunity/Affirmative Action Employer/Educator.

CHAIR, Department of Physiology and Cell Biology, College of Medicine and Public Health, The Ohio State University. The Department of Physiology and Cell Biology in the College of Medicine and Public Health at The Ohio State University invites both nominations and applications for the position of Department Chair. Candidates should hold the Ph.D. and/or M.D. degree, be committed to a balanced vigorous teaching and research program, have demonstrated excellence in research and scholarly activities, and possess proven leadership qualities. Nominations and/or applications should include a curriculum vitae with bibliography and the names of at least three references. Review of candidates will begin January 1, 2000, and continue until the position is filled. Salary is negotiable. Address applications to: Caroline C. Whitacre, Ph.D., Physiology Chair Search Committee, Department of Molecular Virology, Immunology and Medical Genetics, The Ohio State University, 2078 Graves Hall, 333 West 10th Avenue, Columbus, OH 43210. 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.

POSITIONS OPEN

CHAIR, DEPARTMENT OF MEDICAL AND MOLECULAR GENETICS Indiana University School of Medicine

Indiana University School of Medicine seeks outstanding candidates for the position of Chair, Department of Medical and Molecular Genetics. The Department has a distinguished history of research, teaching, and service, and currently has sections in clinical genetics, cytogenetics, molecular genetics, and population genetics. It is responsible for a broadbased training program including a medical genetics Residency, Postdoctoral Fellowships, Ph.D. training, and genetic counseling programs. Departmental resources include a database of 9,000 families with genetic disorders collected since 1961. The Department houses the National Huntington Disease Research Roster and the National Alzheimer's Disease Cell Bank and has an active roster of 4,000 twin pairs. The School is committed to expanding the prominence of the department nationally and internationally. Candidates should have the vision to lead the department into the coming era in which molecular genetics will play a key role in all aspects of medicine, and must have a M.D. and/or Ph.D. degree, be a recognized leader in the field of genetics, and have an active research program and excellent skills in medical education and administration. Please send curriculum vitae and list of referneces to: Hal E. Broxmeyer, Ph.D., Chair, Search and Screen Committee, Fesler Hall 318, 1120 South Drive, Indianapolis, IN 46202-5114. Indiana University is an Affirmative Action/Equal Opportunity Employer/Minorities/Females/ Disabled.

FACULTY POSITIONS

Columbia University announces immediate openings for faculty positions at all levels for the recently established Taub Institute on Alzheimer's Disease and the Aging Brain.

Faculty are sought to join a vigorous and active research group for opportunities in this new institute at Columbia University Health Sciences in New York City. Individuals with proven research records engaged in basic and clinical research related to Alzheimer's disease and related disorders or aging of the brain and nervous system are encouraged to apply.

Successful candidates will have interdisciplinary appointments in the Taub Institute and in an appropriate department. Criteria for selection will be based on future research interests and direction, potential to secure extramural funding, and relationship to existing faculty interests in cellular and molecular biology, genetic epidemiology, and neuroscience.

Applicants should submit a curriculum vitae, three letters of recommendation, and up to three reprints or manuscripts that best reflect their work to: Chair, Taub Institute Faculty Search Committee, Gertrude H. Sergievsky Center, 630 West 168th Street, New York, NY 10032. Columbia University takes Affirmative Action toward Equal Employment Opportunity. Women and minorities are encouraged to apply.

FACULTY POSITION TULANE CANCER CENTER

The Tulane Cancer Center and the Department of Environmental Health Sciences are seeking candidates for a tenure-track appointment at the ASSIST-ANT or ASSOCIATE PROFESSOR level. The successful candidate will develop an innovative, independent research program. Programs in receptors, cell signaling, or genetic diversity are particularly sought.
The successful candidate will be expected to participate in graduate student teaching within the department. Modern laboratory space in the newly constructed floor dedicated to basic cancer research will provide a strong and interacative research environment. Submit applications, including curriculum vitae, summary of research interests, and arrange for three letters of recommendation to: Dr. Prescott Deininger, Tulane Cancer Center, SL-66, Tulane University Medical Center, 1430 Tulane Avenue, New Orleans, LA 70112. Tulane University is an Affirmative Action/Equal Opportunity Employer.



CENTER FOR STATISTICAL GENETICS DEPARTMENT OF BIOSTATISTICS AND DEPARTMENT OF HUMAN GENETICS

UNIVERSITY OF MICHIGAN

The Center for Statistical Genetics and the Departments of Biostatistics and Human Genetics at the University of Michigan together invite applications for three tenured or tenure-track faculty positions in statistical genetics. Junior and senior scientists are invited to apply. Generous salary and start up support are available; joint appointments are encouraged. Applicants should have a doctoral degree in Biostatistics, Genetics, or a related discipline, and demonstrate outstanding research productivity or promise.

Inquiries and applications to: Michael Boehnke, Ph.D., Co-Chair, Statistical Genetics Search Committee, Department of Biostatistics, School of Public Health, University of Michigan, 1420 Washington Heights, Ann Arbor, MI 48109-2029, 734-936-1001 (phone), 734-763-2215 (fax), boehnke@umich.edu. Information about the positions and Departments available at http://www.sph.umich.edu/group/biostat/ and http://www.med.umich.edu/hg/. Applicants should send CV, statement of research interests, and contact information for at least three referees. Recent Ph.D.s also should send academic transcripts. Applicant review will begin November 1 and continue until the positions are filled.

The University of Michigan is an affirmative action/ equal opportunity employer. Women and minorities are encouraged to apply.

MOUSE NEUROGENETICS FACULTY POSITION THE UNIVERSITY OF CHICAGO

Exciting new opportunities are available in the expanding Neuroscience and Genetics programs at the University of Chicago. The Department of Human Genetics (D. H. Ledbetter, Chair) and the Department of Neurobiology, Pharmacology and Physiology (S. Sisodia, Chair) are currently seeking an outstanding mouse geneticist with research interests in developmental neurobiology. An appointment is anticipated at the Associate Professor level, but candidates at any rank will be considered. The applicant must have an established research program and proven track record of external funding. Participation in development of state-of-the-art mouse genomics technologies and collaboration with other scientists within the Biological Sciences Divisions will be essential to this position. State-of-the-art research space and generous start-up funds are available.

Please submit** a letter of interest, CV, research statement, and the names and addresses of three references electronically (as Word or WordPerfect attachments) to:

Mouse Neurogenetics Search Committee recruit@genetics.bsd.uchicago.edu

**Please indicate <u>neurogenetics applicant</u> in the e-mail "subject" line



THE UNIVERSITY OF CHICAGO

The University of Chicago is an Equal Oppportunity Affirmative Action Employer.

Bringing the Art of Science to Life

Bringing the art of science to life is the foundation of Novartis Pharmaceuticals, where we are making significant strides in healthcare solutions. We research, develop, manufacture and market leading innovative drugs used to treat a number of diseases and conditions. We seek to improve people's lives – help strengthen our foundation as a member of our team.

Functional Genomics

Novartis Pharmaceuticals Corporation's new Functional Genomics Department is dedicated to the identification of novel human disease genes and novel drug targets. Using state-of-the-art techniques such as high-throughput gene expression analysis, novel antisense technologies, proteomics, Transgenic Mice, and Drosophila genetics, we work in partnership with our drug discovery groups to identify new research opportunities and to turn these gene-based discoveries into clinical benefits. We are currently seeking highly motivated, creative individuals to join our Basel, Switzerland and Summit, New Jersey operations.

Transgenics Group Leader HB-6580

As the leader of our International Transgenic Group, you will help determine the group's future direction and growth. The Transgenic Group will have expert staff in both New Jersey and Switzerland, and is responsible for creating and utilizing Transgenic Mice for Novartis. This group will work with all therapeutic area departments to elucidate the normal and pathologic role of genes, create new animal models of disease, and develop new transgenic animal technologies. Qualifications include a Ph.D. in Molecular Biology, Cell Biology or a related field, along with a minimum of 10 years' experience in Transgenic Technology and Mouse Molecular Genetics.

Research Scientists HB-6581

We are currently seeking Research Scientists with extensive experience in Transgenic Technology, Molecular Biology and Cell Biology. To qualify, a BS or MS in a biological science is required, along with a minimum of 2 years' relevant experience. Candidates must have extensive experience in creating Transgenic Mice using pronuclear microinjection and/or gene targeting in embryonic stem cells. This position will be based in Summit, NJ.

Postdoctoral Research Fellow HB/PD-6577

The successful candidates will be involved in the discovery and functional validation of candidate disease genes in Oncology. The innovative, dedicated individuals we seek will have a Ph.D. with expertise in molecular biology, as well as experience using yeast and C. elegans as model systems. Our postdoctoral positions encourage creative thinking and offer extensive opportunities for publication and research presentations. This position will be based in Summit, NJ.

We offer a highly competitive salary and compensation package. For consideration, please forward your resume in confidence, indicating position of interest and requisition #, to: R&D Staffing, Novartis Pharmaceuticals Corporation, 556 Morris Avenue, Building 133-1029, Summit, NJ USA 07901; e-mail: hrstaffrd.phuseh@pharma.novartis.com We are an equal opportunity employer. Unfortunately, we will only be able to respond to those candidates who meet our qualifications. Please visit our website at: www.pharma.us.novartis.com



The Spirit of Discovery

FACULTY POSITION UNIVERSITY OF PUERTO RICO

The Institute for Tropical Ecosystem Studies anticipates an opening for a tenure-track position to be filled at the rank of ASSISTANT PROFESSOR or higher. The institute is seeking an individual possessing a Ph.D. with significant research experience in one of two areas: (1) animal community ecology, with preference to be given to individuals studying terrestrial or freshwater arthropods; or (2) ecosystem ecology, with preference given to individuals whose research involves the development and application of simulation models. The successful applicant will be expected to develop a research program in coordination with the Luquillo Long-Term Ecological Research (LTER) Program and seek additional extramural funding. A light teaching load at the undergraduate and graduate levels will also be required. Candidates should direct their applications, including (1) a description of their research and teaching interests. (2) curriculum vitae, (3) copies of all university transcripts, and (4) three letters of recommendation, with a cover letter indicating the rank sought, to: Search Committee, Institute for Tropical Ecosystem Studies, University of Puerto Rico, P.O. Box 363682, San Juan, PR 00936-3682. Website: http://sunceer.upr.clu.edu. Review of applications will begin October 25, 1999. The University of Puerto Rico is an Equal Opportunity/Affirmative Action Employer/ Minorities/Women/Veterans/Disabled.

FACULTY POSITION IN CONSERVATION BIOLOGY AT BROWN UNIVERSITY

The Department of Ecology and Evolutionary Biology (EEB) is a group of strongly interactive faculty with particular strengths in ecology, evolutionary genetics, behavior, and morphology. We announce a three-year, renewable, tenure-track ASSISTANT PROFESSORSHIP for a Conservation Biologist, available 1 July 2000. Applicants must have a Doctorate, demonstrated excellence in research, potential for excellence in teaching, ability to develop an independently funded research program, and potential to complement and interact productively with faculty in fields of ecology, evolutionary biology, and environmental science. They must also qualify for a joint appointment in the Center for Environmental Studies. Responsibilities include teaching a conservation biology course for undergraduates; contributions to courses in ecology, evolutionary biology, or environmental science; and graduate training. Applicants should submit résumé, statement of research plans and teaching interests, and representative reprints; and have three letters of reference, to be received by 15 December 1999, sent to: Dr. D. H. Morse, Box G-W, Department of Ecology and Evolutionary Biology, Brown University, Providence, RI 02912. Brown University is an Equal Opportunity/Affirmative Action Employer.

Developmental biology. The Department of Biology at The University of Akron invites applications for tenure-track position at the rank of ASSISTANT PROFESSOR to begin August 28, 2000. Salary is commensurate with qualifications and experience. Start-up funds are available. Candidates must hold a Ph.D. degree, and postdoctoral experience is preferred. We seek a Biologist with expertise and training in modern developmental biology. The candidate will be expected to develop an externally funded research program in his/her area of expertise, advise graduate students, and teach undergraduate and graduate courses. The University of Akron is a state-assisted, metropolitan university in Ohio, with more than 23,500 students. Review of applications will begin January 17, 2000. Applicants should submit a curriculum vitae, a summary of teaching interests, a research statement, copies of recent publications, and three letters of recommendation to: Dr. Monte Turner, Developmental Biology Search Committee, Department of Biology, The University of Akron, Akron, OH 44325-3908. The University of Akron is an Equal Education and Employment Institution.

POSITIONS OPEN

HEAD DEPARTMENT OF MEDICINAL CHEMISTRY AND PHARMACOGNOSY

The University of Illinois at Chicago College of Pharmacy invites applications and nominations for the position of Head, Department of Medicinal Chemistry and Pharmacognosy. Candidates seeking this position must have a distinguished record in research and teaching and have demonstrated scholarly achievement and effective leadership abilities. Preference will be given to candidates who have earned a doctorate in a field of chemistry, pharmacognosy, biochemistry, or related disciplines. Applicants are expected to have an active research program with demonstrated success in obtaining competitive funding and a strong commitment to professional and graduate education in the pharmaceutical sciences.

The Department of Medicinal Chemistry and Pharmacognosy consists of 18 tenured and five tenuretrack faculty positions with both basic science and clinical interests in computational chemistry, medicinal chemistry, natural product drug discovery and characterization, structural biology, molecular biology, and others. The department offers two doctoral programs: one in medicinal chemistry and the other in pharmacognosy. The head will be expected to promote an environment that fosters excellence in all aspects of the multidisciplinary missions of the department. The candidate should demonstrate leadership skills, have a commitment to academic excellence, and possess interpersonal skills necessary to interact effectively with faculty, students, staff, and external constituencies.

Interested applicants should send a copy of their curriculum vitae, a personal statement of interest, and the names and contact information of three references to: Dr. John M. Pezzuto, Chair of the Search Committee, Office of the Dean (M/C 877), College of Pharmacy, University of Illinois at Chicago, 833 South Wood Street, Chicago, IL 60612. Applications will be accepted until March 1, 2000, or until the position has been filled. The University of Illinois at Chicago is an Equal Opportunity/Affirmative Action Employer.

MALCOLM & SYLVIA BOYCE PROFESSORSHIP IN GEOLOGICAL SCIENCES Indiana University

Department of Geological Sciences

The Department of Geological Sciences at Indiana University invites applications and nominations for the Malcolm & Sylvia Boyce Professorship of Geological Sciences in the field of hydrogeology. We are especially interested in an established scholar with a research focus on water and solute transport (including modeling) at the basin scale, although other areas of expertise will be considered.

Applications should include a personal statement of vision for the future of research, a narrative of important research, teaching, and service accomplishments, a detailed curriculum vitae, and names and addresses (including e-mail) of five referees. Appointment may begin as early as August 2000. Applications should be submitted by November 1, 1999, to: Boyce Professorship Search Committee, Department of Geological Sciences, Indiana University, 1001 East 10th Street, Bloomington, IN 47405 USA. Further information can be found at website: http://www.indiana.edu/~geosci/.

Indiana University, as an Equal Opportunity/Affirmative Action Employer, encourages the candidacies of women and minorities.

IMMUNOLOGIST

ASSISTANT PROFESSOR (tenure-track) in the Department of Biology at Pacific University in Forest Grove, Oregon, able to teach general biology, human physiology, immunology, microbiology, and other courses in area of specialty, and conduct research with undergraduates. Consult website: http://www.biology.pacificu.edu/immunologistad.html for application information.

POSITIONS OPEN

FACULTY POSITIONS IN VIROLOGY WASHINGTON UNIVERSITY MEDICAL SCHOOL IN ST. LOUIS

The Department of Molecular Microbiology at the Washington University School of Medicine solicits applications for two TENURE-TRACK AP-POINTMENTS at either the junior or senior professorial levels, beginning in the fall of 2000. We are especially interested in those investigators focusing on viral pathogenesis, broadly defined. Our program has a strong emphasis on microbial pathogenesis in prokaryotic, viral, and eukaryotic systems (information can be found at website: www.microbiology. wustl.edu). We are seeking interactive individuals with a commitment to teaching and establishing a vigorous and outstanding independent research program. There are numerous common research facilities, a tremendous potential for collaborative interactions, and in the year 2000 we will occupy expanded space in a new research building. Applicants should send a detailed curriculum vitae, a few selected reprints, a brief description of current and planned research interests, and arrange to have three letters of reference sent by December 15, 1999, to: Dr. Stephen M. Beverley, Chairman of Molecular Microbiology, Attn: Faculty Search Committee, Washington University School of Medicine, Campus Box 8230, 660 South Euclid Avenue, St. Louis, MO 63110.

Washington University Medical School is an Equal Opportunity/Affirmative Action Employer. Women and minorities are especially encouraged to apply.

FACULTY POSITION IN ENVIRONMENTAL TOXICOLOGY

The Department of Biological Sciences at the University of Missouri–Rolla invites applications from qualified, energetic individuals for a tenure-track position in environmental toxicology at the rank of AS-SISTANT PROFESSOR to commence fall semester, 2000. Qualifications for the position include a Doctoral degree and one to two years of postdoctoral research experience in environmental toxicology, evidence of excellence in teaching, and a strong record of research. The successful applicant will join a strong and growing biology program and will be expected to teach at the undergraduate level, participate in the development of a new graduate program, and establish a funded research program involving both undergraduate and graduate students. Additional information on the position is available at website: http: www.umr.edu/~biosci. Send complete application including curriculum vitae, statements of research objectives and teaching interests, and arrange to have three letters of recommendation sent to: Human Resource Services, Reference Number R-52825, University of Missouri-Rolla, 1202 North Bishop, 1870 Miner Circle, Rolla, MO 65409-1050. Review of applications will begin on December 15, 1999, and continue until the position is filled. University of Missouri-Rolla is an Affirmative Action/Equal Employment Opportunity Employer. Females, minorities, and persons with disbility are encouraged to apply.

ASSISTANT PROFÉSSORSHIPS 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.



University of Washington - Vision Research Program



Joseph Beavo, Ph.D. Regulation of photoreceptor phosphodiesterases

Mark Bothwell, Ph.D. Neurotrophic factors

Steven L. Buck, Ph.D. Human color vision

John Clark, Ph.D. Development, lens

Dennis Dacey, Ph.D. Physiology of retinal cells

Samir S. Deeb, Ph.D. Molecular genetics of color vision

Peter B. Detwiler, Ph.D. Signaling in retinal photoreceptors and neurons

Albert Fuchs, Ph.D..
Sharona Gordon, Ph.D.
Ion channels, second messengers,

James Hurley, Ph.D.
Biochemical mechanisms of phototransduction

Neil M. Nathanson, Ph.D. Development, muscarinic receptors, neurotrophic factors

Jamie Olavarria, Ph.D. Visual system, development, corpus callosum

Krzysztof Palczewski, Ph.D. Phototransduction, visual cycle

Thomas Reh, Ph.D.
Development of the retina

Fred Rieke, Ph.D Retinal signal processing

Farrel R. Robinson, Ph.D. Cerebellar eye movement control

Henk Roelink, Ph.D. Induction in neural development Michael E. Rudd, Ph.D.
Psychophysics, neural modeling,

John Saari, Ph.D. Visual pigment regeneration, vitamin A metabolism

E. Helene Sage, Ph.D. SPARC, cataract formation

Michael N. Shadlen, M.D., Ph.D. Neurobiology of vision

Helen Sherk, Ph.D. Visual cortex, visual guidance

Davida Y. Teller, Ph.D. Visual development in infants

Steven E. Wilson, M.D. Growth factors, apoptosis, cornea

Norman Wolf, M.D. Pathology cataract, telomeres, DNA damage, and rodent models

William Zagotta, Ph.D.

University of Washington School of Medicine, Seattle WA. http://www.washington.edu/home/staffdir.cgi

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



POSTDOCTORAL POSITION

A postdoctoral position is available to participate in an established research program addressing the regulation of key enzymes in fatty acid and membrane phospholipid synthesis. Candidates with a recent Ph.D. degree interested in utilizing contemporary molecular biology, genetics, structural biology and biochemistry to problems related to gene expression and the regulation of membrane phospholipid biogenesis in bacteria are encouraged to apply. The research focuses on understanding enzyme structure/function and the biochemical mechanism of action of novel antibacterial drugs that target lipid biosynthesis. Applicants should submit their curriculum vitae, reprints and names of three references to: Dr. Charles O. Rock, Blochemistry Department, St. Jude Children's Research Hospital, 332 N. Lauderdale, Memphis TN 38105-2794. E-mall: charles.rock@stjude.org. An Equal Opportunity/Affirmative Action Employer.

TENURE-TRACK FACULTY POSITIONS IN BIOLOGY

Hope College seeks applicants for two tenure-track positions, pending final approval, to begin August 2000. 1) A broadly trained INVERTEBRATE ZOOLOGIST, with appointment expected at the Assistant Professor level. The particular research area is open, but preference will be given to candidates whose research focuses on the biology of freshwater invertebrates or terrestrial arthropods. S/he will teach a course in invertebrate zoology, an introductory course at the organismal or population level, and an additional course in his/her area of specialization. 2) HUMAN ANATOMIST/PHYSIOLOGIST, with appointment expected at the Assistant or Associate Professor level. The research area is open, and applicants with a background in kinesiology are also invited to apply. The successful candidate will teach a human anatomy course (lecture and laboratory) each year and teach on a rotating basis a variety of other courses, including human physiology, introductory biology, and an advanced specialty course:

Successful candidates for these positions will have a Ph.D., and will be expected to develop a vigorous, externally funded research program with active participation by undergraduate students. Postdoctoral experience is preferred.

Hope College is a distinguished liberal arts college with an enrollment of 3,000 and a faculty of more than 250. The college maintains a strong tradition of "teaching through research" in the sciences, and its proximity to Lake Michigan as well as numerous inland lakes and rivers provides unique opportunities for research on freshwater systems. The Department of Biology has 13 full-time and 3 part-time faculty, and has enjoyed 13 straight years of funding for undergraduate research from the National Science Foundation. Hope College is affiliated with the Reformed Church in America.

Qualified applicants should arrange to have a curriculum vitae, undergraduate and graduate transcripts, statements of research interests and teaching philosophy/competencies, and three letters of recommendation sent to:

Dr. Christopher Barney, Chair Department of Biology Hope College 35 East 12th Street Holland, MI 49422-9000

Applications received by 12 November will be assured full consideration. Additional information about the Hope College Biology Department is available through the college's home page, http://www.hope.edu/academic/biology.

Hope College complies with all legal requirements prohibiting discrimination in employment and actively seeks diversity in its applicant pool. Women and persons of color are strongly encouraged to apply. Hope College has a strong commitment to recruiting and sustaining an ethnically diverse student body and faculty. This is particularly important to us in biology because we seek to serve better our students from groups traditionally underrepresented in the sciences.

FACULTY POSITION UNIVERSITY OF WISCONSIN-MADISON INFECTIOUS DISEASE

The Department of Animal Health and Biomedical Sciences and the USGS National Wildlife Health Center invite applications for a full-time tenure-track ASSISTANT PROFESSOR position in infectious diseases of wild birds or mammals, including zoonoses. Applicants should have a Ph.D. or equivalent with established research expertise. The successful applicant will be expected to develop and sustain a strong extramurally funded research program. Teaching responsibilities consist of coordinating a graduate level wildlife disease course. A generous start-up package will be provided. Excellent research facilities are available. Applicants should submit a letter describing research goals, key publications, a curriculum vitae, and contact information for three references to: Judd Aiken, Department of Animal Health and Biomedical Sciences, University of Wisconsin, School of Veterinary Medicine, 1656 Linden Drive, Madison, WI 53706-1581.

To assure full consideration, apply by January 1, 2000.

For additional information on the Department of Animal Health and Biomedical Sciences and the National Wildlife Health Center, see websites: http://www.ahabs.wisc.edu and http://www.umesc.usgs.gov/nwhchome.html.

Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN BIOINFORMATICS UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL College of Arts and Sciences

As part of an ongoing university initiative in genomics science, the College of Arts and Sciences at the University of North Carolina, Chapel Hill announces a tenure-track Junior Faculty position in bioinformatics. A competitive salary and start-up package is available for an appointment to begin on or after July 1, 2000.

Requirements include a Ph.D., in biology, chemistry, statistics, math, computer science, or related discipline, along with demonstrated research excellence in bioinformatics. Appointment or joint appointment will be in the appropriate department(s) in the College of Arts and Sciences.

Send résumé, concise research plans, and arrange for at least three letters of reference to be sent to:

Search Committee for Bioinformatics College of Arts and Sciences CB 3100, South Building University of North Carolina Chapel Hill, NC 27599-3100

Applications completed by December 1, 1999, are guaranteed full consideration.

Women and minorities are encouraged to apply. The University of North Carolina at Chapel Hill is an Equal Opportunity/ADA Employer.

FACULTY POSITIONS IN DEVELOPMENTAL BIOLOGY AND NEUROSCIENCE

Two faculty positions are available at the ASSIST-ANT to FULL PROFESSOR level, Department of Cell Biology and Anatomy, Louisiana State University Health Sciences Center, New Orleans. A Ph.D. and three years of postdoctoral experience required with additional experience commensurate with rank. Applicants should have an extramural funding record or strong potential. One position is for a Developmental Biologist with a genetic or molecular background, the other for a Neuroscientist with a broad understanding of nervous system function. Send curriculum vitae, research interests, and names of three references to: Dr. R. Ranney Mize, Department of Cell Biology and Anatomy, Louisi-ana State University Health Sciences Center, 1901 Perdido Street, New Orleans, LA 70112-1393. LSUHSC is an Équal Opportunity/Affirmative Action Employer.

POSITIONS OPEN



TENURE-TRACK FACULTY POSITION GENETICS/CANCER

The Department of Microbiology and Immunology, University of Kentucky, College of Medicine, seeks candidates for a full-time tenure-track position at the ASSOCIATE/ASSISTANT PROFESSOR level. Applicants with experience in all areas of molecular genetics including gene regulation, cell signaling, proliferation, and differentiation are encouraged to apply. Preference will be given to candidates with expertise in cancer genetics/genomics.

expertise in cancer genetics/genomics.

Applicants should have a Ph.D. and/or M.D. or equivalent degree and postdoctoral experience. A successful candidate is expected to develop an externally funded research program as well as participate in teaching genetics to graduate and medical students. The department offers strong predoctoral and postdoctoral training programs and an established group of faculty in microbial pathogenesis, eukaryotic molecular biology, immunology, molecular virology, and cancer 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: Dr. Brett Spear, Chair, Faculty Search Committee, Department of Microbiology and Immunology, M\$415 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.

The Department of Chemistry at the University of Virginia is seeking qualified applicants for a tenuretrack position at the ASSISTANT or ASSOCIATE PROFESSOR level. The department is especially interested in individuals with research interests and expertise in bioinorganic chemistry. However, candidates representing all areas of biological chemistry will be considered. Candidates are expected to establish an externally funded research program that will attract top-caliber graduate students and Postdoctoral Collaborators. Teaching ability at both graduate and undergraduate levels is also a prime consideration. Applicants should send a curriculum vitae, copies of reprints/preprints, and a detailed description of research plans no later than November 15, 1999, to: Professor Timothy Macdonald, Chair, Department of Chemistry, University of Virginia, Mc-Cormick Road, Charlottesville, VA 22901. Applicants should arrange for three letters of recommendation to be sent to the above address by the closing date. The University of Virginia is an Equal Opportunity/ Affirmative Action Employer.

University of Wisconsin-Madison. Biomolecular chemistry. Tenure-track ASSISTANT PROFES-SOR. This biochemical research and teaching position is available July 1, 2000, for someone with twoplus years of postdoctoral training. Candidates will be expected to establish a vigorous independent research program. Teaching will be at graduate, medical, and undergraduate levels. For more information, go to website: www.medsch.wisc.edu/bmolchem/ assistant/prof.html. Send a curriculum vitae, bibliography, and a one- to two-page research plan, and arrange for three reference letters to be sent by November 5, 1999, to: Dr. James E. Dahlberg, Search Chair, Biomolecular Chemistry, University of Wisconsin Medical School, 587 MSC, 1300 University Avenue, Madison, WI 53706-1532. Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply. Unless confidentiality is requested in writing, information regarding the names of applicants must be released upon request. Finalists cannot be guaranteed

POSITIONS OPEN

BIOLOGY FACULTY POSITIONS TENURE TRACK

Furman University seeks three **ASSISTANT PRO-FESSORS** to replace retiring faculty.

Plant Ecologist conducting research at the ecosystem or landscape level. Teaching responsibilities will include general ecology and plant physiology. Priority will be given to applicants who will take a leading role in our interdisciplinary environmental programs.

Molecular Physiologist working with mammalian systems. Teaching responsibilities will include human physiology and molecular biology. Preference will be given to candidates who can contribute to courses in animal nutrition, animal physiology, or genetics.

Molecular Geneticist working with microbial systems. Teaching responsibilities will include general genetics, molecular genetics, and microbiology.

Successful candidates for the physiology and genetics positions will be expected to work cooperatively with each other and with existing faculty in strengthening the molecular component of the department's research and teaching programs.

All faculty are expected to teach introductory biology and upper-level courses in their specialties. Candidates must have the Ph.D., evidence of interest and excellence in teaching, and a commitment to involving undergraduate students in an active research program. Furman is a selective, independent liberal arts school of 2,500 students, with a strong emphasis on engaged learning and undergraduate research. Startup funds will be available. For further information, see http://www.furman.edu/academics/ website: biology/jobs/. Submit curriculum vitae, statement of teaching credentials and philosophy, description of research interests, unofficial transcripts, and three letters of recommendation to: Search Committee, Department of Biology, Furman University, 3300 Poinsett Highway, Greensville, SC 29613. Review of applications commences October 25, 1999, continuing until positions are filled. Employment will begin no later than September 2000.

The University and the Department have a strong commitment to achieving diversity among faculty and staff. We strongly encourage women and people from diverse racial, ethnic, and cultural backgrounds to apply. Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSORS OF BIOLOGY TWO TENURE-TRACK POSITIONS

The Department of Biological Sciences at Indiana University South Bend (IUSB) invites applications for two tenure-track positions at the Assistant Professor level in (1) ecology and (2) cell biology beginning August 2000. A Ph.D. is required for each position; postdoctoral experience is preferred. Primary responsibilities will be teaching introductory biology and upper-level courses in areas of expertise. The successful candidates will also be expected to establish active research programs involving undergraduates. Cell Biologist employing modern molecular approaches will be preferred, as will Ecologist with strong field experience and field components to their research. Send curriculum vitae, a description of teaching and research interest, and three letters of reference to: Dr. Douglas Duff, Department of Biological Sciences, Indiana University South Bend, P.O. Box 7111, South Bend, IN 46634-7111. Deadline for both positions is December 15, 1999. IUSB is strongly committed to achieving excellence through cultural diversity. The University actively encourages applications from women, persons of color, applicants with disabilities, and members of other under-represented groups.

ENVIRONMENTAL SCIENCE

Tenure-track ASSISTANT PROFESSOR position at Pacific University with appointment in biology or chemistry to teach introductory environmental science courses, an upper-level biology or chemistry environmental course, and supervise undergraduate research, senior projects, and internships in environmental science. Consult website: http://www.envsci.pacificu.edu/environ.html for application information.

Opportunities in Plant Genomics ...

Bioinformatics and Functional Genomics of Wheat

Opportunities are available to participate in a multi-investigator, NSF-funded plant genomics project which features wheat, one of the group of crop and wild plants of the Triticeae in the grass family. Initial efforts will be developing 10,000 unique ESTs and bin-mapping the ESTs with chromosome deletion stocks. Microarrays of mapped, unique ESTs will be available to researchers and will be used in the various project labs for gene discovery targeting reproductive biology of wheat. The project description is available at http://wheat.pw.usda.gov/wEST/nsf/title.html.

Funded positions for bioinformatics specialists, graduate students, postdoctorals, undergraduate interns, and technicians will be available during the next four years. Additional opportunities, with partial funding, are available for visiting scientists. Also anticipated are summer training opportunities for teachers. The project especially seeks inquiries from individuals from underrepresented groups who have a sincere interest in plant science, genetics, and agriculture. Staff positions are available immediately for two bioinformatics specialists to be located at Albany, California and Cornell University.

Successful candidates will be employed by one of the participating universities. The program will provide opportunities for interaction with other labs, including lab rotations. Broad-based training will be provided in bioinformatics, cDNA library development, DNA sequencing, molecular mapping, cytogenetics, developmental biology, genome structure and organization, and evolution.

Project investigators:

James Anderson, University of Minnesota
Olin Anderson, USDA, Albany, CA/Univ. of Calif., Davis
Tim Close, University of California, Riverside
Jorge Dubcovsky, University of California, Davis
Jan Dvořák, University of California, Davis
Bikram Gill, Kansas State University
Kulvinder Gill, University of Nebraska, Lincoln
Perry Gustafson, USDA/University of Missouri
Shahryar Kianian, North Dakota State University
Nora Lapitan, Colorado State University
Henry Nyugen, Texas Tech University
Mark Sorrells, Cornell University
Kay Walker-Simmons, USDA/Washington State Univ.

Project management:

Cal Qualset (PI) and Patrick McGuire, Wheat Genomics Management Office, University of California, Division of Agriculture and Natural Resources, Davis, California

Please provide by email, mail, or fax a statement of interest, expertise, and background; contact information; and date of availability to Patrick McGuire:

email: pemcguire@ucdavis.edu

mailing address: Genetic Resources Conservation Program

University of California One Shields Ave. Davis CA 95616 FAX: 530-754-8505

Inquiries are accepted anytime, but for consideration for appointments by January 1, 2000, please send information by November 15, 1999.



THE DEPARTMENT OF BIOLOGICAL SCIENCES seeks applicants for three tenure-track, academic-year positions in teaching and research, at the level of Assistant Professor.

ENDOCRINE PHYSIOLOGIST

The applicant will pursue research at the whole animal or cellular/molecular level, with the opportunity to collaborate with biologists conducting biomedical and environmental research in several UMaine departments, the Maine Agricultural & Forest Experiment Station, and at The Jackson Laboratory. Research specialties may include, but are not limited to, comparative endocrinology, environmental endocrine disruptors, and signal transduction. Teaching load will be approximately one course per semester, and will include an annual service course in human anatomy and physiology (for undergraduates in allied health programs, physical education, and social work), an upper-level undergraduate course in endocrinology, and a graduate seminar in the candidate's specialty.

LIMNOLOGIST

Research areas may include, but are not confined to, lake productivity and food-web dynamics, pelagic-benthic coupling, lake-watershed interactions, and paleolimnology. A proven ability to integrate basic limnological research with applied issues, such as the effects of land use, non-point pollution, and climate change, is desirable. A rich history of limnological investigations and 6,000 lakes in Maine (see http://pearl.spatial.maine.edu) provide ample research opportunities. The applicant will be expected to interact with others at UMaine, the Maine Agricultural & Forest Experiment Station, and State and Federal agencies dealing with freshwater research and management. Teaching load will be approximately one course per semester, including an upper-level undergraduate course in limnology, periodic participation in an undergraduate course in research methods, and an advanced course or courses in the applicant's specialty.

FRESHWATER VERTEBRATE BIOLOGIST

The applicant will have research and teaching interests in the biology of vertebrates, especially fishes, of freshwater environments. Research areas may include, but are not confined to, population or behavioral ecology, predator-prey interactions, or analysis of food webs. Demonstrated ability to integrate basic research with applied issues is desirable. We are particularly interested in candidates whose research will support and enhance the fisheries program of the Maine Cooperative Fish and Wildlife Research Unit. Teaching load will be approximately one course per semester, and will include an undergraduate course in vertebrate biology each year, and, alternating biennially with participation in an introductory course in organismal biology for biological sciences majors, an advanced course or courses in ichthyology, fish population biology, or a related specialty. Duties will also include assisting in the curation of a major collection of vertebrates used in teaching and research.

Applicants for all positions are expected to establish vigorous, externally-funded research programs. Ph.D. in an appropriate discipline is required, teaching and postdoctoral experiences are preferred, and a strong commitment to undergraduate and graduate education is expected. Where appropriate, applicants will be considered for joint appointment in the Maine Agricultural & Forest Experiment Station. We strongly encourage women and minorities to apply. Review of completed applications for all positions will begin 1 December 1999 and continue until suitable candidates are hired. Applicants should submit curriculum vitae, statement of research and teaching interests, representative published papers, record of successful proposals, and evidence of teaching skills. Applicants should also request three references to send letters addressing the applicant's suitability and particular strengths for the advertised position, to arrive by 1 December. Applications and supporting letters should be addressed to the Chairperson of the relevant search committee (Endocrinology; Limnology; or Freshwater Vertebrate Biology) at Department of Biological Sciences, University of Maine, 5751 Murray Hall, Orono, ME 04469-5751. Information about the Department is available at www.umesci.maine.edu/biology/

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

FUNCTIONAL GENOMICS IN TOXICOLOGY MICHIGAN STATE UNIVERSITY Department of Biochemistry and National Food Safety and Toxicology Center

The National Food Safety and Toxicology Center and the Department of Biochemistry at Michigan State University invite applications for a tenure-track position at the **ASSISTANT PROFESSOR** level in the general areas of food safety and toxicology. We seek outstanding applicants whose research addresses fundamental biological questions in toxicology using the emerging technologies of genomics, proteomics, or bioinformatics. Potential research areas of interest include biochemical and molecular toxicology, chemical pathogenesis, food-borne toxins, toxicogenomics, or pharmacogenomics.

Appointments and laboratory space will be provided in the Department of Biochemistry and the recently completed Food Safety and Toxicology Building. This position provides exceptional opportunities to establish research linkages with other faculty in genomics, biochemistry, pharmacology and toxicology, mirobiology, physiology, epidemiology, and the food and agricultural sciences. Applicants must have a Ph.D. or equivalent and postdoctoral experience demonstrating a strong record of scholarly activity and the potential to develop a vigorous extramurally funded research program. The motivation to act as a team member in collaborative and interdisciplinary research groups will be an important characteristic of the successful candidate. The candidate will also be expected to participate in campus-wide graduate training programs in cellular and molecular biology, genetics, and environmental toxicology.

Applicants should submit a curriculum vitae and a description of research accomplishments and future interests, and have three letters of recommendation sent on their behalf to: Dr. William L. Smith, Chairperson, Department of Biochemistry, Box S, Michigan State University, East Lansing, MI 48824-1319. To ensure consideration, applications should be received by December 3, 1999. Further information about the Department of Biochemistry and the National Food Safety and Toxicology Center is available at website: www.bch.msu.edu and www.foodsafe.msu.edu, respectively.

Michigan State University is an Affirmative Action/Equal Opportunity Employer. Candidates from groups underrepresented in academic science are encouraged to apply. Disabled persons have the right to request and receive reasonable accommodation.

ASSISTANT PROFESSOR INVERTEBRATE PHYSIOLOGY

The Biology Program at Wilkes University invites applications for a tenure-track position in invertebrate physiology, starting August 2000. We seek an individual committed to innovative teaching in an undergraduate setting who complements existing faculty expertise in vertebrate and plant physiology. Responsibilities will include participation in a general biology sequence, human anatomy and physiology for nursing majors, development of upper-level electives in areas of expertise, and assistance with the revision of our physiology curriculum. The individual selected is expected to develop an active research program involving undergraduates. Ph.D. and evidence of teaching excellence required. Preference will be given to individuals with postdoctoral experience and the interpersonal skills necessary to interact effectively with other faculty, students, and staff constituencies. Applicants should provide a curriculum vitae, statements of teaching philosophy and research goals (including how program will involve undergraduates), reprints, and three letters of recommendation to: Dr. Lester Turoczi, Chair, Department of Biology, Chemistry, and Health Sciences, Wilkes University, Wilkes-Barre, PA 18766. Application deadline is 15 November 1999. Wilkes University, a private, non-sectarian institution, is an Equal Opportunity/Affirmative Action Employer and actively seeks applications from women and minorities.

POSITIONS OPEN

Wayne StatE University

The Department of Occupational and Environmental Health Sciences at Wayne State University seeks applications for a tenure-track faculty position in toxicology at the rank of ASSISTANT/ASSOCI-ATE PROFESSOR. The applicant should have a Ph.D. and/or M.D. degree in biomedical sciences. All outstanding candidates will be given serious consideration, but applicants with previous teaching experience and a record of excellence in research will be given preference. An ability to sustain extramurally funded research is expected. Adequate laboratory space and competitive start-up funds will be available to the appointee. Salary and rank are commensurate with experience. Qualified candidates should send curriculum vitae, a concise description of research interests, teaching experience, and names, address, and telephone numbers of three references to: Chair, Search Committee, Department of Occupational and Environmental Health Sciences, 207 Shapero Hall Annex, Wayne State University, Detroit, MI 48202. E-mail: dbhalla@wizard.pharm.wayne.edu.

Wayne State University is an Equal Opportunity/Affirmative Action Employer.

DEPARTMENT OF BIOLOGICAL SCIENCES ILLINOIS STATE UNIVERSITY

Two tenure-track ASSISTANT PROFESSOR-SHIPS are available beginning August 2000.

Physiologist with research interests in the physiology of vertebrates using biophysical, cellular, or molecular approaches. Teaching responsibilities will include a graduate course in vertebrate/mammalian physiology. (Dr. Robert Preston, Chair.)

Freshwater Ecologist with research interests in the ecological or evolutionary biology of freshwater systems. Contribution to the graduate Conservation Biology Sequence is expected. Teaching responsibilities will include an advanced course in freshwater ecology. (Dr. Scott Sakaluk, Chair.)

The successful applicants will be expected to develop independent, extramurally funded research programs and to contribute to the training of Ph.D. and M.S. students. To assure full consideration, applicants should submit their curriculum vitae, copies of three representative publications, three recommendation letters, and a brief statement of research and teaching goals sent to the appropriate Committee Chair at: Department of Biological Sciences, Campus Box 4120, Illinois State University, Normal, IL 61790-4120 by December 7, 1999. Website: http://www.bio.ilstu.edu.

Illinois State is an Equal Opportunity/Affirmative Action University encouraging diversity.

PLANT PHYSIOLOGIST

The Department of Biology, College of Charleston, invites applications for a tenure-track position in plant physiology at the **ASSISTANT PROFESSOR** level. Candidates must possess a Ph.D., a strong commitment to teaching, and an active research program with the potential for undergraduate involvement. Teaching responsibilities include a lecture and laboratory course in plant physiology and possibly introductory biology lectures. The College of Charleston is a public liberal arts institution of 10,000 students. The college's primary aims are teaching and research excellence. In addition to its undergraduate programs, the department offers M.S. degrees in marine biology and environmental studies. Information about the Biology Department can be found at: website: http://www. cofc.edu/~biology/. Applicants should submit a curriculum vitae, statements of teaching philosophy and research interests, reprints of recent publications, and three letters of reference by December 31, 1999 to: Chair, Department of Biology, College of Charleston, Charleston, SC 29424. The College of Charleston is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

MICROBIAL ECOLOGIST ROMBERG TIBURON CENTER FOR ENVIRONMENTAL STUDIES San Francisco State University

The Romberg Tiburon Center for Environmental Studies, a field campus of San Francisco State University located on the San Francisco Bay, seeks candidates for a tenure-track ASSISTANT PROFESSOR-SHIP in microbial ecology (broadly defined). We seek an individual working in estuarine or coastal waters who can complement the research and teaching interests of the center's current and rapidly expanding staff (website: http://rtc.sfsu.edu). Specific areas of expertise might include, but are not limited to, trophic interactions in planktonic food webs (e.g., between bacteria, protozoa, and metazoa) and biogeochemical cycling. Applicants should have an ability to maintain an externally funded research program involving M.A. students and be prepared to teach in the areas of aquatic ecology and microbiology at both the undergraduate and graduate levels. Ph.D. is required. San Francisco State University, a member of the California State University system, serves a diverse student body of 27,000 undergraduate and graduate students. The mission of the university is to promote scholarship, freedom, human diversity, excellence in instruction, and intellectual accomplishment. San Francisco State University faculty are expected to be effective teachers and demonstrate professional achievement and growth through continued research, publications, and/or creative activities. Send curriculum vitae, a statement of teaching and research interests, selected reprints, and the names, addresses, and telephone numbers of three persons able to provide letters of reference to: Chair, Microbial Ecology Search Committee, Romberg Tiburon Centers, 3152 Paradise Drive, Tiburon, CA 94920. Applications will be reviewed beginning January 1, 2000. The Romberg Tiburon Center of San Francisco State University is an Equal Opportunity/Affirmative Action Employer.

ROBERT R. SHROCK PROFESSORSHIP IN SEDIMENTARY GEOLOGY Indiana University Department of Geological Sciences

The Department of Geological Sciences at Indiana University invites applications and nominations for the Robert R. Shrock Professorship in Sedimentary Geology.

Applications should include a personal statement of vision for the future of research, a narrative of important research, teaching, and service accomplishments, a detailed curriculum vitae, and names and addresses (including e-mail) of five referees. Appointment may begin as early as August 2000. Applications should be submitted by November 1, 1999, to: Shrock Professorship Search Committee, Department of Geological Sciences, Indiana University, 1001 East 10th Street, Bloomington, IN 47405 USA. Further information can be found at website: http://www.indiana.edu/~geosci/.

Indiana University, as an Equal Opportunity/Affirmative Action Employer, encourages the candidacies of women and minorities.

SENIOR FACULTY POSITION BIOLOGICAL COMPUTATIONAL SCIENCES Chapical Engineering and

Chemical Engineering and Materials Science Department

The University of Minnesota Institute of Technology is conducting a search for a rendered ASSOCIATE PROFESSOR or PROFESSOR in biological computational sciences in the Chemical Engineering and Materials Science Department. Applicants must possess a distinguished research record, demonstrated ability in establishing and leading a highly visible research program, and a commitment to teaching and tentoring at the graduate and undergraduate levels. The position affords the opportunity, resources, and flexibility to build a blue-chip research program.

flexibility to build a blue-chip research program.

Please see website: http://www.msi.umn.edu/general/jobs/faculty.html for details.

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The **R.W. Johnson Pharmaceutical Research Institute**, located in Raritan, New Jersey, conducts pharmaceutical research in therapeutic areas including anti-infectives, central nervous system, dermatology and oncology.

Postdoctoral Positions Molecular and Cellular Toxicology

Working in a new, exciting and rapidly evolving area of toxicology using modern experimental approaches to create streamlined mechanism-based assays for evaluating the potential toxicity of developmental pharmaceuticals, your key duties will include participating in the development and validation of novel in-vitro assays, including the use of gene expression microarray technology, high throughput screens and computational approaches. Publication of results is encouraged.

Preferred candidates will have a Ph.D. in biochemistry, cell biology, pharmacology, molecular biology or a related discipline and strong knowledge of cell biology and cell culture techniques. Expertise in biochemistry/molecular biology as evidenced by a record of publication and experience with indices of cellular toxicity, genotoxicity, monitoring gene expression, detection of mRNA by hybridization, or fluorescence assays in cultured cells is essential. You must have strong written and verbal communication skills and the ability to work in a highly interactive environment.

As a valued team member, you'll receive a competitive salary and great benefits including medical/dental, a 401(k), a pension plan and a comprehensive wellness program. Please apply directly on-line at our web site www.jnj.com or forward a scannable resume, noting operating company as R.W. Johnson Pharmaceutical Research Institute and Req. Code 993002SCI, to: Johnson & Johnson Recruiting, P.O. Box 16597, New Brunswick, NJ 08906-6597. Please note, resumes received electronically are reviewed within 24 hours. Mailed resumes are reviewed within 3 business days after receipt. We are an equal opportunity employer totally committed to diversity.

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National Institute of Diabetes & Digestive & Kidney Diseases National Institutes of Health

Postdoctoral Position G Proteins/Genomic Imprinting

Postdoctoral position immediately available in the Metabolic Diseases Branch, NIDDK. We are studying the mechanisms by which the G protein Gs regulates energy and glucose metabolism, the mechanisms by which the Gs-α subunit gene is imprinted, and the role of Gs-α defects in human disease, using physiological, biochemical and molecular biological approaches. Candidates should have an Ph.D. or M.D. and less than five years post-doctoral experience. Please send CV, list of publications and the names of 3 references to:

Lee S. Weinstein, M.D.
Metabolic Diseases Branch
NIDDK/NIH
Building 10, Room 8C101
10 Center Drive MSC1752
Bethesda, MD 20892-1752
Voice: (301) 402-2923,
Fax (301) 402-0374
E-mail: leew@amb.niddk.nih.gov

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ASSISTANT/ASSOCIATE PROFESSOR **FUNCTIONAL GENOMICS**

A tenure-track position is available for a highly motivated individual to develop an interdisciplinary program in functional genomics at Clemson University. The candidate will establish an internationally recognized research/teaching program in basic and applied molecular aspects of plant or microbial biology and or plant-microbe interactions. Applicants with experience in non-plant model systems who have a desire to apply their expertise in functional genomics to important cropping systems will be considered. The candidate must hold a Ph.D. in a relevant discipline. Documented experience in functional genomics and acquisition of extramural support is essential. This position includes a competitive salary and generous start-up package. The successful candidate will occupy space in a new \$27 million Plant Biotechnology Building/Greenhouse Complex and will be associated with the Clemson University Genomics Institute, a state-of-the-art facility emphasizing high-throughput gene discovery projects in plants and fungi (website: www.genome.clemson.edu). Submit a curriculum vitae, official transcripts, four letters of reference, and a statement of professional goals to: Functional Genomics Search, Dr. Daniel Kluepfel, Department of Plant Pathology and Physiology, 120 Long Hall, Clemson University, Clemson, SC 29634. Telephone: 864-656-5728; e-mail: dklpfl@ clemson.edu. Review of applications will begin November 30, 1999, and continue until a suitable candidate is hired.

Clemson University is an Equal Opportunity/Affirmative Action Employer.

Biology/limnology. Stetson University invites ap plications for a tenure-track position for an ASSIST-ANT PROFESSOR of biology. Ph.D. required. The successful candidate will offer an introductory biology course and upper-level courses in limnology and a second area of interest. Expertise in environmental issues or research involving molecular techniques and ability to guide undergraduate research in required senior projects and to contribute to our new interdisciplinary aquatic/marine biology program are especially desirable. Stetson, Florida's first private university, is a selective, independent university with 2,000 undergraduates; for more information on the university and the department, see our website: www. stetson.edu. Faculty development funds are available, and salaries are competitive. Please send a curriculum vitae; a letter of application addressing teaching and research philosophies for an undergraduate liberal arts program; graduate and undergraduate transcripts (copies acceptable for screening); and three letters of recommendation to: Dr. Terry Farrell, Chair, Biology Department, Stetson University, DeLand, FL 32720. E-mail: tfarrell@stetson.edu. Screening begins November 30, 1999; starting date is August 20, 2000. Stetson University, an Equal Opportunity Employer, affirms the values and goals of diversity and strongly encourages applications from women and groups historically underrepresented in higher education.

ASSISTANT PROFESSOR of pathology. The Department of Pathology at the University of Alabama at Birmingham invites applications for a fulltime, tenure-track faculty position. The successful candidate will have expertise in the general field of vascular biology and particular interests in the area of vascular smooth muscle cell gene expression. Expertise in biochemistry and molecular biology is essential, and experience in whole-animal studies of arterial injury is considered important. Applicants must have an M.D., Ph.D., or M.D.-Ph.D. and postdoctoral experience with excellent publications in mainstream journals. Applicants should submit a current curriculum vitae and a statement of research interests to: Thomas Lincoln, Ph.D., Director, Division of Molecular and Cellular Pathology, Department of Pathology, Volker Hall, 1670 University Boulevard, Birmingham, AL 35294-0019. The University of Alabama at Birmingham is an Affirmative Action/Equal Opportunity Employer and welcomes applications from qualified women and minorities.

POSITIONS OPEN

FACULTY POSITIONS STUDYING BACTERIAL AND EUKARYOTIC PATHOGENS Washington University

Medical School in St. Louis

The Department of Molecular Microbiology at the Washington University School of Medicine solicits applications for tenure-track appointments as ASSIST-ANT PROFESSOR, beginning in the fall of 2000. We are interested in those studying disease mechanisms used by bacterial and eukaryotic pathogens (protozoa and fungi), the host response, and/or basic studies of the causative organisms (including genomic approaches). Our program has a strong emphasis on microbial pathogenesis, in prokaryotic, viral, and eukaryotic systems (information can be found at website: www.microbiology.wustl.edu). There are numerous common research facilities, a tremendous potential for collaborative interactions, and in the year 2000 we will occupy expanded space in a new research building. We are seeking interactive individuals with a commitment to teaching and establishing a vigorous and outstanding independent research program. Applicants should send a detailed curriculum vitae, a few selected reprints, a brief description of current and planned research interests, and arrange to have three letters of reference sent by December 15, 1999, to: Dr. Stepehen M. Beverley, Chairman of Molecular Microbiology, Attn: Faculty Search Committee, Washington University School of Medicine, Campus Box 8230, 660 South Euclid Avenue, St. Louis, MO 63110.

Washington University Medical School is an Equal Opportunity/Affirmative Action Employer. Women and minorities are especially encouraged to apply.

ENVIRONMENTAL CELL BIOLOGIST UNIVERSITY OF MINNESOTA-DULUTH

The Department of Biology, University of Minnesota-Duluth (UMD) is seeking an experienced person with an interdisciplinary focus whose experimental research addresses environmental aspects and applications of cellular structure, development, functioning, regulation, or interaction for a tenured or tenure-track ASSOCIATE or FULL PROFESSOR position. Working within the Research Center for Cell and Molecular Biology, this Professor will participate in the continued growth of cell and molecular biology programs at UMD and should be able to lead the development of new research or graduate programs. The complete job description and list of application materials is available at website: http:// www.d.umn.edu/biology/positions.htm or in the 3 September 1999 issue of Science. Questions may be sent to: Dr. Randall Hicks, e-mail: rhicks@d.umn. edu. Review of completed applications will begin on 4 October 1999 and continue until the position is filled. The University of Minnesota is an Equal Opportunity Educator and Employer.

MARINE FISHERIES BIOLOGIST

The Marine Sciences Research Center (MSRC) at the State University of New York at Stony Brook is continuing its search for up to two tenure-track Faculty in fisheries science who will complement the existing expertise of MSRC in applying research to problems in management of living marine resources. Areas of concentration may include finfish/shellfish ecology, population dynamics and modeling, larval ecology, population genetics, and/or conservation. These positions will likely be filled at the ASSIS-TANT PROFESSOR level but higher ranks will also be considered. Ph.D. or equivalent and evidence of excellence in research and teaching required. Application review will begin November 15, 1999, and will remain open until filled. Send statement of interests, curriculum vitae, and names and addresses of four references to: Professor D. O. Conover, Search Committee Chair, Marine Sciences Research Center, SUNY, Stony Brook, NY 11794-5000. See website: http://www.msrc.sunysb.edu for more information. The State University of New York is an Equal Opportunity/Affirmative Action Educator and Employer

POSITIONS OPEN

BIOLOGY

Animal Molecular Biologist. The Department of Biology at the University of Regina invites applications for a tenure-track position at the ASSISTANT PROFESSOR level, effective July 1, 2000 (subject to budgetary approval). We are seeking qualified individuals who use molecular techniques to study animal systems. The successful candidate will be welcomed to interact with members of GenBioTek, an interdepartmental unit made up of individuals who use molecular techniques in their research. Candidates must have a recent Ph.D., postdoctoral experience, and a productive research record. As well as establishing an externally funded research program, the successful candidate will be expected to participate in the teaching of undergraduate and graduate courses, and to develop an advanced undergraduate course in his/her area of expertise. Start-up research funds will be provided, as well as a reduced teaching load in the first two years. To apply for the position, submit a leter of application outlining research and teaching goals, a curriculum vitae, samples of research publications, and arrange for three letters of reference to be sent 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. The closing date for applications is December 31, 1999. Further information about the department is available on the World Wide Web at 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.

The University of Texas Southwestern Medical Center at Dallas seeks an outstanding scientist at the ASSISTANT PROFESSOR level who will develop a basic science research program in kidney development or genetics. Applicants must have a Ph.D. and or M.D. degree and at least three years of postdoctoral research experience in developmental biology, genetics, or a related field. Applicants must have, or be competitive for, extramural funding. Start-up packages and laboratory space will be provided to facilitate the development of the applicant's research program. In addition, the new faculty member will direct core facilities for renal morphology and genetics, and will participate in the training of postdoctoral fellows. University of Texas Southwestern provides outstanding support for the basic sciences, and the Nephrology Division has established research programs in epithelial transport, gene expression, hormonal regulation, potassium channels, renal growth, and immunology. Send curriculum vitae and description of research program to: Peter Igarashi, M.D., Chief of Nephrology, University of Texas Southwestern, 5323 Harry Hines Boulevard, Dallas, TX 75235-8856. University of Texas Southwestern is an Equal Opportunity/ Affirmative Action Employer.

PLANT POPULATION/EVOLUTIONARY GENETICIST

The Botany Department at Iowa State University seeks a plant population/evolutionary geneticist to join the faculty at the level of ASSISTANT PRO-FESSOR. The Botany Department is an integrative plant biology group with active, collaborative research in plant ecology, genetics, physiology, molecular biology, systematics, and evolution (website: http:// www.public.iastate.edu/~botany.homepage. html). The successful candidate will be expected to develop a competitive research program in an environment committed to basic plant biology research and contribute to undergraduate and graduate teaching. Applicants should submit a curriculum vitae, statements of research/teaching interests, and selected reprints, and have three letters of recommendation sent to: Dr. Jonathan F. Wendel, Chair Search Committee, Department of Botany, Iowa State University, Ames, IA 50011-1020 by December 1, 1999. Iowa State University is an Equal Opportunity/ Affirmative Action Employer. Women and members of minority groups are encouraged to apply.



Deputy Director, Science NASA/Marshall Space Flight Center (MSFC) Huntsville, AL

The Science Directorate, NASA/MSFC seeks to fill the above Senior Executive Service (SES) position to provide scientific and engineering leadership and management in the generation and communication of new knowledge in areas of biotechnology, materials science, space science, earth science, and space optics manufacturing technology. The Directorate conducts basic and applied research, develops enabling technologies, and administers assigned NASA programs and projects. It is in process of implementing the National Center for Space Science and Technology (NSSTC) in cooperation with other Government agencies, academia, and industry. Preference will be given to applicants who have successful peer-reviewed publications and/or who have experience in leading state-of-the-art research and technology development.

An overview of current research can be found at http://www.science.nasa.gov

Inquiries: Dr. M. Franklin Rose, Director, Science Directorate, NASA MSFC, Huntsville, AL 35812; 256-544-7721 or frank.rose@msfc.nasa.gov.

Application: Apply under vacancy announcement MSFC ES-11-99. A full text job announcement and filing instructions are available at http://hrd.msfc.nasa.gov/JOBS/ses.html or by calling Sue Payne at 256-544-7530.

TRAINING

CANADIAN BIDINFORMATICS WORKSHOPS

The Canadian Genetic Diseases Network and Biotechnology Human Resources Council offers a series of hands-on computer laboratory based workshops on

GENOMICS - Vancouver, Jan 24 - 29, 2000 **PROTEOMICS** - Toronto, May 3 - 8, 2000 **DEVELOPING THE TOOLS** -

Montreal, June 26 - July 1, 2000 and;

BIOINFORMATICS - Aug 7 - 19, 2000

Led by Francis Ouellette, Centre for Molecular Medicine and Therapeutics, UBC, key instructors will include: **Phil Hieter**, UBC; **Christopher Hogue**, Samuel Lunenfeld Research Institute, Toronto; **Steven Jones**, BC Cancer Agency; **François Major**, University of Montreal; **Christoph Sensen**, NRC Institute for Marine Biosciences, Halifax; **David Wishart**, University of Alberta.

WHO SHOULD APPLY

For those interested in bioinformatics with either a computational or life science background, an introduction to the methodology and algorithms that underlie successful development and use of these tools.

FOR MORE INFORMATION AND TO APPLY

Visit www.cmmt.ubc.ca/bioinformatics

CGDN, 351 - 2125 East Mall, Vancouver, BC V6T 1Z4, Canada Tel: 604-822-1386 Fax: 604-822-7945 At Monsanto, we share a common goal - to help people lead longer, healthier lives. We are pioneering the use of life-science technologies to understand how the connections between human health, nutrition and agriculture can be used to develop products to improve the quality of life for everyone, everywhere.

GENOMICS SEQUENCING CENTER

We work in a high-throughput sequencing and genomic analysis environment based in the new genomics facility in St. Louis, Missouri, on the main Monsanto Creve Coeur campus. You will play a key role and help establish and implement high-throughput DNA isolation and sequencing technologies, including the use of automation and computers.

TECHNICAL DEVELOPMENT COORDINATOR

Seeking BS/MS/Ph.D. with several years DNA Sequencing experience to lead the Technology Development Group at the new Genomic Sequencing Center facility in St. Louis. Responsibilities include the supervision of the Technology Development Group to investigate, test and implement chemistry, protocols, and instrument improvements in a high-throughput sequencing environment. Extensive experience of DNA sequencing procedures, technologies, and automated sequencing instrumentation is required. Candidate must also have excellent leadership, communication and troubleshooting skills. Experience with robotic automation and implementation is preferred. Ad Code: 99-2145

LIFE SCIENCE INFORMATICS

We're putting together a team of top professionals who can work together to help us achieve our goals. You'll have a chance to make your mark and work with all aspects of our business relating to bioinformatics. This includes everything from pharmaceuticals to agriculture to genomics. It's silicon valley technology, right here in the Midwest. As you'd expect, our environment is cutting-edge and entrepreneurial. We can offer you the feel of a start-up and the resources of a global company. Various positions available in St. Louis, MO; Boston, MA; and Mystic, CT.

BIOINFORMATICS SCIENTIST

The Bioinformatics team supports the development and implementation of high-speed, high-throughput information and biology technologies, which comprise Monsanto's rapidly growing Genomics initiative. Your primary responsibility will be in the area of data mining and data curation. You will be responsible for processing and analyzing sequence data and molecular marker data. In addition, you will interact with research scientists to apply genomic data to product discovery programs.

We require a Ph.D. in Molecular Biology, Genetics and 2 years experience in bioinformatics with a strong biology and computer background, especially in generating useful information from massive output of data generated by sequencing, genetic fingerprinting, mapping, positional cloning, or transcriptional profiling efforts. An in-depth knowledge of bioinformatics tools and a demonstrated skill in a programming language such as C, C++, Java, or PERL are a must.

Ad Code: 99-0315

GENOMIC PIPELINE ENGINEER

Your primary responsibilities in this position will include maintaining and/or briefly extending an existing PERL-based sequence analysis pipeline to ensure smooth and effective processing of our current sequence data flows. You will contribute to the architecture, design, implementation, testing/validating, and maintaining of a second generation scaleable, reliable, flexible, sequence processing pipeline. You will interact with customers to clarify details of requirements for bug fixes and new development efforts and will work with other groups in the LSI to interface other bioinformatics systems.

We require a BS/MS and proven skills and experience in PERL and shell script writing. Must have a working familiarity with software life cycles and software 'best practices'. Experience in sequence analysis automation would be very valuable. Java and C++ programming skills, experience writing software that interfaces with relational databases, and exposure/training in biology are all pluses. Must have excellent interpersonal skills and be customer and results oriented. Ad Code: 99-0623

For fastest consideration for the above positions, please submit your resume in scannable format to: monsanto@aon-hros.com, ad code (from above) on your subject line and cover letter for expedited review. Please note on cover letter where ad was seen. Or mail to: Monsanto-(ad code), PO Box 1262, Findlay, OH 45840. You will receive a postcard to confirm receipt of your resume. EEO/AA Employer M/F/D/V. Visit our website at monsanto.com.

MONSANTO

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The innovative R&D work we do at Bristol-Myers Squibb Pharmaceutical Research Institute enhances the lives of people everywhere under the stars. Your contribution could make all the difference in the world.

APPLIED GENOMICS Princeton, NJ

We anticipate opportunities for investigators interested in the application of genomics to drug discovery. We are most interested in identifying candidates with experience in disciplines such as model systems genetics, transcriptional profiling, proteomics, bioinformatics, pharmacogenomics and target validation. If your area of expertise is not listed below, please submit your resume using Code: PRSM121AG.

Transcriptional Profiling

Ph.D. Scientist to manage transcriptional profiling research projects in collaboration with therapeutic area scientists, with the goal of identifying novel drug discovery candidates. Should have 3-5 years experience in transcriptional profiling technologies, a background in molecular biology, experience with tissue culture and an interest in molecular immunology. Demonstrated ability to manage a small research group is required. Code: PRSM121MN1

B.S./M.S. Scientist to work on transcriptional profiling experiments using microarray technology, subtractive cDNA libraries, and quantitative realtime PCR. 3+ years experience in molecular biology, including PCR, northern analysis, and RNA isolation. Candidate should be computer literate with demonstrated ability to learn the use of sophisticated software tools for data analysis. Code: PRSM121MN2

B.S./M.S. Scientist to operate slide microarray production facility to support transcriptional profiling group. 3+ years lab experience in biochemistry or molecular biology, demonstrated experience operating delicate instrumentation, ability to maintain logs and a production database. Code: PRSM121MN3

Pharmacogenomics

Ph.D. Bioinformatics/Computational Scientists experienced with analysis of microarray data. Code: PRSM121ND1

Ph.D. Quantitative Geneticist experienced with analysis of complex diseases using association and linkage methods. Code: PRSM121ND2

Ph.D. Biochemist/Chemist experienced with the utilization of microarrays for transcriptional profiling/SNP analyses. Code: PRSM121ND3

B.S./M.S. Molecular Biologists/Biochemists
experienced in preparing and working with RNA, RT-PCR, northern
blotting, and expression analyses. Code: PRSM121ND4

METABOLIC AND CARDIOVASCULAR DISEASES Princeton, NJ

Aging Research and Metabolic Bone Disease anticipates additional opportunities in 2000. Candidates with Ph.D., M.S. and B.S. degrees in biochemistry, molecular biology, in vivo physiology, and endrocrinology are invited to apply to Code: PRTG121AR or the following current openings:

D.V.M., M.D. or Ph.D. Aging Research Senior Drug Evaluation Scientist. Degree in Biology, Pharmacology or Endocrinology, a minimum of 4 years postdoctoral experience, and a broad background in animal physiology with significant experience in molecular biological techniques. The individual will lead a lab in Aging Research to support the identification of therapeutic agents and will need to be creative in the use of molecular techniques in the development of new model systems to assess drug action on aging both in vivo and ex vivo. Code: PRTG121DB1

Ph.D. &/or M.D. Metabolic Bone Disease Senior Drug Evaluation Scientist. Degree in Biology, Biochemistry, Cell Biology or Endocrinology and 4+ years of nuclear hormone receptor experience including analysis of nuclear hormone receptor physiology. The individual will lead a lab focused on drug discovery through the modulation of nuclear receptor activity utilizing both molecular and biochemical approaches. Code: PRTG121DB2

Cardiovascular Drug Discovery

B.S./M.S. Electrophysiologist with 2+ years industrial laboratory experience in biophysics or molecular physiology of ion channels, including skills in two-electrode voltage clamp, whole-cell and single-channel patch clamp, fluorescence microscopy, myocyte isolation and cell culture. Code: PRTG121CM

B.S./M.S. Biochemist/Molecular Biologist with 2 years of industry experience to express, purify, characterize, and assay recombinant proteins for drug discovery research. The ideal candidate will have experience with multiple protein expression systems, enzyme kinetics, and the various aspects of drug screening. Code: PRTG121JK

Metabolic Diseases Drug Discovery

B.S./M.S. In Vivo Pharmacologist with 2-5 years of experience to assist in drug discovery research in areas of diabetes and obesity. Must understand physiology and pharmacology and have skills in surgical preparation, drug dosing, performing various in vivo and in vitro assays and familiarity with glucose clamp study. Code: PRTG121SH

Our work has

IMMUNOLOGY, INFLAMMATION and PULMONARY DISEASES Princeton, NJ

Pulmonary Immunology

Ph.D. with 5+ years postdoctoral experience in pre-clinical in vivo models of allergy/asthma, COPD and/or lung inflammation. Solid understanding of immunological principles involved in pathogenesis of pulmonary disease. Ability to directly assess pulmonary function and interpret data from physiologic measurements. Supervisory experience required. Background in pharmaceutical industry/drug discovery desired. Code: PRSM121KB

Immunology/Inflammation

Ph.D. Preclinical Research Scientist with 5+ years postdoctoral experience in Immunology/Inflammation research and strong skills in cellular biology to identify, characterize and develop novel therapeutic targets. Focus is on cell adhesion. Additional skills in biochemical characterization and development of in vitro assays required. Code: PRSM121DH

LEAD DISCOVERY Wallingford, CT

Ph.D. Scientist to develop reaction conditions for the bioconjunction of labels to other biomolecules, synthesis of the bioconjunctions in small-scale and large-scale, and purification and characterization of the products. A degree in chemistry, biochemistry or related fields with experience in protein chemistry, organic synthesis and purification, HPLC, and UV/fluorescence spectrophotometry. Code: PRMA121RP

B.S./M.S. Scientist to carry out production improvement experiments for early phase lead candidates from microbial source media formulation, strain improvement techniques, biotransformation and scale-up of metabolites in fermentor. Degree in Microbiology, Biology or Biochemistry with experience in microbial fermentation, biotransformation, media formulation and strain improvement techniques, and HPLC.

Code: PRMA121RL

B.S./M.S. Scientist to evaluate and develop state-of-the-art liquid and detection instruments as part of our world-leader assay miniaturization program. A practical hands-on approach to laboratory instrumentation problem-solving is essential. Experience of liquid-handling and/or detection instruments for high-throughput screening is desirable.

Code: PRMA1210B

METABOLISM AND PHARMACOKINETICS Wallingford, CT

B.S./M.S. Scientist to be responsible for daily operation of automated screen for evaluating the metabolic stability of discovery compounds. Requires experience in the use of automated techniques for laboratory assays. Familiarity with enzyme kinetics is desirable. Willingness/ability to learn HPLC/mass spectrometry techniques in sample analysis is essential. Code: PRRH121JK

far-reaching effects.

PROCESS RESEARCH AND DEVELOPMENT

New Brunswick, NJ

Ph.D. Group Leader in Process Research to manage and lead projects directed toward the synthesis of new drug candidates. This requires a high level of familiarity with and skills in modern and classical synthetic organic chemistry, analytical techniques and instrumentation, and scale-up techniques. A minimum of 6-8 years of industrial experience in a development setting with a proven track record of accomplishment is required. Code: PRRG121RP

For Princeton and New Brunswick positions, send resumes to:

Bristol-Myers Squibb Company Pharmaceutical Research Institute P.O. Box 4000 Princeton, NJ 08543-4000 FAX: 609-581-8841

For Wallingford positions, send resumes to:

Bristol-Myers Squibb Company Pharmaceutical Research Institute P.O. Box 5101, 5 Research Parkway Wallingford, CT 06492-7661 FAX: 203-677-7762



Pharmaceutical Research Institute

Bristol-Myers Squibb uses resume-scanning technology. Please submit resumes, including Code #, to appropriate address. Resumes should be printed on plain white bond paper, using standard type and fonts (no italics, graphics or staples please).

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IMMUNOLOGY

Two tenure-track positions available at ASSISTANT/ASSOCIATE/FULL PROFESSOR level in the Department of Microbiology, School of Medicine and Biomedical Sciences, SUNY at Buffalo, with membership in the Center for Microbial Pathogenesis and The Ernest Witebsky Center for Immunology. Websites: http://www.smbs.buffalo.edu/microb/ and http://www.smbs.buffalo.edu/cmp/index. html. Preference will be given to candidates with research interests in immunology, cellular immunology, or immunology as it relates to infectious diseases. Candidates are expected to have a Ph.D., M.D., D.D.S., or equivalent degree and at least two years of postdoctoral experience, will conduct vigorous independent research, and will be expected to teach immunology to students of medicine, dentistry, and other health-related professions. Generous start-up support and laboratory space will be available; salary is negotiable. The application deadline is December 31, 1999, with a starting date as early as January 1, 2000. Those interested should send a curriculum vitae, brief descriptions of current and future research interests, copies of recent publications, and the names, mail, and e-mail addresses of three references to: Dr. John Hay, Professor and Chairman, Department of Microbiology, School of Medicine and Biomedical Sciences, State University of New York at Buffalo, Box A, 138 Farber Hall, Buffalo, NY 14214. State University of New York is an Affirmative Action/Equal Opportunity Employer.

MEDICAL UNIVERSITY OF SOUTH CAROLINA DEPARTMENT OF PHYSIOLOGY AND NEUROSCIENCE

The Department of Physiology and Neuroscience at the Medical University of South Carolina seeks to fill four TENURE-TRACK POSITIONS. Rank will be commensurate with experience, and the candidates must have a Ph.D. or M.D., a minimum of two to three years of postdoctoral training, and evidence of the ability to sustain an extramurally funded research program. Candidates should have research experience in one of four areas: 1) molecular neurobiology with an emphasis on substance abuse; 2) biophysics of neurotransmission; 3) neurobiology of CNS neoplasms; and 4) aging, neuroregeneration, or apoptosis, to be part of a multidisciplinary center of Parkinson's and Alzheimer's disease. Candidates should send a curriculum vitae, summary of research interests, and a list of at least three individuals to contact as references to: Jacqueline F. McGinty, Ph.D., Search Committee, Department of Physiology and Neuroscience, Medical University of South Carolina, 167 Ashley Avenue, Suite 607, Charleston, SC 29425. Review of applications will begin on November 1, 1999, and continue until the positions are filled. For further information contact e-mail: heissenc@musc.edu and website: www2. musc.edu/PGY/PGY.html.

Medical University of South Carolina is an Equal Employment Opportunity/Affirmative Action Employer.

Cell Biologist. The Boise State University Biology Department will fill a tenure-track position in the fall of 2000 at the rank of ASSISTANT PROFESSOR. We seek a broadly trained Biologist to teach cell biology, a freshman-level course, and one in his/her area of expertise. Candidates should possess postdoctoral experience and a record of scholarly publications. Development of an extramurally funded research program and participation in the Master's of biology program is expected. Additional information is found at website: www.idbsu.edu/biology. Send a letter describing teaching and research interests, a curriculum vitae, up to three reprints, and names, addresses (including e-mail), and telephone numbers of three references to: Dr. A. Dufty, Biology Department, Boise State University, Boise, ID 83725. Closing date is November 29, 1999. Boise State University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

POSITIONS OPEN

THE UNIVERSITY OF CALIFORNIA, BERKELEY

ASSISTANT/ASSOCIATE RESEARCH PHYS-ICIST. Brain Imaging Center. Salary: Commensurate with experience. Closing date: November 22, 1999.

The Neuroscience Institute at the University of California, Berkeley is seeking an individual with technical training and extensive experience in functional magnetic resonance imaging, for the position of nontenured Assistant/Associate Research Physicist in the new Brain Imaging Center. Responsibilities will include oversight of technical operations for a new Varian 4T MRI scanner, including supervision of hardware maintenance and software development. Preference will be given to individuals with a strong record of independent research, and experience in one or more of the following areas: pulse-sequence programming, coil design, and the development of new methods for image acquisition, processing, and analysis. Ph.D. required in a related field. A strong interest in neuroscience applications is also desirable. Opportunities will be available for conducting independent research in MRI and for training and supervision of students. Applicants should send a curriculum vitae, a research statement, representative publications, and three letters of reference to: Neuroscience Institute, University of California Berkeley, 498 Life Sciences Addition #3190, Berkeley, ČA 94720-3190 postmarked by Monday, November 22, 1999. The University of California is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR MICROBIOLOGY LOYOLA UNIVERSITY, NEW ORLEANS

The Department of Biological Sciences, Loyola University, New Orleans (website: www.loyno. edu/~biology) seeks to fill a tenure-track faculty position at the Assistant Professor level for fall 2000. The successful applicant will have a Ph.D. in the biological sciences, be committed to outstanding undergraduate teaching and the establishment of a research program with extramural funding that involves UG students. The successful candidate will contribute to teaching biology core courses, upper-level courses including microbiology, and non-major's courses. She/he will develop a research program in cell and molecular biology. We are especially interested in individuals who use prokaryotic models. To apply, send curriculum vitae, college transcripts, statements of teaching and research interests and expertise, and three letters of reference to: Biology Search Committee, Department of Biological Sciences, Loyola University, New Orleans, LA 70118. We will begin reviewing applications on November 15, 1999, and will continue until the position is filled.

Loyola University is an Affirmative Action/Equal Opportunity Employer and encourages members of groups underrepresented in science to apply.

ASSISTANT PROFESSOR HUMAN BIOLOGY

Applications are invited for a tenure-track position in human biology at the University of Wisconsin–Green Bay for fall 2000. Teaching responsibilities include principles of biology I for majors, human genetics, and an upper-level course in area of specialty. Candidates must have completed a Ph.D. (or equivalent) by August 2000 in genetics or a related field. The candidate should be broadly educated in biology and be committed to directing undergraduate research. Undergraduate teaching and/or postdoctoral experience desirable. First screen November 15, 1999; position open until filled. Please submit a letter of application, curriculum vitae, statement on teaching and research philosophy, copies of undergraduate and graduate transcripts, and three current letters of reference to: Dr. Joseph A. Mannino, University of Wisconsin-Green Bay, 2420 Nicolet Drive, Green Bay, WI 54311-7001. Telephone: 920-465-2681; FAX: 920-465-2769; e-mail: manninoj@uwgb. edu. Further information available at website: http://www.uwgb.edu/humbio/.

POSITIONS OPEN

ASSISTANT PROFESSOR of biology (two positions). Applications are invited for two one-year positions anticipated to begin September 2000. Ph.D. required. Salary competitive and consistent with level of experience. These positions provide excellent opportunities for anyone who intends to pursue a teaching/research career in a liberal arts college. The first position is for one year (with possibility of extension) with teaching responsibilities that include cell biology and advanced courses in area of expertise. The second position is a one-year sabbatical replacement with teaching responsibilities that include animal physiology, participation in the introductory biology sequence, and other courses in area of expertise. Kalamazoo College is a highly selective, nationally known liberal arts college that takes pride in its tradition of outstanding undergraduate science education. Candidates are expected to have high aptitude and interest in undergraduate teaching and a commitment to the liberal arts. Completed applications received by December 15, 1999, will receive full consideration, with later applications reviewed as needed until the position is filled. Send letter of application. curriculum vitae, undergraduate and graduate transcripts (unofficial acceptable), statement of teaching philosophy and research interests, and three letters of recommendation to: Dr. David A. Evans, Chair, Department of Biology, Kalamazoo College, 1200 Academy Street, Kalamazoo, MI 49006-3295.
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.

VISITING ASSISTANT PROFESSOR PLANT COMMUNITY ECOLOGIST University of Wisconsin-Milwaukee

The Department of Biological Sciences at the University of Wisconsin–Milwaukee solicits applications for a Visiting Assistant Professor (non–tenure-track) in plant community ecology. This position is for a limited-term, two-year appointment. We seek individuals with expertise in species interactions. Ph.D. required, postdoctoral experience preferred. Teaching responsibilities will include upper-level courses in plant ecology and natural resources management, and a rotation in an introductory botany course. The successful candidate will also assist in advising majors in conservation and environmental studies. Send a current curriculum vitae, a concise statement of research, teaching goals, and names and telephone numbers of three references to:

Chair, Plant Ecologist Search Committee Department of Biological Sciences, Box 413 University of Wisconsin-Milwaukee Milwaukee, WI 53201

E-mail questions may be addressed to e-mail: ehlinger@uwm.edu. Applications must be post-marked by November 15, 1999, for full consideration. The University of Wisconsin-Milwaukee is an Affirmative Action/Equal Opportunity Employer.

Full-time Faculty position in physiology at the rank of ASSISTANT PROFESSOR. Candidates with achievements in teaching/research will be considered for higher rank. The successful candidate will be expected to participate in teaching physiology and to pursue a vigorous research program. Review of applications will continue until the position is filled. Interested applicants should send a curriculum vitae including publication list, statement of research plans, and names and addresses of three references to: Dr. Arnold L. Nagler, Senior Associate Dean, New York College of Osteopathic Medicine, Old Westbury, NY 11568. Equal Emplayment Opportunity/Affirmative Action/Minorities/Females/Disabled/Veterans.

RESEARCH SCIENTISTS needed to work in medical research foundation. Snyder Research Foundation has permanent positions for biologically oriented Ph.D.-level scientists to work in research laboratory. Although any area of basic cancer research will be considered, priority will be given to those interested in tumor markers. Apply before November 15, 1999, to: Dr. Larry Smith, Executive Director, 1407 Wheat Road, Snyder Research Foundation, Winfield, KS 67156. E-mail: snyderrf@hit.net.

Cracking the Code

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At Celera, we are combining leading-edge technology with pioneering research and discovering powerful tools for predicting risk and identifying genetic components that trigger disease. Our goal is to become the definitive source of genomic and medical information that will enable scientists to develop breakthrough therapeutics and diagnostics. It is an undertaking so complex and broad in scope...

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POSTDOCTORAL RESEARCH POSITIONS NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES **NATIONAL INSTITUTES OF HEALTH** P.O. BOX 12233, RESEARCH TRIANGLE PARK, NC 27709-2233

Biostatistical Methods in Genetics Clarice Weinberg, Ph.D. (weinberg@niehs.nih.gov)

Calcium Signaling James Putney, Ph.D. (putney@niehs.nih.gov)

cDNA Microarray for Testicular Toxicology Robert Chapin, Ph.D. (chapin@niehs.nih.gov)

Cell Adhesion and Signal Transduction in Tumor Cell Metastasis Kenneth Olden, Ph.D./John Roberts, Ph.D. (roberts1@niehs.nih.gov)

Cyclooxgenases, NSAID's and Cancer Robert Langenbach, Ph.D. (langenb1@niehs.nih.gov)

Cytochrome P450 Arachidonic Acid Metabolism Darryl Zeldin, Ph.D./Joyce Goldstein, Ph.D. (zeldin@niehs.nih.gov)

Eicosanoids and Pulmonary Immune Function Darryl Zeldin, Ph.D./Dori Germolec, Ph.D. (zeldin@niehs.nih.gov)

Epidemiology of Respiratory Illness Stephanie London, M.D., Dr.P.H. (london2@niehs.nih.gov)

Genetics of Human Cytochrome P450 Joyce Goldstein, Ph.D. (goldste1@niehs.nih.gov)

Glucocorticoid and Orphan Nuclear Receptor Action
John Cidlowski, Ph.D. (cidlowski@niehs.nih.gov)
Ion Channel Physiology
Jerrel Yakel, Ph.D. (yakel@niehs.nih.gov)

Mitochondrial DNA Replication William Copeland, Ph.D. (copelan1@niehs.nih.gov)

Mechanisms of Cell Adhesion and Migration Steven Akiyama, Ph.D. (akiyama@niehs.nih.gov)

Mechanisms of Chemical-Induced Hepatocarcinogenesis Burhan Ghanayem, Ph.D. (ghanayem@niehs.nih.gov)

Mechanisms of Regulation of Apoptosis John Cidlowski, Ph.D. (cidlowski@niehs.nih.gov)

Mechanisms by Which Organisms Produce Mutations Burhan Ghanayem, Ph.D. (ghanayem@niehs.nih.gov) Nuclear Receptors in Molecular Toxicology Masahiko Negishi, Ph.D. (negishi@niehs.nih.gov)

Pediatric Epidemiology Walter Rogan, M.D. (juras@niehs.nih.gov)

Protein NMR Robert London , Ph.D. (london@niehs.nih.gov)

Regulation of Signal Transduction Pathways by Adaptor Proteins John O'Bryan, Ph.D. (obryan@niehs.nih.gov)

Renal Secretory Transport Mechanisms John Pritchard, Ph.D. (pritcha3@niehs.nih.gov)

Reproductive Epidemiology Allen Wilcox, M.D.,Ph.D./Donna Baird, Ph.D (juras@niehs.nih.gov)

Role of Maternal Genes in Early Xenopus Development Perry Blackshear, M.D., D.Phil (black009@niehs.nih.gov)

Signal Transduction by Inositol Phosphates Stephen Shears, Ph.D. (shears@niehs.nih.gov)

Signal Transduction Events in the Pathogenesis of Pulmonary Fibrosis James C. Bonner, Ph.D. (bonner) niehs.nih.gov)

Steroid Receptor Mediated Transcription and Chromatin Remodeling Trevor Archer, Ph.D. (archer1@niehs.nih.gov)

Stochastic Modeling in Toxicology Christopher Portier, Ph.D. (portier @niehs.nih.gov)

Stress Induced Signaling Pathways
Elizabeth Murphy, Ph.D. (murphyl @niehs.nih.gov)
Structure of Drosophila Telomeres
James Mason, Ph.D. (masonj@niehs.nih.gov)

Structure Function Studies of Zinc Finger Proteins Perry Blackshear, Ph.D., D.Phil (black009@niehs.nih.gov)

Must possess Ph.D., M.D. or equivalent with no more than five years of postdoctoral experience. For further information on these positions, access our Human Resources website http://www.niehs.nih.gov/vacancy/postdoc.htm http://dir/niehs.nih.gov provides laboratory information. To apply, submit a cover letter, curriculum vitae and the names of three references to the hiring scientist at the above address.

NIH/NIEHS Is An Equal Opportunity Employer

TENURE-TRACK FACULTY POSITION LIFE TECHNOLOGIES PROFESSORSHIP Center for Advanced Research in Biotechnology Protein-Nucleic Acid Interactions

The Center for Advanced Research in Biotechnology (CARB) announces the reopening of a search to identify outstanding candidates for a tenure-track, Life Technologies Professor faculty position. We are particularly interested in applicants that are highly motivated toward creative research in the area of protein-nucleic acid interactions; candidates with an interest in polymerase-nucleic acid interaction are especially encouraged to apply. The position is with the University System of Maryland at the rank of ASSIST-ANT PROFESSOR, although exceptional Senior Scientists may be considered. The successful candidate will be expected to develop a strong, independent, externally funded research program, and to interact with other CARB faculty and with investigators at Life Technologies, Inc., with expertise in macro-molecular crystallography, high field NMR spectroscopy, computational chemistry, and biochemistry and molecular biology.

CARB is a research center of the University of Maryland Biotechnology Institute and the National Institute of Standards and Technology devoted to fundamental problems of macromolecular structure, function, engineering, and design. Review of applications will begin December 1, 1999. Applicants should submit a curriculum vitae, a statement of research plans, and have three letters of reference sent to:

Chair, LTI Faculty Search Committee Center for Advanced Research in Biotechnology University of Maryland Shady Grove 9600 Gudelsky Drive Rockville, MD 20850

CARB is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply.

ANIMAL PHYSIOLOGIST CELL/MOLECULAR BIOLOGIST AND ECOLOGIST

We invite applications for three tenure-track ASSISTANT PROFESSOR positions in animal physiology, cell/molecular biology, and ecology for fall 2000 (see website: http://www.sfsu.edu/ ~biology). Ph.D. is required and postdoctorate is preferred. San Francisco State University faculty members are expected to be effective teachers and demonstrate professional achievement and growth through continued research, publications, and/or creative activities. Candidates must have a record of research and willingness to establish a research program including supervision of Master's students. The Department of Biology offers a comprehensive program with 40 faculty with diverse research interests. San Francisco State University, a member of the California State University system, serves a diverse student body of 27,000 undergraduate and graduate students. The mission of the university is to promote scholarship, freedom, human diversity, excellence in instruction, and intellectual accomplishment. Send letter, curriculum vitae, statements of teaching and research interests, three letters of reference, and copies of two representative papers to either: Animal Physiology, Ecology, or Cell/Molecular Biology Search, Department of Biology, San Francisco State University, 1600 Holloway Avenue, San Francisco, CA 94132. Review of applications will begin December 8, 1999. Women, ethnic minorities, and persons with disability are especially urged to apply. San Francisco State University is an Equal Opportunity/Affirmative Action Employer.

RESEARCHER POSITION in Parkinson's and movement disorders. Appropriate candidate would be involved in pharmacology mechanism(s) of Parkinson's disease. Must have a Ph.D. related to neuroscience with or without postdoctoral experience. Experience in behavioral, neurobiological, and electrophysiological measures preferred. Send curriculum vitae to: Daniel Truong, M.D., website: www.pmdi.org.

POSITIONS OPEN

GEORGE MASON UNIVERSITY ECOSYSTEM AND CONSERVATION SCIENCE

The Biology Department at George Mason University (GMU) seeks an **ASSISTANT PROFESSOR** for the fall 2000 to join its recently initiated thrust in ecosystem and conservation science. Applicants should complement existing strengths in aquatic, wetland, and terrestrial ecology. Applicants addressing ecologically based issues at large spatial scales (i.e., ecosystem, watershed, region) or whose research interests lie at the interface between ecosystem ecology and conservation science are encouraged to apply. Evidence of publication, extramural funding, and teaching excellence are required, and postdoctoral experience is preferred. Salary and start-up funds are nationally competitive. George Mason University is the state university in Northern Virginia. See World Wide Web for information on GMU (website: http://www.gmu.edu) and Department of Biology (website: http://www.gmu.edu/departments/ Biology). Send letter of application, curriculum vitae, statement of research and teaching interests, and names of three references to: Chair, Conservation and Ecosystem Science Search Committee, Department of Biology Dept MSN 3E1, George Mason University, Fairfax, VA 22030-4444. Evaluations will begin 1 December 1999. Affirmative Action/ Equal Employment Opportunity.

CELL BIOLOGIST

The Department of Zoology at North Carolina State University invites applications for a 12-month tenure-track position at the ASSISTANT PROFESSOR level. Applicants should have an outstanding record of research achievements with interests in fundamental principles of cell biology, molecular biology, or functional genomics. Canidates with expertise in neurobiology and/or developmental biology are especially encouraged to apply. The successful applicant is expected to establish an energetic, extramurally funded research program and to teach and advise students at the undergraduate and graduate levels. Further information is available on the North Carolina State University website: http://www.cals.ncsu.edu/zoology.

Applicants should submit a curriculum vitae, statement of research interests, statement of teaching interests, and the names of three references to: Dr. Robert R. H. Anholt, Chair, Search Committee, Department of Zoology, Box 7617, North Carolina State University, Raleigh, NC 27695-7617. Review of applications will begin immediately and will continue until the position is filled.

North Carolina State University is an Affirmative Action/ Equal Opportunity Employer.

ASSISTANT PROFESSOR

The Department of Biological Sciences, Mississippi State University, invites applications for a tenure-track, 9-month faculty position. Starting date: 16 August 2000.

Plant ecologist. We are seeking a broadly trained individual who uses quantitative approaches to study the ecology of plants. Preference will be given to applicants working at the community or landscape level.

Qualifications. Completed Ph.D. in a relevant field and established record of research productivity; teaching and postdoctoral experience desirable. Successful candidate is expected to develop an externally funded research program and direct graduate students. Application should include a curriculum vitae, a concise statement of research and teaching interests, three reprints, and three letters of reference. Screening will begin 1 December 1999 and will continue until the position is filled. Applications should be sent to: Dr. Christopher M. Taylor, Search Committee Chair, Department of Biological Sciences, P.O. Drawer GY, Mississippi State University, Mississippi State, MS 39762. Telephone: 662-325-8591; email: ctaylor@ra.msstate.edu. Mississippi State University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITION MRI/SPECTROSCOPY UNIVERSITY OF KENTUCKY Medical Center

The Magnetic Resonance Imaging and Spectroscopy Center and the Department of Anatomy and Neurobiology invite applications from individuals with a strong background in magnetic resonance imaging (MRI) or spectroscopy for a tenure-track position at the ASSISTANT PROFESSOR level. We are seeking candidates with exceptional promise for establishing a strong extramurally funded research program using MRI. Current strengths include functional MRI studies on normal aging processes in the nervous system and neurodegenerative diseases. The Research MRI Center has a research-dedicated 1.5T Siemens VISION unit with high-performance gradients, EPI, and multinuclear spectroscopic capabilities. Applicants should have a Ph.D., M.D., or equivalent degree. Applicants should send their curriculum vitae, a short statement of research and teaching interests, and the names of three references to: Dr. Don M. Gash, Director, Magnetic Resonance Imaging and Spectroscopy Center, Chandler Medical Center MN224, Lexington, KY 40536-0298. The Search Committee will begin reviewing applications on November 15, 1999 and will continue until the position is filled. Women and minority candidates are encouraged to apply. The University of Kentucky is an Affirmative Action/ Equal Opportunity Employer.

ASSISTANT/ASSOCIATE PROFESSOR, Openings exist in the Department of Oral Biology and Pathology for full-time, tenure-track faculty at the Assistant/Associate Professor levels. Successful candidates will be expected to undertake active research programs and to participate in aspects of the departmental teaching programs. These include the teaching program for dental students (biology of oral mineralized tissues, dental supporting tissues, oral microbiota, salivary glands and their products, mucous membranes and other epithelia, and oral sensory and motor systems, developmental biology of the face and oral cavity, and oral diagnostics). The department also has active graduate programs leading to M.S./Ph.D. degrees in oral biology. Candidates must have a D.D.S., M.D., or Ph.D. degree. Dual degree applicants are encouraged to apply. Appointees at the Associate Professor level will be expected to have demonstrated excellence in both research and teaching. Salary commensurate with qualifications, experience, and rank. Send résumé and names/telephone numbers of at least three references to: Dr. Lome Taichman, Department of Oral Biology and Pathology, School of Dental Medicine, SUNY Stony Brook, Stony Brook, NY 11794-8702. An Affirmative Action/Equal Opportunity Employer and Educator. Women and minorities are encouraged to apply.

Animal molecular biology position-University of Nebraska. The School of Biological Sciences invites applications for a tenure-track faculty position at the ASSISTANT PROFESSOR level in the area of animal molecular biology. Candidates with expertise that will strengthen our programs in animal molecular virology and mammalian molecular genetics are particularly encouraged. Development of a vigorous research program and teaching responsibilities in both undergraduate and graduate level courses in cell and molecular biology and/or microbiology are expected. Scientists with a Ph.D. and postdoctoral experience are encouraged to apply by sending a curriculum vitae, statement of research interest, and arrange for three letters of reference to be sent by November 30, 1999, to: Animal Molecular Biology Search Committee Chair, School of Biological Sciences, 348 Manter Hall, University of Nebraska-Lincoln, Lincoln, NE 68588-0118. The position will be open until a suitable candidate is selected. 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; contact Jack Morris at Telephone: 402-472-6676 for assistance.

Realize the Future of Medicine.



At Scriptgen, we are at the forefront of a new breed of bio-pharmaceutical companies that are changing the way new drugs are being discovered. Behind our success is a strong team of managers, scientists, corporate partners and investors with a common goal: Driving medicine forward.

Protein Biochemist

Apply your skills to purifying and characterizing recombinant proteins for use in high throughput screens using patented HTS platform technology. All degree levels will be considered. At least three years' experience with protein expression and purification required. You must demonstrate proficiency in biochemical techniques. Your experience must include biophysical protein characterization; assay development; and a broad range of expression systems, including Pichia and Baculovirus. Job code PB02.

Analytical Chemist

You will take responsibility for method developments for a variety of structures of molecules from early drug discovery phase. Duties include analytical testing, evaluation of data and preparation of reports. Qualified candidates will have an MS degree in Analytical Chemistry and a minimum of two years of industry experience with the analysis of small molecule compounds and metabolites in the biological matrices. Successful candidate must be a team player and work closely with scientists in medicinal chemistry, biology and pharmacology groups. Hands-on experience on LC-MS and HPLC is essential. Job code ACO1.

Compound Library, Database, Automation Manager Supervise the group responsible for management of extensive compound libraries and an Oracle-based database for high throughput screening and drug optimization. You will also implement automation in library management and high throughput screening areas. You must have at least five years' experience, database and automation expertise, and management experience. Familiarity with organic/medical chemistry preferred. Job code CL01.

Protein Biophysicist/Protein Folding Expert

Ph.D or equivalent scientist needed to work in a highly collaborative interdisciplinary environment focused on drug discovery. You will provide biophysical expertise for HTS assay setup, conduct and direct technology development projects, and execute and expand capabilities for biophysical characterizations of macromolecules. You must have a strong background in protein folding, stability and biochemistry, as well as experience with biophysical techniques such as ultracentrifugation, CD fluorescence, calorimetry, NMR and light scattering. Ideally, you are also well-versed in RNA, biochemistry, high throughput assay technology and enzymology. Familiarity with techniques in molecular biology also preferred. Job code PF01.

HTS Biochemist Affinity Screening

Position involves establishment and management of novel high throughput assays. This position requires extensive experience in protein biochemistry, HTS assay development and execution, a strong attention to detail, automation expertise, project management skills and familiarity with data management and relational databases. The ideal candidate will have a minimum of three years of relevant experience. Job code AS03.

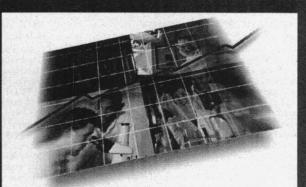
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Growth through Discovery

Parke-Davis Pharmaceutical Research, a division of Warner-Lambert, has maintained an outstanding track record of innovation through scientific research to discover drugs for unmet medical needs. Focused on the future, we continue our global success in an environment that recognizes and rewards the individual and team contributions of our diverse colleagues. As we continue to experience rapid growth, we have the following opportunities to join our state-of-the-art research facility in ANN ARBOR, MICHIGAN:

Diabetes and Obesity Research at Parke-Davis - Senior Scientist and Postdoctoral Positions

The Department of Cell Biology at Parke-Davis Pharmaceutical Research in Ann Arbor, MI invites applications for Sr. Scientist and Postdoctoral positions in the areas of Diabetes and Obesity. Successful candidates will be highly motivated individuals with a proven record of accomplishment in molecular and cellular biology or physiology, committed to the pursuit of basic knowledge. They will join a highly interactive group of scientists working in the areas of metabolic and proliferative diseases. The positions currently open are:

- · Sr. Scientist focusing on the molecular biology of insulin secretion. MD or Ph.D with 3 or more years of postdoctoral experience, and demonstrated expertise in beta-cell biology.
- · Sr Scientist focusing on neuroanatomy and obesity. MD or Ph.D with 3 or more years of postdoctoral experience with in situ hybridization and immunocytochemical techniques to identify neuronal phenotypes within the CNS involved in body weight regulation; familiarity with transneuronal tracing techniques to identify connectivity of identified neuronal systems.
- · Sr. Scientist/Behavioral Pharmacologist will focus on the regulation of appetite. MD or Ph.D with 3 or more years of postdoctoral experience with expertise in the delivery of substances to the brain and the evaluation of the behavioral, endocrine and metabolic status of various animal obesity models.
- Postdoctoral Scientists in metabolism. Recent MD or Ph.D. graduates in Cell or Molecular Biology or Biochemistry with interests in transcriptional regulation, signal transduction and functional genomics approaches to insulin resistance, beta-cell function, fat cell biology and central molecular mechanisms involved in the regulation of appetite and energy expenditure.

We offer competitive salaries, outstanding benefits, and an environment that's conducive to professional growth. We have the above opportunities in ANN ARBOR, MI. For consideration, please forward your resume with Job Code HS/98-0731SC to: Parke-Davis, 2800 Plymouth Road, Ann Arbor, MI 48105. Fax: (734) 622-7617. E-mail: humanresources.resume@wl.com.

www.parke-davis.com Equal opportunity in action. Smoke-free work environment.



HUMAN GROSS ANATOMIST

Tenure-track ASSISTANT PROFESSOR. Ph.D. in anatomy, medical sciences, or a closely related discipline in biology completed by 21 August 2000. Broadly trained Human Gross Anatomist with research experience in anatomy or related areas, other than neuroscience, required. Experience in anatomy applied to health sciences strongly preferred. Specialization in muscular/skeletal anatomy and broad training in anatomy and physiology preferred. A strong commitment to college teaching, prior teaching at the college level, and experience working with diverse groups are desirable. Duties: teaching upper-division and graduate courses in gross anatomy for biology and physical therapy majors; teaching introductory anatomy and human biology courses; developing new courses; participating in the physical therapy graduate program; engaging in scholarly activities; advising; supervising undergraduate and graduate research; serving on committees; and engaging in community service. Submit curriculum vitae, all transcripts, names and telephone numbers of three references, statements of teaching and scholarly interests, and arrange to have three letters of recommendation sent to: Laurel Heffernan, Chair, Biological Sciences, California State University, Sacramento, CA 95819-6077. Website: http://www.csus.edu/bios/. Applications must be postmarked by November 19, 1999. Affirmative Action/Equal Employment Opportunity.

ASSISTANT PROFESSOR (RESEARCH) DIVISION OF IMMUNOLOGY AND TRANSPLANTATION BIOLOGY

The Division of Immunology and Transplantation Biology of the Department of Pediatrics, Stanford University School of Medicine, is seeking qualified candidates for a Research Immunologist at the Assistant Professor (Research) level. Requirements include the Ph.D. degree in molecular and cellular biology with three to four years of postdoctoral training in immunology, and an established reputation of scholarly excellence in the field of transcriptional regulation and late T cell activation. Duties will include development of an active research program within the division and interaction with other immunology research groups at Stanford. Please send a letter describing current/future research interests, curriculum vitae. and names/telephone numbers of three professional references to: Alan M. Krensky, M.D., Chief, Division of Immunology and Transplantation Biology, Pediatrics Room H-306, 300 Pasteur Drive, Stanford University School of Medicine, Stanford, CA 94305-5208. Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.

RESEARCH ASSOCIATE POSITIONS IN MOLECULAR MEDICINE UNIVERSITY OF PITTSBURGH

Applications are invited to join a group of Investigators interested in the molecular analysis of human melanoma and its precursor lesions. The aims of the individual research projects of the program are isolation and analysis of genes differentially expressed in melanoma precursor lesions versus advanced-stage melanomas; molecular analysis of the role of bFGF/FGFR-1 and STAT transcription factors in the progression pathway of melanoma; and application of optical imaging to study melanoma angiogenesis in

Regarding the first two projects, experience in molecular biology is essential, and knowledge in the areas of signal transduction and gene therapy is desirable. For the third project, a strong background in biophysics is required with special emphasis on optics and bioimaging. Qualified individuals who are interested in joining these research projects are invited to submit their curriculum vitae and the names and addresses of three references to: Dorothea Becker, Ph.D., Department of Pathology, University of Pittsburgh, PA 15213 USA.

POSITIONS OPEN

MOLECULAR EVOLUTION AND BEHAVIORAL ECOLOGY

The Department of Biology at the University of Central Florida invites applications for two ninemonth, tenure-track positions to begin August 2000.

(1) We seek a person at the ASSISTANT or ASSOCIATE PROFESSOR level who uses molecular techniques to investigate problems in evolution and conservation biology. The individual will serve as a bridge between developing programs in biomolecular sciences and conservation biology. The successful candidate would be expected to teach molecular evolution, conservation genetics, and contribute to teaching core undergraduate and graduate courses in evolutionary biology. This individual would also be expected to direct graduate students and establish a strong, externally funded research program.

strong, externally funded research program.

(2) We seek a person at the ASSISTANT PROFESSOR level whose research focuses on behavioral ecology. The successful candidate is expected to teach undergraduate and graduate courses in behavioral ecology plus contribute to the existing biology curriculum. This person will develop an externally funded research program with a strong field component, direct graduate students, and participate in a new Conservation Biology program in collaboration with Disney's Animal Kingdom.

A Ph.D. and postdoctoral experience are minimum requirements for both positions. Applicants should submit a curriculum vitae, statements of research and teaching interests, plus three letters of recommendation to: (Position 1) Franklin F. Snelson or (Position 2) John F. Weishampel, Department of Biology, University of Central Florida, 4000 Central Florida Boulevard, Orlando, FL 32816-2368. All materials must be postmarked by 19 November 1999 for either position. The University of Central Florida is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply. As an agency of the State of Florida, all application materials, including transcripts, and selection procedures are available for public review.

We are seeking, tenure-track faculty at the rank of ASSISTANT/ASSOCIATE PROFESSOR or PROFESSOR with active research programs in human molecular genetics. DNA damage and repair, or genetic susceptibility (SNPs; polymorphisms) and disease. These positions are available in the Institute of Chemical Toxicology. Competitive start-up packages are provided, and membership in the Environmental Health Sciences Center in Molecular and Cellular Toxicology with Human Applications, the Comprehensive Cancer Center, and the Center for Molecular Medicine and Genetics provides additional opportunities for professional interactions, pilot project funding, and facility core support. This represents a unique opportunity to enter a growing program in human genetics/genetic susceptibility and molecular epidemiology. Your curriculum vitae should be sent to: Dr. Mark Hughes, Chair, Search Committee, The Institute of Chemical Toxicology, Wayne State University, 2727 Second Avenue, Room 4000, Detroit, MI 48201-2654. Information on the Environmental Health Sciences Center and Institute of Chemical Toxicology may be viewed at website: http://www.wayne.edu/ehsctr. Wayne State University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

TOXICOLOGIST

Battelle is seeking an experienced Toxicologist for the Toxicology NW Op (Richland, Washington). Requires a Ph.D. in toxicology or related fields, or equivalent; must meet requirements of DABT; minimum of two years of postdoctoral training; Study Director experience in the subchronic/chronic inhalation studies under GLP; experience in kinetic analyses including PBPK modeling, in vivo/in vitro toxicity, and metabolism studies. Must have an authorization to twork in United States. Battelle offers competitive salray/benefits. Send your résumé to: Battelle, Attn. Richard Shaw, 505 King Avenue, Columbus, OH 43201. Battelle is an Equal Opportunity/Affirmative Action Employer. Minorities/Females/Disabled/Veterans.

POSITIONS OPEN

Molecular Geneticist. The Biology Department at SUNY Fredonia is seeking applications for a tenure-track ASSISTANT PROFESSOR position to begin August 2000. Ranked in the top ten in the Northeast by US News and World Report, SUNY Fredonia is a selective, public, undergraduate liberal arts college. Our majors benefit from opportunities to work closely with faculty in ongoing research. Candidates must have a Ph.D., and postdoctoral experience is preferred. Area of research interest is open but applicants with interests in eukaryotic systems are especially encouraged to apply. The successful applicant will teach a genetics course for biology, medical technology, and recombinant gene technology majors, as well as general education and upper-level/ graduate courses. An active research program that promotes scholarship and involves undergraduate and M.S. students is expected. The complete application includes an application letter, curriculum vitae, statements of research interests and teaching philosophy, unofficial copies of undergraduate and graduate transcripts, and three letters of reference. Review of complete applications will begin November 15, 1999. Send materials to: Genetics Search Committee, Department of Biology, SUNY Fredonia, NY 14063. Website: http://www.fredonia.edu/department/ biol.htm; e-mail: biology@fredonia.edu.

SUNY Fredonia is an Affirmative Action/Equal Opportunity Employer. We actively seek and encourage applications from minorities, women, and people with disability.

ANIMAL PHYSIOLOGIST AND CONSERVATION BIOLOGIST

Princeton University invites applications for two tenure-track ASSISTÁNT PROFESSORSHIPS in the Department of Ecology and Evolutionary Biology. Both applicants are expected to develop research programs that address fundamental questions in ecology, evolution, and/or behavior. The Animal Physiologist might address issues in areas such as physiological ecology, behavioral endocrinology, or the role of physiology in evolutionary innovation. The Conservation Biologist is expected to address basic scientific issues arising from solving current environmental problems such as those associated with biodiversity loss and global change. The Animal Physiologist is expected to teach an undergraduate physiology course with laboratory. The undergraduate teaching of the conservation biologist will depend on departmental needs. Applicants should have a strong commitment to teaching and a well-developed conceptual basis for their research. A recent curriculum vitae, a statement of research interests, three reprints, and three letters of recommendation should be sent to: Dr. Jeanne Altmann, Department of Ecology and Evolutionary Biology, Guyot Hall, Princeton University, Princeton, NJ 08544-1003. Screening of applications will begin 1 December 1999. Princeton University is an Affirmative Action/Equal Opportunity Employer

PROCESS DEVELOPMENT MANAGER/DIRECTOR

Needed immediately for a dynamic, growing oncology drug development firm with a facility in Boston. Directs fermentation and bioprocess development projects. Provides scientific and technical support for process development of novel proteins. Optimizes Pichea and E. coli expression systems and applies the principles of protein chemistry to process development. Provides support for troubleshooting novel protein purification; reviews process protocols; conducts experiments at laboratory scale and pilot scale; SOPs, batch records, and other controlled documentation and analysis; assists process validation and tech transfer. Ph.D. required, three years of related experience in biopharmaceutical process development. Experience in protein chemistry and knowledge of cGMP required. ILEX™ offers an excellent benefit package and a competitive salary. Send résumé to: Human Resources, 11550 IH-10 West, Suite 100, San Antonio, TX 78230. FAX: 210-949-8483; e-mail: jobs@ilexonc.com. Equal Opportunity Employer/Minorities/Females/Disabled/Veterans.

Southern Illinois University Edwardsville

invites applications for 2 tenure-track positions at the Assistant Professor level.

GENETICIST. We seek applicants with broad training in genetics. The successful candidate will share responsibility for teaching a genetics course for biology majors and will design an advanced course in his or her specialty and will also be expected to participate in non-majors courses in biology. Candidates should exhibit potential for independent and innovative research involving Master's and undergraduate students. OUALI-FICATIONS: Ph.D. in biology, genetics or related field. Post-doctoral teaching and/or research experience strongly preferred.

PHYSIOLOGIST. We seek applicants with broad training in animal physiology. The successful candidate will share responsibility for teaching an introductory animal systems course for biology majors and will design an advanced course in his or her specialty and will be expected to participate in non-majors courses in biology. Candidates should exhibit potential for independent and innovative research involving Master's and undergraduate students. QUALI-FICATIONS: A Ph.D. in biology, zoology or animal physiology. Postdoctoral teaching and research experience preferred.

To apply send letter of application, statements of teaching and research interest, curriculum vitae, copies of official transcripts, names and addresses of three references, and no more than three reprints to: CHAIR (insert appropriate position title to which you are responding), Box 1651S, Department of Biological Sciences, Southern Illinois University, Edwardsville, IL 62026. Review of applications will begin Jan. 1, 2000 and continue until position is filled. SIUE is a comprehensive regional university located in the St. Louis Metropolitan Region, and is dedicated to excellence in undergraduate educa-

SIUE is an affirmative action employer.

GLOBAL OPPORTUNITIES



Equal opportunity in employment is University policy.

DEPARTMENT OF PHYSICS

Lecturer (Level B)

- Experimental Physics
- Soft Condensed Matter Physics/Biophysics

The Department of Physics seeks to appoint a lecturer in experimental physics. This will be the first appointment in a new experimental physics program in the department. The successful applicant will be a dynamic and innovative person with the potential to become an internationally recognised research leader, and an inspired teacher of both undergraduate and postgraduate students in physics.

The successful applicant must possess postgraduate qualifications (PhD level or equivalent) in experimental physics and will have established a reputation for world class research in experimental condensed matter physics which might include one or more of the following areas: biomolecular polymer physics, self assembled structures, membrane biophysics, single cell and single molecule biophysics, molecular motors,

organic and biological nanostructures, laser biophysics, liquid crystals, microreheology, colloids and interfaces, and near field spectroscopy of nanostructures.

This is a continuing appointment at Level B. Salary range: A\$48,327 – A\$57,388 per annum plus employer superannuation contributions of 17%.

Further information, including selection criteria and duty statement, may be obtained by contacting Professor Gerard J. Milburn, Department of Physics on email milburn@physics.uq.edu.au. Alternatively see the university web site http://www.uq.edu.au.

Applications (an original plus eight (8) copies) quoting **Reference No. 54899**, addressing the selection criteria and including a résumé, the names and addresses of three (3) referees and a detailed statement of research goals for the next five years, should be forwarded to the Personnel Officer, Faculty of Engineering, Physical Sciences and Architecture, The University of Queensland, Brisbane Qld 4072, Australia. Closing date for applications: 31 December 1999.

WORLD CLASS: BE PART OF IT



MANAGER PROTEIN PURIFICATION DEVELOPMENT

R&D Systems, Inc. a leading manufacturer of biological products, seeks a proven professional to manage a group of approximately 10 Scientists and Research Associates in the Protein Purification Development group in the development of cost-effective, robust and scaleable processes for the purification of a large variety of recombinant proteins.

Req. Ph.D. in Biochemistry or related field with a min. of 7+ yrs. of relevant experience in the biotechnology or pharmaceutical industry, hands on experience in recombinant protein purification including laboratory and process scale chromatography, ultrafiltration, centrifugation, etc. Knowledge of protein chemistry and protein characterization methods. Excellent laboratory, organizational, communication, problem solving and people skills.

We offer a competitive salary & a comprehensive benefits package. Candidates wishing to be considered for this position please submit your curriculum vitae or resume to:

R & D Systems, Inc.

Human Resources 614 McKinley Place NE Minneapolis, MN 55413

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Post-Doctoral Fellows

MOUNT SINAL SCHOOL OF MEDICINE

Mount Sinai School of Medicine is a leader in medical research and education. Positions are available immediately for a Ph.D. and/or M.D. to study the molecular

basis for cellular senescence as a mechanism of tumor suppression, and to identify/characterize new tumor suppressor genes in pediatric tumors. Areas of research include: analyzing the roles of p53 and mitochondria in cellular senescence; identifying important protein targets of p53 that mediate cell fate and identification/characterization of the molecular basis for pediatric solid tumors. Ultimately, our lab will focus on developing new alternative cancer treatments based on novel molecular targets. Training in molecular biology or cell biology and biochemistry are required. Expertise in any of the following methodologies would be helpful: cloning, tissue culture, transfection, inducible gene expression systems, immunohistochemistry, FACS, and cell cycle analysis.

For consideration, please send C.V. and names/addresses of 3 references to: M. M. Sugrue, M.D., Ph.D., Assistant Professor, Box 1664, Mount Sinai School of Medicine, One Gustave L. Levy Place, NY, NY 10029-6574; Fax: 212-426-1972; E-mail: m.sugrue@smtplink.mssm.edu We are an equal opportunity employer fostering diversity in the workplace.

ASSISTANT PROFESSOR OF MEDICINAL CHEMISTRY

The University of Kansas Department of Medicinal Chemistry is seeking to fill a tenure-track Faculty position beginning August 18, 2000. A Ph.D. in medicinal chemistry, organic chemistry, or a related field is required, and postdoctoral experience is desirable. Duties include teaching at the undergraduate and graduate levels and the direction of a vigorous, externally funded, basic research program. The research interests of the candidate should be in the field of bio-organic chemistry, defined broadly, and should complement those of the current faculty (website: http://www.pharm.ukans.edu/medchem). The opening is expected to be filled at the Assistant Professor level, but outstanding applications may be considered for appointment at a higher rank. Candidates must show evidence of well-defined research plans through the submission of an outline of proposed research. Salary will be commensurate with qualifications and experience. Applicants should submit a letter of interest, résumé, a brief summary of research interests, and should arrange for submission of three or more letters of recommendation to: Professor Jeffrey Aubé, Department of Medicinal Chemistry, University of Kansas, Lawrence, KS 66045-2506. Initial review of applications will begin November 19, 1999, and will continue until the position is filled. Equal Opportunity/Affirmative Action Employer.

MOLECULAR GENETICIST/ CELL BIOLOGIST

The Arizona Cancer Center at the University of Arizona in Tucson is seeking a Molecular Geneticist/Cell Biologist with an interest in cell cycle control as it relates to cancer. This position is tenure-track at the ASSISTANT or ASSOCIATE PROFESSOR level with an appointment in an appropriate academic basic science department. The successful candidate will be expected to build an independent research program. The Arizona Cancer Center, an NCI-designated Comprehensive Cancer Center, offers an outstanding environment for multidisciplinary and translational research.

Applicants must have a Ph.D., M.D., or equivalent degree and a track record of investigation in the molecular genetics of cancer.

Applicants should send a curriculum vitae and the names and addresses of three references to: Daniel Von Hoff, M.D., Director, Arizona Cancer Center, 1515 North Campbell Avenue, Tucson, AZ 85724-5024. The Search Committee will begin reviewing applications on November 19, 1999, and will continue until the position is filled. The University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer. Minorities/Women/Disabled/Vetrans.

Two tenure-track physiology faculty positions. AS-SISTANT/ASSOCIATE PROFESSOR. Responsibilities include teaching courses at the introductory and upper levels in human physiology and such courses as pharmacology, pathology, or nutrition. In addition, you will be expected to develop new courses in your area of expertise. You will be responsible for advising majors in biomedical and health sciences and serving on appropriate institutional committees. We are looking for enthusiastic and energetic individuals who want to teach in an environment committed to quality undergraduate and graduate education. Research that can provide students first hand experience in the laboratory is strongly encouraged. An earned Ph.D. in physiology or related area, or M.D., with postdoctoral experience in physiology, pharmacology, pathology, or nutrition and excellent teaching skills are required. Research experience with undergraduate students preferred. Initial review of candidate files will begin on December 6, 1999, and continue until the positions are filled. Complete applications must include transcripts, curriculum vitae, and three letters of recommendation. Apply to: Dr. Miles Hacker, Chair, Biomedical and Health Sciences Search Committee, Department of Biomedical and Health Science, e-mail: hackerm@gvsu.edu.

POSITIONS OPEN

Biology positions. Birmingham-Southern College (BSC), a selective national liberal arts college, is seeking broadly trained Biologists who are committed to liberal arts education, to excellence in teaching, and to developing an active research program involving un-dergraduates, to fill two TENURE-TRACK POSI-TIONS. Ph.D. required. Position 1: Vertebrate biology. The successful candidate will be able to teach the introductory population/ecosystem and organismal biology classes, a vertebrate field biology course, and course in area of expertise. Interest in behavioral ecology, environmental topics, and GIS desirable. Position 2: Eucaryotic molecular genetics. The successful candidate will be able to teach the required upperlevel genetics course, introductory cell and molecular biology, advanced cell biology, and a course in area of expertise. Interest in emerging areas of molecular biology desirable. Start-up funds for research available. Construction of the new Elton B. Stephens Science Center is scheduled to begin in spring 2000. Application deadline is 15 December 1999. Please submit a letter of application, statement of teaching philosophy and research interests including how undergraduates will be involved, curriculum vitae, reprints of selected recent publications, transcripts, and three letters of recommendation to: Leo Pezzementi, Chair, Division of Science and Mathematics, Box 549022, Birmingham-Southern College, Birmingham, AL 35254. BSC complies with the Alabama Child Protection Act of 1999. Equal Opportunity Employer.

Novartis Agricultural Discovery Institute Inc. (NADII) is one of the largest single fully funded research endeavors dedicated to agricultural genomics. We apply cutting-edge biotechnology to match genes with traits and provide advanced technologies that can be used widely in agribusiness research for the development of gene-based products. We currently seek an exceptional individual to join NADII's growing team:

ASSOCIATE SCIENTIST

Position available to study host-virus interactions and to use viral vectors to study plant gene function. Studies of host-virus interactions will use integrated genetic and reverse genetic approaches to idetify host genes involved in plant viral pathogenesis. Analysis of plant gene function will utilize plant viruses or other methods to overexpress or silence plant genes. Requires a Ph.D., with an emphasis on plant-virology-related research. Excellent computer, communication, and organizational skills are essential.

NADII offers excellent compensation and a great benefits package, including 401K. For immediate and confidential consideration, please send résumé/salary history to: Novartis Agricultural Discovery Institute, Inc., Human Resources Department—AS/SW-SCI, 3115 Merryfield Row, Suite 100, San Diego, CA 92121-1102. FAX: 858-812-1096. Affirmative Action/Equal Opportunity Employer.

MOLECULAR BIOLOGY POSITIONS

The Department of Biology at the University of Missouri–St. Louis invites applications for two tenure-track positions at the ASSISTANT or ASSOCI-ATE PROFESSOR level, beginning August 2000. Applicants must have a Ph.D. and postdoctoral experience in molecular biology. Candidates whose research focus is in microbiology or in plant molecular biology will be given particular consideration. The successful candidates will be expected to establish strong, externally funded research programs and teach undergraduate and graduate courses in molecular biology, molecular genetics, or other core courses in the biology curriculum. Applicants should submit curriculum vitae and a statement of research plans and teaching interests. Applicants should arrange to have three letters of reference sent to: Molecular Biology Search Committee, Department of Biology, University of Missouri-St. Louis, 8001 Natural Bridge Road, St. Louis, MO 63121-4499. Review of applications will begin on December 1, 1999. The University of Missouri-St. Louis is an Affirmative Action/ Equal Opportunity Employer committed to excellence through diversity

POSITIONS OPEN

The Department of Biology at the University of Mississippi invites applications for the position of AS-SISTANT PROFESSOR (tenure-track) in the area of evolution/population genetics of host-parasite or symbiotic interactions to begin August 2000. The successful candidate will develop an extramurally funded research program that complements the department research focus in ecology, evolution, and conservation biology; direct graduate student research; teach courses such as population genetics, evolution, epidemiology, or parasitology; teach freshmen majors or nonmajors on rotation; direct undergraduate research; advise students; and provide appropriate service. A Ph.D. in the biological sciences, evidence of ability to conduct independent research, and a commitment to excellence in teaching are required. Send (1) curriculum vitae, (2) up to five reprints, (3) statement of research and teaching philosophy, (4) evidence of teaching effectiveness and experience, (5) names and postal and e-mail addresses of four references to: Dr. Stephen T. Threlkeld, Search Committee Chair, Department of Biology, University of Mississippi, University, MS 38677 USA. E-mail: stt@olemiss.edu. Review of applications will begin 1 December 1999 and continue until the position is filled (website: www.olemiss.edu). Women and minorities are especially encouraged to apply. The University of Mississippi is an Equal Employment Opportunity/Affirmative Action/ADA/ADEA/Titles VI & IX/Section 504 Employer.

CELL CULTURE RESEARCH ASSOCIATE

Needed immediately for a dynamic, growing oncology drug development firm with a facility in Boston. Independently develops and conducts mammalian cell culture experiments for assay of ongoing research and development projects. Develops assays involving primary human normal cells in addition to cell lines, and develops high-throughput fluorescent and radioactive assays. Experience in angiogenesis, flow cytometry, immunology, molecular biology, histology, and/or tumor biology a plus. Two to seven years of related experience required. Industry experience preferred. B.S. required; M.S. or Ph.D. preferred. ILEX™ offers an excellent benefit package and a competitive compensation package. Mail résumé to: Human Resources Department, 11550 IH-10 West, Suite 100, San Antonio, TX 78230 FAX: 210-949-8483; e-mail: jobs@ilexonc.com.

Equal Opportunity Employer/Minorities/Females/Disabled/Veterans.

SCIENTISTS

Gemini Science, Inc. is a San Diego-based biotechnology company focusing on the development of therapeutics for immune-related diseases. Our laboratories are located within the La Jolla Institute for Allergy and Immunology. We are actively recruiting key individuals to support the current expansion of our research and development efforts. We have the following opportunities available: both positions require a minimum of three years of working experience, Ph.D. preferred. Hybridomas: experience in all aspects of murine monoclonal antibody production, including immunization, cell fusions, and screening. Protein chemistry: experience with all aspects of protein chemistry and purification. For consideration please submit your résumé and cover letter to: Gemini Science, Inc., 4275 Executive Square, Suite 940, La Jolla, CA 92037. FAX: 858-558-7689.

LEAD SCIENTIST

BioStar Research Inc., a new company aimed at the innovative diagnosis and management of animal diseases, has two positions available in the Division of Molecular Genetics and Immunodiagnostics. We seek scientists who have a Ph.D., with extensive postdoctoral research experience in biochemistry, microbiology, vaccine research, immunoassay development, infectious disease diagnostics, or a related life science. Please send résumé and cover letter to: BioStar Research, Inc., Human Resource Coordinator, P.O. Box 23157, Lansing, MI 48909-3157.

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SaXBTA

SENIOR RESEARCH SPECIALIST IN THE HEALTH SCIENCES Biomedical Magnetic Resonance Laboratory

Biomedical Magnetic Resonance Laboratory University of Illinois at Urbana-Champaign

Manage NMR imaging and spectroscopy laboratories and initiate and participate in research and training programs, Ph.D. (preferred) or M.S. in science or engineering required. Two years of training and experience in NMR spectroscopy and/or imaging required. Position is a 100-percent-time, 12-month academic professional appointment. Salary negotiable, dependent upon qualifications and experience. For full consideration, send a letter of application, résumé, and the names, addresses, and telephone numbers of three references by November 8, 1999, to: Professor Paul C. Lauterbur, Biomedical Magnetic Resonance Laboratory, 2100 South Goodwin Avenue, Urbana, IL 61801. E-mail: bmrl@bmrl.med.uiuc.edu; website: http://bmrl. med.uiuc.edu:8080/. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.

PLANT MOLECULAR BIOLOGIST. Permanent position (GS 11-13, \$42,673-\$79,063, depending on experience) is available with the Agricultural Research Service, U.S. Department of Agriculture, Albany, California to work on cereal molecular biology and functional genomics. Candidate to join a project working to apply genomics technologies to applied and basic problems related to cereal improvement, with emphasis on wheat. Should have combinations of experience in molecular biology, genomics, and bioinformatics. U.S. citizenship required. Vacancy announcement is at website: www.ars.usda.gov: announcement # ARS-X9W-9434. Send letter and curriculum vitae to: Dr. Olin D. Anderson, WRRC, ARS, USDA, 800 Buchanan Street, Albany, CA 94710. Telephone: 510-559-5773; e-mail: oandersn@ pw.usda.gov. Minorities are encouraged to apply. The USDA is an Equal Opportunity Employment Employer.

RESEARCH ASSOCIATE position available immediately to investigate the nature of interprotein binding and electron transfer between redox active membrane proteins such as cytochrome P450. The applicant should have a Ph.D. in biochemistry or chemistry and be highly motivated. Knowledge of enzyme kinetics and stopped-flow spectroscopy preferred. Salary commensurate with experience. Send résumé and three letters of reference to: L. Waskell, Ph.D., Research Service 11R, VA Medical Center, 2215 Fuller Road, Ann Arbor, MI 48105. E-mail: waskell@umich.edu.

BIOINFORMATICS SCIENTIST. Managerial position responsible for software validation, release coordination, and documentation. Required: Ph.D. in molecular biology or related field with two-plus years of postdoctoral experience; desktop and webbased sequence analysis; excellent organization and communication skills; extraordinary attention to detail. Preferred: UNIX, Perl, SQL experience. Send résumé to: Peter Covitz, InforMax Inc., 6010 Executive Boulevard, North Bethesda, MD 20852. E-mail: peter@informaxinc.com.

POSTDOCTORAL FELLOW experienced in engineering of vectors (HIV, HPV, adenoviral vectors) who has an interest in the design of conditionally replication competent vectors that exhibit specificity for the regulatory environment of tumor cells and are able to target to neoplastic cells of specific organ sites. Please contact: Albert Deisseroth, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06520-8032. E-mail: albert.deisseroth@yale.edu.

POSTDOCTORAL POSITION in retroviral RNA processing to study splicing regulation (RNA 5:333, 1999) or nucleocytoplasmic export of RNA (J. Virol. 70:3834, 1996). Experience in molecular biology and/or nucleic acid biochemistry is required. Send curriculum vitae, reprints, and names of three references to: Dr. Karen Beemon, Department of Biology, Johns Hopkins University, 3400 North Charles Street, Baltimore, MD 21218. E-mail: klb@jhu.edu.

POSITIONS OPEN



FRED HUTCHINSON CANCER RESEARCH CENTER

DIVISION DIRECTOR FRED HUTCHINSON CANCER RESEARCH CENTER

The Fred Hutchinson Cancer Research Center is seeking a Director for the Division of Human Biology. The newly formed division was created to foster and support laboratory-based science at the interface of basic, clinical, and population sciences that is needed to understand the complex problems of neoplasia and other human diseases. The Division currently has 20 faculty members with research interests in the fundamental basis of human biology and disease, particularly cancer. See website: www.fhcrc.org/science/human_biology/ for additional information about the division.

The Hutchinson Center invites applicants to head this scientific division; the successful applicant must have a highly successful laboratory-based research program, proven leadership skills, and a vision for the future of human biology research. Applications from female and minority candidates are strongly encouraged. Candidates should send a curriculum vitae and a concise statement of research plans to:

Division Director Search Committee Fred Hutchinson Cancer Research Center Mailstop D1-060 1100 Fairview Avenue North P.O. Box 19024 Seattle, WA 98109-1024

Applications will be accepted until the position is filled.

Fred Hutchinson Cancer Research Center is an Equal Opportunity Employer committed to work force diversity and provides a smoke-free environment.

POSTDOCTORAL POSITION TO INVESTIGATE FUNCTION AND DYSFUNCTION OF THE HUMAN ONCOPROTEIN MDM2

Applications are invited from recent graduates for a Postdoctoral position in a laboratory involved in understanding molecular biology of tumorigenesis and role of the human oncoprotein MDM2 in the etiology of cancer (see EMBO J. 17:2513, 1998). This position is to investigate the biochemical mechanism of human MDM2-mediated growth regulation in normal cells. Individuals with expertise in cDNA technology, DNA sequencing, mammalian cell culture systems, or expression analysis in transgenic mice are especially encouraged to apply. Salary is negotiable. Send complete curriculum vitae and arrange for three letters of reference to be sent directly to: Swati Palit Deb, Ph.D., Associate Professor, Department of Cancer Biology, Comprehensive Cancer Center of Wake Forest University, Medical Center Boulevard, Winston-Salem, NC 27157-1082. FAX: 336-716-0255; e-mail: swdeb@wfubmc.edu. Affirmative Action/Equal Opportunity Employer.

We have openings for STAFF SCIENTISTS, AS-SOCIATE SCIENTISTS, POSTDOCTORAL FELLOWS, and RESEARCH ASSOCIATES at Charlottesville, Virginia and Spring House, Pennsylvania locations. A range of individuals are sought for working on regulation of gene expression, nuclear receptor molecular biology, transgenic animal models, viral and nonviral vector development, vector targeting, and high-throughput screening. Requirements for Staff Scientists are Ph.D. in a relevant field followed by two to three years of postdoctoral work. Industrial and managerial experience will be a plus. Fresh Ph.D. will be considered for Associate Scientist and Postdoctoral positions. Research Associates require a M.S. or B.S. degree with two years of experience. Interested individuals may send their curriculum vitae and list of three references to: Human Resources, RHeoGene LLC, c/o Argonex Inc., 706 Forest Street, Charlottesville, VA 22903. E-mail: rhhire@argonex.com. Equal Opportunity Employer.

POSITIONS OPEN

DEVELOPMENTAL BIOLOGIST

The University of Minnesota, Morris (website: www.mrs.umn.edu) seeks to fill a tenure-track position in developmental biology beginning August 14, 2000. Responsibilities include teaching undergraduate courses including developmental biology, advising undergraduates, conducting research, and sharing in governance and development activities. Candidates must expect a Ph.D. in developmental biology or a closely related field by August 14, 2000. Two years of teaching experience at the undergraduate level is required. (Graduate Teaching Assistant experience is acceptable.) The University of Minnesota, Morris is a small, selective, residential, undergraduate, liberal arts campus of the University of Minnesota. Salary range: \$35,000 to \$42,000 depending upon qualifications. Applications must include a letter of application, résumé, graduate and undergraduate transcripts, three reference letters, and two statements: (1) a teaching statement in which approaches to teaching are described and past teaching experiences are evaluated, and (2) a research statement in which the applicant proposes a research program that is viable and accessible to advanced students at a small liberal arts college. Send applications to: Biology Search Chair, Division of Science and Mathematics, University of Minnesota, Morris, MN 56267-2128. Applications must be received by December 15, 1999. The University of Minnesota is an Equal Opportunity Educator and Employer

The American Museum of Natural History seeks applications for a tenure-track position of ASSIST-ANT or ASSOCIATE CURATOR with a research focus on the discovery of the diversity and evolutionary history of amphibians and/or reptiles. An ambitious field program and collection enhancement is strongly preferred, as is potential for extramural funding. Responsibilities will include strong publication output, joint responsibility for one of the largest research collections of amphibians and reptiles in the world, as well as museum service as required, such as exhibition development. Other activities valued in the museum are interaction with and support of postdoctoral fellows and graduate students, and professional activities that promote and enhance science. Appointment will be made no earlier than 1 July 2000 with salary commensurate with experience. Collection experience preferred and Ph.D. required at the time of hiring. Please have three letters of reference sent and submit cover letter (describing qualifications and research philosophy), curriculum vitae, and copies of publications from the last five years to: Dr. Darrel Frost, Chair, Division of Vertebrate Zoology, American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024. Evaluations will begin 1 January 2000 and will continue until the position is filled. Equal Employment Opportunity/Affirmative Action. Women and minority candidates are strongly urged to apply.

POSTDOCTORAL POSITION DEVELOPMENTAL NEUROBIOLOGY HARVARD MEDICAL SCHOOL

Position available to study the molecular genetic mechanisms controlling neuronal differentiation. Project focuses on understanding how distinct subsets of neurons are specified during embryonic development. For reference see: Nature 397:76–80, 1999; Neuron 18:397–409, 1998; Development 118:417–425, 1993. Website: http://neuro.med.harvard.edu/http/stefan/thors.html.

Ph.D. with experience in either molecular biology, developmental biology, neurobiology, or *Drosophila* genetics is required. Send curriculum vitae, a brief (one page) description of research experience, and names, mailing and e-mail addresses, and telephone and FAX numbers of three references to: Dr. Stefan Thor, Department of Neurobiology, GB 504, Harvard Medical School, 220 Longwood Avenue, Boston, MA 02115. E-mail: sthor@hms.harvard.

An Affirmative Action/Equal Opportunity Employer.

The Department of Geosciences PRINCETON UNIVERSITY

announces competition for the

HARRY HESS FELLOWS

An Honorific Postdoctoral fellowship program named for Harry Hess has been established to provide opportunities for outstanding geoscientists to work in the field of their choice. Research may be carried out independently or in collaboration with members of the Geosciences Department. Applicants will also be considered for other available postdoctoral positions in the department Current areas of research include:

> Geochemistry • Biogeochmical Cycles

• Petrology

Paleontology

• Structural Geology

· Mineral Physics

Geophysics

Seismology

Tectonics

Geomicrobiology

Candidates should send a letter of application and the supporting materials listed below to the HESS FELLOWS COMMITTEE, c/o Prof. George Philander, Princeton University, Department of Geosciences, 113 Guyot Hall, Princeton, NJ 08544. We will begin reviewing applications on December 1, 1999. Applications will continue to be accepted until the position is filled, but no later than December 31, 1999.

- 1. Curriculum Vitae
- 2. List of publications and preprints
- 3. Brief statement of research interests and goals
- 4. Names, address and e-mail address of three referees familiar with the candidate's work (the candidate should arrange to have the letters of recommendation sent directly to the address

The fellowships provide an annual stipend along with an allowance for research support. The fellowships are awarded for 1 year with a nominal starting date in February 2000. Extensions for an additional year are possible.

Princeton University is an Affirmative Action/Equal Opportunity employer and particularly welcomes applications from women and members of minor ity groups.

Our URL for the WEB is "http://geoweb.princeton.edu"

American Academy of Arts and Sciences

Editor

Daedalus, Journal of the American Academy of Arts and **Sciences**

The American Academy of Arts and Sciences, a 220-year-old learned society located in Cambridge, Massachusetts, seeks an editor for its distinguished quarterly journal, Daedalus. For 40 years, Daedalus has brought a multidisciplinary perspective to the analysis of critical social and intellectual concerns, ranging from major issues of public policy to the challenges facing higher education. Its objective is to advance the Academy's commitment to analyze and bring to public attention issues that are of common interest to the intellectual community in the US and abroad.

The successful candidate must have broad intellectual interests and knowledge of the arts and sciences, the learned professions and public life. The editor will ensure that Daedalus serves as a contemporary forum that reflects the interests of the Academy. He or she will be responsible for the direction and editorial content of the journal. He or she will consider potential changes in the journal and how best to relate it to the Academy's mission and goals.

The new editor of Daedalus will serve as a senior member of the Academy's administration and will work with the Academy's Advisory Board on Publications. Considerable experience at the senior level in the editorial, managerial, and business aspects of publishing is required. A Ph.D. or relevant advanced degree is desirable.

Please send nominations or formal letters of interest (please, no fax or e-mail) together with resumes and supporting materials by November 10, 1999 to:

Daedalus Search Committee, c/o Executive Officer American Academy of Arts and Sciences • 136 Irving Street • Cambridge, MA 02138-1996

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Courses & Training



ADVANCED **VACCINOLOGY COURSE**

Les Pensières, Veyrier-du-Lac (near Annecy, French Alps) 22 May-3 June 2000

Organized by the Mérieux Foundation with the co-sponsorship of the Bill & Melinda Gates Children's Vaccine Program, European Commission, WHO, CDC, Johns Hopkins School of Public Health, University of Geneva

programs, at national or international level. It is relevant to both the public and private sectors.

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Critical immunological issues

related to vaccination real and perceived

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Web site: http://www.fond-merieux.org

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EUROPEAN OPPORTUNITIES



ExonHit Therapeutics -Paris, France, is a start-up biotech. company, dedicated to functional genomics through its technology DATAS (Differential Analysis of Transcripts with Alternative Splicing). We are offering several positions:

Head of Oncology. The candidate, molecular biologist, with a good knowledge of therapeutic modalities of treatment of cancer, will provide scientific leadership to the Oncology program. Developing strong relationships with external centers of excellence in Oncology, he/she will scan for and assess potential alliances with biotech companies and academic institutions.

BioInformatics: Research Associate.

The responsibilities include: Developing a BioInformatics tool for classification and analysis of sequences issued from ExonHit's proprietary technology.

Two research scientist positions for molecular and cellular Biologists, with preferred knowledge of tumor suppressor gene detection and validation assays.

We offer competitive salaries and a comprehensive benefits program. Knowledge of French is not required.

Please send C.V., list of publications and the names of two references.

ExonHit Therapeutics 65, Bld Masséna 75013 - Paris France website: www.exonhit.com exonhit@exonhit.com.

MOLECULAR SCIENTIST

The University of Oklahoma College of Pharmacy invites applications for two tenure-track positions in the Department of Pharmaceutical Sciences, which comprises the disciplines of medicinal chemistry, nuclear pharmacy, pharmaceutics, pharmacology, and toxicology. We are seeking a pharmaceutical scientist with expertise in molecular biology techniques, to employ state-of-the-art approaches to study drugs and/or disease states. Applicants should have a Ph.D. and postdoctoral experience in their discipline. A background in pharmacy is desirable. Applicants should be strongly motivated to maintain a vigorous, externally funded research program and committed to professional and graduate teaching. Appointments at the ASSISTANT or ASSOCIATE PROFESSOR level will be considered, depending on the previous experience of the applicant.

Applicants should submit a curriculum vitae, a statement of research interests, and the names and addresses of three references to:

Lester A. Reinke, Ph.D. Department of Pharmaceutical Sciences College of Pharmacy, Box 26901 Oklahoma City, OK 73190

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

SCIENTIST MOLECULAR BIOLOGY

Commonwealth Biotechnologies, Inc. (CBI), a cutting-edge biotechnology company located in the Richmond, Virginia area, invites applications for a STAFF SCIENTIST position in molecular biology. The successful candidate will hold the Ph.D. degree in molecular biology, biochemistry, or a related discipline and will have two to five years of postdoctoral experience. We seek an individual with up-to-date bench skills who strives to become a group leader. Candidates with extensive experience in a high-throughput laboratory and/or shotgun library construction are encouraged to apply. Excellent communication skills and the ability to work well in a team-oriented environment are also required.

CBI is a preclinical contract research organization that offers a comprehensive array of technologies. We offer an excellent benefit package at our new research facilities. Please send your résumé with a cover letter and the names of three references to: Director Human Resources, Commonwealth Biotechnologies, Inc., 601 Biotech Drive, Richmond, VA 23235. Telephone: 804-648-3820; FAX: 804-648-2641; e-mail: hr@cbi-biotech.com; website: http://www.cbi-biotech.com. Commonwealth Biotechnologies, Inc., is an Equal Opportunity Employer.

A second POSTDOCTORAL POSITION is available to study the mitochondrial pathogenetic mechanism of neurodegeneration and cardiomyopathy in Friedreich's ataxia (representative reference Hum. Mol. Genet. 8:425–430, 1999). Applicants with experience in molecular biology, mitochondrial biochemistry, and tissue culture will be strongly preferred. Appointment level dependent on experience. Submit curriculum vitae to: G. A. Cortopassi, VM: Molecular Biosciences, University of California, Davis, Davis, CA 95616 USA. E-mail: gacortopassi@ucdavis.edu; FAX: 530-754-9342. University of California, Davis is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION RESPIRATORY TOXICOLOGY

Postdoctoral position is available to study mechanisms underlying the development of non-neoplastic respiratory disease by inhaled air pollutants. Candidate with biochemical/molecular expertise preferred. Candidates must be U.S. citizens or permanent residents. Send curriculum vitae and names and addresses of three references to: Dr. Richard B. Schlesinger, Department of Environmental Medicine, New York University School of Medicine, 57 Old Forge Road, Tuxedo, NY 10987. FAX: 914-351-5472.

POSITIONS OPEN

CORNELL UNIVERSITY

Weill Medical College

TENURE-TRACK POSITIONS IN GENETIC MEDICINE

As part of a significant enhancement of its basic biomedical science research programs and laboratory facilities, Weill Medical College of Cornell University (formerly known as Cornell University Medical College) is undertaking a major program initiative in the area of genetic medicine and is seeking to recruit tenure-track faculty at all levels to its newly formed Institute of Genetic Medicine. We are especially interested in candidates with basic research interests related to molecular and genetic approaches to understanding stem cell biology and the use of stem cells in transplantation, tissue regeneration, and organ regeneration. Exceptional candidates in other related/appropriate fields will also be considered. Candidates for junior positions should demonstrate the potential of establishing a vigorous independent research program. Candidates for senior positions should have an outstanding publication record, as well as substantial recent success in obtaining peer-reviewed grant support. Primary appointment of these independent, tenure-track faculty is anticipated in the Institute of Genetic Medicine directed by Ronald G. Crystal, M.D.

Recruited faculty will receive generous start-up support, will occupy newly constructed laboratories, and will have access to the newly completed, 12,000—square-foot Arthur and Rochelle Belfer Gene Therapy Core Facility. Candidates may participate in the Graduate School of Medical Sciences Program, which includes faculty from the Weill Medical College and the Sloan-Kettering Institute, and in the Tri-Institutional M.D.-Ph.D. Program, which also includes faculty from The Rockefeller University.

Applications should include a curriculum vitae, statement of research interests, and three letters of recommendation. Applications should be sent to: Bernadette M. Mosellie, Genetic Medicine Recruitment Committee (RC), Box #27, Weill Medical College of Cornell University, 1300 York Avenue, New York, NY 10021.

RESEARCH FELLOWS

The following NIH-funded Postdoctoral positions in the Division of Immunology at The City of Hope/Beckman Research Institute are available:

In the lab of **Susan Kovats**, to study presentation of self and viral antigens by MHC class II molecules. Both *in vitro* and *in vivo* approaches will be used to investigate the influence of cytokines, viral infection, and antigen presenting cells on mechanisms of antigen processing and presentation.

In the lab of **Chin-Pin Liu**, to study signal transduction events in T cell development. Studies will focus on the effect of TCR mediated signaling events on T cell functions. Previous experience in immunology, signal transduction, molecular biology, and handling of mice desirable.

Please send cover letter, curriculum vitae, and three references to: I. Abich, Beckman Research Institute, 1450 East Duarte Road, Duarte, CA 91010-3000. FAX: 626-301-8843.

TUMOR BIOLOGIST

Needed immediately for a dynamic, growing oncology drug development firm with a facility in Boston. Tests novel anti-cancer agents in murine tumor models. Excellent knowledge of murine tumor models required. Experience in histology, cell biology, and angiogenesis a plus. Two to seven years of related experience; industry experience preferred. B.S. required; M.S. or Ph.D. preferred. ILEXTM offers an excellent benefit package and a competitive compensation package. Mail résumé to: Human Resources Department, 11550 IH-10 West, Suite 100, San Antonio, TX 78230. FAX: 210-949-8483; e-mail: iobs@ilexonc.com.

Equal Opportunity Employer/Minorities/Females/Disabled/Veterans.

POSITIONS OPEN

ASSOCIATE DIRECTOR OF RESEARCH
The Women's Reproductive Health
Research Center and The Endometriosis
Association Research Project
Vanderbilt University School of Medicine

The Women's Reproductive Health Research Center (WRHRC) at Vanderbilt University, housed within the Departments of Obstetrics and Gynecology and Cell Biology in the School of Medicine, has a research focus on uterine biology and the pathophysiology of endometriosis. A new research position has been created within the research laboratory of the Center Director in the Department of Obstetrics and Gynecology. The successful candidate for this position will be expected to lead the daily research activities of a small, highly interactive research team in the Director's laboratory as well as coordinate interactions among collaborative laboratories within the research center. Candidates with a Ph.D. degree in the reproductive sciences and a strong background in molecular biology or toxicology are sought. Additionally, clear evidence of research productivity and strong interpersonal communication and leadership skills are necessary. This position will be a non-tenure-track faculty appointment within the Department of Obstetrics and Gynecology at the RESEARCH INSTRUC-TOR or RESEARCH ASSISTANT PROFESSOR level. The creation of this position is intended to provide a competitive salary with 100 percent protected time for research within a team atmosphere. Vanderbilt University, located in Nashville, Tennessee, offers both a creative intellectual environment and competitive benefits.

Candidates should apply by submitting a curriculum vitae and names of three references to: Betty Cortner, Vanderbilt University School of Medicine, Department of Obstetrics and Gynecology, B-1100 Medical Center North, Nashville, TN 37232-2519. Vanderbilt University is an Equal Opportunity Employer.

RICE GENOMICS: SEQUENCING CLEMSON UNIVERSITY

Position available immediately (December 1, 1999) for a talented and highly motivated SCIENTIST to manage a high-throughput sequencing laboratory aimed at producing >20Mb of finished rice genomic DNA over the next two years. You must have a Ph.D. with at least one year of experience in advanced sequencing techniques (AB1377/3700 and UNIX). To apply send curriculum vitae, three reference letters, and publications to: Rod Wing, Director, Clemson University Genomics Institute, 100 Jordan Hall, Clemson, SC 29634 (website: www.genome.clemson.edu). Clemson University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available December 1, 1999, to study the induction of tolerance to orally administered antigen and its alteration in the presence of mucosal infection. We are examining the influence of enteric infection on the response to oral vaccines and on the development of food allergies. U.S. citizen or permanent resident with experience in immunology preferred. Send curriculum vitae and three references to: Cathryn Nagler-Anderson, Ph.D., Mucosal Immunology Laboratory, Massachusetts General Hospital East, Building 149, 13th Street, Charlestown, MA 02129. E-mail: nagler_a@helix.mgh.harvard.edu.

POSTDOCTORAL FELLOW

Focus on pathogenesis of human chlamydial infections/vaccine development. Projects: (1) molecular mechanisms of regulation of ocular genital infections; (2) analyses of key proteins/host immune response that impact pathogenesis and persistence; and (3) additional research in bioinformatics.

Send curriculum vitae and three references to: Dr. Deborah Dean, Children's Hospital Oakland Research Institute, 5700 Martin Luther King, Jr. Way, Oakland, CA 94609. E-mail: debd@itsa.ucsf.edu

VICTORIA UNIVERSITY OF WELLINGTON NEW ZEALAND

Te Whare Wananga o te Upoko o te Ika a Maui Aotearoa



Faculty of Science

Lecturer/Senior Lecturer in Pharmacology School of Biological Sciences

The School of Biological Sciences wishes to appoint a Lecturer/Senior Lecturer to teach Pharmacology, including the principles of rational drug design, in both the existing Bachelor of Science and the new Bachelor of Biomedical Science programme. This is an exciting opportunity to be involved in a new initiative within the Faculty of Science.

Postgraduate teaching will also be required, and the appointee will be expected to demonstrate a record of success in research grant applications.

Familiarity with computational chemistry as applied to receptor-ligand interactions is needed, and there is a preference for applicants with research interests in molecular neuropharmacology. Familiarity with receptor modeling and energy minimisation and drug design is highly desirable. An active interest in ion channel function would be welcome but is not essential.

Further information about position can be obtained from Dr John Andrews at the School of Biological Sciences, phone 64-4-465 5233 ext 8173, email John.Andrews@ vuw.ac.nz

The applicant will start as soon as possible in the year 2000, but preferably no later than 1 April 2000

Please quote position Ref SA950.

Job descriptions, including method of application, are available from the HR Assistant, Faculty of Science, Victoria University of Wellington, PO Box 600, Wellington, New Zealand (phone 64-4-463 5233 ext 8071, fax 64-4-63 5122, email Science-appoint@vuw.ac.nz). Applications close on 22 November 1999 or when vacancy is filled, and should be sent to the address

Victoria University of Wellington is an EEO employer and actively seeks to meet its obligations under the Treaty of Waitangi. A diverse workforce is highly desirable to meet these goals. We welcome applications from women and men from all cultures and backgrounds.

EUROPEAN OPPORTUNITIES



- Innovation is looking at things differently -

Molecular biologist

to head a laboratory in our nerve regeneration group

Join our worldwide team to shape the future.

Research and Development and modern technology are the basis for our worldwide growth.

Communication is our key.

Our business areas:

Human

Pharmaceuticals,

Animal Health,

Chemicals.

Our shared ambition: Value through innovation Boehringer Ingelheim is devoted to discovering, developing, manufacturing and marketing innovative pharmaceutical products. Current research programmes focus on pulmonary, cardiovascular, metabolic and central nervous system diseases, cancer biology and immunology.

We are seeking an outstanding molecular biologist with post-doctoral experience to head a laboratory in the neuro-regeneration group of the Department of Central Nervous System Research. You should have a degree in biological sciences or related discipline and a Ph.D. with a proven track record in modern techniques of gene cloning, expression and structure-function analysis as well as experience with high-throughput expression analysis (DNA micro-array analysis) and cell culture. In addition, you should have the creativity, enthusiasm and communicative skills to influence future research objectives and formulate new projects ideas. We expect presentation and publication of research results and encourage national and international collaboration.

The laboratory is responsible for providing molecular biological support for the regeneration group. The activities will include cloning and expression of novel genes which regulate neuronal outgrowth and axonal guidance, as well as running appropriate cell culture facilities, developing new assays for screening compound libraries and interacting with our genomics group to identify new drug targets.

Although fluency in German is not a prerequisite for the position, a willingness to learn is.

Boehringer Ingelheim offers an attractive working environment, flexible working hours and training and development possibilities. We can also provide excellent career opportunities and rewards for success.

Should you have any further questions, please contact Dr. Adrian Carter (+49) 61 32 - 77 30 92.

If you feel that you are qualified for this position, please send your resume to

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www.boehringer-ingelheim.com



RICE GENOMICS BIOINFORMATICS/EVOLUTION CLEMSON UNIVERSITY UNIVERSITY OF GEORGIA

A joint POSTDOCTORAL POSITION (two to three years) is available immediately for a talented and highly motivated Scientist to participate in the International Rice Genome Sequencing Project to data mine, annotate, and experimentally test the role of transposable elements in the evolution of the rice genome. You must have a Ph.D. and experience in bioinformatics and molecular biology techniques. To apply send curriculum vitae, three reference letters, and publications to: Rod Wing, Director, Clemson University Genomics Institute, 100 Jordan Hall, Clemson, SC 29634 (website: www.genome. clemson.edu) and Sue Wessler, Department of Genetics, Life Sciences Building, University of Georgia, Athens, GA 30602 (website: www.dogwood.botany.uga.edu). Clemson University and University of Georgia are Affirmative Action/Equal Opportunity Employers.

POSTDOCTORAL POSITIONS are available immediately to study the biochemical and molecular aspects of cell-cell and cell-matrix interactions, as well as signal transduction in leukocytes. A strong background in immunology, molecular and cellular biology is desirable. Projects include identification and characterization of genes responsible for a novel leukocyte deficiency. Please send curriculum vitae and the names of three references to: Dr. Li Zhang, Department of Vascular Biology, Holland Laboratory of The American Red Cross, 15601 Crabbs Branch Way, Rockville, MD 20855. FAX: 301-738-0465; e-mail: zhangl@usa.redcross.org.

A POSTDOCTORAL POSITION (funded by NIH through Health Research) is available to study the regulation of Cytochrome P450 genes important for drug metabolism and chemical carcinogenesis. Experience with nuclear factor purification, cloning, and functional characterization is desirable. Salary will be based on NIH standard. Send curriculum vitae and names of three references to: Dr. Xinxin Ding, Wadsworth Center, New York State Department of Health, Empire State Plaza, Box 509, Albany, NY 12201. E-mail: xding@wadsworth.org. Affirmative Action/Equal Opportunity Employer.

The Molecular Cardiology Laboratory within the Section of Heart Failure/Transplant, Albany Medical Center, is seeking two POSTDOCTORAL FELLOWS; one with expertise in protein biochemistry and one with expertise in gene-expression analysis. Our research effort is focused on the study of novel therapeutic targets for the treatment of heart failure. Send curriculum vitae to: Lawrence S. Zisman, M.D., Director, Section of Heart Failure/Transplant, Department of Medicine A-57, 47 New Scotland Avenue, Albany, NY 12208. FAX: 518-262-5304; e-mail: lzisman@rush.edu.

Two POSTDOCTORAL POSITIONS are available to study the latency associated proteins and glycoproteins of Kaposi's sarcoma associated human herpesvirus-8. Experiences in molecular virology preferably in herpes viruses, protein chemistry, and communication skills are essential. Send curriculum vitae, interests, and names of three references to: Bala. Chandran, Department of Microbiology, University of Kansas Medical Center, Kansas City, KS 66160-7420. FAX: 913-588-7295. The University of Kansas Medical Center is an Affirmative Action/Equal Opportunity Employer.

A POSTDOCTORAL POSITION is available immediately in an active NIH-funded laboratory to investigate the mechanism of tolerance and pathogenesis of autoimmune. Molecular and cellular immunology technique desirable and salary is competitive. Send a curriculum vitae and the names, addresses, and telephone numbers of three scientists for letters of recommendation to: Dr. Kenneth Tung, Department of Pathology, University of Virginia, Charlottesville, VA 22908. FAX: 804-924-8060; e-mail: kst7k@virginia.edu.

POSITIONS OPEN



Harvard University is searching for a SENIOR SCIENTIST ADMINISTRATOR to provide administrative leadership for the Department of Physics. Website: http://hussle.harvard.edu/~gabriels/gabrielse/Director.html.

POSTDOCTORAL POSITION

A Postdoctoral Fellowship position is available immediately at the U.S. Environmental Protection Agency in Research Triangle Park, North Carolina. The fellow will examine health effects associated with inhalation of ambient airborne particulate matter on the immune host defenses in the lung. Specifically, research will be directed toward determining the effects of recently collected natural and synthetic urban air particles on murine models of influenza and streptococcus infection, and determine the mechanisms by which particles may alter immune host defenses. The position rquires a Ph.D. (or equivalent) in biological sciences with good laboratory experience. Training in immunology, infectious disease, and/or inhalation toxicology is desired but not necessary. The candidate must be willing to work with laboratory animals. Candidates must be U.S. citizens or permanent residents. Salary will be commensurate with experience. Send letter of interest, résumé, and names/addresses of three references to: M. Ian Gilmour, Ph.D., Immunology Branch, Experimental Toxicology Division, NHEERL, MD83, USEPA, Research Triangle Park, NC 27711.

MORPHOLOGIST

POSTDOCTORAL or JUNIOR FACULTY POSITION available within the Dementia Research Center at the Nathan Kline Institute for a Morphologist with experience in morphometric techniques to work with transgenic models of neurodegenerative disease. Dual appointment at New York University School of Medicine. Research interests include cytoskeletal abnormalities, Alzheimer's disease, Parkinson's disease, and related disorders. Experience in mouse anatomy and computer-assisted image analysis is an advantage. The Center provides a cohesive and interactive environment within the Institute, which is situated in a rural setting 15 miles from midtown-Manhattan. Applicants should send a curriculum vitae, a statement of research interests, and a list of 3 references to: Ralph Nixon, Ph.D., M.D., Nathan Kline Institute, 140 Old Orangeburg Road, Orangeburg, NY 10962.

MICROSCOPIST

The Scripps Research Institute (TSRI) is seeking an experienced Microscopist for our modern and expanding biomedical imaging facility. Responsibilities include teaching/developing confocal and deconvolution microscopy. Experience in immunocytochemistry and UNIX is essential, and experience with histology/cell biology is a major plus. Website: www.scripps.edu. Please reference Science in cover letter and send to: TSRI, 10550 North Torrey Pines Road, TPC-11, La Jolla, CA 92037. E-mail: resumes@scripps.edu; FAX: 858-784-8071. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP in molecular genetics research available immediately. Candidates must have a Ph.D. in molecular genetics and good publication record. The scientific projects include linkage, mapping, and identification of candidate genes in animal and human studies. Experience in molecular genetics research required. Salary and benefits competitive; possibility exists for long-term position. Please send cover letter, curriculum vitae, and names of three references to: Ms. C. Farrell, Loma Linda University, P.O. Box 7210, Loma Linda, CA 92354. Lona Linda University is an Equal Opportunity Employer.

POSITIONS OPEN

TEMPLE UNIVERSITY

POSTDOCTORAL RESEARCH ASSOCI-ATE. A NIH-funded Postdoctoral Research Associate position is available immediately in the Department of Pathology and Laboratory Medicine to study signal transduction pathways associated with mechanisms of anticancer drug action. Candidate should have a Ph.D. and an extensive experience in molecular biology techniques including PCR/RT-PCR, analysis of differential gene expression, blotting, cloning, DNA sequencing, transfection, analysis of recombinant protein expression/activity, and a working knowledge of *in vitro* cell culture. Please apply with your curriculum vitae, including names and telephone numbers of three references, to: Hemant Parekh, Ph.D., Department of Pathology, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, PA 19140. FAX: 215-707-2781. Temple University is an Equal Opportunity/Affirmative Action Employer and strongly encourages applications from women and minorities.

POSTDOCTORAL POSITION available immediately to study NIH-funded projects. Our laboratory is involved in characterizing a collagenous attachment protein from tooth cementum, and we are also investigating adhesion-induced biochemical signaling mechanisms (see: J. Bone and Min. Res. 14:65-72, 1999, 12:1691-1699, 1997). We are also characterizing the functions of a human fibroblast-specific gene (see: Am. Rev. Resp. Cell. Mol. Biol. 20:327-331, 1999). The candidate must have a Ph.D. background and experience in biochemistry/cell/molecular biology. U.S. citizenship or permanent residency is required. Please send a current curriculum vitae and the names, addresses, and telephone numbers of three references to: A. S. Narayanan, Department of Pathology, Box 357470, University of Washington, School of Medicine, Seattle, WA 98195. E-mail: sampath@ u.washington.edu.

University of Washington is an Equal Opportunity Employer.

POSTDOCTORAL POSITION to study the function and structure of the intracellular calcium release channels in the heart. Research involves singlechannel recordings in planar lipid bilayers of native and cloned ryanodine receptors and biochemical analyses of interactions of calcium release channels with signaling cascades and with regulatory subunits. The role of the calcium release channels in the heart failure and sudden cardiac death (arrhythmias) will also be studied. Experience in electrophysiology, molecular and cellular biology, or protein biochemistry is necessary. Send curriculum vitae and names of three references to: Dr. Andrew R. Marks, Molecular Cardiology Program, Columbia University, 630 West 168th Street, New York, NY 10032. E-mail: arm42@columbia.edu; FAX: 212-305-3690. We are an Equal Opportunity/Affirmative Action Employer.

MEDICAL

Children's Hospital currently has an immediate opening for a NIH-funded POSTDOCTORAL POSITION to study molecular mechanisms of somatostatin signaling in kidney cells. Position requires a background in molecular and cellular biology. Interested candidates should send curriculum vitae along with references to: Martin A. Turman, M.D., Ph.D., Section of Pediatric Nephrology, The Ohio State University, Children's Hospital, 700 Children's Drive, Columbus, OH 43205. FAX: 614-722-6482; e-mail: mturman@chi.osu.edu.

A POSTDOCTORAL POSITION is available at the Beth Israel Deaconess Medical Center, Harvard Medical School to study antibody diversity and isotype in HIV neutralization. Projects include gene usage, generation of isotype switched antibodies and sFv, and analysis of functional effects. Experience with molecular biology and cell culture required. Contact: Marshall Posner, M.D./Lisa Cavacini, Ph.D., Beth Israel Deaconess Medical Center, 21-27 Burlington Avenue, Room 556, P.O. Box 15709, Boston, MA 02215. E-mail: lcavacin@caregroup.harvard.edu.

Postdoctoral Positions in Structural Biology Sloan-Kettering Institute

Positions are available to study molecular mechanisms of vesicular trafficking and protein sorting in the secretory pathway. Projects range from biochemical investigations of protein sorting machinery to X-ray crystallographic studies aimed at establishing structure-function relationships (see Cell **92**, 415-423; Cell **95**, 237-248; Cell **96**, 893-902).

Highly motivated candidates are sought, with a strong background in either protein biochemistry or crystallography. The laboratory is equipped with state-of-the-art facilities for X-ray crystallography, biochemistry and computing.

Letters of application, including a CV and the names of three references, should be sent to: Jonathan Goldberg, Ph.D., Cellular Biochemistry & Biophysics Program, Memorial Sloan-Kettering Cancer Center, Box 238, 1275 York Avenue, New York, NY 10021. Fax 212-717-3135. EOE/AA.





YALE UNIVERSITY SCHOOL OF MEDICINE

POSTDOCTORAL FELLOWSHIP POSITION

Postdoctoral positions are available as part of a NIH supported training grant for MD's or PhD's seeking postdoctoral research training in both Molecular and Cellular Neurobiology. Projects address questions related to neuronal injury or tolerance to O₂ deprivation. Candidates trained in Molecular Biology, Genetics or Electrophysiology are particularly encouraged to apply. Applicants must be U.S. citizens or permanent residents of the U.S. For consideration, please send full CV and three references letters to:

Gabriel G Haddad, M.D. Inquiries: Gabriel Haddad@yale.edu or fax: 203-785-6337

Yale University is an Equal Opportunity Employer/Affirmative Action Employer

EUROPEAN OPPORTUNITIES



The Faculty of Science (Mathematisch-Naturwissenschaftliche Fakultät) of the University of Zürich invites applications for

a tenure track Assistant / Associate Professorship in Developmental and/or Evolutionary biology

at the Zoological Institute. Successful candidates must have a record of excellent postgraduate research in the area of developmental and/or evolutionary biology. They should interact with and complement the five existing groups working on various aspects of Drosophila development at the University of Zürich-Irchel campus. Candidates working with simple model organisms (i.e. C. elegans, Xenopus) or approaches using bioinformatics and genomics are strongly encouraged to apply.

Applicants are invited to submit by November 15, 1999 a curriculum vitae, a publication list, copies of three key publications, a short synopsis of the past and future research interests and names and addresses of three referees, to:

Dekan der Mathematisch-naturwissenschaftlichen Fakultät der Universität Zürich, Prof. Dr. V. Ziswiler, Winterthurerstrasse 190, CH-8057 Zürich, Switzerland.

For futher information, contact Prof. Ernst Hafen, Zoological Institute, phone +411 635 4871, email: hafen@zool.unizh.ch

AWARDS

The Boehringer Ingelheim Fonds

invites applications for the

2000 Research Award for Postdoctoral Fellows

to be submitted by February 1, 2000. The Foundation supports activities concerned with basic research in biomedicine and aimed at acquiring new scientific knowledge.

The award is intended for postdoctoral researchers, who, having spent two to three years working overseas or in Europe, plan to move to or within Europe with the intention of establishing his/her own research group. The scientific achievements of applications must be of outstanding quality having resulted in papers published in or accepted by leading international journals. Applicants should not be older than 31 years. Nationality is irrelevant.

The award consists of a three-year fellowship. After a period of two and a half years, the results attained by the Fellow and his/her further intentions will be evaluated in order to decide whether the fellowship is to be extended for a further three-year term. The first year of the scholarship may be availed of in order to bring projects in progress at the present laboratory to a conclusion. Once a Fellow takes up his work in the envisaged institute he/she will receive a one-off project-related grant of DM 100,000.

Detailed instructions are available in the internet: http://www.bifonds.de or on request from: Boehringer Ingelheim Fonds, Foundation for Basic Research in Biomedicine, Stafflenbergstrasse 32, D-70184 Stuttgart; Tel: 49/711/24 73 97; Fax: 49/711/24 81 40; E-mail: secretariat@bifonds.de

POSTDOCTORAL POSITIONS CANCER GENETICS AND PROTEIN-DNA INTERACTIONS

Positions available as part of a Cornell University Medical Center (Professor Francis Barany and Dr. Weiguo Cao); Memorial Sloan Kettering Cancer Center (Philip Paty, M.D.); Rockefeller University (Professor Arnold J. Levine) multi-institutional National Cancer Institute-funded program. Project Grants for (i) expression and mutational profiling of human tumors using DNA chips, (ii) characterizing thermophilic DNA-recognition proteins using biochemical, genetic, and structural approaches, and their use in (iii) identification of SNPs, mutations, and new cancer genes. Applicant should have a Ph.D., preferably with experience in cancer genetics, genomics, protein-DNA or protein-protein interactions, and/or automation in DNA and PCR technology. Competitive salary commensurate with experience. Send curriculum vitae and names of three references to: Professor Francis Barany, Program Director, Programs of Biochemistry, Structural Biology, and Molecular Biology, Box 62, Cornell University Medical Center, 1300 York Avenue, New York, NY 10021. FAX: 212-746-8588. Equal Opportunity Employer.

POSTDOCTORAL FELLOW HUMAN GENE THERAPY RESEARCH INSTITUTE

The Human Gene Therapy Research Institute (HGTRI) has available a Postdoctoral position for research in gene transfer systems and their application to the treatment and prevention of cancer.

Laboratory focus is on translational research with a long-term goal of improving gene transfer into humans. Backgrounds in molecular virology, cancer biology, immunology, and microbiology will be considered. Position is available immediately.

HGTRI is a not-for-profit, research organization located in Des Moines, Iowa. To learn more about HGTRI, please visit the website: www.hgtri.org. Applicants should submit a curriculum vitae, an outline of current and future research interests, and three references to: Human Resources, Iowa Health System, 1313 High Street, Suite 111, Des Moines, IA 50309. Equal Opportunity Employer/Affirmative Aetion/Minorities/Females/Disabled/Veterans.

POSTDOCTORAL POSITION available to study signal transduction mechanism involving the stress-induced NF-xB and JNK pathways (see: Lee et al., Cell 88:213, 1997; Zhao & Lee, JBC 274:8355, 1999). Experience in molecular biology required. Send a curriculum vitae and the names of three references to: Dr. Frank Lee, Department of Pathology and Laboratory Medicine, University of Pennsylvania School of Medicine, 218 John Morgan Building, Philadelphia, PA 19104. FAX: 215-573-2272; e-mail: franklee@mail.med.upenn.edu.

POSTDOCTORAL POSITION funded by NIH available immediately to study various aspects of autoinducer biosynthesis in *Pseudomonas aeruginosa*. Cantoinducer biosynthesis in *Pseudomonas aeruginosa*. Cantoindates holding a Ph.D. degree with a strong background in bacterial genetics/molecular biology and protein biochemistry methods are preferred; experience with 2D gel electrophoresis desirable. Send curriculum vitae, statement of research experience, and three reference contacts to: Dr. Herbert P. Schweizer, Department of Microbiology, Colorado State University, Fort Collins, CO 80523. E-mail: hschweiz@cvmbs.colostate.edu.

The Division of Digestive Diseases, The Ohio State University College of Medicine has positions open for POSTDOCTORAL FELLOWS who have obtained their Ph.D. in molecular biology, biochemistry, or physiology. Applicants must possess excellent communication skills in English. Please send curriculum vitac to: Dr. Sundaram, Digestive Diseases, 410 West 10th Avenue, N214 Doan Hall, Columbus, OH 43210-1228. Telephone: 614-292-6828; FAX: 614-688-5706.

POSITIONS OPEN

NIH-NRSA POSTDOCTORAL TRAINEE POSITIONS MARINE BIOMEDICAL SCIENCES

Up to three positions for collaborative projects with Investigators of the University of Miami, NIEHS Marine and Freshwater Biomedical Sciences Center:

Lynne Fieber-Neurophysiology.

Lora Fleming-Epidemiology of Marine Toxin-Related Diseases.

Robert Gawley-Chemistry of Marine Natural Products.

Churchill McKinney-Evolution of Vertebrate Immune Systems.

Michael Schmale-Tumor Viruses and Transgenics. Patrick Walsh-Ammonia Toxicity in Vertebrates.

Two-year positions available beginning February to July, 2000. Applicants must be U.S. citizens or permanent residents. Stipend is set by NIH, and depends on the number of years since the Ph.D., starting at \$26,256. Priority will be given to applicants just finishing or recently receiving their Ph.D. Send curriculum vitae, transcripts (unofficial okay) of undergraduate and graduate education, and three letters of recommendation using form available at website: http://asnetserver.as.miami.edu/rgawley/NRSA-Ref-T32.pdf, to: Professor Robert E. Gawley, Department of Chemistry, University of Miami, P.O. Box 249118, Coral Gables, Florida 33124. More detailed information can be found at website:

http://www.rsmas.miami.edu/groups/niehs/.
The University of Miami is an Equal Employment Opportunity Employer.

POSTDOCTORAL POSITION in single-molecule spectroscopy, available immediately, for studying single-molecule, single-protein, and single-enzyme conformational fluctuation, and the molecular dynamics of protein-protein and protein-DNA interactions, ion-channel, receptor activation, and enzymatic reaction in vivo and in vitro. Experience in one of the fields of molecular biology, cell biology, biophysics, and experimental physical chemistry is desired. Research involves state-of-the-art near-field and confocal microscopy, CARS microscopy, AFM, FCS, patch clamp, and optical tweezers. If interested, please send curriculum vitae and three letters of reference to: Dr. H. Peter Lu, Pacific Northwest National Laboratory, P.O. Box 999, MSIN K8-88, Richland, WA 99352. E-mail: hong.lu@pnl.gov. PNNL is operated by Battelle for the U.S. Department of Energy, is an Affirmative Action/Equal Opportunity Employer, and supports diversity in the workplace.

V. DROPKIN FELLOWSHIP UNIVERSITY OF CHICAGO

A two-year Postdoctoral Fellowship is available for work in the Department of Ecology and Evolution at the University of Chicago. Fellows will be selected based on their potential to perform innovative research in plant pathology and/or sustainable agriculture, and will be expected to commence studies no later than fall 2000. Applicants are encouraged to contact potential faculty sponsors within the department to discuss their applications, and should send a three-page research proposal, curriculum vitae, and three letters of recommendation by 15 January 2000 to: Dr. Joy Bergelson, Department of Ecology and Evolution, 1101 East 57th Street, Chicago, IL 60637.

A POSTDOCTORAL POSITION is available immediately to identify genes responsible for malignant conversion in the human prostate. Candidates must have a Ph.D. expertise in molecular biological techniques, and a desire to utilize cDNA microarrays in differential gene expression analysis. The candidate does not need to be a U.S. citizen or hold a green card. Please send or FAX curriculum vitae, a brief description of research experience, and names and telephone numbers of three references to: Dr. Jill A. Macoska, Department of Surgery/Urology, The University of Michigan, 7306 CCGC, 1500 East Medical Center Drive, Ann Arbor, MI 48109-0946. FAX: 734-647-9480.

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS IN APPLIED CONSERVATION

The Nature Conservancy (TNC) announces the third round of David H. Smith Conservation Research Fellowships, which provide two-year postdoctoral support in applied conservation biology. Each Fellow will carry out research pertinent to conservation issues in the United States, with an institution selected by the Fellow, in close association with a TNC mentor. Research will focus on priority TNC sites in the United States or questions germane to them. Research themes of particular interest include freshwater conservation, conservation planning, and invasive species. Proposals are due February 15, 2000; brief preproposals are encouraged and due December 1, 1999. Funding for Fellows will be available August 2000. For more information, including the proposal guidelines, see the section on the Smith program at website: http://consci.tnc.org/. You can also request a copy of the guidelines by sending an e-mail or writing to: Smith Conservation Research Fellows Program, The Nature Conservancy, 4245 North Fairfax Drive, Suite 100, Arlington, VA 22203-1606. E-mail: postdoc@tnc.org. The Nature Conservancy is an Equal Opportunity Employer.

Full-time POSTDOCTORAL ASSOCIATE for studies on the structure and antibody interactions of outer surface proteins from the Lyme Disease spirochete, Borrelia burgdorferi. Responsibilities include NMR spectroscopy, solution structure determination, molecular modeling, protein expression, protein mapping and purification. Doctoral degree, M.D., Ph.D. or equivalent, in biochemistry with a minimum of I year of experience preferred in biophysical analysis of macromolecules and protein chemistry. These collaborative studies will be conducted at SUNY at Stony Brook and the University of Rochester. Incumbent must be willing to work part of the year at the University of Rochester Medical Center to conduct NMR spectroscopy and structure calculations. Candidate must demonstrate ability to be creative, innovative, and be able to work independently. Salary \$24,000 to \$30,000/year. Send résumé to: Priscilla C. Munoz, Laboratory Manager, Department of Medicine, Division of Infectious Diseases, HSC 16T-040, SUNY at Stony Brook, Stony Brook, NY 11794-8161. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available at The Ohio State University Medical Research Facility to conduct NIH-funded research on purinergic regulation in enteric neural reflexes. Applicants must have a strong Ph.D. background in neurobiology and strong communication skills. A strong interest in GI research and documented experience in electrophysiology is highly desirable. Independence is a plus. Send cover letter, curriculum vitae, and names of three references to: Dr. Fievos L. Christofi, Department of Anesthesiology, The Ohio State University, 420 West 12th Avenue, 226 MRF, Columbus, OH 43210-1228. FAX: 614-688-4894; e-mail: christofi.1@ osu.edu.

POSTDOCTORAL FELLOW position available to study eicosanoids in tick salivary gland physiology. Research will focus on the role of prostaglandin E2 in stimulating secretion of bioactive proteins into tick saliva. Experience in physiology, biochemistry, or related field is desirable. Please send curriculum vitae and names of three references to: Dr. John R. Sauer, Department of Entomology and Plant Pathology, Oklahoma State University, 127 NRC, Stillwater, OK 74078-3033. FAX: 405-744-6039; e-mail: irs4864@okstate.edu.

POSTDOCTORAL POSITION is available to study biochemical determinants of differentiation and proliferation in normal and tumor cell systems using magic angle spinning proton NMR spectroscopy. Experience in one- and two-dimensional NMR spectroscopy is required. Send curriculum vitae and names of three references to: Dr. Samuel Singer, Brigham and Women's Hospital, Harvard Medical School, 75 Francis Street, Boston, MA 02115. FAX: 617-734-0336; e-mail: ssinger@partners.org.

Build and lead a new team. Make a real scientific and strategic impact as:

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You're a gifted PhD Medicinal Chemist or Biologist - maybe with a background in photosensitiser chemistry and/or antibody tagging, although this is not essential. Familiar with other key disciplines - DMPK, Pharmacology etc. - you're a team player who leads by scientific ability. With significant experience and a proven track record of drug discovery in the pharmaceutical industry, your interpersonal skills, management experience and commercial acumen will be used to the full. In return you will receive a remuneration package that reflects the pivotal nature of the role.

To apply, please send a succinct yet comprehensive CV and covering letter to Dr Patrick Mileham, or call first for a confidential initial discussion. Please include details of your current remuneration and quote Ref: 99123S.



Roger Stephens & Associates Chequers House, 1 Park Street, Old Hatfield, Herts AL9 5AT

Chequers House, 1 Park Street, Old Hatfield, Herts AL9 5AT Telephone: 01707 259333 / 275361 Direct Fax: 01707 271366 e-mail: rsvp@pharmarecruit.com www.pharmarecruit.com

Max-Planck-Institut für Entwicklungsbiologie

Tübingen, Germany

Head of Research Division

Abteilungsdirektorin/direktor

At the Max Planck Institute of Developmental Biology in Tübingen, Germany (www.eb.tuebingen.mpg.de), two of the six directorial positions will be vacant in the coming year. The positions are comparable to full professorships at universities and are provided with adequate space and resources for research. Within the field of Developmental Biology, the research of the institute presently concentrates on

genetics, evolution, neuroembryology, morphogenesis, pattern formation, functional genomics

The institute is interested in strengthening these fields as well as in adding innovative approaches to complement the ongoing research. There are no teaching obligations, although the institute participates in various teaching and graduate programs at the University of Tübingen. Scientists with international recognition, who are interested in these positions and in conducting an innovative research program in an interactive and stimulating environment are encouraged to write to:

Christiane Nüsslein-Volhard Managing Director Max-Plank-Institut für Entwicklungsbiologie Spemannstr 35, D - 72076 Tübingen Germany

The Max Planck Society is an equal opportunity employer. Deadline for applications is December 1, 1999. It is planned to have a symposium in Tübingen In March 25/26, 2000, at which selected applicants will have the opportunity to present their research activities.

nature

seeks an

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Nature, the international weekly journal of science, is seeking a full-time correspondent to be based in Tokyo at Nature Japan K.K., the Asia/Pacific wing of the Nature Publishing Group.

The correspondent will be responsible for writing weekly news for *Nature* on the Asia/Pacific region, covering Japan, China, Korea, Taiwan and Singapore. The job will require frequent lab visits throughout the region to collect material for news stories and to encourage editorial contributions to other sections of *Nature*.

Applicants should have strong journalistic skills, fluency in Japanese and/or other languages of the region. A strong background in science, preferably a PhD, is also required.

This is an exciting opportunity to work with a rapidly expanding multilingual team in Tokyo that is pushing forward all aspects of the publishing of *Nature* journals in the region, both on paper and on the web. For background information, we suggest you visit our bilingual Japanese/English website at www.naturejpn.com and our Chinese/English site at www.natureasia.com.

Please submit a CV, a concise letter outlining why you want the job, and a 500-word news article in the style of the News section of *Nature* to the address below by 8th November, 1999. The article should be on an important recent development in science policy, science community news, or in science itself.

Dr David Swinbanks, Asia-Pacific Editor of *Nature*, Nature Japan K.K., Shinmitsuke Bldg 3/4F, 3-6 Ichigaya Tamachi, Shinjuku-ku, Tokyo 162-0843 e-mail: d.swinbanks@naturejpn.com Fax: +81-3-3267-8746



Nature Japan K.K.

POSTDOCTORAL POSITIONS

The University of Texas Health Center at Tyler, Texas is expanding its research programs, and several Postdoctoral positions are available immediately to investigate:

(1) The role of blood coagulation in cardiovascular diseases/tumor metastasis and tissue factor-VIIa signaling (three positions). Requirements: Ph.D. in biochemistry/molecular/cell biology. Research experience in one or more of the above areas or signal transduction is desirable, but not essential. (Principal Investigators: Dr. L. Vijaya Mohan Rao, e-mail: rao@uthct.edu; Dr. Usha R. Pendurthi, e-mail: usha@uthct.edu).

(2) Processing of oxidative lesions by DNA polymerases/enzymology of base excision DNA repair/mutagenesis (two positions). Requirements: Ph.D. in biochemistry or related field and experience in enzyme kinetics and/or enzymology of DNA polymerases/N-glycosylases. (Principal Investigator: Dr. Zafer Hatahet, e-mail: zhatahet@uthct.edu).

(3) Characterization of protective immune responses to *M. tuberculosis* and *M. avium*, and identification of mycobacterial virulence factors that enhance intracellular mycobacterial growth (two positions). Requirements: Ph.D. in immunology or molecular biology with experience in molecular biology and/or cellular immunology. (Principal Investigators: **Dr. Benjamin Wizel**, e-mail: bwizel@uthct.edu; **Dr. David Lakey**, e-mail: dlakey@uthct.edu; **Dr. Peter Barnes**, e-mail: pbarnes@uthct.edu).

The University of Texas is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study the eukaryotic RNA polymerase II holoenzyme (visit laboratory website: www2.umdnj.edu/ ~huangsu/woychiklab.html). The laboratory is part of a dynamic scientific community on a shared campus with Rutgers University, located in a suburban setting 20 miles from New York City. Salary is competitive and commensurate with experience. Send curriculum vitae and three letters of recommendation to: Dr. Nancy Woychik, Department of Molecular Genetics and Microbiology, University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854-5635. FAX: 908-235-5037; e-mail: woychina@umdnj.edu. The University of Medicine and Dentistry of New Jersey is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study apoptosis. Current research projects include regulation of caspases, signaling pathways of apoptotic receptors, and controlled apoptosis in gene therapy (Cell 89:1067; Molecular Cell 1:319; Science 281:1355; Science 281:1860). Experience in molecular biology, biochemistry, or genetics is preferred. Send curriculum vitae and names of three references to: Dr. Xiaolu (Kelvin) Yang, Institute for Human Gene Therapy, University of Pennsylvania, 610 BRBII/III, 421 Curie Boulevard, Philadelphia, PA 19104-6160. FAX: 215-573-8606; e-mail: xyang@mail.med.upenn.edu.

POSTDOCTORAL POSITION available immediately to study signaling and molecular mechanisms of apoptosis, transformation, and metastasis. Applicant must be U.S. citizen or permanent resident and have an M.D. or Ph.D. degree and experience in molecular biology and tissue culture. Please FAX curriculum vitae to: Dr. Kam-Meng Tchou-Wong, Department of Medicine, New York University School of Medicine, 550 First Avenue, MSB 147, New York, NY 10016. FAX: 212-263-8902; e-mail: tchouk02@endeavor.med.nyu.edu.

POSTDOCTORAL POSITION immediately available to study human osteosarcoma metastasis. Recent Ph.D. with experience in molecular biology and cancer cell biology is desirable. Send curriculum vitae and names of three references to: Dr. Sheila Nielsen-Preiss, Department of Orthopaedics, B202, UCHSC, 4200 East Ninth Avenue, Denver, CO 80262. E-mail: sheila.preiss@uchsc.edu.

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP

Postdoctoral positions are immediately available in the Cancer and Developmental Biology Laboratory Group, Division of Basic Sciences, National Cancer Institute under the supervision of **Dr. Mark Lewandoski**. The Laboratory focuses on the role of the FGF signaling pathway during mouse embryogenesis with an emphasis on brain and limb development. We are using the latest genetic and transgenic techniques to create multiple alleles and tissue-specific knockouts (*Nat. Genet.* **18**:136–41). Projects include genetic screens for identifying downstream targets of FGF-signaling and the further advancement of systems such as Cre/loxP to manipulate the mouse genome *in nino*

The Laboratory is located at the NCI-Frederick Cancer Research and Development Center, Frederick, Maryland. The NCI offers competitive Postdoctoral stipends (\$29,000 to \$36,200) and an excellent work environment. Interested applicants should send a curriculum vitae, an introductory letter containing a brief description of research experience, and contact information for three references to: Dr. Mark Lewandoski, Cancer and Development Biology Laboratory, NCI-Frederick Cancer Research and Development Center, P.O. Box B, Building 539, Room 121, Frederick, MD 27102. E-mail: rhoderic@mail.ncifcrf.gov.

The National Institutes of Health is an Equal Opportunity Employer and encourages all qualified women and minorities to apply. Selection for this position will be based solely on merit, with no discrimination for nonmerit reasons such as race, marital status, physical or mental disability, age, sexual orientation, or membership or nonmembership in an employee organization.

POSTDOCTORAL POSITION

A Postdoctoral Fellowship position is available immediately to examine the health effects associated with ambient airborne particulate matter exposure. Specifically, research will be directed toward determining: (1) the ability of particles to induce pulmonary transcription factor activation; (2) the cellular origin and molecular mechanism(s) of particle-induced pulmonary nuclear transcription factor activation. The position requires a Ph.D. in cell and/or molecular biology or pathology. Laboratory experience in techniques and procedures involved in analysis of nuclear transcription factors is highly desirable. Candidates must be U.S. citizens or permanent residents Salary will be commensurate with experience. Send letter of interest, résumé, and names/addresses of three references to: Kevin L. Dreher, Ph.D., Leader, Molecular Toxicology Group, Pulmonary Toxicology Branch, NHEERL, MD83, USEPA, Research Triangle Park, NC 27711.

POSTDOCTORAL POSITION available immediately for Ph.D. or M.D.-Ph.D. with strong background in cellular immunology to study the T cell response to cancer (*Nature Medicine* 5:677, 1999) using state-of-the-art methodologies such as peptide/MHC tetramers, 11-color FACS analysis, and DNA array technology. Experience with culturing human T cells and molecular biology, demonstrated research ability, and strong communication skills desired. Salary \$30,000-plus depending upon experience. Please send curriculum vitae to: Peter P. Lee, M.D., Department of Medicine/Hematology, S-161, Stanford University, 300 Pasteur Drive, Stanford, CA 94305. E-mail: ppl@stanford.edu.

POSTDOCTORAL FELLOW for beginning of 2000 to work on fundamental approaches to the molecular therapeutics of cystic fibrosis. Applicants should have experience in biosynthetic processing and intracellular trafficking in the secretory pathway. Expertise required in molecular biology, membrane glycoprotein biochemistry, or ion channel structure/function. Please send curriculum vitae and the names and addresses of three references to: John R. Riordan, Ph.D., Department of Biochemistry and Molecular Biology, Mayo Clinic Scottsdale, 13400 East Shea Boulevard, Scottsdale, AZ 85259. Mayo Clinic Arizona is an Affirmative Action Employer and Educator.

POSITIONS OPEN

PRE- and POSTDOCTORAL TRAINING program in the molecular basis of cellular damage and toxicology. The Pennsylvania State University College of Medicine has several openings on a NIHfunded training program in molecular toxicology. Competitive positions are available for both Predoctoral (B.S.) and Postdoctoral (Ph.D. or M.D.) Fellowships. This program is focused on molecular mechanisms of toxicant action and transgenic model systems in toxicology. Training is directed by a steering committee of established Investigators. The training faculty includes: M. Billingsley, molecular neurotoxicology; R. Levenson, transgenic models; A. Pegg, carcinogenesis and DNA repair; D. Rannels, pulmonary damage; K. Cheng, mutagenesis and genomic instability; G. Clawson, carcinogensis and nuclear structure; J. Connor, metal neurotoxicology; K. Eckert, mutagenesis; C. Smith, toxicology and natural products; M. Kester, cell injury and lipid signaling; E. Hess, murine models of neuronal damage; H. Isom, hepatic gene expression and pathogenesis; J. Lakoski, serotonergic neurotoxicology; S. Levison, developmental neurotoxicology; R. Milner, glial and microglial injury response genes; K. Mulder, TGF signaling; Y. Ng, cardiac cell injury; T. Vary, cellular responses to sepsis; and T. Wood, growth factors and central nervous system damage. Candidates must meet NRSA U.S. citizenship and residency requirements. Send inquiries and curricula vitae to: Dr. M. L. Billingsley, Department of Pharmacology, MC H078, Pennsylvania State University College of Medicine, P.O. Box 850, Hershey, PA 17033. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS IN MOLECULAR BIOLOGY AND HISTOLOGY AT SAN ANTONIO

Three postdoctoral positions are available to join an interdisciplinary group studying hormonal regulation of gene expression related to aging and cancer. For two Molecular Biologist positions, previous experience in DNA/protein interaction and/or transcriptional regulation is required. For the Histologist position, expertise in immunohistochemistry is essential. Please send curriculum vitae and names of three references to: Arun K. Roy, Ph.D., Professor of Cellular and Structural Biology, The University of Texas Health Science Center at San Antonio, Mail Code: 7762, 7703 Floyd Curl Drive, San Antonio, TX 78229-3900. FAX: 210-567-3846. The University of Texas Health Science Center at San Antonio is an Equal Employment Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS IN BACTERIAL PATHOGENESIS/ GI DISEASES

Available immediately. Seeking individuals interested in gene regulation, mechanism of action of bacterial toxins, and modulation of inflammatory responses. Experience in molecular biology, immunology, and cell signaling is required. Please send curriculum vitae and names of three references to: A. K. Chopra, Ph.D., Department of Microbiology and Immunology, University of Texas Medical Branch, Galveston, TX 77555-1070. E-mail: achopra@utmb.edu. UTMB is an Affirmative Action/Equal Opportunity Employer/Minorities/Females/Disabled/Veterans.

POSTDOCTORAL POSITION

Postdoctoral position in neuroimmunopharmacology. Investigate the effects of opioids (morphine and other opioids) on immune function and resistance to infection. Mucosal immunology background helpful. NIH training grant position: U.S. citizen or permanent residency required. Send curriculum vitae plus names of three references to: Toby K. Eisenstein, Ph.D., Temple University School of Medicine, Department of Microbiology and Immunology and Center for Substance Abuse Research, 3400 North Broad Street, Philadelphia, PA 19140. E-mail: tke@astro.ocis.temple.edu.



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- Fluent English, knowledge of French;
- Independent, able to motivate members of the team, well-organized, determined, target-orientated.

If you are interested in this position and your profile corresponds to the above requirements, please send your application including list of publications to **Mr François ROHRBACH**, Director Human Resources, to the address mentioned below, or send your application by e-mail to hrfirsa@firmenich.com

Human Resources Department FIRMENICH SA - Box 148 - CH 1217 MEYRIN 2

University of Zürich Department of Psychiatry Research



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Previous experience in clinical dementia research and ambulatory patient care is required. Speciality may be in neurology, psychiatry or human genetics. Languages: fluent German and English.

Raising of own funds is a strong asset. Candidates should intend to complete a Habilitation.

Please address your application until December 15, 1999, to: PD Dr. C. Hock, Medical Director, Department of Psychiatry Research, University of Zürich, Lenggstrasse 31, CH-8029 Zürich, Switz-erland, Tel. +41-1-384-2271, Fax +41-1-384-2275, Email chock@bli.unizh.ch



The Faculty of Science of the University of Zürich invites applications for a

PROFESSORSHIP IN MOLECULAR PLANT PHYSIOLOGY

at the Institute of Plant Biology. The position is intended to strengthen the institute's molecular focus and the research program should concentrate on the study of plant model systems.

Applicants must have an internationally competitive research program and outstanding scientific achievements in the field of plant physiology. The appointment will be made at the level of associate (Extraordinarius) or full professor (Ordinarius), depending on the qualification and experience of the candidate. The successful applicant is expected to participate in general teaching in plant biology as well as in more advanced courses.

Applications should include a curriculum vitae, a publication list, a short summary of current and future activities in research and teaching, copies of three recent key publications and names, addresses, phone/fax number of three potential referees. Applications should be sent by November 20, 1999, to

Prof. Dr. V. Ziswiler, Dean, Mathematisch-naturwissenschaftliche Fakultät der Universität Zürich, Winterthurerstr. 190, CH-8057 Zürich. phone: +41 1 635 40 05, fax: +41 1 635 68 06 e-mail: reber@zuv.unizh.ch

For further information please contact Prof. Dr. Beat Keller, Institut für Pflanzenbiologie der Universität Zürich Zollikerstrasse 107, CH-8008 Zürich phone: +41 1 634 82 30, fax: +41 1 634 82 04

e-mail: bkeller@botinst.unizh.ch

POSTDOCTORAL RESEARCH ASSOCIATE position in quantitative behavioral studies.

A three-year Postdoctoral Research Associate position is available to conduct laboratory and field studies of coordinated motion of schooling fish. Job will include behavioral experiments, computerized video analysis, and quantitative modeling of individual and group-level behavior.

Successful candidate must have a Ph.D. in biological, behavioral, or aquatic sciences. Experience in fish behavior or animal aggregation, writing skills, and an ability to work well in groups are musts. Knowledge of video, computational analysis, and modeling techniques is desirable.

Åpplications will be accepted until 5 November 1999 or until position is filled. Please send letter of interest, curriculum vitae, writing sample, and contact information for three references to: Julia Parrish, Department of Zoology, Box 351800, University of Washington, Seattle, WA 98195. The University of Washington is an Equal Opportunity Employer.

EUROPEAN OPPORTUNITIES

POSTDOCTORAL POSITION at the INSERM research unit, "Genetics of development and differentiation," Université de Nice, France: Meiotic expression of the Cre recombinase as a tool for genomic engineering.

A Postdoctoral position is available starting in the fall of 1999 to study with **Dr. M. Rassoulzadegan** and **Professor F. Cuzin** the use of TAMERE transgenic mice, expressing the Cre recombinase in the male germ line as a tool for targeted mutagenesis in the mouse genome (see: **Hérault et al.**, *Nature Genetics* **20**:381–384, 1998; **Vidal et al.**, *Mol. Reprod. Dev.* **51**:274–280, 1998). Applications should include a detailed curriculum vitae, a brief statement of research interests, and the names and FAX or e-mail addresses of two references. Send to **Pr. F. Cuzin by FAX: +33**-492-07-64-02; **e-mail: cuzin@unice.fr.** Outline of the scientific project can be found on our website: http://www.unice.fr/Biochimie.

GLOBAL OPPORTUNITIES

BIOLOGY FACULTY. Possible faculty position to teach, in English, courses in general biology and a core curriculum course in scientific thinking. Ph.D. required. University teaching experience required. Two-year appointment begins September 2000. Renewal of the appointment depends upon institutional needs and/or the appointee's performance. The normal teaching load is three courses per semester. Salary and rank according to scale based on qualifications and professional experience. For expatriates, housing, annual round-trip air travel for appointee and accompanying family, plus schooling for up to two children are included. In view of The American University in Cairo's protocol agreement with the Egyptian government, which requires specific proportions of Egyptian, U.S., and third-country citizen faculty, at this time preference will be given to qualified applicants who are U.S. citizens. Mail letter of application specifying Job Number BIO-1 with curriculum vitae and names and addresses of three references to: Dr. Earl (Tim) Sullivan, Provost, The American University in Cairo, 420 Fifth Avenue, Floor 3-S, New York, NY 10018-2729 before November 15, 1999. AUĆ is an Equal Opportunity Employer.

DIRECTOR OR SENIOR RESEARCHER OF PLANT STRESS RESEARCH PROGRAM CHONNAM NATIONAL UNIVERSITY

The Chonnam National University, Kwangju, Republic of Korea, invites nominations for the position of Director or Senior Researcher in the area of plant stress biology to actively organize the Science Research Center funded by KOSEF beginning in the year 2000. The salary is negotiable depending on qualifications. To apply, send a letter indicating the willingness of application, curriculum vitae, and publication lists to: Gap Chae Chung, e-mail: gcchung@chonnam.chonnam.ac.kr. The deadline is November 30, 1999. For more information contact: Gap Chae Chung, Telephone: +82-62-530-2064.

POSITIONS OPEN



THE UNIVERSITY OF CHICAGO

POSTDOCTORAL POSITION

A Postdoctoral position is immediately available at the University of Chicago to study the role of apoptotic regulation in carcinogenesis, and the cellular responses to genotoxic exposure. Experience with molecular biology and tissue culture is required. Please send curriculum vitae and names of three references to: Dr. Charles Rudin, University of Chicago Hospitals MC2115, 5841 South Maryland Avenue, Chicago, IL60637.FAX:773-702-1576;e-mail:crudin@medicine.bsd.uchicago.edu. An Affirmative Action/Equal Opportunity Employer.

UNIVERSITY OF PENNSYLVANIA

Our laboratory has several POSTDOCTORAL POSITIONS and a LABORATORY TECHNI-CIAN position available on projects dealing with (1) MMR studies of mouse and human tumors, (2) near-infrared studies of tumors, (3) ²³Na NMR studies of cystic fibrosis and hearts. Interested applicants should contact: Dr. Glickson or Dr. Bansal, Department of Radiology, University of Pennsylvania School of Medicine, B1 Stellar-Chance Laboratories, 422 Curie Boulevard, Philadelphia, PA 19104. E-mail: glickson@mail.med.upenn.edu. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer. Qualified female and minority candidates are encouraged to apply.

POSTDOCTORAL POSITION available in the Metabolism Branch, National Cancer Institute, to focus on signaling by the insulin-like growth factor I receptor. Applicants should have an M.D. or Ph.D. Experience in molecular biology and cell biology is required. Please send a curriculum vitae, the names and addresses of three references, and a brief summary of research accomplishments and interests to: Peter Nissley, M.D., Building 10, Room 4N115, NIH, Bethesda, MD 20892-1374. NIH is an Equal Opportunity Employer.

A POSTDOCTORAL POSITION is available for several projects in the field of vascular biology/thrombosis/gene transfer. Experience with molecular biology and/or viral techniques preferred. Surgical skills a plus. Citizenslip or pennanent residency required. Interested applicants should send a curriculum vitae by e-mail: jjrade@welchlink.welch.jhu.edu, to: Jeffrey Rade, M.D., Division of Cardiology, Johns Hopkins University, Baltimore, MD.

FELLOWSHIPS

FELLOWSHIPS IN REPRODUCTIVE BIOLOGY NORTHWESTERN UNIVERSITY

Postdoctoral Fellowships are available in reproductive biology for highly qualified applicants. A diverse but integrated program offers research training in molecular, biochemical, cellular, physiological, and behavioral aspects of reproduction. Participating faculty include: Erwin Goldberg (molecular biology of the testis); Mary Hunzicker-Dunn (ovarian signal transduction); J. Larry Jameson (nuclear receptor control of reproduction); Jon Levine (neuroendocrinology of peptidergic neurons); Daniel Linzer (molecular endocrinology); Kelly Mayo (gene regulation in reproductive systems); Fred Turek (seasonal cycles/ circadian clocks); Teresa Woodruff (ovarian physiology and molecular endocrinology); and Catherine Woolley (hormonal regulation of plasticity in brain). Send curriculum vitae and names of three references to: Dr. Jon E. Levine, Department of Neurobiology and Physiology, Northwestern University, 2153 North Campus Drive, Evanston, IL 60208-3520. Applicants must be eligible for NIII training support (U.S. citizen or permanent resident). An Equal Opportunity

POSITIONS OPEN

POSTDOCTORAL POSITION available for a Neurobiologist to study the anatomy of thalamocortical substrates for pain and temperatures sensation in primates. Experience with tract-tracing, immunohistochemistry, and forebrain cytoarchitecture most useful. Physiological studies with single-unit, fMRI, and PET methods are also used for anlaysis. Send curriculum vitae, description of experience, and names of references to: Dr. A. D. (Bud) Craig, Atkinson Research Laboratory, Division of Neurosurgery, Barrow Neurological Institute, St. Joseph's Hospital and Medical Center, 350 West Thomas Road, Phoenix, AZ 85013. E-mail: bcraig@chw.edu.

St. Joseph's Hospital and Medical Center is an Equal Opportunity Employer.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIPS

NIH-funded Neurovirology–Molecular Biology Training Program at the University of Colorado Health Sciences Center (UCHSC) offers Postdoctoral Fellowships in the laboratories of:

Jeffrey Bennett: neurotrophins and eye development.

Randall Cohrs and Donald Gilden: molecular mechanisms of herpesvirus latency in human gånglia.

Paul Hagerman: mitochondrial DNA defects and neurodegenerative diseases.

Anthony Hayward: cell-mediated immune responses to HSV and VZV.

Kathryn Holmes: molecular pathogenesis of coronavirus infection.

Ravi Mahalingam: animal model of VZV latency. Donald Gilden, Gregory Owens, and Mark Burgoon: identification of an antigen in multiple sclerosis.

David Patterson: chromosomal abnormalities and neurodegenerative diseases.

Jerome Schaack: virus transcription.

Roderic Smith: modification of neuronal excitation by viral-mediated gene transfer.

Kenneth Tyler: virus-induced apoptosis in the nervous system.

Applicants must be U.S. citizens or hold a permanent resident alien card.

For more information, please contact: Dr. Donald Gilden, Professor and Chairman, Department of Neurology, #B182, University of Colorado Health Sciences Center, 4200 East 9th Avenue, Denver, CO 80262. Telephone: 303-315-8281; FAX: 303-315-8720; e-mail: don.gilden@uchsc.

UCHSC is an Equal Opportunity/Affirmative Action Employer.

GRADUATE FELLOWSHIPS

The Academy for Educational Development invites applications for National Security Education Program NSEP) Graduate International Fellowships. Fellowships enable U.S. graduate students to add an important international dimension to their education by supporting the study of languages, cultures, and world regions deemed critical to U.S. national security. Excluded is study of Western Europe, Canada, Australia, and New Zealand. Fellowships are awarded in a broad range of disciplines including applied, biological, economic, health, physical, and social sciences. Awards support overseas and domestic study for up to 24 months. Award recipients incur a requirement to work for a federal government agency or office involved in national security affairs or in higher education in an area for which the Fellowship was awarded, in that order of precedence. Applicants must be U.S. citizens-enrolled in or applying to graduate programs in accredited U.S. colleges and universities located within the United States. Deadline: January 15, 2000. Contact: Academy for Educational Development, National Security Education Program Graduate International Fellowships, 1825 Connecticut Avenue N.W., Washington, DC 20009. Telephone: 202-884-8285 or 800-498-9360; website: www.aed.org/

POSTDOCTORAL POSITION IMMUNOLOGY OF TICK-HOST-PATHOGEN INTERACTIONS

A Postdoctoral position is available to study host immunosuppressive proteins of tick salivary glands. The focus of the project will be to use protein-based, molecular, and cellular approaches to better understand how ticks modulate host immunity and to develop novel strategies to control tick infestation and pathogen transmission. Proficiency is required in protein purification and molecular biology, including PCR, RT-PCR, Northern blot analysis, gene cloning, and Escherichia coli and baculovirus expression vector systems. Knowledge of assays to assess humoral and cell-mediated immune responses is desirable. Position includes salary (negotiable), fringe benefits, and the opportunity to be a member of a multidisciplinary microbial pathogenesis research group studying the immunology of tick-host-tick-borne pathogen interactions. Send two copies of curriculum vitae as well as the names, addresses, telephone numbers, and e-mail addresses of three references to: Dr. Stephen Wikel, 127 Nobel Research Center, Oklahoma State University, Stillwater, OK 74078.

SENIOR POSTDOCTORAL POSITION IN FUNGAL GENOMICS

An NSF-funded position is available to oversee genomics projects in Neurospora, Pneumocystis, and Aspergillus. Applicant should have three to four years of postdoctoral experience in molecular and cellular biology. Must be a U.S. citizen or permanent resident.

By November 1, 1999, send curriculum vitae, summary of research experience, and three reference names to: Dr. Jonathan Arnold, Genetics Department, University of Georgia, Athens, GA 30602. E-mail: arnold@uga.edu.

University of Georgia is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS available for highly motivated Ph.D's and/or M.D's experienced in molecular biology. Current studies focused on the genetic progression of cancer and development of novel markers for early cancer detection. Send curriculum vitae, three references, and a letter describing research skills/interests to: Dr. David Sidransky, The Johns Hopkins University School of Medicine, 818 Ross Research Building, 720 Rutland Avenue, Baltimore, MD 21205-2196. FAX: 410-614-1411; e-mail: dsidrans@jhmi.edu.

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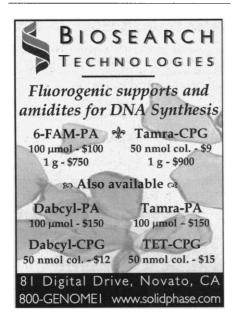
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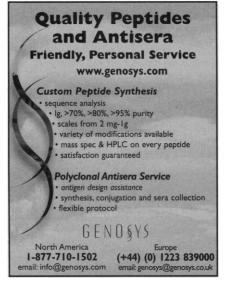


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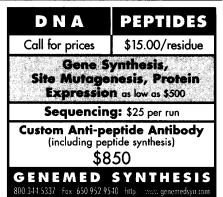
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Nishi, T.,et al. High efficiency gene transfer in solid tumors by *in vivo* electroporation. Cancer Gene Therapy, vol.4(6), P-56 (1997)



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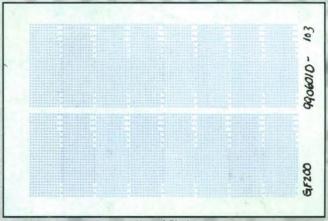


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- 1. Lennon, G., Auffray, C., Polymeropoulos, M., Soares, M.B. (1996) Genomics 33, 151-152.
- 2. http://www.ncbi.nlm.nih.gov/UniGene/index.html
- 3. http://ratEST.uiowa.edu

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