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NEW PRODUCTS

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IMAGING WUNDERKIND

The MetaMorph Imaging System is a software product with a comprehensive set of imaging tools for users running computers with Windows 95, 98, 2000, or NT operating systems. Functions provided by MetaMorph include control of imaging devices, capture of live video (NTSC, PAL, RGB, RS170, CCIR) and still

images from numerous sources, image processing on live and captured images, image analysis (measurement of over 100 attributes), object identification or classification within images, presentation tools, and image overlay options.

MetaMorph is commonly used for automating microscopic analyses. The program will synchronize image acquisition and analysis with the scanning of a motorized stage. Collections of images (called stacks) can be assembled into AVI or QuickTime movies. MetaMorph's functions for three-dimensional (3D) reconstructions, live video processing, deblurring, and device control will be welcomed by confocal microscope users. The user interface has been significantly enhanced in the most recent version of the program. Users will also be pleased with an array of new functions for controlling microscopes.

MetaMorph contains a standard set of tools for image analysis and processing, including densitometric analyses; edge detection; position, distance, and angle measurements; unsharp masking; and contrast enhancement. The program offers statistical analyses and outputs measures in table, histogram, or spreadsheet formats. Users of the popular public domain NIH Image or Image/J programs (http://rsb.info.nih.gov/nih-image/about.html) will note a small amount of overlap of features with MetaMorph, but the latter program distinguishes itself in comprehensiveness and in providing easy access to powerful features. MetaMorph's functions for device control, 3D, and video are not available in NIH Image, and many of MetaMorph's sophisticated object recognition functions are either not provided in NIH Image or require user programming to mimic them.

Tools for deconvolution in MetaMorph allow users to enhance image appearance by applying sophisticated mathematical alteration of image data to remove common out-of-focus artifacts of optical microscopes. Related options enable object boundary detection and sharpening. Users also have access to logical Boolean operators for altering or combining images. Other functions permit researchers to overlay up to six images for analysis of fluorescent probes.

Capping the MetaMorph feature set are presentation-making options. These include drawing tools, tools to create movies or slide shows, and numerous formats for exporting images. Meta-Morph is a powerful solution to a multitude of imaging problems.

–Kevin Ahern

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CONTINUED ON PAGE 1339

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West Coast Data Experts

Advances in biology and biomedical science demand continually more expertise in mathematics and computer science to manage and mine growing data sets. This article explores how these mounting needs are creating a shortage of bioinformatic experts on the West Coast.

he boom in biotechnology on the West Coast drives a rising demand for experts in informatics. For example, the number of people employed in biotechnology in Washington alone increased by more than 20 percent last year. Moreover, some biotechnology companies dedicate upwards of one-quarter of their work force to informatics. Academic departments also seek information scientists to fill a variety of positions. This situation creates so much demand in informatics that some recruiters call it an employee's market in the West.

The West Coast market in informatics for biotechnology includes three subspecialties. Bioinformatics focuses on genes and proteins, cheminformatics concentrates on small compounds, and clinical informatics concentrates primarily on data from clinical trials. In many cases, the search for new pharmaceuticals pushes this field ahead, but biotechnology companies also explore other areas, such as compounds that battle crop pests. Many companies seek experts in virtually any area of informatics, and the number of jobs often exceeds the number of qualified candidates.

As long as both biology and medicine continue to create enormous batches of data, informatics should experience continued growth. To provide an overview of the job market in informatics on the West Coast, this article provides viewpoints from an advocacy institute, a state university system, and three biotechnology companies.

LA JOLLA, California: The California Healthcare Institute represents more than 200 biotechnology, diagnostics, medical device, and pharmaceutical companies plus universities and research institutes in California. This organization provides advocacy at both state and federal levels for issues involving research and development in the life sciences. Such a wide scope gives this group a broad view on biotechnology employment opportunities.

- 🖵 California Healthcare Institute
- \Longrightarrow Cytokinetics, Inc.
- 🛶 Exelixis, Inc
- University of California

When asked about the West Coast job market in informatics, David Gollaher, the institute's president, said, "It's terrific. There aren't very many people who are bilingual in the sense of being fully proficient in mathematics or computer science and life sciences." Consequently, experts in this field can often pick and chose among the best jobs. Gollaher said, "The people who are products of any academic pro-

gram that teaches these kinds of skills can really write their own ticket."

With a shortage of academically trained informatics experts, Gollaher points out that people often jump into this field from others. In most cases, he thinks that people with computer or math skills can switch to informatics with less difficulty than most biologists can. He said, "Typically, it's a lot easier to teach biology to somebody who has a strong math or applied math background than the other way around.



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Applicants should have a Ph.D. or M.D. degree with a minimum of 8-10 years of experience in the neuroscience field.

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Seeking motivated project leader to direct a group of scientists and research associates in the development of an AAV-FVIII gene therapy product. Experience in molecular biology, assay development, in vitro and in vivo gene expression, and animal models required. Good management and communication skills required. AAV and FVIII experience preferred.

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SENIOR FORMULATION SCIENTIST

As part of an ongoing expansion of our Development Group, we are seeking a highly qualified scientist to fill a key role in the development of recombinant AAV vectors for human clinical trials.

The successful candidate will have a strong background in the optimization of formulation and stability of biotechnology products, ideally viral vectors. A good working knowledge of relevant FDA regulations and cGMP required.

Experience in vector purification process optimization and scaleup a plus. Candidates must have a PhD, 3+ years of relevant experience, and excellent communication skills.

DEVELOPMENT SCIENTIST / PLASMID PURIFICATION

As part of an ongoing expansion of our Development Group, we are seeking a highly qualified scientist to fill a key role in the development of recombinant AAV vectors for human gene therapy.

The successful candidate will be responsible for development and scale-up of processes for plasmid purification, and will have a background in plasmid production and purification at large scale. A good working knowledge of relevant FDA regulations and cGMP required. Candidates must have a PhD, 2+ years of relevant experience, and excellent communication skills.

PHARMACOLOGY / TOXICOLOGY SCIENTIST

Seeking a pharmacologist/toxicologist to design, coordinate, monitor, and evaluate GLP toxicity and biodistribution studies in support of the clinical evaluation and registration of AAV based gene therapy products.

Position requires PhD in toxicology with 2+ years of industrial experience in in vivo toxicology testing. Experience with biological and viral based products preferred.

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Candidate must have at least a BS degree and relevant management experience.

ANALYTICAL PROTEIN BIOCHEMIST

Avigen has an opening for a protein biochemist. The successful candidate will join a multidisciplinary team of scientists and will be principally involved in the structural characterization of AAV-based gene therapy vectors. The scientist will also collaborate with research and development groups on related projects such as structure-function studies and formulation-stability studies.

Candidates must have a strong background in physical biochemistry and have extensive experience with protein analytical methods, spectroscopic methods, and chromatography. Extensive experience with mass spectroscopy of proteins is required. Candidates should have a Ph.D. and Post-Doctoral experience in a relevant field, and at least 2 years of industry experience.

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It just seems to be a product of education or an artifact of how we organize thinking."

In the future, though, Gollaher hopes to see academic institutions produce more graduates with informatics degrees, because he predicts an ongoing demand. He asked: "Will the market produce people with these skills? I think the answer is yes, but I also think that the field is galloping forward faster right now than our ability to produce the people power to keep up with it."

DAVID GOLLAHER

Gollaher believes that training more experts in informatics will require changes in education. He hopes that undergraduate programs can attract students to informatics by revealing the power of this field. As he pointed out: "If there was some way to push down the job opportunities and the excitement in this field to undergraduates at an early stage of their career, it would actually improve the whole throughput."



BERKELEY, California: As the director of the University of California's systemwide program in biotechnology for more than 15 years, Susanne L. Huttner watched informatics move to a central position in biological and biomedical research and development. Today, as the associate vice provost for research for the entire University of California system, Huttner expects even more growth in the need for information sci-

SUSANNE L. HUTTNER entists. She said, "There is tremendous interest in building new kinds of curricula and degree programs to address the growing need for information technology, computer science, mathematics, and statistics training in life sciences degrees."

Right now, most universities do not offer the degrees and training needed for work in informatics. Huttner said, "The bottom line is: The companies are having to train people." Nevertheless, Huttner and her colleagues are working hard to change that. She said, "Faculty across the entire UC system are addressing the need to integrate information technology—more mathematics, more statistics, more computer science—into their degree programs both at the undergraduate and graduate levels. The students need it. There's no question about it, and they want it. They're seeking it." In fact, new curricula and degree programs are being planned and offered at the University of California campuses at Davis, Irvine, Los Angeles, San Diego, and San Francisco. Huttner also pointed out: "California Governor Gray Davis recently launched four major California Institutes for Science and Innovation, each of which includes a strong focus on information technology applied to the life sciences."

Nevertheless, students often get seduced from education to industry

before completing a degree. Huttner said, "In fact, it's very difficult to keep the students in the graduate school. There are many opportunities in the private sector. In the biotechnology sector alone, the demand is so great that the students find lots of lucrative and challenging positions when they're still early, relatively speaking, in their training."

Huttner also serves as executive director of the Industry-University Cooperative Research Program, which has a budget of \$60 million a year to apply to a variety of areas, including biotechnology and life science informatics. She believes that academia and industry must work together to provide better trained information scientists in the future. She said, "There is a huge need for such people right now in industry and academia. Basic research programs in universities desperately need people with these kinds of skills, too. The market is, in all respects, very hot for people who have training both in the life sciences and in information technologies."



SOUTH SAN FRANCISCO, California: From its start in 1998, Cytokinetics, Inc., blended life sciences and information technology. According to Nolan Sigal, Cytokinetics' executive vice president of research and development and chief scientific officer, Cytokinetics includes two dimensions: It focuses on the cytoskeleton as a source of drug discovery, and it also creates cellular bioinformatics technologies.

In today's environment, Sigal believes that

NOLAN SIGAL

every company needs informatics. He said, "Sooner or later, everybody recognizes this. Sometimes they recognize it before they have accumulated a lot of information in a haphazard fashion. In other cases, it's years before this dawns on them and they're piled knee-deep in information." He added, "We face the challenge of integrating things from the genomics world, traditional pharmacology, and everything in between. It never gets simpler. It just gets more complicated."

To keep up, Cytokinetics built a team of information scientists. Sigal said, "Over the past year, we have assembled a group of over a dozen people—probably closer to 16 people now—in the general field of informatics. That represents close to 20 percent of all the scientists in the company. That's a big number." Most of these employees come in with a strong background in computer science through either an undergraduate or graduate degree. Beyond a degree, however, Cytokinetics usually hires people with real-world experience, as well. Sigal said, "Almost all of these individuals have experience somewhere, and that's typically in the high-tech world." He pointed out that his company rarely takes someone right out of college.

Sigal also mentioned a change in the hiring environment over the past year. He said, "A year ago, when we were just perhaps at the begin-

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Exelixis, Inc. is a leader in the discovery of high-quality novel targets for several major human diseases, and a leader in the discovery and development of new drug therapies specifically for cancer and other proliferative diseases. Our mission is to leverage our integrated discovery platform to increase the speed and the quality of pharmaceutical and agricultural product discovery and development.

EXELIXIS

Senior Research Scientist, Cell Genetics

You will play a direct role in prioritizing oncology targets that have been identified in genetic screens and utilizing biochemical, cell biology, and molecular biology expertise. Requires a PhD, MD or equivalent and 5+ years experience in cancer research and signal transduction. A broad knowledge of oncology-related assays (apoptosis, transformation) and a strong molecular, cell biology, and biochemistry background preferred. Industry experience is a plus. (Job# 01-103)

Research Scientist/Senior Research Scientist, Cell Genetics

You will play a direct role in prioritizing oncology therapeutic gene targets that have been identified in our various genetic screens. You will also design and execute experiments using human cell biology and biochemistry to validate human homologs and explore biological function and signal transduction pathways. You will present your findings to the Oncology and Cell Genetics groups as well as corporate collaborators. Requires a PhD, MD or equivalent and 4+ years industry experience. Knowledge of mammalian cell viral expression techniques (retroviral, adeno, AAV, lentivirus) is required. Experience with oncology-related assays (DNA damage, apoptosis) and oncology-related signal transduction pathways is preferred. (Job# 01-104)

Research Scientist/Senior Research Scientist, Molecular Technology

You will establish, supervise and operate our immunohistochemistry laboratory. Responsibilities will include obtaining specimens and maintaining our repository, as well as supervising/performing experiments and interpreting the results. In addition you will be coordinating collaborative efforts in analyzing and characterizing a variety of antibodies. Your lab will play a key role in the progression and development of biotherapeutic agents as well as validation reagents. Requires a PhD or equivalent and 3+ years of demonstrated experience in general immunohistochemistry/cytochemistry techniques. A strong histology background with some pathology experience is preferred. (Job# 01-63)

Research Scientist/Senior Research Scientist, Proteomics

You will establish and lead the proteomics group and be responsible for developing and implementing IP and MS methods to analyze protein-protein interactions in signaling pathways, as well as determining post-translational modifications of proteins. You will also be responsible for supervising routine MS analysis of recombinant proteins produced for HTS and crystallography. Requires a PhD in analytical biochemistry or equivalent and 2-5 years of MS experience. Familiarity with qqTOF determination of protein sequence preferred. Experience in preparation of biological samples for MS analysis required. Strong interpersonal skills and the desire to work collaboratively are essential . (Job# 01-87)

Research Scientist, Biology Technology

You will play a direct role in establishing recombinant mammalian protein expression systems to produce recombinant cell lines and protein for use in assay development, antibody production, and crystallography. Requires an MS, PhD or equivalent and 2+ years experience with mammalian cell culture and recombinant protein expression, including familiarity with standard molecular biology techniques (DNA construct design and preparation, DNA sequencing, cell transfection) and protein characterization (SDS-PAGE, Western analysis). Flow cytometry experience desired. (Job# 01-46)

Research Scientist, Biology Technology

You will play a direct role in establishing medium to high-throughput expression vector construction and expression analysis using E.coli and baculovirus systems. Requires a PhD and 2+ years experience with E.coli and baculovirus recombinant protein expression systems, standard molecular biology techniques (DNA construct design and preparation, DNA sequencing) and small-scale protein purification and characterization (SDS-PAGE, Western analysis). Previous experience with developing medium to high-throughput expression systems desired. (Job# 01-97)

Research Scientist, Biology Technology

You will have extensive experience in purifying and characterizing recombinant proteins from various expression systems (10-100 mg scale). You should also have extensive protein chemistry background as evidenced by a strong publication record. You will play a direct role in supporting assay development, high-throughput screening and crystallography efforts. Requires a PhD and 2+ years experience in biochemistry, molecular biology or biochemical engineering. Must have hands-on experience with multiple chromatographic separation techniques in protein purification. Working knowledge of FPLC, HPLC and other related analytical techniques is required. Strong interpersonal skills and the desire to work collaboratively are essential. Experience with kinases is a plus. (Job# 01-96)

Informatics Research Scientist, Core Informatics

You will build, implement, and integrate software tools and database resources to support research at Exelixis. Requires an MS or equivalent in Computer Science and 5+ years of software engineering experience with strong skills in software architecture, object-oriented design, database design, and distributed systems. Experience with Java, C++, Python, UNIX/shell scripting, Tcl/Perl, XML, SQL, HTML, CGI/JSP/PHP, Apache/iPlanet, and/or Oracle is also required. (Job# 01-09)

Please visit our website at www.exelixis.com to view additional exciting career opportunities and job descriptions.

Exelixis offers competitive salaries and benefits, equity participation, and a research setting that recognizes and rewards achievement. Please send your resume/CV to Exelixis, Inc., HR Department; Fax (650) 837-7226; or email careers@exelixis.com.EOE



ning of the bursting of the high-tech bubble, it was a real challenge to get the top people. As the year has gone on, we have seen that the overall applicant pool has increased, the quality has increased, and our ability to bring those people in has improved dramatically." Sigal also thinks that bursting bubble changed more than the potential-employee pool. He added: "I think that the whole perspective has changed enormously and maybe people are going back to a few more traditional values—having a good team to work with and doing important work."

KIRKLAND, Washington: Rosetta Inpharmatics specializes in informational genomics, which integrates biology, informatics, and technology. Roland Stoughton, Rosetta's vice president of informatics, said, "I think we are leaders in the area of gene expression data—creating the data and analyzing it. We already have one of the best bioinformatics departments in the country." In addition, Rosetta will soon be a sub-



sidiary of Merck, so it will apply its bioinformatics expertise to drug discovery.

When asked to describe the demand for bioinformatics experts at Rosetta, Stoughton called it a very strong demand. He added: "We have need for skills across the entire spectrum from basic software development all the way up to the highest level genomic annotation involving the coupling of genomics, biology, and bioinformatics."

Stoughton pointed out that filling these positions can be difficult. He said, "Of course,

ROLAND STOUGHTON positions can be difficult. He said, "Of course, the most valuable people are those who have a combination of skills, but they're also the hardest people to find—those who have some formal training in computer science and languages and some database experience and have worked in the domain of genomics and biology." Although Rosetta can easily find people with a little knowledge in both biology and computer science, Stoughton said, "It's hard to find people that are truly strong and competent in both." As many as half of the bioinformatics people who come to Rosetta are recent graduates from doctoral programs. Stoughton said, "They tend to either have converted from biology, molecular biology, or biochemistry by taking some formal courses in computer science."

Although Rosetta needs people with a variety of skills, Stoughton indicated a special need for people trained in genomic annotation. These positions require a variety of skills: sequence based bioinformatic capabilities, a knowledge of the format and location of public data, mathematical knowledge of the algorithms for interpreting sequence patterns and looking for similarities, and database experience.

For further valuable career features, go to Solence and Perspectives.

SOUTH SAN FRANCISCO, California: A wide variety of research goes on at Exelixis, Inc. Investigators at this company explore model organisms—from fruit flies and worms to mice and zebrafish to *Arabidopsis* and micro-tomatoes—to better understand both genetics and comparative genomics. They use this work to find points in gene pathways that make good targets for therapeutic attack. Those targets lead to drug discovery and development.



In describing this company's work, Christian Burks, vice president and chief informatics officer, said, "If you think of the typical drug development pipeline, it starts with biology, goes into chemistry, and then goes into clinical trials." Consequently, he said, "The needs here at Exelixis span bioinformatics, cheminformatics, and clinical informatics." Although this company's informatics group, which includes staff at the company's locations in South San Francisco,

CHRISTIAN BURKS Portland, Oregon, and Germany, includes about 40 people, Burks said, "We're still hiring in bioinformatics. We are growing faster in cheminformatics and are beginning to build in the area of clinical informatics."

In seeking job candidates, Burks and his colleagues consider people with a variety of backgrounds. In describing the ideal candidate, Burks said, "The obvious thing that one would like to say is a bachelor's or a Ph.D. in informatics, but it's only in the last few years that those programs have really begun to be established at universities." Consequently, Burks looks for other qualifications. He said, "We've been pretty open to people who either started, say, with biology, chemistry, or something related to that, or people on the computer science side of things but who've crossed over somehow or another in their career or in terms of their extracurricular interests or jobs they've had." Nevertheless, this company does prefer to fill informatics positions with people who have experience with software engineering or database resources in a production environment.

Overall, Burks calls the competition in this field very strong. He said, "Most of the folks with significant experience doing informatics in a company milieu these days are receiving weekly calls from recruiters. If you ever wanted to move, it's more a matter of just deciding to stop saying 'No' rather than going and reading the paper and seeing if there is an ad out there for a job that interests you." For newcomers, though, he suspects that they will still need to pound the pavement. In the end, more than experience comes into the decision. Burks said, "Our recruiting strategy certainly dictates selecting for excellent skills and experience, but additionally focuses on understanding that the candidate is excited about Exelixis and the opportunity to work with informatics and other staff at Exelixis." III

We're Witting a New Chapter in Drug Discovery Development

Cytokinetics is focused on cytoskeletal pharmacology. Cytoskeletal involvement is apparent in many different diseases, and we're committed to advancing drug discovery & development in this area through the identification and development of small molecules for clinical studies. Our R&D teams are working in several therapeutic areas to capture the broad opportunities presented by targeting the cytoskeleton. Our proprietary biology and cellular informatics platforms allow us to selectively target important cytoskeletal proteins. If you're energetic and passionate about your work, and are a team player who enjoys thinking about cutting-edge science, then come join us. We're a Pre-IPO biotech leader that is defining a new class of therapeutic agents!

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- Senior Scientists
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- Scientist Biochemistry (Job# BC01-06-SCI)
- Senior Scientist Analytical Chemistry (Job# CH01-07-SCI)
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At Perlegen Sciences, we possess a high-density, wholewafer, microarray technology that enables us to compare the entire genomes of thousands of diseased and healthy individuals in order to associate genetic regions with important phenotypes. We invite you to consider joining our unique company as we apply this technology to bring focus to biological research and to accelerate the discovery of drugs and diagnostics.

Recently established, we are a well-funded, pre-IPO company that is moving quickly, building a world-class team that includes:

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- I molecular biologists

If you possess inventive skill in these areas and would enjoy working in a cross-disciplinary culture that encourages creativity and challenges intellectually, we'd love to hear from you. Please mail your resume to Perlegen Sciences, 3380 Central Expressway, Santa Clara, CA, 95051. Fax to 408-731-5455. Or email to perlegen_HR@Perlegen.com.

For more information on these positions and other opportunities, visit our website at **www.perlegen.com**. EOE.





The Applied Genomics Division of Arcturus, located in San Diego, CA, integrates a proprietary platform of laser-based instruments, disposables and molecular biology methodology with state-of-the-art bioinformatic analysis to expression-profile specific cell types from clinically relevant biopsies. We are currently seeking qualified candidates for:

Bioinformatics Scientist/ Cancer Biologist

The bioinformatics group has an opening for a cancer biologist with expertise in breast cancer research. Individual will be responsible for designing and analyzing gene expression profiles from laser-captured cells of biopsy tissues. Requires a strong background in the molecular biology of cancer and substantial practical knowledge of bioinformatics tools and databases. Experience in analyzing large-scale gene expression data and familiarity with genomics technologies are highly desirable. Familiarity with relational databases and programming languages C/ Java/Perl a plus. Requires Ph.D. in molecular biology/genetics or a related field, 2+ years of postdoctoral research in cancer biology.

Business Development

We are also seeking an individual with 5+ years of hands-on business development expertise in establishing partnerships and identifying business opportunities in molecular diagnostics as it applies to drug development and clinical medicine.

Arcturus offers competitive compensation and benefits program including stock, medical, dental, vision, LTD and 401(k).

Please send or fax resume and cover letter to:

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www.arctur.com

EOE

VaxGen. Inc., founded in 1995, is building a national and international science-driven organization dedicated to the development of an AIDS vaccine.

Director of Process Sciences Job Code 40060401 KW

A Director level candidate to lead the Recovery Process Sciences Group, the Cell Culture/Fermentation Group, and the Bioanalytical Chemistry Group. Will direct all process development and manufacturing activities required for IND and BLA filings. Includes budgeting, forecasting manufacturing needs, and resource allocation skills. Expected to recruit addtl staff and participate in the design of new lab facilities to support the AIDS VAX manufacturing plans. Req: 10 yrs of exp. in recovery process sciences or a related field, excellent GMP practices and CMC documentation, and an excellent record of accomplishment as a manager. The candidate will need to be self-motivated with leadership and team building skills.

Process Development PhD/Engineer-Fermentation Job Code 46060401 CK

Responsible for the design, optimization validation, and scale-up of CHO cell fermentation processes. Hands on operations of fermentation systems, ranging from 2L-10L reactors. Req: excellent troubleshooting and data analysis skills. Knowledge of pharmaceutical industry manufacturing operations, lab and commercial scale instrumentation is necessary. Demonstrated problem-solving ability needed. Expected to be selfmotivated. Managing up to 2 research associates will be required. Reqs: Ph.D in biochemistry, microbiology or chemical engineering with a minimum of 6 yrs of pharma or biotech company experience.

HIV Molecular Virologists, PhD Job Code 43060401 KW

Responsibilities will involve: molecular and genetic characterization of viruses from clinical trial cohorts, development of novel envelope based vaccine antigens, and immunological evaluation of antisera raised against candidate vaccine antigens. Expertise in molecular biology, virology, or immunology is required. Experience w/automated sequencing & analysis, virus culture, in vitro mutagenesis, RT-PCR, bioinformatics, mammalian cell transfections, immunoprecipitation and immunoblotting is required. Expected to take responsibility for generating high quality data required to support regulatory submissions, and must be able to troubleshoot technical problems. Great skill with Excel, Sequencher, etc, is essential. A BS or BA science degree and four yrs of lab work exp are required.

Molecular Epidemiology/Sequencing Group Leader - 43060401 DE

Primary responsibilities: PCR cloning/automated sequencing of HIV-1 envelope glycoproteins from clinical specimens; molecular epidemiologic analysis of virus sequence data; archiving and organization of data for regulatory submission. Expertise in Molecular Biology with exp. in virology, population genetics, bioinformatics, immunology, or protein structure is desirable. Good computer skills especially in sequence analysis and contig assembly are essential. The successful candidate will be expected to work as part of a multidisciplinary team and manage RAs. A PhD with two yrs of relevant postpoctoral exp., or an undergraduate science degree and six yrs of molecular biology exp. is required.

VaxGen offers full benefits and a competitive salary package. Applicants should send a curriculum vitae and the names of three references to: job code, VaxGen, Inc., 1000 Marina Blvd., Suite 200, Brisbane, CA 94005-1841, or jobs@vaxgen.com. Please indicate job code in the subject line of your email.

Postdoctoral Research Scientist Positions (Proteomics) (Posting# BS-1867)

Two postdoctoral positions are available immediately in the Biology and Biotechnology Research Program at Lawrence Livermore National Laboratory (LLNL) to develop a novel proteomic technology. The successful candidates will have protein biochemistry experience and expertise in protein characterization and molecular biology. The first position requires a strong background in recombinant protein expression and purification, specifically using baculovirus (send CV to albala1@llnl.gov). The second position requires experience with mass spectrometry (send CV to smaloney@llnl.gov). Both positions require a recent PhD in biochemistry, molecular or cellular biology, or related area. To be considered, reference source# AJSC8H1BS and posting# BS-1867.

Located in the scenic Livermore Valley, LLNL offers a challenging environment and competitive salary/benefits package. LLNL is operated by the University of California for the Department of Energy. We are proud to be an equal opportunity employer with a commitment to workforce diversity.



For more information about this position and others, visit us on the web at:

www.llnl.gov/jobs

Research Microbiologist/Virologist

The USDA, Agricultural Research Service (ARS), Food Safety and Health Research Unit, Western Regional Research Center, Albany, California (San Francisco Bay Area) is accepting applications for the position of Microbiologist/Research Virologist (GS-12/13; depending upon training and experience: \$56,411 - \$87,212 per annum, plus benefits). The incumbent will be a permanent scientist in a Unit working on the biology and control of human pathogens related to poultry and fresh produce. The incumbent defines approaches and plans experimental procedures on aspects of the project involving development of methods for: (1) detecting and identifying multiple viruses related to contamination of food (e.g. Norwalk-, Rota-, Hepatitis A-Virus); (2) growing and maintaining viruses that are currently difficult to grow; (3) identifying and characterizing viral genes and factors important for virus survival in host cells; and (4) viral genomics. General objectives of the research are to better understand the biology of human viral pathogens in food environments and to use this knowledge to develop new strategies for control. A PhD or equivalent doctoral degree is required. Candidate must be a U.S. Citizen. A complete copy of the vacancy announcement, and how and where to apply, can be obtained at: http://www.afm.ars.usda.gov/divisions/hrd/index.html; select announcement ARS-X1W-1460; or contact Personnel at 510/559-6090. Closing date for applications is October 1, 2001. For information, contact Craig Parker, USDA, ARS, WRRC, Albany CA 94710; email: parker@pw.usda.gov.

JSDA/ARS is an Equal Opportunity Provider and Employer, women and minorities are encouraged to apply.



A WHOLLY OWNED SUBSIDIARY OF MERCK & Co., Inc.

Rosetta Inpharmatics, a wholly owned subsidiary of Merck & Co. Inc., develops and implements technologies that will improve the way drugs are made. The company's leading-edge genomic research and data analysis focus on how medical compounds affect biology, enabling more accurate selection of drug targets, faster drug development and better drugs.

Opportunities at Rosetta Inpharmatics:

Bioinformatics Scientist. Design microarray probes. Background in molecular biology and experience with microarrays, PERL, UNIX, and SQL required. MATLAB desired.

Data Analyst. Analyze biological data. Must have thorough understanding of experimental data uncertainty. MATLAB or SPLUS and experience with experimental data required. Ph.D. required.

Principal Investigator, Computational Biology. Design and lead computational research efforts on functional interpretation of genomic sequence and gene expression data. PhD required.

Senior Genome Analyst. Lead R&D efforts on functional interpretation of genomic sequence, incl. information resource integration, algorithm development, and data modeling. PhD required.

Molecular Toxicology Scientist. Investigate molecular toxicology/pharmacology mechanisms through state-of-the-art gene expression profiling technology and analysis. PhD required.

Cell Biology Scientist. Expert in modern molecular biology techniques. Focus on gene discovery and functional characterization using ink-jet DNA microarrays. PhD required.

All opportunities will be located in Kirkland, Washington. For more information, detailed job descriptions, and to apply, please visit www.rii.com. EOE. Email resumes to hr@rii.com or fax to 425-821-5354.

Aurora Biosciences is a leader in applying innovative bioassay technologies and advanced instrumentation to make the process for discovering new medicines smarter and faster than ever before. Behind every one of our solutions is a close-knit group of talented, knowledgeable and creative professionals committed to improving human health.

SCIENTIST I/II

In this role, you will develop cell-based assays as secondary and primary screens for drug discovery, focusing on assays directed at targets associated with allergy and inflammation. You will also run high throughput screens with orphan ligands against a panel of cellular reporter assays. The ideal candidate will have a PhD in Immunology or Cellular Biology with general knowledge of signaling pathways and gene regulation. General molecular biology skills, as well as experience growing, transfecting and cloning human cell lines are necessary. Familiarity with primary cells is a plus.

In addition to competitive salary and benefits, we offer equity participation via an ISO and Stock Purchase Program. Email your resume and letter, referencing Job#0211GH, to hr@aurorabio.com. Or fax to (858) 404-6720. If unable to email or fax, please mail to Aurora Biosciences Corporation, HR, 11010 Torreyana Rd., San Diego, CA 92121. EOE.



MEDAREX

The Antibody Technology Company

Medarex, Inc., the Antibody Technology CompanySM, is a biopharmaceutical company developing monoclonal antibody-based therapeutics to fight cancer and other life-threatening and debilitating diseases. We have assembled a broad platform of patented technologies for antibody discovery and development. We create and develop high-affinity fully human antibodies for ourselves and others, offering a full range of antibody development capabilities, including pre-clinical and clinical manufacturing services. Medarex has numerous products currently in human clinical trials and partnerships with more than two dozen global pharmaceutical and biotechnology companies.

SCIENTIST/SENIOR SCIENTIST, MOLECULAR BIOLOGY

This person will lead a group focused on the development of high level mammalian recombinant protein expression systems for antibodies and other proteins. Candidate should have a Ph.D. in molecular biology or related discipline and a minimum of 2 years postdoctoral experience. A background in gene cloning, vector development, gene expression, cell transfection, mammalian tissue culture and immunology is desirable. Job code CA-600-00-09

SENIOR SCIENTIST, PROTEIN CHEMISTRY

This person will lead a group responsible for the purification and characterization of human monoclonal antibodies. Additional responsibilities include isolation and characterization of protein antigens and development of techniques for purification of cell surface proteins. The candidate should have a Ph.D. in chemistry, biochemistry or related areas, with at least 8 years of experience in academia or industry. Job code CA-600-01-11

SCIENTIST/SENIOR SCIENTIST, PROTEIN CHEMISTRY

As a Scientist in protein chemistry group, responsibilities include experimental design and implementation of mass spectrometry and liquid chromatography-based analyses of proteins and peptides needed for our internal and external discovery/development programs. The scientist will also be involved in database searching of MS/MS data derived from biomolecules and interpretation of these spectra. Expertise in protein and peptide analysis by mass spectrometry. Ph.D. in life science or equivalent, with a strong background in biochemistry and mass spectrometry. Must have at least three years of experience in an academic or industrial setting. Biotechnology/pharmaceutical industry setting is preferred. Job code CA-600-01-14

SENIOR SCIENTIST/ASSOCIATE DIRECTOR, HYBRIDOMA RESEARCH

This person will lead a group focused on development of our technology platform for making human monoclonal antibodies, including generation of new transgenic mice, development of means to enhance immortalization of cells producing antibodies to target antigens and optimization of testing methodologies for identification of lead antibodies. This person also will participate in the identification and development of new projects for antibody targeting and in the generation and characterization of human monoclonal antibodies from transgenic mice in our UltimabTM platform. We are looking for a driven and focused person with a Ph.D. in immunology or related field. Experience in hybridoma generation and antibody purification and characterization is required. Job code CA-600-01-22

MANAGER/SCIENTIST, HYBRIDOMA RESEARCH

This person will lead a group focused on the generation, isolation and characterization of human monoclonal antibodies from transgenic mice (HuMAb-Mouse® and TC-MouseTM). The person will also be involved in efforts to further develop our technology platform and will participate in the identification and development of new projects for antibody targeting. Ph.D. in immunology or related field is preferred. Experience in hybridoma production and antibody purification and characterization is required. Job code CA-600-01-23

Medarex offers a competitive compensation package including stock options and participation in a variety of benefit programs. For consideration, please forward your CV to: Medarex Inc., 521 Cottonwood Drive, Milpitas, California 95035, via email: send to californiajobs@medarex.com or FAX to 408-545-2799.

ANIMAL GENOMICS University of California-Davis Two Positions Open

The College of Agricultural and Environmental Sciences (CAES) and the School of Veterinary Medicine (SVM) invite applications for two animal genomics faculty positions. Both positions incorporate Cooperative Extension outreach and Agricultural Experiment Station research responsibilities. The two host departments (Animal Science and Population Health and Reproduction) and their college/school administrative units are developing joint research and outreach efforts in animal genomics. Candidates are sought whose focus will be on applications of genomics/biotechnology to the productivity (CAES), and health/ disease resistance (SVM) of food-producing species.

The Department of Animal Science (CAES) invites applications for an Assistant Cooperative Extension Specialist in Animal Genomics and Biotechnology (75% Extension, 25% Research). We seek an outstanding candidate with a Ph.D. degree in animal genomics, animal biotechnology or closely related field with experience and interest related to agricultural aspects of genomics and biotechnology. Contact: Mary E. Delany, CE Genomics/Biotechnology Search Committee Chair, Department of Animal Science, One Shields Ave., University of California, Davis CA 95616, (530-754-9343). For a full position description see: http://animalscience.ucdavis.edu/Intranet/Recruiting/CEgenomicsSpecialist/announcement.htm

The Department of Population Health and Reproduction (SVM) invites applications for an Assistant Veterinarian in Animal Health Genomics (50% Extension, 50% Research). We seek an outstanding candidate with a DVM degree (required). A Ph.D. or other advanced research training is preferred. Contact: Linda Bentley, Population Health & Reproduction, University of California, One Shields Avenue, Davis, CA 95616 (530-753-7848). For a full position description see: http://www.vetmed.ucdavis.edu/PHR/genomics.html

Applicants should submit to the appropriate contact listed above: a curriculum vitae, transcripts of Ph.D. training (official transcripts are required if Ph.D. was granted in the past five years), plus a statement of extension experience and interests, research accomplishments, and career goals. Submit the names, addresses and FAX numbers of three to five individuals familiar with applicant's extension and research abilities. E-mail applications will not be accepted or acknowledged. To ensure consideration, applications must be received by October 15, 2001; positions open until filled.

The University of California, Davis, is interested in candidates who are committed to the highest standards of scholarship and professional activities, and to the development of a campus climate that supports equality and diversity. The University of California is an affirmative action/equal opportunity employer.

CENTER LEADER - Institute of Geophysics and Planetary Physics

The Earth and Environmental Sciences Division Director seeks a Director for the Los Alamos branch of the Institute of Geophysics and Planetary Physics (IGPP). This Center is a branch of a University of California multi-campus research unit with a mission to foster and sponsor collaborative research in solid earth geophysics, geochemistry, hydrology, planetary geophysics, astrophysics, ocean/ atmospheric, and magnetospheric sciences and other geophysical and planetary phenomena between the Los Alamos National Laboratory, the University of California and other universities. The IGPP Director provides scientific/technical leadership and line management of IGPP.

Collaborations between the Laboratory and the University of California are very important to the intellectual vitality of the Laboratory, and the IGPP Director serves to foster such collaborations in the scientific areas mentioned above. The Director will be responsible for overseeing a yearly peerreview process to select proposals for funding. The Institute hosts visiting scholars, post doctoral fellows, and graduate students for short and long-term visits. Organizationally, the Institute is located within the Earth and Environmental Sciences (EES) Division that is within the Strategic and Supporting Research Directorate at Los Alamos. IGPP plays an institutional role within the Laboratory and encourages collaboration with scientists throughout the entire Laboratory.

The Director's line management responsibility includes accountability for the quality of research; strategic planning; development and maintenance of technical capabilities; environment, safety and health; security; workforce excellence, productivity, and diversity; financial management; cost effectiveness; and communications. The IGPP Director must maintain effective working relationships with leaders, managers, and staff throughout the Laboratory, government, university, and industrial officials and collaborators.

Requires a Ph.D. in a scientific or engineering field relevant to IGPP and demonstrated success in management of personnel in a scientific/technical organization. You must also have successful experience in establishing and maintaining research collaborations, and be able to obtain a Department of Energy (DOE) "Q" clearance, which usually requires U.S. citizenship. Knowledge of the following areas is desirable: Laboratory, University, DOE, other national and international programs of relevance to the Center's activities, management, and administration systems and **practices** of national laboratories and/or UC universities.

Notes to Applicants: For specific questions about the status of this job, call (505) 667-0763. A full **description** of the position can be found at **http://www.hr.lanl.gov/worldview/jobs**, Job #017583. **For more information** on the EES Division and IGPP, visit our Web site at **http://ees.lanl.gov:80**.

To Apply: Submit a comprehensive resume and cover letter that addresses the specific required criteria, referencing "Science017583", via email to jobs@lanl.gov, or via postal service to Los Alamos National Laboratory, Resume Service Center, Mailstop P286, Los Alamos, NM 87545.





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VION

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Research Scientist Medicinal Chemistry Job Code: SD6111RA

An opportunity exists in the Chemistry group for a creative individual and team player to design and synthesize small molecule combinatorial libraries and targeted combinatorial libraries. The ideal candidate will have a Ph.D. in Organic Chemistry and 2-3 years of medicinal chemistry experience. Experience in the design, synthesis and purification of novel organic compounds is required; experience in parallel synthesis methodology (solid and solution phase) is a plus.

Senior Computational Scientist Cheminformatics Research Job Code: SD6520CSSS1

This position offers opportunities for developing and applying computational approaches and informatics tools in order to impact the efficiency of the drug discovery process. Incumbent will develop and deploy algorithms, models and tools to provide cheminformatic solutions to chemists in the support of internal drug discovery efforts for lead identification and lead optimization. Specific activities will include generation of algorithms for data and SAR analysis as well as developing QSAR, QSPR and pharmacophore models from internal and external data. Incumbent will help define strategy and cheminformatics direction for components in LION's Informatics-based solution for drug discovery. Incumbent will work in collaboration with scientists in the medicinal chemistry and biology departments, as well as with bioinformaticians and data integration specialists. The successful candidate will have a Ph.D. in chemistry or related discipline and have at least 3 years experience in developing and applying computational chemistry approaches to drug discovery programs and problems. Computer programming experience is a plus.

We have additional career opportunities in Chemistry, Cheminformatics, Toxicology, Biology and Marketing. For consideration, please send your resume to: jobs@US.lionbioscience.com or to Human Resources, 9880 Campus Point Drive, San Diego, CA 92121. Fax: 858-410-6627. Please visit our web site: www.lionbioscience.com

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TWO FACULTY POSITIONS Physiological Genomics: Lactational Physiology Physiological Genomics: Animal Stress Department of Animal Science, University of California, Davis

The Department of Animal Science in the College of Agricultural and Environmental Sciences seeks applicants for two Assistant Professors in Physiological Genomics: one in Lactational Physiology and one in Animal Stress (40% teaching/60% research). We seek outstanding applicants with a Ph.D. or equivalent degree. Post-doctoral experience is preferred. Combined educational experiences should emphasize genetics, functional genomics, proteomics, and/or biotechnology as it relates to lactational or stress physiology. Demonstrated competence in state of the art animal biotechnologies is expected. Interests related to agricultural aspects of lactation and stress are highly desirable. Development of an extramurally funded research program emphasizing functional genomics of either lactational metabolism or animal stress is expected. Teaching responsibilities will include a course in lactation (lactation position) and molecular biotechnology (stress position) with additional contributions to departmental courses. These are nine-month tenure-track appointments with elevenmonth employment to be offered and continued based on academic personnel review; they are available on or about January 1, 2002. Applicants should submit a CV, transcripts, research and teaching statements and background, copies of relevant publications and manuscripts, and the names and contact information of three to five references to: A.M. Oberbauer, Physiological Genomics Search Committee Chair, Department of Animal Science, One Shields Avenue, University of California, Davis, CA 95616, telephone (530) 752-4997, amoberbauer@ucdavis.edu. Open until filled but to ensure consideration, applications should be received by October 15, 2001. A more detailed job description is available at http:// animalscience.ucdavis.edu/Intranet/Recruiting/Genomics/ announcement.htm. E-mail applications will not be considered.

The College of Agricultural and Environmental Sciences and Department of Animal Science at UC Davis is committed to building a diverse faculty, staff and student body reflecting the population and educational needs of California and the nation.



University of California, Irvine

Announces a Department in Statistics

The University of California, Irvine is starting a Department of Statistics. We anticipate appointing a full-time faculty in statistics of 6-8 people over the next seven years, with several more half-time appointments shared with other units at UCI. It will be a department with a strongly interdisciplinary flavor, focused both on theoretical research and applied problems, and it will be associated with an independent statistical consulting center that presently serves the campus and surrounding businesses and industry.

Three faculty positions are open for recruitment in 2001-02: two with tenure, including one for the Chair of the Department; and one tenure-track assistant professorship. In all cases demonstrated excellence in research, teaching, and service are sought and, in the case of the Chair, evidence of leadership ability is required.

A detailed account of plans for the new department is available at www.evc.uci.edu/proposal.pdf. For information about UC1, see www.uci.edu/. For information about the community around UC1, see www.oc.ca.gov/.

Completed applications with a cover letter, sample research publications, and if possible three letters of recommendation and up to five additional names who may be contacted should be sent to the Chair of the search committee: Professor Duncan Luce, c/o Office of the Executive Vice Chancellor, 535 Administration Bldg., University of California, Irvine, Irvine, CA 92697-1000.

Applications received before November 1, 2001, will receive preference, but later applications will be considered.

The University of California is an Equal Opportunity Employer committed to excellence through diversity.

THE J. DAVID GLADSTONE INSTITUTES UNIVERSITY OF CALIFORNIA SAN FRANCISCO

RESEARCH OPPORTUNITIES

Postdoctoral Fellowship in the laboratory of Dr. Bruce Conklin requiring an interest and experience in biology and computers. Projects include DNA array studies, interpretation and development of publicly available computer program for DNA array analysis. Job #C00-37W

Postdoctoral Fellowship in the laboratory of Dr. Fen-Biao Gao to study dendritic morphogenesis in development and neurological disorders, using fruitfly Drosophila as a genetic model system. Candidates should have a background in neurobiology, molecular genetics, or developmental biology. Job #N01-06W

Postdoctoral Fellowship in the laboratory of Dr. Mike McCune to study HIV pathogenesis, with particular emphasis on effects on the hematolymphoid system. Candidates should have a background in hematology or immunology, preferably with experience in flow cytometry, cell culture, and assays of hematopoietic function. Job #V00-09W

Postdoctoral Fellowship in the laboratory of Dr. Douglas Nixon to study HIV pathogenesis, with particular emphasis on cellular immune responses. Candidates should have a background in virology or immunology, preferably with experience in flow cytometry, cell culture, and assays of immunological function. Job # V00-19W.

Postdoctoral Fellowship in the laboratory of Dr. Robert Pitas to study mechanisms by which the apoE isoforms exert differential effects on lipid metabolism and on the development of neurological and cardiovascular disease. Experience in cell culture and lipid analysis a plus but not essential. Job #C01-08W

Postdoctoral Fellowship in the laboratory of Dr. Tony Wyss-Coray to research the molecular basis of neurodegeneration with an emphasis on Alzheimer's disease and cerebrovascular abnormalities. Specifically, we aim to manipulate key signaling pathways in vivo to study the role of injury and inflammation in models of neurodegeneration and neuroprotection. Candidates should have experience with molecular biology and neuroscience. Job # N01-05W

Postdoctoral Fellowship in the laboratory of Dr. Yadong Huang to study the role of apolipoprotein E in lipid metabolism and in neurodegenerative disorders with an emphasis on Alzheimer's disease. Projects feature use of both transgenic and knockout mice. Experience in molecular biology and lipid metabolism or neuroscience is required. Job # C01-07W

We offer an exceptional trianing program for postdoctoral fellows, including rigorous scientific training, personalized attention and mentoring, and a rich research environment to allow our fellows to develop to the fullest of their abilities. In addition, we offer excellent benefits, including three weeks of vacation, employer-paid medical programs, tuition reimbursement, and various retirement programs.

All positions require a Ph.D., M.D., or both. Please send cover letter indicating job number along with CV and three references to:

The J. David Gladstone Institutes John LeViathan - Human Resources P.O. Box 419100 San Francisco, CA 94141 email: postdoc@gladstone.ucsf.edu web: http://gladstone.ucsf.edu Equal Opportunity/

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Is Out There.

At SUGEN, we foster a creative, everygetic, and team-oriented atmosphere to develop small molecule drugs sing renowned drug discovery techniques. Our continued success has created an excellent opportunity for several motivated team players to join us in the following key roles:

Scientist

- Discovery Biology -

The position requires a Ph.D. and experience with the cloning, expression, purification and characterization of recombinant proteins for biochemical, biophysical and structural studies. Familtarity with protein-protein/ligand interactions, protein engineering and/or protein crystallization is essential. (Job Code: AS50077021-KB)

Scientist/Group Leader

ADME/Biopharmaceutical

You will direct the tend optimization and selection process by evaluating and recom-mending the ADME/P (biopharmaceutical requirements for various leads in our oncol-ogy programs. Utilizing your in-depth knowledge of in silico approaches for the predic-tion of biopharmaceutica ADME technologies, you will also assist discovery programs with lead identification and sue resolution. 5-8 years of relevant industry experience and proven supervisory/management skills are desired. (Job Code: LA50031SCI-JR)

Scientist

- Bioanalytical, Pharmacokinetic, Metabolism -You will conduct biotransformation studies bidentify metabolic soft spots and to guide chemistry for the synthesis of compounds with appropriate ADME properties. The posi-tion requires a Ph.D. in medicinal chemistry, pharmacology, analytical chemistry or related field with 0-5 years of post doc experience. A solid understanding of analytical instrumentation (LC, MS, and NMR), structural characterization using MS and NMR data, and in vitro pharmacology is highly desired. (Job Code: DZ50045SCI-JR)

Scientist I

- Drug Discovery -

The position requires a Ph.D., 2-3 years post-doc experience, and excellent biology skills, including the expression of recombinant proteins in heterology nt molecular us systems and the development of cellular assays in mammalian cell lines. Experience ith signal transduction pathways is a plus. (Job Code: RH50209SCI-KB)

> We also have openings for Scientists, Research Associates, and IT professionals in the following departments:

 Clinical & Regulatory Affairs Discovery Precinical & Pharmaceutical Development Preclinical Besearch & Translational Medicine Preject Management • Chemistry

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We will reward you with an attractive compensation & benefits package that includes a 1st class pension plan, a generous profit sharing/penus program, weekly happy hours (TGIF), and a fun, collaborative work environment that encourages creativity and achievement. Please forward resume & cover letter to:



SUGEN, Inc. **HR** Department Attn: (Job Code: ____ 230 East Grand Avenue South San Francisco, CA 94080 FAX: (650) 837-3301 Email: jobs@sugen.com (MS Word docs only, please)

EOE

EXERCISE BIOLOGIST

THE DIVISION OF BIOLOGICAL SCIENCES, UNIVERSITY OF CALIFORNIA, DAVIS, invites applications and nominations for a position in exercise biology. This is a tenure-track faculty position at the level of ASSOCIATE PROFESSOR or PROFESSOR, as appropriate to the candidate's qualifications. The position will be in the Exercise Biology Program with a joint appointment in the Section of Neurobiology, Physiology & Behavior. A Ph.D. (or equivalent) and postdoctoral experience is required. The candidate must have an outstanding record of research achievement and a strong independent research program in exercise biology. Particular attention will be afforded candidates who have an integrative perspective and employ mechanistic approaches to address important issues in exercise biology, such as skeletal muscle physiology/ development, muscle adaptation to exercise or aging. The successful candidate will be expected to teach undergraduate and graduate level courses in exercise biology/exercise science and participate fully in the teaching and advising programs coordinated by the Divisions of Biological Sciences and Graduate Studies. A senior appointee would also be expected to take a leadership role within the Exercise Biology Program.

Applications should include: (1) curriculum vitae (with e-mail address), (2) statement of current and proposed research interests, (3) three relevant reprints, (4) statement of teaching experience/ interests, and (5) names, telephone numbers, and addresses (postal and e-mail) of at least three references. Candidates should also arrange to have their reference letters mailed directly to the Committee Chair. All materials should be sent to: Charles A. Fuller, Chair, Exercise Biology Search Committee, Exercise Biology Program, University of California, One Shields Avenue, Davis, CA 95616-8674. Closing date: open until filled, but all materials must be received by September 28, 2001 to be assured of full consideration.

The University of California, Davis, is an Affirmative Action/ Equal Opportunity Employer with a strong institutional commitment to the development of a climate that supports equality of opportunity and respect for differences.

StructuralGenomiX

Structural GenomiX is harnessing the power of protein structure to alter the way drugs and compounds are discovered. Knowing a protein's structure gives deep insight into its function. And understanding how proteins work-and what happens when they don't-is a key to uncovering the molecular basis of disease.

We have combined the best people, great technology and a stateof-the-art facility to be a leader in genomics. Our scientists and researchers share our vision and commitment and are changing drug discovery. We are seeking the following talent:

Synthetic Chemists **Biochemists (Enzymology) Group Leader - Fermentation**

To learn more about these and other exciting opportunities, please visit our Web site at:

www.stromix.com

SGX offers a competitive salary/benefits package, including cash incentive program, stock options, 401(k) savings plan, tuition reimbursement, flexible spending account, 3 weeks' vacation, lunch & learn sessions and fitness benefits. Please send your CV, citing appropriate job title and salary history. to: Human Resources, Structural GenomiX, 10505 Roselle St., San Diego, CA 92121; Fax: 858-622-8459; E-mail: HR@stromix.com. EOĚ

Humanizing Science[™]

Protein Design Labs, Inc.

(PDL), is a leader in the development of humanized monoclonal antibodies to treat various disease conditions. We currently have antibodies in clinical development for autoimmune and inflammatory conditions, asthma and cancer. Our multidisciplinary approach to drug discovery and clinical product development utilizes a broad range of scientific disciplines and skills. We are seeking talented, motivated individuals to contribute to our vision and join the PDL team at our Fremont, California location. Opportunities exist in the following roles:

Staff/Senior Scientist

- Cancer Models -

You will evaluate potential anti-cancer targets using antibody therapy in xenograft and other murine tumor models; design, implement and direct specific scientific research projects; establish murine tumor models for antibody efficacy evaluation; interpret scientific validity of results. Candidate must possess a Ph.D. in cancer biology, immunology, molecular biology or a related field or DVM with a minimum of 2-5 years of relevant industrial/post-doctoral experience. A strong background in the characterization of one or more animal models of cancer is required. (*Job#832*)

Development Associate/ Senior Development Associate

- Analytical & Formulation Sciences -

You will help develop new protein formulations to support IV, subcutaneous, or other special routes of administration. Candidates must possess a BS in natural sciences with 4-9 years of directly related experience, or an MS in biochemistry, chemistry, or a related discipline with 3-7 years' directly related experience. Requires proficiency with analytical protein chemistry techniques (HPLC, get electrophoresis, and spectroscopy), experience with data collection/presentation and word processing & spreadsheet applications, strong written/verbal communication skills, and the ability to work independently. Experience in other analytical methodology (CD, DSC, FTIR), formulation development, and conducting studies for IND and/or NDA/PLA filing is a plus. (Job#784)

Director

- Business Development -

You will identify business opportunities, new corporate partners, potential markets and new targets for antibody therapy, as well as identify, research, and analyze business opportunities and potential markets in order to recommend new projects. Specifically, you will work with the research staff to identify and evaluate new targets for antibody therapy from the academic or industrial research community. Candidates must possess a Ph.D. in biological sciences or equivalent, and 5-8 years' experience in a biotech or pharmaceutical company, including 3+ years in business development. Excellent written/verbal communication skills and the ability to work independently within broadly defined policies are required. Must be willing to travel. (Job#752)

To learn more about career possibilities with PDL, visit out website at www.pdl.com. We provide a collaborative team environment where we encourage you to use your creativity, seize individual responsibility, and take initiative to go beyond the challenges of your job. We offer competitive salaries/benefits & attractive stock options. Send resumes to: **Protein Design Labs, Inc., HR Department, Attn:(Job# ____), 34801 Campus Drive, Fremont, CA 94555; FAX: (510) 574-1448; Email: careers@pdl.com.** EOE m/lid/v



Ground-breaking Research. Advanced Technology. Dedicated People.

At **Axys Pharmaceuticals**, our scientific staff applies state-ofthe-art techniques to discover and develop breakthrough drugs for major diseases. Our expanding proprietary oncology discovery program has placed us at the forefront of cancer research, and our collaborations with world-class pharmaceutical companies are building a broad and diversified pipeline of treatments for chronic diseases such as asthma, osteoporosis and autoimmune disease. We currently have excellent opportunities for motivated professionals to join us in the following roles:

Scientist/Cell Biologist

The selected candidate will evaluate the mechanism of action of novel compounds that induce apoptosis. The ideal candidate will have a Ph.D. in cell biology or related discipline, 3+ years of post-graduate experience, a solid understanding of apoptosis, and hands-on experience with a wide range of cellular and molecular techniques. (*Job#* 00-067-SCI)

Scientist

Enzymology/HTS

This key role will design/perform experiments to characterize Axys' lead compounds in a variety of enzyme systems. Candidates must possess a Ph.D. in biochemistry or related field and at least 2+ years of postdoctoral experience with a proven publication record. Experience in a pharmaceutical company is ideal. A strong background in enzyme kinetics, assay development, and high throughput screening is desired. Experience in the biology and characterization of kinases and proteases is helpful. (*Job# 01-010-SCI*)

Research Associate

Cell Biology

The successful candidate will develop and utilize cell-based assays to determine the efficacy of novel compounds and analyze mechanism of action. Qualified candidates will have a BS/MS and 2-5 years of relevant experience in an industrial or academic research lab setting. Proficiency with commonly used cell biology techniques and the demonstrated ability to analyze data are required. (*Job# 00-064-SCI*)

We will be attending the ACS National Meeting in Chicago, IL, August 26-28. Come see us at the Career Center and speak with one of our recruiters.

Besides attractive salaries and outstanding benefits, we offer the opportunity to be part of a dynamic environment that fosters professional & personal growth. Please forward your resume/cv to: Axys Pharmaceuticals, HR Department, Attn: (Job#), 180 Kimball Way, South San Francisco, CA 94080; email: human_resources@axyspharm.com. We look forward to hearing from you. EOE



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GERON is a biopharmaceutical company focused on discovering, developing and commercializing therapeutic and diagnostic products for applications in oncology, drug discovery and regenerative medicine. Our continued growth & success has created an excellent opportunity in our Menlo Park, CA location for an energetic, well-organized team-player to join our preclinical team.

DEVELOPMENT SCIENTIST

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You will optimize and scale-up Geron's cell culture processes leading to cell manufacturing for therapeutic use, evaluation and qualification of raw materials; develop process controls and product specifications; and conduct stability and shelf-life studies. You will also help formulate products, develop assays, and manage vendor relationships /contracts. Requires a PhD in chem/ biochemical engineering or allied discipline; 3+ years of related work experience; and demonstrated expertise with human primary cell culture process optimization & scale-up.

We will reward you with an attractive compensation and benefits package and a unique opportunity to learn and grow in a progressive environment. Please forward your resume to:

> Geron Corporation, Attn: Job# SC1501, 230 Constitution Dr., Menlo Park, CA 94025 FAX: (650) 473-8668 or Email: hr@geron.com

For more details on this, as well as our other opportunities, please visit our website:



ASSISTANT EXERCISE BIOLOGIST

THE DIVISION OF BIOLOGICAL SCIENCES, UNIVERSITY OF CALIFORNIA, DAVIS, invites applications and nominations for a faculty position in exercise biology. This is a tenure-track position at the level of ASSISTANT PROFESSOR. The position will be in the Exercise Biology Program with a joint appointment in the Section of Neurobiology, Physiology & Behavior. A Ph.D. (or equivalent) and postdoctoral experience is required. Candidates must have an outstanding record of research achievement and will be expected to develop a strong independent research program in exercise biology. Particular attention will be afforded candidates who have an integrative perspective and employ mechanistic approaches to address important issues in exercise biology, such as skeletal muscle physiology/development, muscle adaptation to exercise or aging. The successful candidate will be expected to teach undergraduate and graduate level courses in exercise biology/exercise science and participate fully in the teaching and advising programs coordinated by the Divisions of Biological Sciences and Graduate Studies.

Applications should include: (1) curriculum vitae (with e-mail address), (2) statement of current and proposed research interests, (3) three relevant reprints, (4) statement of teaching experience/ interests, and (5) names, telephone numbers, and addresses (postal and e-mail) of at least three references. Candidates should also arrange to have their reference letters mailed directly to the Committee Chair. All materials should be sent to: Charles A. Fuller, Chair, Exercise Biology Search Committee, Exercise Biology Program, University of California, One Shields Avenue, Davis, CA 95616-8674. Closing date: open until filled, but all materials must be received by September 28, 2001 to be assured of full consideration.

The University of California, Davis, is an Affirmative Action/ Equal Opportunity Employer with a strong institutional commitment to the development of a climate that supports equality of opportunity and respect for differences.

Best in your field? We're looking for the cream of the crop!



Torrey Mesa Research Institute, (formerly Novartis Agricultural Discovery Institute, Inc.), a research institute of Syngenta Research & Technology, is one of the largest, single, fully-funded research endeavors dedicated to agricultural genomics, consumer health, and postgenomics technology. As an innovative and team-oriented company, we develop and apply cutting-edge biotechnology to match genes with traits for improved agribusiness products, including consumer and animal health products. We are seeking the following talented individual:

Postdoctoral Associate

Postdoctoral Associate position is available immediately to develop new technologies for manipulation of endogenous gene function/cellular processes through a novel combination of chemistry and biology. Candidates should have a Ph.D. in Molecular Biology or Biochemistry and experience in molecular biology techniques, including plant or mammalian tissue culture. Job Code: PDA/TSER-SCI

TMRI offers excellent compensation and a great benefits package, including 401(k) with match and immediate vesting. For confidential consideration, please send cover letter indicating position of interest and resume including salary history and expectations to: **Torrey Mesa Research Institute, Attn: HR/(Job Code), 3115 Meryfield Row, San Diego, CA 92121-1102. Fax: (858) 812-1096.** EOE

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Stanford University

Pehong and Adele Chen Particle Astrophysics and Cosmology Institute **DIRECTOR**

The Stanford Linear Accelerator Center (SLAC) and the Department of Physics are pleased to announce a search for the first Director of the newly established Pehong and Adele Chen Particle Astrophysics and Cosmology Institute of Stanford University. The Director will occupy an endowed, tenured, full professorship chair and will have joint appointments in the Stanford Linear Accelerator Center and the Department of Physics. The Director will report to the Vice-Provost for Research of Stanford University.

The Institute will serve as a focal point for eminent researchers and visitors in experimental, observational, and theoretical particle astrophysics and cosmology. The Institute building will be at the Stanford Linear Accelerator Center and will contain the main offices, meeting rooms and small laboratories. Facilities required for major experimental projects will be available at SLAC and near the Department of Physics.

The Institute will have ten Stanford faculty along with staff, students and visitors. The Institute faculty will have appointments at SLAC, the Department of Physics and/or the Department of Applied Physics.

Candidates should have demonstrated outstanding research accomplishments and leadership in fields such as particle astrophysics, astrophysics, cosmology, astronomy or related areas of physics. The Director will have major responsibility for the development of the Institute's faculty and staff, for setting the goals and style of the Institute, and for bringing additional funding to the Institute. Directorship terms of service are five years and renewable.

Applications containing a CV and a list of references should be sent before November 1, 2001, to the address below. Stanford University is an equal employment opportunity employer. We especially invite applications from women and minority scientists.

Prof. Martin L. Perl and Steven Chu, Co-chairs Chen Institute Director Search Committee – Stanford University Stanford Linear Accelerator Center 2575 Sand Hill Road, Mail Stop 61, Menio Park, CA 94025





SPARKS

At Biogen, we believe that computational biology and chemistry are guintessential ingredients for successful drug discovery in the post-genome era. Our Research Informatics Department is responsible for the development, implementation, and support of sophisticated solutions for data analysis and information management across the whole spectrum of research activities. We are looking for highly motivated candidates to join this rapidly expanding team.

www.biogen.com



DELIVERING ON THE PROMISE OF BIOTECHNOLOGY.

BIOINFORMATICS

We have several opportunities for bioinformatics experts to create, implement, and maintain bioinformatics tools in support of Biogen's transcription profiling program. In close collaboration with experimental scientists, they will be responsible for the identification of needs for new software solutions for gene expression analysis; application of advanced statistical approaches for experimental design, high throughput data analysis and interpretation; evaluation of new technologies, analysis methodologies, and computational tools; acquisition, deployment, and integration of external solutions; development, implementation and maintenance of novel software. Requirements include a PhD in Statistics, Biophysics, Bioinformatics or related discipline, with 3+ years of relevant academic or industrial experience with the emphasis on computational analysis of gene expression data. Familiarity with Affymetrix and/or microarray platforms is expected, and demonstrated programming experience is a prerequisite.

COMPUTATIONAL CHEMISTRY

We are looking for a PhD computational chemist to be involved in the application of programs for structure-based drug design, diversity analysis, combinatorial chemistry and QSAR analysis. The selected individual will provide molecular modeling support for discovery projects by applying state-of-the-art computational techniques for the identification as well as the optimization of novel drug leads. Experience in de-novo ligand design, molecular docking, pharmacophore development, library design and analysis, protein-ligand simulation, QSAR and methodology development is particularly desirable. Requirements include a PhD in Chemistry, Biochemistry, Biophysics, or a related discipline, plus at least 2 years experience in computer-aided drug discovery, preferably in the pharmaceutical industry. Programming skills (preferably in Perl, C++, or Java) and a background in statistics are a plus.

STRUCTURAL INFORMATICS

Our Structural Informatics Group is looking for a PhD scientist to support the biology, protein engineering and genomics teams by utilizing structural information of proteins which are of interest to Biogen. The ideal candidate will have a strong background in protein modeling/structural bioinformatics, and an expertise in knowledge-based homology modeling and protein structure prediction methods. Two to five years of postdoctoral or industrial experience preferred. Proficiency in UNIX and demonstrated scientific programming skills in C/C++, Java or Perl are highly desirable.

CORE INFORMATICS OPERATIONS

Several opportunities exist for computational scientists to work on novel solutions for data management and analysis in key growth areas of Biogen Research, in particular pharmacology and animal modeling, analytical chemistry, proteomics, and assay development. We are particularly interested in applicants who have demonstrated experience in laboratory information management systems, automation, and management of complex biological and chemical information. Responsibilities include the creation and implementation of new solutions; software and database management, maintenance, and documentation; and expert-level user support. PhD or MS in a life science, Chemistry, Pharmacology, Computer Science, or a related discipline. 2+ years of industry experience preferred.

Because of the interdisciplinary, team-oriented nature of these positions, a broad knowledge base and excellent communication skills are a requirement for all openings, as is a proactive, entrepreneurial, and hands-on attitude. To learn more about all of our exciting career opportunities, visit our website at www.biogen.com.

Foster your initiative and creativity at Biogen. We have one of the strongest financial profiles in the industry and our compensation and benefits package, including equity participation, is unmatched. For consideration, please email your resume to ron_cornila@biogen.com. You may also fax your resume to (617) 679-2546 or mail to: Biogen, Inc., Attn: Ron Cornila, 14 Cambridge Center, Cambridge, MA 02142. Biogen is an Equal Opportunity Employer. No phone calls, please.



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

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

The College of Agricultural Sciences is a leading college of agriculture in the nation. It is one of 12 academic colleges on the University Park Campus. Currently there are 265 faculty in the College. Undergraduate student enrollment is approximately 2,500 and graduate student enrollment is approximately 450; about 25 percent of the graduate students are enrolled in intercollege graduate programs. Research expenditures of the College for FY2000 totaled nearly \$68 million. Major education and research thrusts of the College include the life sciences, food systems, natural resources/environment, and children, youth, and families. More information about the College and Penn State can be found at www.cas.psu.edu.

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

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

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

Robert D. Steele, Dean College of Agricultural Sciences The Pennsylvania State University 201 Agricultural Administration Building-Box SCI University Park, Pennsylvania 16802-2600

Applications and nominations will be reviewed beginning October 1, 2001.

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



The University of Kentucky College of Medicine is seeking applications for Chair of Physiology. The department is one of five basic science departments within the University of Kentucky Chandler Medical Center in Lexington, KY and ranks in the top 20 in NIH funding among public universities. Twenty-five faculty members fulfill the mission of the department in education, research, service, and supporting the aims and objectives of the Medical Center. Faculty members teach approximately 600 graduate students and undergraduates in more than six programs. The department has broad expertise in molecular and cellular methods and in all major areas of physiological science, including neurobiology, aging, and cardiovascular, reproductive, respiratory, endocrine, and renal physiology. The College is now seeking a candidate who will build on the foundation of this exceptional department. Candidates must have a PhD or MD and demonstrate a record of leadership and administrative experience.

Please send nominations or an application packet including a letter of interest, a CV and three reference names to Edythe Tevelson Lach, College of Medicine, Office for Research and Leadership Development, L007 Kentucky Clinic, Lexington, KY 40536-0284 or to etlach@email. uky.edu. The committee will begin reviewing applications on September 14, 2001, and will continue accepting them until the position is filled.

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POSTDOCTORAL POSITIONS NIH-FUNDED TRAINING PROGRAM Cellular and Molecular Biology of Aging

Baylor College of Medicine

Disciplines include cell cycle, cellular senescence, telomere biology, gene transcription, bone development, hormonal regulation, neurodegenerative diseases, cardiology, learning and memory, and immunology.

Preceptors:

Stanley H. Appel Ronald L. Davis Stephen J. Elledge Gerard Karsenty Estela E. Medrano Roy G. Smith Hui Zheng

Gretchen J. Darlington Lawrence Donehower J. Wade Harper Victoria Lundblad Innocent N. Mbawuike George E. Taffet

Support for these position is restricted to U.S. citizens or permanent residents. Please submit résumé and contact information for three references to:

Estela E. Medrano, Ph.D. Baylor College of Medicine Huffington Center on Aging One Baylor Plaza, M320 Houston, TX 77030

E-mail: medrano@bcm.tmc.edu.

Baylor College of Medicine is an Equal Opportunity/Affirmative Action Employer.



The best is getting even better! As the world's largest pharmaceutical research enterprise, Pfizer is dedicated to providing the best innovations in medicine while pursuing tomorrow's discoveries in research and development. With an R&D budget of \$5.1 billion, our team has spurred Pfizer's exceptional performance in 30 countries and across 6 continents. If you share our dedication to discovering, developing and delivering medicines to improve the health of both people and animals worldwide, we want yours to be the newest Face of Pfizer. Consider the following opportunities at Pfizer Global Research and Development facilities in Groton, Connecticut, and Ann Arbor, Michigan.



Life is our life's work.

challenge innovation teamwork

The Face of Pfizer

careers that matter

Senior Research Scientist (Groton)

You and your team of 2-3 assistants will be involved in initiating drug discovery programs within Exploratory Medicinal Sciences. Your primary responsibilities will include developing and validating enzymatic, receptor-binding and whole-cell assays; characterizing lead structures in potency, selectivity and functional assays; and collaborating with project team chemists to develop preliminary SARs. You must have a PhD and 3+ years postdoctoral training in Enzymology, Molecular Pharmacology or Cell Biology. Familiarity with enzyme kinetics and/or receptor-binding assays is essential, and demonstrated chemical literacy is preferred. Req. #03Aug0106635

Head of Mass Spectrometry and Biomarker Technologies (Ann Arbor)

Biomarkers Technology impacts drug discovery by integrating mass spectrometry and biofluids NMR technologies to contribute to PGRDAnn Arbor's initiatives in proteomics and biomarkers discovery. As the leader of the Mass Spectrometry and Biomarkers Technology group, your responsibilities will include the scientific leadership for the Biological Mass Spectrometry, Biofluids NMR, and Biometrics programs, and championing the application of these technologies to the drug discovery process. You will also lead a group of scientists with a diverse range of expertise. This position requires a PhD in Chemistry, Biochemistry, or related field and 8 years postgraduate experience in the field of protein mass spectrometry, with an emphasis on pharmaceutical applications. Req. #03Aug0106625

Sr. Associate Scientist/Scientist, Mass Spectrometry (Ann Arbor)

Working with a team-based research group, you will support proteomics and protein characterization projects by applying mass spectrometry (ESI, I.C.MS, MALDI, ion trap, Q-TOF, and TOF systems) to measure molecular mass, verify sequence, and identify post-translational modifications of target proteins. Acting as a member of the Proteomics team, you'll develop and implement high throughput LC-MS/MS methods for the identification of proteins separated by 2D PAGE. This position requires a BS/MS/PhD in Chemistry or a related field, 3-5 years experience in protein mass spectrometry and/or HPLC-MS and a thorough knowledge of instrumentation, mass spectrometry, and HPLC-MS techniques. Experience using specialized mass spectrometry and/or bioinformatics software is preferred, as is familiarity with handling peptides, proteins, and other biomolecules. Reg. #27Jun0105846

Head of X-ray Crystallography (Ann Arbor)

You will lead a group of X-ray crystallographers that supports drug discovery both by determining the structures of novel drug targets, and by delivening iterative inhibitor-bound structures as part of an integrated structure-based design group, Structure-based design at PGRD-Ann Arbor is a multi-disciplinary team-based enterprise, so your extensive experience in the various stages of structure determination — from gene to structure — is a strong consideration. Responsibilities include providing scientific leadership to the Crystallography group; team leadership for individual structural biology projects; and managing the protein X-ray Crystallography laboratory and group. You must have a PhD in Biochemistry, Biophysics, or a related field, 8 years experience in the field of protein X-ray crystallography with an emphasis on protein-ligand interactions, and extensive expertise in modern phasing methods. Req. #12Jul0106165

Head of Expression Technologies (Ann Arbor)

You will lead a group of protein expression experts to implement and execute methodologies for the rapid survey of expression strategies to yield high quality proteins for inhibitor screening and structural biology applications. Methodologies include bacterial and baculovirus expression, as well as bioreactor-based expression in eukaryotic cells. One of your primary responsibilities will be to provide the scientific leadership for the group's efforts to develop high throughput protein expression technologies to allow a rapid progression from genes to screens and structures. You'll need a PhD in Biochemistry, Molecular Biology or related field, 8 years experience in protein expression technologies with an emphasis on structural biology applications, and extensive knowledge of protein expression systems, protein expression optimization and protein purification. Reg. #12Jul0106166

Pfizer offers an exceptional work environment complete with competitive salaries, exceptional benefits and training opportunities designed to develop your professional talents. We encourage all applicants to apply by emailing your resume, indicating the appropriate Req. # in the subject field, to SCI@pfizerresumes.com. If necessary, you may also mail your resume, indicating Req. #, to Pfizer Resume Processing Center, 630 Boston Road M-104, Billerica, MA 01821, Attn: Softshoe Resumes. An equal opportunity employer, Pfizer offers a workplace rich with diversity and potential.

POSITIONS OPEN



FACULTY POSITION PHYSIOLOGY/PHARMACOLOGY

ASSISTANT PROFESSOR (tenure track): The Department of Physiology and Pharmacology in the College of Veterinary Medicine of the University of Georgia invites applications from outstanding Scientists with a Ph.D., M.D., D.V.M., or equivalent degree for a tenure-track position at the Assistant Professor level beginning July 1, 2002, or thereafter. Of particular interest are candidates who will establish an active, independent program of extramurally funded research and participate in veterinary medical and graduate training. Program strengths within the Department include cell and molecular physiology, endocrinology, cardiovascular and renal physiology, molecular pharmacology, reproductive physiology, toxicology, and neuroscience (website: http://www.uga.vet.edu/vph). While we seek candidates who will complement research strengths within the Department and College, the excellence of a candidate is more important than the area of research focus. The University of Georgia has established a strong biomedical research focus with seven members of the National Academy of Sciences on our faculty. Applicants should submit curriculum vitae, a brief statement of research plans, and a list of three references to: Dr. Scott Brown, Search Committee Chair, Department of Physiology and Pharmacology, College of Veterinary Medicine, University of Georgia, Athens, GA 30602. E-mail: sbrown@vet.uga.edu. Applications re-ceived by September 20, 2001, are assured full consideration. The University of Georgia is an Equal Employment Opportunity/Affirmative Action Institution.

BIOLOGICAL CHEMISTRY Wake Forest University

Applications are invited for a tenure-track ASSIST-ANT PROFESSOR faculty position that augments a small, dynamic, Ph.D.-granting chemistry department. The desired candidate will have a Ph.D. in biochemistry or chemistry with research interests involving protein structure and function. The candidate will have a strong commitment to teaching chemistry and biochemistry at the undergraduate and graduate levels and will establish a vigorous, externally supported research program. Collaboration with Biomedical Science Departments at Wake Forest University School of Medicine is possible and encouraged. Deadline for applications is November 1, 2001, and the submitted résumé should include copies of graduate and undergraduate transcripts, three letters of recommendation, a statement of teaching philosophy, and proposals for research. Reply to: Search Committee Chair, Department of Chemistry, Wake Forest University, Winston-Salem, NC 27109. Departmental information is available at website: http://www.wfu.edu/chem. Wake Forest University is an Equal Opportunity/Affirmative Action Employer.

The Viral Diseases Unit at the University of Pittsburgh is recruiting a Research Virologist, Viral Immunologist, or Biochemical Pharmacologist with interests in virology at the rank of ASSISTANT or AS-SOCIATE PROFESSOR. Candidates should have a M.D., Ph.D., or equivalent and have sufficient experience to establish an independent, funded research program in basic virology, immunology, or biochemical pharmacology. Competitive salary and start-up packages are available including newly renovated laboratory and office space. Send curriculum vitae, summary of research interests, and names of three references to: John W. Mellors, M.D., Chief, Infectious Diseases Division, Director, HIV/AIDS Program, University of Pittsburgh, Scaife Hall, Suite 818, 3550 Terrace Street, Pittsburgh, PA 15261. Telephone: 412-624-8512; FAX: 412-383-7982; e-mail: fern@pitt.edu. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

EUKARYOTIC CELL AND/OR MOLECULAR BIOLOGIST

The Department of Biology at Wake Forest University is seeking a tenure-track ASSISTANT PRO-FÉSSOR in the area of eukaryotic cell and/or molecular biology to begin in August 2002. Wake Forest is a Doctoral II University that confers undergraduate and graduate degrees in the Colleges of Arts and Sciences, Law, Business, Management, Medicine, and Divinity. The University espouses the teacher/scholar ideal, in which teaching and research are intimately related. The successful candidate will be expected to teach both undergraduate and graduate courses and to develop an independent research program that involves M.S., Ph.D., and undergraduate students. The ability to teach genetics or development will be considered an asset. For an in-depth description of the Department, please consult our website: http:// www.wfu.edu/Academic-departments/Biology/ new/index/html. Please submit curriculum vitae, a statement of current and future research plans, up to three representative publications and, because we are committed to excellence in teaching as well as research, a statement of interests and philosophy in teaching. In addition, please have letters of reference from three references sent directly to: Dr. James Curran, Department of Biology, P.O. Box 7325, Wake Forest University, Winston-Salem, NC Wake Forest University, 27109. FAX: 336-758-6008; e-mail: curran@ wfu.edu. We will begin reviewing applications September 30, 2001, and will continue until the position is filled. Wake Forest University is an Equal Opportunity Employer and is committed to increasing the diversity of its faculty.

Albright College in Reading, Pennsylvania, seeks applications for a full-time, tenure-track position as **ASSISTANT PROFESSOR** of biology beginning fall semester 2002. Responsibilities for this position include (1) teaching at least one course in ecology and one course in evolution, (2) full participation in at least one semester of the introductory biology course for majors including lectures and laboratories, (3) participation in the development and implementation of our environmental science program, and (4) development of an active research program emphasizing undergraduate student involvement. Successful candidates must clearly demonstrate a commitment to excellence in undergraduate biology instruction at all levels and an appreciation for the special mission of a small liberal arts institution. Review of applications will begin September 28, 2001. Applicants should submit a letter of application, curriculum vitae, a statement of teaching and research philosophy, copies of undergraduate and graduate transcripts, and three letters of recommendation to: Biology Search Committee, c/o Dr. Thomas Brogan, Academic Dean, Albright College, Reading, PA 19612-5234, Questions may be directed to: Dr. Karen A. Campbell; e-mail: karenc@alb.edu. Visit the Albright College website: http://www.alb.edu. Albright College is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR Evolutionary Biology University of California, Irvine

The Department of Ecology and Evolutionary Biology is soliciting applications for a tenure-track position at the Assistant Professor level. Candidates are welcome in all areas of evolutionary biology including those using theoretical, molecular, or experimental approaches. Applicants must have the ability to teach evolutionary biology at the undergraduate and graduate level.

Further information about the Department can be obtained at website: http://ccoevo.bio.uci.edu/. By October 15, 2001, please submit curriculum vitae; a description of research interests and teaching interests; relevant publications; and arrange to have three letters of recommendation sent to: Evolution Search Committee, Department of Ecology and Evolutionary Biology, 321 Steinhaus Hall, University of California, Irvine, CA 92697-2525.

The University of California, Irvine, is an Equal Opportunity Employer committed to excellence through diversity.



A faculty position as ASSISTANT PROFESSOR is available in protein crystallography in the Department of Biochemistry. Qualified candidates could be considered at the ASSOCIATE PROFESSOR rank. This recruitment is part of an ongoing structural biology initiative at Wake Forest University. Applicants should have a Ph.D. and postdoctoral experience. We seek an outstanding candidate who will establish a nationally competitive, independent research program in structural biology and will participate in graduate teaching. Excellent new facilities and generous start-up funds are being provided. Many opportunities for research collaborations are also available within the institution. Candidates are encouraged to seek additional information regarding faculty research interests, major instrumentation, and the structural biology initiative at Wake Forest from our website: www.wfubmc.edu/biochem/xray. Review of applications will begin as they are received and will continue until the position is filled. Applicants should submit curriculum vitae and a statement of current and future research plans and should have three letters of reference sent to: Dr. Leslie Poole, Protein Crystallography Search Committee, Department of Biochemistry, Wake Forest University School of Medicine, Winston–Salem, NC 27157. Wake Forest University is an Equal Opportunity/Affirmative Action Employer.

DIRECTOR OF MICROSCOPY/ADJUNCT ASSISTANT PROFESSOR OF BIOLOGY

The Department of Biology at Wake Forest University seeks a Director for its microscopy facility. The facility contains research-grade light microscopes equipped with fluorescence, DIC and phase optics, and an SEM. Duties include training and advising faculty, graduate, and undergraduate students on the use of microscopes, digital cameras, and imageprocessing software. Duties also include maintenance and upgrading of equipment and ordering of supplies for facility. The Director will act as a liaison between the Biology Department and the Wake Forest Medical School confocal and TEM facility. The Director will be encouraged to collaborate with faculty on research projects and teach an undergraduate- /graduate-level course on microscopy. Laboratory space will also be available for maintaining an independent research program. Expertise in light microscopy (particularly fluorescence microscopy) and digital imaging is required. Submit curriculum vitae and the names and addresses of three references by September 15, 2001, to: Dr. Herman Eure, Department of Biology, P.O. Box 7325, Wake Forest University, Winston-Salem, NC 27109. We will accept applications until this position is filled. Wake Forest is an Equal Opportunity Employer.

University of New Mexico, School of Medicine, Women's Health Research Center, is seeking a tenure-track faculty member at the ASSOCIATE PRO-FESSOR level. The successful candidate should be actively involved in women's health research with current NIH grant funding and a solid history of grant obtainment. In fiscal year 2000, research programs at UNM SOM received more than \$77 million through federal research grants and contracts. For complete information, access our website: http://www. unm.edu/~oeounm. For best consideration, applications must be received within 30 days of advertisement. Send a signed letter of interest and curriculum vitac to: Theresa Everling, Search Coordinator, Department of Obstetrics/Gynecology, University of New Mexico, 2211 Lomas Boulevard N.E., ACC4, Albuquerque, NM 87131-5286. FAX: 505-272-3918; e-mail: teverling@salud.unm.edu. UNM is an Equal Employment Opportunity/Affirmative Action Employer/Educator.



When curiosity is developed to its full potential, great discoveries are made. At Pharmacia Corporation, we invest more than \$2 billion a year in R&D with major activities focused in the areas of arthritis/inflammation, cancer, infectious diseases, cardiovascular and metabolic diseases, and disorders of the central nervous system. Exciting opportunities now exist for innovative, forward-thinking professionals to join our highly collaborative team.

BIOINFORMATICS SCIENTISTS St. Louis, Missouri

We seek highly motivated and experienced computational biologists to work closely with molecular biologists and multi-disciplinary drug discovery project teams, providing bioinformatic analysis to address therapeutic challenges in inflammation, cardiovascular disease and oncology. You will integrate and analyze large, complex data sets, such as sequences, array-based gene expression studies, human genetic studies and model organism studies, and develop independent research projects within Pharmacia's therapeutic focus. Successful candidates must have a PhD, 2 years postdoctoral experience or equivalent, expertise in sequence and protein structure similarity searching, data mining and presentation, and biological interpretation of sequence information and scientific programming in a UNIX operating environment. Expertise in standard bioinformatic tools (e.g., BLAST, GCG tools) and any of the following areas is required: transcriptional profiling analysis, signal transduction, biochemical and regulatory networks, HMMs and profile methods, human genetics (SNPs), protein folds recognition, and homology modeling. Strong communication and writing skills are essential. Reg. #00-1361

ASSOCIATE DIRECTOR, BIOINFORMATICS Kalamazoo, Michigan

We are seeking an experienced bioinformatics scientist with demonstrated leadership skills to support our Discovery Research organization. You will coordinate bioinformatics research as applied to CNS and Infectious Diseases genomics programs, including prioritization of projects and resource allocation, participation in global bioinformatics infrastructure projects, and carrying out independent and collaborative research to support our therapeutic area genomics programs. While managing the bioinformatics research group, you'll also interact with other scientists and management within our global genomics, preclinical development, and clinical development organizations, requiring a strong vision for the role of computational biology in pharmaceutical research. Successful candidates must have a PhD or equivalent degree in a biological science, 5+ years experience in drug discovery-related bioinformatics, and background implementing computational biology systems, including the development of new methods in areas such as gene sequence analysis, expression profiling, protein functional assignment, pathway mapping, and pharmacogenetics. Expertise in one or more of the following areas is required: human and mouse bioinformatics or genomics, bacterial or fungal genomics and bioinformatics, microarray data analysis, and experience with high throughput data mining for genome analysis. Strong interpersonal and communication skills, and excellent management and leadership skills are essential. Req. #01-3669

We offer generous compensation and benefits, performance rewards, and entrepreneurial opportunities for personal and career development. To apply, please visit our website. You may search by keyword or Req. #. When responding, please indicate in your cover the position for which you are applying, referencing "Science." Or you may fax your resume to the Pharmacia Resume Processing Center, noting the information above along with the appropriate Req. #, at **520-287-0963**. As an EEO/AA employer, Pharmacia Corporation values a diverse combination of ideas, perspectives, and cultures.



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POSITIONS OPEN

ASSOCIATE/FULL RESEARCHER

Full-time, tenure-track, Associate/Full Researcher of Integrative Medicine, Position Number 83651, at the University of Hawaii John A. Burns School of Medicine, to begin approximately October 2001 pending position clearance and availability of funds. This position will serve as key faculty member/researcher in exploring the research possibilities presented by Hawaii's unique mixture of cultures and healing practices. Will develop NIH-funded multidisciplinary research programs in ethnopharmaceuticals using molecular biology and functional genomics to study the biological effects of medicinal plants of Asia and the Pacific; goal is to build an integrative medicine research and training program at the medical school. Other duties as assigned. A key focus of the position will be to assist with the development of a research agenda for a new division in integrative medicine. For full position description, qualifications, and salary, please go to website: http://www.hawaii. edu/new/kulama/010817/vacancies.html; Telephone: 808-956-8546. Closing date: September 18, 2001. To apply, send curriculum vitae, cover letter, and names of five references to: T. Samuel Shomaker, M.D., University of Hawaii John A. Burns School of Medicine Dean's Office, 1960 East-West Road, Honolulu, HI 96822. Inquiries: T. Samuel Shomaker; Telephone: 808-956-8601; e-mail: shomaker@hawaii.edu. An Equal Employment Opportunity/Affirmative Action Institution.

MICROBIOLOGY FACULTY POSITION University of Utah

The Department of Biology at the University of Utah invites applications for a tenure-track faculty position at the level of ASSISTANT PROFESSOR in the general area of microbiology. We seek an individual who can contribute to both the research and teaching activities of a department with unusually broad interests ranging from biochemistry to community ecology. Research areas of particular interest for this appointment include metabolism/energetics and population biology/evolution, but we will consider candidates working in any area of microbial biochemistry, physiology, genetics, or ecology. In addition to developing a strong research program, the successful candidate will be expected to contribute to teaching at the undergraduate and graduate levels including courses in microbiology. Please submit curriculum vitae, a description of research and teaching interests, several representative publications, and three letters of reference to: John Roth, Chair, Microbiology Search Committee, Department of Biology, University of Utah, 257 South 1400 East, Salt Lake City, UT 84112-0840. Review of applications will begin October 15, 2001. The University of Utali is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities and provides reasonable accommodation to the known disabilities of applicants and employees.

CHAIRPERSON DEPARTMENT OF PHYSIOLOGY The University of South Alabama College of Medicine

The College of Medicine invites applications and nominations for the position of Lenoir Locke Professor and Chair of the Department of Physiology. Significant facilities and resources are available to support the continued development of a high-quality research and teaching department. Prospective candidates must have a suitable Ph.D., M.D., or equivalent degree; a record of outstanding research and leadership ability; and a commitment to medical and graduate education.

Interested candidates should submit recent curriculum vitae, a brief description of their research interest, and the names and addresses of at least three references to: Samuel J. Strada, Ph.D., Chairman, Search Committee for Physiology Chair, University of South Alabama, College of Medicine, CSAB 170, Mobile, AL 36688-0002. An Affirmative Action/Equal Opportunity Educational Institution.

POSITIONS OPEN



ECOLOGISTS

Department of Biology and Microbiology, California State University, Los Angeles, seeks two tenuretrack ASSISTANT PROFESSORS starting fall 2002. Ph.D.s required. Successful applicants are expected to establish a productive, externally funded research program and participate in the Center for Environmental Analysis (website: http://cea-crest. calstatela.edu/), an NSF-funded center conducting multidisciplinary environmental research and instruc tion. Core facilities provide greenhouse culture, marine and freshwater culture, animal care, DNA sequencing, image processing, GIS analysis, and simulation modeling. Individual research space is provided. Relocation expenses and competitive start-up funds are available. Teaching opportunities include introductory classes, courses in the areas of specialty, and graduate seminars. Applications should include curriculum vitae, statements of research interests and teaching philosophy, and three letters of recommendation. Review of applications begins 1 October 2001 and continues until the positions are filled.

MOLECULAR ECOLOGIST

The successful candidate will apply molecular techniques to nonmicrobial taxa to address evolutionary, ecological, or environmental questions. Submit application or questions to: Dr. Carlos Robles, Director of CEA-CREST, Molecular Ecologist Search Committee, California State University, Los Angeles, CA 90032-8201. FAX: 323-343-5795; email: crobles@calstatela.edu.

MICROBIAL ECOLOGIST

The successful candidate will be a broadly trained Scientist applying microbial methods to ecological or environmental questions at any organizational level (molecules, organisms, populations, or ecosystems). Submit application or questions to: Dr. John Gamon, Microbial Ecologist Search Committee, Department of Biology and Microbiology, California State University, Los Angeles, CA 90032-8201. FAX: 323-343-6451; e-mail: jgamon@ calstatela.edu.

An Equal Opportunity/Title IX Employer. Reasonable accommodations may be requested.

MOLECULAR GENETICIST/ ENDOCRINOLOGIST/BIOLOGIST ASSISTANT OR ASSOCIATE PROFESSOR Department of Poultry Science The University of Georgia

Applications are invited for a 12-month tenuretrack faculty position. The individual selected will be expected to develop a research program in molecular biology supported in part by external funds, grants, etc. Teaching responsibilities will include participation in an undergraduate applied biotechnology methods course. Other teaching responsibilities may include courses in genetics or endocrinology. Addi tional duties may include undergraduate advisement, student recruitment, and service to the industry. A Ph.D. in molecular biology or a related field is required. Evidence of research ability and oral and written communication skills are essential. Postdoctoral research experience is desirable. Integration of molecular biology concepts into multidisciplinary research programs in areas of poultry redproduction, nutrition, and management is essential. Applicants should submit an application letter, a résumé with a list of publications, and official transcripts. Three letters of reference should be forwarded to: Dr. M. P. Lacy, Department of Poultry Science, Poultry Science Building, The University of Georgia, Athens, GA 30602-2772. Telephone: 706-542-1337; FAX: 706-542-1827; e-mail: mlacy@arches.uga.edu. To assure full consideration, applications must be received by August 31, 2001.

The University of Georgia is an Equal Opportunity/Affirmative Action Institution.

POSITIONS OPEN

ASSISTANT OR ASSOCIATE PROFESSORS OF MICROBIOLOGY The University of Iowa

The University of Iowa Department of Microbiology invites applications for a faculty position at the rank of Assistant or Associate Professor. The position is a 12-month, tenure-track appointment with highly competitive start-up funds, modern laboratory facilities, and salaries and benefits. Outstanding candidates interested in microbial pathogenesis are encouraged to apply. Areas of interest include but are not restricted to genomics and bioinformatics, gene expression, biofilms, bacterial cell signaling, interactions with host cells, and bacterial infections in cystic fibrosis. The appointee will be expected to maintain a vigorous research program and participate in the teaching activities of the Department. The Department of Microbiology consists of 30 faculty members with strengths in bacterial genetics and physiology, animal virology, pathogenic bacteriology and virology, and immunology. Applicants must have a Ph.D. or an equivalent degree. Candidates should send curriculum vitae, a statement of research interests, and should arrange to have at least three letters of recommendation sent to the address below before January 31, 2002.

E. Peter Greenberg Search Committee Chair (F2231) Department of Microbiology Bowen Science Building The University of Iowa Iowa City, IA 52242

Anticipated start date is September 1, 2002. The University of Iowa is an Equal Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply.

ASSOCIATE PROFESSOR/PROFESSOR PHYSIOLOGY

Outstanding Scientists employing modern cellular and molecular approaches to investigate physiological processes are invited to apply for a tenuretrack position at the Associate Professor/Professor level. Candidates must possess a Ph.D., M.D., or equivalent degree. A strong record of continuous research productivity and funding including current support from national sources is required. Individuals with outstanding credentials in all areas of physiological research will be considered. The appointee will be expected to continue a nationally recognized research program supported by extramural funding and participate in medical and graduate teaching. Excellent opportunities exist within the Department and institution for collaboration. Salary, start-up resources, and laboratory space are competitive and commensurate with experience. Applicants should send curriculum vitae; a brief description of current and future research interests; three representative reprints; and the names, addresses, telephone numbers, and e-mail addresses of three references to: Dr. Sinva Benyajati, Department of Physiology, College of Medicine, The University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, OK 73190. FAX: 405-271-3181; email: siribhinya-benyajati@ouhsc.edu; website: http://w3.ouhsc.edu/physiology. Electronic ap-plications are welcome. Review of applications will begin September 15, 2001. Anticipated starting date: July 2002. OUHSC is an Equal Opportunity Institution.

FUNCTIONAL GENOMIST: We seek an AS-SISTANT/ASSOCIATE PROFESSOR with expertise in gene identification, animal cloning, and transgenics to establish a strong research program and to teach, train, and advise students. Requires Ph.D. or equivalent degree. See website: http://personnel. usu.edu/jobsagriculture.htm (2-126). Send letter of application, résumé, transcripts, and names/telephone numbers of three references to: Dr. Thomas Bunch, Animal, Dairy, and Veterinary Sciences Department, Utah State University, 4815 Old Main Hill, Logan, UT 84322-4815. Review begins September 15, 2001; open until filled. Affinnative Action/Equal Opportunity Employer.

SINFORMAX

InforMax, Inc. is the leading global provider of bioinformatics software and services to academia and industry. We are an exciting, fast-growing company that blends biology, computer science, and business expertise to create state of the art software and services for researchers all over the world. Our headquarters are in Bethesda, MD and we have regional offices in South San Francisco, CA, and Golden, CO.

Four APPLICATION SCIENTISTS/SENIOR APPLICATION SCIENTISTS Responsibili-

ties: As part of the application science team, participate in defining, documenting, developing and aiding in the implementation of worldclass bioinformatic software systems at the company. Responsibilities include complete scientific understanding of in-house software, working with teams of scientists and researchers to define further enhancements to the software, and writing use cases to document these further goals. Interacting with teams of developers, computational biologists, quality control engineers, scientific writers and interface designers will be an essential part of the job, providing the scientific input to the overall bioinformatics product. Location: Corporate Headquarters in Bethesda, Maryland.

APPLICATION SCIENTIST PROTEIN-PROTEIN INTERACTION, SIGNAL TRANSDUCTION (POSITION # PD109)

Qualifications: This position requires a Ph.D. in molecular biology, cell biology or related discipline with at least 2 years of post doctorate experience. The ideal candidate must have hands on experience in signal transduction research specifically directed toward the understanding of protein interactions and their importance in disease. In addition, very strong computer skills in relation to scientific bioinformatic analysis of protein interaction and signaling pathway data are required. Must have strong communication skills with a proven ability to act as a team member. Ideal description would be "super-user" of bioinformatics software, providing the "how to use bioinformatics software to evaluate protein-protein interactions to elucidate signaling mechanisms leading to disease." Programming skills are not required but would be a bonus. Industry experience desired, particularly directed toward identifying targets important in disease specific signaling pathways.

APPLICATION SCIENTIST PROTEIN EXPRESSION, ASSAY DEVELOPMENT, ANTIBODIES (POSITION # PD110)

Qualifications: This position requires a Ph.D. in molecular biology, cell biology or related discipline with at least 2 years of post doctorate experience. The ideal candidate must have hands on experience in protein expression and assay development. In addition, very strong computer skills in relation to scientific bioinformatic analysis are required. Must have strong communication skills with a proven ability to act as a team member. Experience in antibody development and epitope tagging is desired. Ideal description would be "super-user" of bioinformatics software, providing the "how to use bioinformatics software to best express proteins and develop assays for small-molecule discovery." Additional knowledge of "how to use software to help in the production of protein detection tools such as antibodies and epitope tagged molecules" would be a bonus. Programming skills are not required but are desired. Industry experience, particularly directed toward protein expression and assay development, and a commercial background are also desired.

APPLICATION SCIENTIST SEQUENCE ANALYSIS - GENOMIC AND cDNA (POSITION # PD111)

Qualifications: This position requires a Ph.D. in molecular biology, cell biology or related discipline with at least 2 years of post doctorate experience. The ideal candidate must have hands on experience in DNA and sequence analysis - specifically with application to the backbone of the human genome and its application to protein products and splice variants. In addition, very strong computer skills in relation to scientific bioinformatic analysis are required. Must have strong communication skills with a proven ability to act as a team member. Ideal description would be "super-user" of bioinformatics software, providing the "how to use bioinformatics software to perform DNA sequence and protein product scientific analysis." Programming skills are not required but would be a bonus. Industry experience desired, specifically directed toward the analysis and documentation of the human genome to define lead targets for commercialization.

APPLICATION SCIENTIST MICROARRAY AND EXPRESSION (POSITION # PD112)

Qualifications: This position requires a Ph.D. in molecular biology, cell biology or related discipline with at least 2 years of post doctorate experience. The ideal candidate must have hands on experience in DNA microarray analysis and large scale expression research. In addition, very strong computer skills in relation to scientific bioinformatic analysis are required. Must have strong communication skills with a proven ability to act as a team member. Ideal description would be "super-user" of bioinformatics software, providing the "how to use bioinformatics software to perform microarray scientific analysis." Programming skills are not required but would be a bonus. Good statistical background in hands-on evaluation of data quality with application of appropriate tools to large datasets is desired. Industry experience specifically directed toward the development of lead candidates for commercialization, is also desired.

HUMAN FACTORS: INTERFACE DESIGN SPECIALIST (POSITION # PD113) Responsibilities: Collaborate with scientists, bioinformaticists, and programmers to enhance the user interface of a world-class bioinformatics software platform. Define design standards and templates to enable software to support maximum productivity and high-throughput research. Scope includes entire customer experience: software, documentation, online help, training materials, tutorials, web resources, etc. As needed: (1) create low-fidelity UI mockup and/or high fidelity UI screen shots; (2) create UI prototypes; (3) write or contribute to User Interface Specification. Review any functional system design changes that impact the user interface. Manage usability of features across products to ensure consistency of features within the product and with other products. Candidate must be able to present design ideas to the project team and document the design in user interface specifications. Work closely with customers, marketing, business and the development teams to play a lead role in user interface design. Interview customers, conduct evaluations, run usability tests, analyze usability data and present findings to development team. Qualifications: Masters (*BS) degree in Human Factors, Cognitive Psychology, Technical Communication, Human-Computer Interaction, or related field; or equivalent experience. Undergraduate degree in biology, molecular biology, cellular biology or related field a bonus. Strong experience in usability design, Human-Computer Interaction, Man-Machine Interfaces, etc. Very strong verbal and written communication skills, proven teamwork skills. Excellent understanding of human factors and UI workflows. Five (*three) or more years practical experience with usability or human factors engineering in commercial or government sectors. Knowledge of molecular biological, genomic or related research field a very large bonus. *Some knowledge of biological science required. Experience with scientific visualization and presentation preferred. Location: Bethesda, Maryland.

BIOINFORMATICS SCIENTIST (POSITION # PS103) Responsibilities: Collaborate with scientists at InforMax customer sites in order to further their research using InforMax bioinformatics software. Activities include data mining, protocol development and automation, software creation and customization and general bioinformatics support. Qualifications: Ph.D. in Life Science with 2+ years of post-doctoral work and hands on bioinformatics software and analysis experience required. Particularly interested in applicants with experience in two or more of the following: Sequence analysis, Microarray analysis, Genome analysis, Genetic analysis, Structural analysis, Metabolic Pathway analysis. Collegial temperament is also required. Computer programming experience is a must, with experience in Oracle or other relational databases a distinct advantage. Experience with BioPerl or BioPython a definite advantage. Location: Corporate Headquarters in Bethesda, Maryland or Golden, Colorado.

Please send your resume and cover letter indicating position of interest. Email: employment@informaxinc.com; Fax: (240) 747-4026; Mail: InforMax, Inc. Human Resources, 7600 Wisconsin Ave, Suite 1100, Bethesda MD 20814.

InforMax is proud to ensure that equal talent will always get equal opportunity.

POSITIONS OPEN

ECOLOGIST. The Department of Horticulture at Oregon State University seeks exceptional candidates to conduct innovative investigation of the use of plants and plant communities to remediate environmental problems. This 12-month, tenure-track AS SISTANT PROFESSOR position will be available January 1, 2002. The successful candidate will develop a strong program of basic research supported by extramural funding in an area of ecology underlying important environmental issues, collaborate with professional and industry colleagues to identify and address relevant important environmental issues, and participate in undergraduate and graduate education. Qualifications include a Ph.D. in ecology, horticulture, forestry, or other relevant field and excellent training and accomplishments at the postdoctoral level. Applicants must submit a narrative describing their vision for this position, curriculum vitae, copies of transcripts, and three reference letters sent directly from the writer. For additional information, call or e-mail: Dr. William Proebsting; Telephone: 541-737-5454; e-mail: proebstw@bcc.orst.edu. The Department website is: http://www.orst.edu/ dept/hort. Send all application materials to: Viki Freeman, Department of Horticulture, Oregon State University, 4017 ALS, Corvallis, OR 97331-7304. For full consideration, all application materials must be received by November 1, 2001. Oregon State University is an Affirmative Action/Equal Opportunity Employer and has a policy of being responsive to the needs of dual-career couples.

FACULTY POSITIONS IN PHARMACOLOGY AND TOXICOLOGY Wright State University School of Medicine

The Department of Pharmacology and Toxicology invites applications for a Toxicologist at the ASSO-CIATE or FULL PROFESSOR level. All applicants must have a Ph.D. or M.D. with an established research program supported by extramural funds. Full Professor candidates should have administrative experience. Departmental research programs are in cardiovascular, neuroscience, and neurotoxicology with strong ties to triservice toxicology at Wright Patterson Air Force Base. Facilities are available for gene microarray, proteomics, confocal imaging, and physiological genomics. Preference will be given to candidates who use molecular approaches to address toxicity mechanisms. Competitive salary and start-up packages are available. Review of applications will begin September 24, 2001, and continue until the position is filled. Send curriculum vitae, a description of research interests, and names and addresses of three references to: Mariana Morris, Ph.D., Department of Pharmacology/Toxicology, Wright State Uni-versity School of Medicine, 3640 Colonel Glenn Highway, Dayton, OH 45435-0001. Affirmative Action/Equal Opportunity Employer.

The Department of Chemistry and Biochemistry, University of Notre Dame, is seeking to fill at least four tenure-track positions beginning August 2002. Appointments at the ASSISTANT PROFESSOR level are preferred, but outstanding candidates at other levels will be considered. We seek outstanding candidates in all areas of inorganic, organic, and physical and biochemistry, but we have special interest in candidates with expertise in experimental and theoretical physical chemistry or chemical physics and synthetic inorganic and materials chemistry. Applicants should have a strong commitment to leading a vigorous, independent research program and to teaching both undergraduate and Doctoral students. Candidates should submit detailed curriculum vitae, a list of publications, a summary of proposed research plans, and a statement of teaching interests. Candidates must also arrange for at least three letters of recommendation to be sent directly to the Search Committee. Applications will be reviewed on a continuing basis beginning October 1, 2001, until the positions are filled. All materials should be mailed to: Department of Chemistry and Biochemistry Search Committee, University of Notre Dame, 251 Nieuwland Science Hall, Notre Dame, IN 46556-5670. The University of Notre Dame is an Equal Opportunity Employer and actively solicits applications from women and minorities.

POSITIONS OPEN

MICROBIOLOGISTS University of Saskatchewan Department of Microbiology and Immunology College of Medicine

Applications are invited for two positions at the level of **ASSISTANT PROFESSOR**. One position is for a tenure-track Assistant Professor with an option for clinical microbiology service. The second is a without-term position Assistant Professorship with the potential for permanent status for a certified Clinical Microbiologist. For each position, higher rank will also be considered for outstanding candidates who have established extramurally funded research programs.

The Department is seeking individuals who could contribute to research and teaching in one or more of the areas of basic microbiological science (genomics, microbial physiology, immunology, virology [animal or bacterial], microbial genetics, microbial pathogenesis, drug discovery) or in clinical microbiology. The positions are open to individuals with Ph.D., M.D., or M.D./Ph.D. degrees. Qualified candidates will have a demonstrated record of scholarly, laboratory-based achievements and the scientific background to conduct independent, extramurally funded research.

Participation will be expected in teaching responsibilities of the Department for students in colleges of Health Sciences (medical, nursing, pharmacy) and Arts and Science. The successful candidates will engage in scholarly work related to their research interests. Access to start-up funds is available.

The faculty of the Department includes basic science Microbiologists, Immunologists, and Clinical Microbiologists. Qualification for clinical microbiology service includes appropriate training to allow staff appointment within the Royal University Hospital (serving a testing radius of 350,000 people) and Board certification as a Clinical Microbiologist in Canada or the United States (or eligibility to be certified within four years). The service responsibilities are within the Division of Clinical Microbiology (sections: bacteriology, virology, mycobacteriology, and infection control) in the Department of Laboratory Medicine, Saskatoon District Health, and represent a maximum of quarter time.

Applications accompanied by curriculum vitae, statement of research, future plans, and names of three references should be submitted to: Dr. Sidney Hayes, Head, Department of Microbiology and Immunology, College of Medicine, University of Saskatchewan, 107 Wiggins Road, Saskatoon, Saskatchewan S7N 5E5 Canada. Website: http:// www.usask.ca/medicine/microbio/. Candidates must declare the position of interest and applications will be reviewed monthly as received. The positions will be held open until filled.

The University of Saskatchewan is committed to Employment Equity. Members of designated groups (women, aboriginal people, people with disabilities, and visible minorities) are encouraged to self-identify on their applications. These positions have been cleared for advertising at the two-tier level. Applications are invited from qualified individuals regardless of their immigration status in Canada.

PLANT PHYSIOLOGICAL ECOLOGIST (terrestrial), Utah State University. Readvertised. Tenure-track ASSISTANT PROFESSOR, Rangeland Resources Department (College of Natural Resources), Ecology Center. Available 1 January 2002. Physiological Ecologist interested in ecosystem-scale processes in intermountain West. Basic research on ecological consequences of global change (defined broadlv), e.g., climate change, ecosystem-level effects of invasive species, land use practices, etc. Nine months; 50% research and 50% teaching. Requires earned Ph.D. or equivalent in ecology or related discipline at time of appointment and record of published plant physiological ecology research. See website: http://personnel.usu.edu/W2-144-2000.htm or contact: Gene Schupp; e-mail: schupp@cnr.usu.edu for full announcement and application procedure. Review begins 10 September 2001. Affirmative Action/Equal Opportunity Employer. Applications from minorities and women are especially encouraged.

POSITIONS OPEN

The Division of Immunogenetics in the Department of Pathology at Columbia University invites applications for a research-track ASSISTANT PRO-**FESSOR** position in the field of cellular/molecular immunology. Responsibilities include supervision of the flow cytometry laboratory, development of protocols, and research in the same area of immune regulation. Requirements are a Ph.D. with at least two vears of postdoctoral experience in cellular and molecular immunology; expertise in T cell cultures and functional assays with excellent molecular and cellular biology skills is highly desirable. Send curriculum vitae and the names of three references to: Dr. Nicole Suciu-Foca, Pathology/Immunogenetics Division, Columbia University, 630 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION Genetics, Cell/Molecular/Developmental Biology, and Biochemistry University of Utah

The Department of Biology at the University of Utah seeks applicants for a tenure-track faculty position at the ASSISTANT PROFESSOR level in the areas of genetics, cell/molecular/developmental biology, and biochemistry. We seek an individual who can contribute to both the research and teaching activities of a department with unusually broad interests spanning structural biology to ecology (see website: http://www.biology.utah.edu). The new faculty member will be expected to establish a vigorous, independent research program and to contribute to teaching in his or her area of expertise at both the undergraduate and graduate level. Please submit curriculum vitae, representative publications, descriptions of research and teaching interests, and three letters of reference to: Michael Bastiani, Chair, Genetics, Cell/Molecular/Developemental Biology, and Biochemistry Search, Department of Biology, University of Utah, 257 South 1400 East, Salt Lake City, UT 84112-0840. Review of applications will begin October 15, 2001. The University of Utah is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities and provides reasonable accommodation to the known disabilities of applicants and employees.

ASSISTANT PROFESSOR University of California Santa Barbara

University of California, Santa Barbara, Department of Geography, invites applications for a tenuretrack position at the Assistant Professor level in terrestrial biophysical processes. A Ph.D. is required by July 1, 2002. The successful applicant shall have research and teaching interests in the interaction between biological and physical-geographical processes at local to regional spatial scales and in quantitative spatial modeling. Expertise in remote sensing and numerical modeling is highly desirable. Relevant areas include atmosphere-biosphere interactions, regional vegetation dynamics, and biogeochemical cycles. The Department has strengths in three systematic areas: (1) modeling, measurement, and computation; (2) human-environment relations; and (3) Earth system science. This position is primarily associated with Earth system science and systematic area (1), but interests in one or both of the other systematic areas are also expected. The Department has a strong commitment to multidisciplinary research and teaching and provides opportunities for interactions with other departments and research units on the campus. The application deadline is October 1, 2001, and the starting date is July 1, 2001. Qualified applicants should mail complete curriculum vitae, a statement of research and teaching interests, and the names of at least three references to: Oliver Chadwick, Search Committee Chair, Department of Geography, University of California, Santa Barbara, CA 93106-4060. FAX: 805-893-3146; e-mail: oac@geog.ucsb.edu. To learn more about the Department, visit our website: http://www.geog.ucsb.edu. University of California is an Equal Opportunity/Affirmative Action Employer.

Opportunities within Gastroenterology

Join a world of research without boundaries.

Passionate about fighting disease, we're a world-leading pharmaceutical company striving to help people live longer, happier and healthier lives. However, our £multi-billion investment in R&D is just part of the picture. Recently we've established CEDDs - Centres for Excellence in Drug Discovery. These specialist units focus on specific diseases, taking novel molecules through to clinical trials.

Now we're making a phenomenal investment in Gastrointestinal (GI) Research. The goal is not only to develop the next generation of drugs but also to take dramatic steps forward in our understanding of GI physiology and pharmacology. This includes detailed studies on the enteric nervous system, and the brain-gut axis in disease pathophysiology.

A significant part of this inventive research work is taking place at the GSK Unit for Experimental Medicine (EM) at Addenbrooke's Hospital. The first of its kind, working alongside Cambridge University and liaising with some of the world's most renowned and respected figures, this Unit focuses on non-invasive investigational means for elucidating the action of chemicals on cells, tissues and organs in man. As part of our huge investment plan, we're now looking for exceptional individuals to generate ground breaking ideas in an area which promises unprecedented scope for advancement.

As the **Therapeutic Area Project Leader**, you'll pioneer new initiatives with a focus on optimising the development and support of GI EM studies. Advocating GI within the company, you'll drive the team and its cross-functional interactions. Driving the international standing of Clinical Development and appropriate worldclass collaborations with external EM and platform technology groups, you'll also ensure the continuing publication and presentation of scientific results. To succeed you'll need a PhD with upwards of five years' experience and a proven record of significant achievements in biomedical research and expertise in GI or a relevant area.

With an understanding of clinical pharmacology and an insight into working to GLP and GCP standards, you'll be both a powerful leader and an inspirational colleague.

There are further opportunities for less experienced individuals with similar skills to make a fundamental difference to the future of GI. For confidential consideration, please email your CV, quoting the reference **AG/EMX/026/SI**, to gskjobs@adep.co.uk or you can send your CV quoting the reference on both the letter and envelope, to: The Recruitment Manager, GlaxoSmithKline, c/o PO Box 192, Brentford, Middlesex TW8 9XB.

For a full listing of current opportunities, please visit our website at www.gsk.com All data is processed in accordance with the provisions of the Data Protection Act.

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Gerard P. Zambetti: Characterization of regulators and mediators of the p53 tumor suppressor pathway. MCB 18:3735 (2000); Genes & Dev. 14:2358 (2000).

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

Biochemistry Departmental Fellowships Department of Biochemistry St. Jude Children's Research Hospital 332 N. Lauderdale • Memphis, TN 38105

> www.stjude.org/departments/d-biochem.htm An Equal Opportunity/Affirmative Action Employer

MEDICAL COLLEGE OF WISCONSIN

Tenure-Track Faculty Positions in Cell/Molecular Biology

The Medical College of Wisconsin Department of Cell Biology, Neurobiology and Anatomy. A tenure-track faculty position at the Assistant and/ or Associate Professor level is available for cell biologists using cellular, molecular, developmental and/or genetic approaches. Competitive salary laboratory space, and start-up funds are available Candidates at the Associate Professor level would be expected to have an established research program with significant extramural funding. The Department's current strengths are in developmental biology and cellular neurobiology. The successful candidate must show promise of establishing a distinguished research career using modern technical approaches and an ability to focus on fundamental questions central to the field of cell biology. Ph.D. or M.D., Ph.D. (or equivalent) plus additional postdoctoral experience essential

Interested individuals should send resume and the names of three references to: Dr. Joseph C. Besharse, Chairman, Department of Cell Biology, Neurobiology and Anatomy, Medical College of Wisconsin, 8701 Watertown Plank Road, Milwaukee, WI, 53226-0509.

For more information visit our website at: http://www.mcw.edu/cellbio/

Equal Opportunity/Affirmative Action Employer

FACULTY POSITION MATERIALS SCIENCE AND ENGINEERING

The Department of Materials Science and Engineering at Cornell University is seeking applications for a faculty opening at any level which may be filled by the end of 2001. Candidates are expected to have or to develop an internationally recognized independent research program in materials science focusing at the interfaces between biological systems and inorganic materials, including possible interests in nanotechnology, photonics, information processing and new energy systems.

Interdisciplinary research efforts are strongly encouraged. Candidates are also expected to participate effectively in the teaching of materials science and biomaterials at both the undergraduate and graduate levels. Considerable institutional resources for the support of the successful applicant's research program are available and a competitive start-up package can be expected. The successful candidate can expect to benefit from association with one or more of Cornell's interdisciplinary research centers, national facilities, and national resources which include the Cornell College of Veterinary Medicine, the Cornell Center for Materials Research, the Cornell Nanofabrication Facility, the Cornell Theory Center, the Cornell High Energy Synchrotron Source, the Biotechnology Center, the Nanobiotechnology Center and the NIH funded resources for Macromolecular X-ray Diffraction and for Biophysical Imaging. Additional opportunities for joint research in the biological area include Cornell's Weill Medical College, Syracuse Upstate Medical University, University of Rochester Medical Center, and local industries in ceramics include Corning and General Electric.

Applications, which should include a resume, a statement of teaching and research interests, copies of publications or preprints, and names of several references, should be submitted by October 31, 2001 to **Professor Christopher Ober, Director, Department of Materials Science and Engineering, Cornell University, 214 Bard Hall, Ithaca, New York 14853.**

Cornell University's College of Engineering is an equal opportunity/affirmative action employer and welcomes nominations of, and applications from, women and underrepresented minorities.



Head, Division of Biostatistics University of Minnesota

Due to the sudden death of Professor Richard Tweedie, applications and nominations are invited for the position as Head of the Division of Biostatistics at the University

of Minnesota School of Public Health. The successful candidate is expected to be a nationally recognized professional in her/his field of expertise, with leadership potential to further develop the teaching, research, and statistical practice activities of the division. The Division of Biostatistics is widely recognized for research in clinical trials, analysis of spatial models and longitudinal data, hierarchical Bayesian and MCMC methods, survival analysis, and generalized linear models. The division currently has 15 faculty, 20 research associates and fellows, 56 students in MPH, MS, and Ph.D programs and 40 additional staff members. The Division also houses the Coordinating Centers for Biometric Research (acts as a coordinating statistical center for multi-center clinical trials and clinical research groups) and the James R. Boen Biostatistics Consulting Laboratory (provides statistical advice to the University community). Plans for a new clinical trials research center and expansion of bioinformatics are underway. Faculty in the division collaborate with the University Comprehensive Cancer Center, the School of Statistics, the General Clinical Research Center, and other schools in the Academic Health Center. Additional information about the Division of Biostatistics is available on the website http://www.biostat.umn.edu.

Candidates must have a doctoral degree in biostatistics, statistics, or a related field, and demonstrated potential for effective leadership in an academic setting where education and collaborative and methodological research are valued. The successful candidate should have a commitment to academic excellence, a demonstrated record of accomplishment in research, a sustained research program, and a commitment to graduate level teaching and directing doctoral student research.

Candidates may apply by submitting a letter outlining current interests and relevant experience, curriculum vitae and the names of three references. Review of applications and nominations will begin October 15, 2001, and continue until position is filled.

Send applications or nominations, to: William Toscano, Search Committee Chair, School of Public Health, MMC 807, 420 Delaware Street SE, University of Minnesota, Minneapolis, MN 55455.

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Faculty Positions in Biomedical Engineering

The University of Texas at Austin is seeking highly qualified tenure track faculty at both junior and senior levels to be appointed in the new Department of Biomedical Engineering. In addition to exceptional institutional commitment by the University of Texas, resources for growth of the Department of Biomedical Engineering are also available through a Whitaker Foundation Development Award. The vision of the new BME Department is to educate students and conduct research in biomedical engineering from the molecular to physiological scales for applications in device design, biotechnology and computation. A total of 12 new faculty positions will be added over a five year period, and up to five positions are targeted for the current academic year. Outstanding faculty will be recruited in the areas of cell and molecular imaging, cellular and bio-molecular engineering, and computational biomedical engineering and bioinformatics. Areas of expertise desired include: microdevices and instrumentation, bio-molecular and biomedical optics, molecular engineering of novel diagnostic molecules and imaging probes/contrast agents, novel microscopies, nanoprobes and nanostructures, genetic and developmental guided tissue engineering, computational biology, and database development and analysis. Qualified candidates working in complementary areas are also encouraged to apply. Required qualifications include a doctorate in engineering or a related field. Applicants must have an outstanding record of research accomplishments, a strong interest in undergraduate and graduate teaching in biomedical engineering and a commitment to professional service. The successful candidates are expected to teach undergraduate and graduate courses, develop a research program, collaborate with other faculty, and be involved in service to the university and the profession. In addition to establishing an aggressive program of research, the successful candidate will be expected to develop innovative research and teaching collaborations with the UT System Medical Schools as well as among centers of research excellence at UT-Austin, including the Institute for Cellular and Molecular Biology, the Center for Nanoand Molecular Science and Technology, the Texas Materials Institute, the Texas Institute for Computational and Applied Mathematics, and the Microelectronics Research Center.

Interested persons should submit a detailed curriculum vitae including academic and professional experience, a list of peer reviewed publications and other technical papers, a summary of research and teaching goals as related to our departmental focus (see http://www.bme.utexas.edu), and the names, addresses and telephone numbers of three or more references to: Biomedical Engineering Faculty Search Committee, The University of Texas, Department of Biomedical Engineering, ENS 610, Austin, TX, 78712-1084.

> The University of Texas at Austin is an Equal Opportunity/ Affirmative Action Employer.

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Principal Analyst/Scientist Core Technician - As Group Leader for the U.S. part of the DDC-IT group, you will provide the required IT solutions for DDC U.S. as part of the global DDC-IT organization, and build bridges between DDC staff, scientists and IT. The group leader will be expected to ensure full coordination and collaboration within the global DDC-IT group, as well as of the local DDC-IT operation. Responsibilities will include the design of system architecture, the elaboration of functional and conceptual requirements, system analysis, data and process modeling, design and development of databases, and database and multi-tiered client/server application. Additionally, you will plan, coordinate, organize and execute the implementation and integration of new systems or system components at the global level, manage IT projects and ensure the close collaboration with staff and scientists in the Drug Discovery Center. Qualifications include a B.S. degree in Information Technology/Computer Science (M.S. preferred) with 3-5 years' experience in management of HTS data. Good computer science, software engineering, and development skills and experience in the following areas will be required: Oracle and Microsoft development tools; object-oriented design concepts and programming languages; strong abstraction and system design skills, familiarity with modern system architectures and varied programming techniques, and with Activity Base. Previous work experience in a scientific area or a background in a non-IT scientific discipline is an asset. Occasional overseas travel will also be required. Requisition #10246AD.

Sr. Clinical Research Physician - May serve as International or Regional Clinical Leader and/or Protocol Physician on Respiratory projects. Will be responsible to Line Unit Management (and/or Project Leadership) for the management and conduct of clinical trials, for independently developing clinical development plans (including budget and resource planning), and for leading a clinical team in the execution of a clinical development program. Additionally, you will advise and serve as Protocol Physician on clinical trial protocols, analyze clinical data and write clinical trial reports, lead, write and/or edit Investigator Brochure, IND Annual Reports, FDA/EMA submissions, Expert Reports, etc. Incumbent will also monitor safety, eligibility, enrollment and data consistency, prepare/implement project-specific training programs, participate in multidisciplinary task forces in support of management objectives, and serve as representative of project to external expert advisors, scientific community and regulatory bodies; serve as clinical project representative to other in-house Line Functions, e.g., Research, Marketing, for project and area specific initiatives. Qualifications include an M.D. degree (or equivalent with expertise in respiratory disease), demonstrated ability to create, implement and manage Clinical Development Plans, including budget and resources, and experience in key regulatory filings, i.e.: IND, NDA, Expert Reports, Labeling. Must possess working knowledge of GCP and local regulatory requirements for trial execution and reporting, as well as knowledge and experience of clinical trial design, analysis, and reporting in line with regulatory requirements. Ability to recognize safety and efficiency data trends occurring across geographies, trials, and indications, medical scientific writing skills, and familiarity with all aspects of the drug development process will also be needed. Requisition #10658AD.

Systems Analyst/Scientist - Incumbent will be responsible for providing computer software design support in data management for High Throughput Screening. This will include the design, realization and implementation of IT solutions according to given specifications, elaboration of functions/objects, customize standard solutions, elaboration of functions/objects, customize standard solutions, consult with research scientists on the specification of hardware and software systems and support lindows 98/NT/2000 platform and a variety of application software. Qualifications include a B.S. degree in Information Technology or equivalent relevant practical experience. The candidate must have 1-2 years' of experience with one or more MS-Windows based development environments, such as Visual Basic, Visual C++, and possess skills in one or more development languages (E.G., Java, HTML, and PL/SQL). Working experience with relational database management systems (ORACLE) supported by excellent understanding of logical database design, along with laboratory instrument interfacing and laboratory data management software experience will also be required. Experience with Activity Base is highly desirable. Requisition #10247AD.

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Please email your resume as a 'Microsoft Word' attachment to **ericquinn@prodigy.net** Include in your email message the following information: 1. In the subject area and in the main copy of your email, reference the requisition # (4 digit req #) for sorting purposes. 2. In a brief note or cover letter, indicate where core competencies align with requisition. As an alternate method of submission, you may fax your resume and cover letter to: 888-764-2029. If you would like to know more about openings available at Novartis, please visit their website at: www.joinnovartis.com. Novartis is an equal opportunity employer M/F/D/V. Principals Only.





Director, Stem and Progenitor Cell Research Department of Neurosciences Lerner Research Institute

The Department of Neurosciences seeks an outstanding candidate to direct a program in Stem and Progenitor Cell Research. While the search is focused at the Full Professor level, qualified Associate Professor candidates will be considered. Applicants must have a Ph.D. and /or M.D. and an active, independent research program. Areas of research can include cellular and molecular biology of stem and progenitor cells, neurodevelopment, pathogenesis of human disease, or CNS therapeutics. Excellent departmental facilities, generous start-up funds, and additional faculty recruitments are committed to this program.

The Department of Neurosciences and the Lerner Research Institute have strong programs in developmental neurobiology and CNS disease pathogenesis. Programs are integrated with those in Neurology, Neurosurgery, and Neuroradiology.

Candidates should submit a curriculum vitae, a list of publications, a brief statement of research interests, and three letters of reference to:

Bruce D. Trapp, Ph.D. Chairman, Department of Neurosciences NC30 The Cleveland Clinic Foundation 9500 Euclid Ave Cleveland, OH 44195

Affirmative Action/Equal Opportunity Employer



Tenure-Track, Assistant Professor in CryoEM Department of Biological Science and Structural Biology Program of the Institute of Molecular Biophysics

The Department of Biological Science and the Structural Biology Program of the Institute of Molecular Biophysics (IMB) of Florida State University are inviting applications for a faculty position in the area of cryoEM of biologically relevant macromolecules and macromolecular assemblies. The appointment will be at the Assistant Professor level in the Department of Biological Science. The successful candidate will join a very active cadre of cell and molecular biologists in the Department and will be a member of the Structural Biology Program administered through the Institute of Molecular Biophysics. The successful candidate will be expected to develop a highly visible and externally funded research program and contribute to the undergraduate and graduate teaching mission of the Department.

Structural Biology is broadly represented at the University with groups in the areas of cryoEM, X-ray crystallography, NMR, EPR/EMR, and mass spectroscopy. Major recruiting efforts in the area of computational structural biology are underway through the new Center of Excellence in Biomolecular Computer Modeling and Simulation. State-of-the-art microscopy capabilities are available in the Department's Biological Science Imaging Resource Facility including Philips CM300-FEG and CM120 cryoEM systems, Z/I Imaging Photoscan2000 scanner and Teitz Video 2K x 2K CCD camera. Other core facilities are available in the Department and IMB. Additional information about faculty, programs and facilities can be found at the following websites: Biological Science (http://www.bio.fsu.edu) and IMB (http://www.sb.fsu.edu).

Evaluation of applications will begin September 24. Interviews will take place in mid fall. Applications should consist of a CV, statement of research/ teaching interests and two representative reprints. Please arrange to have three individuals provide reference letters. All materials and reference letters should be sent to the following address: CryoEM Search Committee, c/o Tonya Kilpatrick, Center Coordinator, Institute of Molecular Biophysics, Florida State University, Tallahassee, FL 32306-4380.

Florida State University is an Equal Opportunity/Affirmative Action Employer, committed to diversity in hiring, and a Public Records Agency



Duke University Executive Director The Center for Global Change

The Center for Global Change, a university-wide initiative under the auspices of the Provost's Office, will provide broad-based research and graduate training in the basic sciences behind environmental change and the interface between science and socioeconomic change. Center activities will include: sponsorship of semester-long working groups which will develop new science initiatives; workshops, and interdisciplinary graduate-level courses.

The Executive Director will be the chief operating officer for the Center for Global Change and will:

- Lead the Center in cooperation with the faculty director, including management of the budget and other financial matters.
- Prepare grant proposals and assist development staff with fund-raising.
- Mentor and advise undergraduate, graduate and professional students.
- Create distance communities (via videoconferencing) through partnerships with alumni, industry, nonprofit organizations, and other academic programs at Duke and around the country and the world.
- Work with industry, government offices, and nonprofit organizations in the Triangle to create internships and experimental, experiential pedagogies.
- Coordinate efforts with other universities, institutions, and corporations, including participation at national and international conferences.
- Develop a Center web site for students and faculty.
- · Coordinate and publicize events for the Center.
- · Serve as a resource for faculty and graduate students.
- Supervise and coordinate the work of an Administrative Assistant, Staff Assistant, and Computer Technician.

Minimum Education and Training: Ph.D. or a Master's degree in a relevant discipline.

Minimum Experience and Type: At least two years experience in academic, non-profit, or corporate setting. Must demonstrate a commitment to science and capability to raise external funds. Understanding of how academic science, federal agencies and non-governmental organizations operate. Contact: Please send a cover letter and cv to Dr. Jim Clark, Duke Univer-

sity, Box 90338, Durham, NC 27708.



Animal Developmental Biologist Tenure-Track Position

The Department of Biology at the University of Minnesota Duluth (UMD) invites applications for a tenure-track, nine-month Assistant Professor position in animal developmental biology starting January 2002.

Expectations include: establishing a vigorous externally funded research program; teaching an animal development course with laboratory, a core or advanced specialty course, and a team-taught introductory biology course; undergraduate and graduate student advisement; and service. The opportunity exists for collaboration with researchers at the UMD School of Medicine, EPA Mid-Continent Research Laboratory, and UMD Natural Resources Research Institute. Construction of a new state-of-the-art research/teaching laboratory facility is anticipated to begin 2002.

Essential qualifications: Ph.D. or equivalent degree in the biological sciences; post-doctoral training and research experience in molecular/cellular approaches used to address fundamental questions concerned with the development of animal systems; evidence of potential for achievement in teaching and research; strong oral and written communication skills; and at least one peer reviewed publication.

Review of complete applications will begin on September 17, 2001 and will continue until the position is filled. Send letter of application, curriculum vitae, brief statements of teaching and research experience and interests, up to three refereed publications and arrange to have three letters of reference sent to:

Dr. Conrad E. Firling, Chair Developmental Biologist Search Committee Department of Biology University of Minnesota, Duluth 10 University Drive Duluth, Minnesota 55812-2496 Email: cfirling@d.umn.edu Tel: 218-726-7270 Fax: 218-726-8142

Visit UMD at www.d.umn.edu

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PROGRAM OFFICER, CASUALTY CARE AND MANAGEMENT (Physiologist, Pharmacologist, Microbiologist,

General Biological Scientist, or Medical Officer) The Office of Naval Research is seeking a qualified individual to manage sponsored basic/applied research, and advanced development programs and projects in the broad area of combat casualty care and management. Subareas include: molecular, cellular and physiological aspects of hemorrhagic shock; metabolic downregulation, and pain; neuroimmunology of trauma; development of hemostatic materials and devices: enhanced resuscitation fluids and resuscitative drugs; oxygen carrying blood replacements; and improved portable diagnostic and therapeutic instruments for casualty care on the battlefield. This is a Federal Civil Service position at the 13/14/15 level (\$63,211 - \$114,224), depending on individual gualifications.

For information on qualifications and how to apply, see Announcement #DE-ONR-01-0695-NR (for non-Federal applicants) or #ONR-01-0045 (for current Federal employees) at either of two web sites http://www.onr.navy.mil/hr or http://www.usajobs.opm.gov. Applications must be in the HRSC Office by close of business 5 Oct 2001 or postmarked as of that date. For technical information contact Dr. Jeannine Majde-Cottrell at (703) 696-4055, E-mail: majdej@onr.navy.mil, for program information visit:

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Research Assistant - Molecular Neurobiologist

- BS or MS in a relevant area of Biology
- 3-5 years of relevant laboratory experience
- Strong skills in molecular biology
- · Expertise in molecular cloning and gene analysis and familiarity with a broad range of Genomics technologies
- Background in molecular and phenotypic characterization in transgenic and gene-targeting projects a plus

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One Shared Vision



Department of Cell and Structural Biology University of Illinois at Urbana Champaign

Qualification: Minimum requirement: MS or BS degree in Biochemistry, Molecular Genetics or a related field and at least one year experience in DNA cloning technologies, RNA isolations, protein biochemistry and/or functional genomics.

Description: Multiple full/part-time positions (part-time position may increase at a later date) in interdisciplinary functional genomics project. The project is carried out under the direction of Dr. Schuler (CSB), Dr. Sligar (Biochemistry), Dr. Band (Biotechnology Center), Dr. Liu (Biotechnology Center) and Dr. Bohnert (Plant Biology) and includes the PCR amplification of *Arabidopsis* P450 DNA fragments for microarray analysis, screening and analysis of cDNA libraries, baculovirus and yeast expression of proteins, and the generation of transgenic *Arabidopsis* lines expressing reporter genes. Successful applicants will be familiar with molecular genetics techniques, protein biochemistry techniques, cell culture methodologies and lab management. These positions offer the opportunity to independently conduct research projects within this large multi-investigator research program.

Salary: Varies depending on qualifications.

Starting Date: As soon as possible after closing date.

Send Applications to:

Ms. Cathy Paceley (MS) Department of Cell and Structural Biology B107 Chemical and Life Sciences Laboratory University of Illinois 601 S. Goodwin Avenue Urbana, IL 61801 Phone: (217) 333-5175

Closing Date: For full consideration, applications (resume and 3 letters of reference) should be submitted by August 31, 2001. Interviews may be conducted before the closing date, but all applications received by that date will receive full consideration and the final selection will not be made until after that date.

University of Illinois at Urbana-Champaign is an Affirmative Action, Equal Opportunity Employer.

The University of Texas Health Science Center at San Antonio Department of Molecular Medicine

Post-doctoral positions are available in the Department of Molecular Medicine to study mechanisms of DNA replication, repair and recombination in yeast and mammalian cells.

Relevant articles: Current Bio. 10:919, 2000; J. Biol. Chem. 275:26196, 2000; EMBO J. 17:3786, 1998. These positions offer a highly competitive salary and generous fringe benefits in an interactive department. Prior training in contemporary molecular biology techniques and protein biochemistry is desirable.

Prospective candidates should forward their CV and the names of three professional referees to:

Dr. Alan Tomkinson Associate Professor Telephone: 210-567-7327 Fax: 210-567-7324 Email: Tomkinson@uthscsa.edu www.molecularmedicine.uthscsa.edu Institute of Biotechnology and Department of Molecular Medicine The University of Texas Health Science Center at San Antonio 15355 Lambda Drive San Antonio, Texas 78245-3207 The University of Texas Health Science Conter at San Antonio is an Faual

Center at San Antonio is an Equal Employment Opportunity/Affirmative Action Employer



Tenure-Track Clinical Investigator Position in Endocrinology, NIH

The National Center for Complementary and Alternative Medicine (NCCAM) seeks exceptional candidates for a tenure-track clinical investigator position in Endocrinology and Metabolism in its new Intramural Research Program on the National Institutes of Health campus in Bethesda, Maryland. Applicants must possess an M.D. or D.O. degree, be licensed to practice medicine within the United States, and have substantial research and clinical training in the area of endocrinology.

The successful candidate will be expected to establish an independent, patient-oriented research program to assess the potential efficacy, safety, and mechanisms of action of selected, complementary and alternative (CAM) modalities that are relevant to the areas of aging, stress, depression and osteopenia. Prior research experience in related areas and a promising publication record involving clinical trials and translational research are highly desirable. Laboratory and clinical support and access to the incomparable facilities of the NIH Clinical Center are committed to the successful applicant. Salary and benefits will be commensurate with experience. Applications from women, minorities and individuals with additional training in some CAM discipline are encouraged.

Candidates are invited to submit a curriculum vitae, and the names and addresses of three references, to: Dr. Derek LeRoith, Chair, Endocrine Search Committee, Intramural Research Program, NCCAM, NIH, 6707 Democracy Bivd, Suite 200, Bethesda, Maryland 20892.

Applications must be postmarked by September 11, 2001. NIH is an Equal Opportunity Employer

BARBARA ANN

CANCER INSTITUTE **Faculty Positions**

Transgenic/Knockout Mouse Biologist

Michael A. Tainsky, Ph.D.

Program Director, Molecular Biology and Genetics

Barbara Ann Karmanos Cancer Institute 317 Prentis, 110 East Warren

Detroit, MI 48201

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Affirmative Action Employer.

Center's Program in Molecular Biology and Genetics.

versity School of Medicine.

Staff Clinician Position in Endocrinology, NIH

The National Center for Complementary and Alternative Medicine (NCCAM) seeks outstanding candidates for a staff clinician position in Endocrinology and Metabolism in its new Intramural Research Program on the National Institutes of Health campus in Bethesda, Maryland. Applicants must possess an M.D. or D.O. degree, be licensed to practice medicine within the United States, and have substantial clinical and research training in the area of endocrinology.

The successful candidate will be expected to contribute importantly to a patient-oriented research program designed to assess the potential efficacy, safety, and mechanisms of action of selected, complementary and alternative (CAM) modalities. A specific research interest and experience in the areas of neuroendocrinology, aging and stress, and prior experience and publications in phase I, II and/or III clinical trials, are highly desirable. The extensive clinical research facilities of the NIH Clinical Center will be made available to the successful applicant. Salary and benefits will be commensurate with experience. Applications from women and minorities are encouraged.

Candidates are invited to submit a curriculum vitae, and the names and addresses of three references, to: Marc R. Blackman, M.D., Clinical Director, Intramural Research Program, NCCAM, 6707 Democracy Blvd, Suite 200, Bethesda, Maryland 20892.

Applications must be postmarked by September 11, 2001.

NIH is an Equal Opportunity Employer



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

POSITIONS OPEN

ASSISTANT PROFESSOR POSITIONS Organic and Bioanalytical Chemistry

The Department of Chemistry at West Virginia University invites applications for two tenure-track Assistant Professor positions, one in organic chemistry and one in bioanalytical chemistry, beginning August 16, 2002. The Department seeks applicants for the organic position with a research interest in any area of organic chemistry. For the bioanalytical chem istry position, the Department seeks applicants whose research interests and training include bioanalytical and biological chemistry. Applicants must have a Ph.D. degree and postdoctoral experience is preferred. Excellence in teaching at the undergraduate and graduate levels and the development of a vigorous and externally funded research program are expected. Applicants should submit curriculum vitae, a descrip tion of research plans, a brief description of teaching interests (courses), and arrange for three letters of recommendation to be sent to: Organic Faculty Search Committee or the Bioanalytical Faculty Search Committee, Department of Chemistry, P.O. Box 6045, West Virginia University, Mor gantown, WV 26506-6045. Review of completed applications will begin on October 15, 2001. West Virginia University is an Equal Opportunity/Affirmative Action Employer. Women and protected-class individuals are encouraged to apply.

ENVIRONMENTAL BIOLOGY FACULTY POSITION University of Utah

The Department of Biology at the University of Utah seeks candidates for a tenure-track faculty position at the ASSISTANT PROFESSOR level. We are looking for an individual with broad biological interests who will establish a strong basic research program relevant to environmental issues. Areas of interest include but are not limited to ecosystem ecology, global change ecology, and invasive species ecology. We seek individuals likely to interact broadly in our department and to bridge with other departments conducting environmental research on campus. Applicants should submit curriculum vitae, statements of research interests and teaching interests, and copies of four recent publications. They should also arrange to have three letters of recommendation sent to: James Ehleringer, Chair, Environmental Search Committee, Department of Biology, University of Utah, 257 South 1400 East, Salt Lake City, UT 84112-0840. The review of applications will begin October 15, 2001, with interviews anticipated in November or December 2001. The University of Utah is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities and provides reasonable accommodation to the known disabilities of applicants and employees

ASSISTANT/ASSOCIATE PROFESSORS: The School of Veterinary Medicine at Tufts University invites applications for two faculty positions in the Department of Biomedical Sciences. Primary responsibilities include teaching and research. The incumbents will be joining a well-established, multidisciplinary research program concerned with many and diverse aspects of enteric infections of the normal and the immunodeficient host and expected to participate in team-taught courses on immunology/microbiolo gy to professional and graduate students. Candidates must have a D.V.M. (or equivalent) and/or Ph.D. degree with a strong background in pathophysiology, immunopathology, and/or pathogenesis of infections (preferably of the gastrointestinal tract). Candidates for the Associate Professor position must have a record of extramural research funding. Review of applications will begin immediately and the search will continue until the positions are filled. Interested applicants should submit a letter of application with a statement of career goals, curriculum vitae, and the names of three or more references to: Dr. Sawkat Anwer, Professor and Chair, Department of Biomedical Sciences, Tufts University School of Veterinary Medicine, 200 Westboro Road, North Grafton, MA 01536. Tufts University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

SENIOR FACULTY POSITION Medical Pharmacology and Toxicology

A tenure-track faculty position at the FULL PRO-FESSOR level is available in the Department of Medical Pharmacology and Toxicology, College of Medicine, Texas A&M University System Health Science Center. Applicant should have a strong, independent research program and experience in medical and graduate education. The position will be available in the spring of 2002. Program strengths within the Department include neuroscience, alcoholism, aging, toxicology, molecular biology, signal transduction, and ocular pharmacology (website: http://medicine. tamu.edu/pharm). An Endowed Professorship may be associated with the position depending on the research area of expertise and qualifications. Applications should include curriculum vitae, selected reprints, statement of research interests, and three leters of reference. Please send your application to: Dr. William H. Griffith, Chair, Search Committee, Department of Medical Pharmacology and Toxicology, College of Medicine, Texas A&M University System Health Science Center, College Station, TX 77843-1114. Review of applications will begin November 1, 2001, and will continue until the position is filled. The Texas A&M University System is an Equal Opportunity Employer.

GENETICS: Ithaca College seeks applicants for tenure-track **ASSISTANT PROFESSOR** position in genetics starting August 2002. Candidate expected to develop active research program with undergraduates, teach genetics, and contribute to introductory biology and nonscience-major courses. Research emphasis on eukaryotic system, yeast excluded; teaching xperience desirable. More information at website: http://www.ithaca.edu/biology. Send curriculum vitae statements of teaching experience/philosophy, research interests, and three letters of recommendation to: M. Servetnick, Genetics Search Committee, Biology Department, Ithaca College, Ithaca, NY 14850-7278. Screening of applications will begin October 15, 2001; the position will remain open until filled. Ithaca College is an Equal Opportunity/Affirmative Action Employer. Members of underrepresented groups (including people of color, persons with disabilities, Vietnam veterans, and women) are encouraged to apply.

RESEARCH ASSISTANT PROFESSOR to (1) study the role of chromatin structure and gene expression in DNA repair in mammalian cells, cell extracts, and yeast (e.g., Prog. in Nucleic Acids Res. and Mol. Biol. 62:227, 1999; J. Biol. Chem. 274:12201, 1999; J. Biol. Chem. 275:23729, 2000; Kosmoski et al., Proc. Natl. Acad. Sci. USA, in press), and (2) help train students and Postdoctorals in laboratory methods. Training in biochemistry, biophysics, molecular biology, and/or molecular genetics in preferred. Send statement of interests, résumé, and names of three references to: Dr. Michael J. Smerdon, Biochemistry and Biophysics, School of Molecular Biosciences, Washington State University, Pullman, WA 99164-4660. E-mail: smerdon@mail.wsu. edu; Telephone: 509-335-6853; FAX: 509-335-9688. WSU is an Equal Opportunity/Affirmative Action Employer.

The Division of Hematology-Oncology at St. Jude Children's Research Hospital is accepting applications for ASSISTANT MEMBER positions. Candidates should have a Ph.D. (or equivalent) degree and one year of postdoctoral experience. Research areas should focus on bone marrow transplantation, particularly alloimmune therapy in the treatment of childhood cancer, and unrelated donors in stem cell transplantation. The successful candidates will join a large group of researchers conducting clinical and basic research. Collaborative interaction with other departments is strongly encouraged. The facilities and salaries are competitive and a generous benefit package is included. Letter of inquiry with curriculum vitae should be sent to: St. Jude Children's Research Hospital, Academic Programs-C7011, 332 North Lauderdale, Memphis, TN 38105.

POSITIONS OPEN

CHAIR Department of Biological Sciences Old Dominion University

The Department of Biological Sciences at Old Dominion University invites nominations and applications for the position of DEPARTMENT CHAIR. Applicant should possess an earned Doctorate in the biological sciences and qualify for the rank of PRO-FESSOR. The Department consists of 26 faculty, 8 staff, 50 Doctoral students, 60 Master's students, and 600 undergraduate majors. Applicants should have a internationally recognized research program with a strong commitment to undergraduate and graduate education. Special consideration will be given to those candidates who conduct intergrated research at the molecular, organismal, and/or computational levels. Applicants should have a vision or strategy for enhancing the Department's teaching mission and sponsored research. For further information, see the Department's website: http://www.odu.edu/sci/ biology

To apply: Submit a letter addressing pertinent qualifications, curriculum vitae, and the names and complete contact information for four references. Send applications to: Chair, Search Committee, Department of Biological Sciences, Old Dominion University, Norfolk, VA 23529-0266. Screening of applicants will begin October 1, 2001, and continue until a successful candidate is identified. Old Dominion University is an Equal Opportunity/Affinnative Action Institution and requires compliance with the Immigration Reform and Control Act of 1986.

ASSISTANT PROFESSOR POSITION IN GENETICS Central Michigan University

The Department of Biology invites applications from broadly trained individuals for an Assistant Professor tenure-track position in plant, microbial, or animal genetics beginning either in August 2002 or earlier. Candidates are expected to have a Ph.D. in the biological sciences; excellent verbal and written communication skills; and to demonstrate a strong commitment to and potential for teaching, research, and external funding. Postdoctoral experience is preferred. Teaching responsibilities include genetics, instruction in the individual's area(s) of expertise at the undergraduate and M.S. level, and ability to contribute to the Department's introductory program. Submit a letter of application, curriculum vitae, copies of all transcripts, statement of teaching philosophy and statement of proposed research plans, and three letters of recommendation to: Genetics Search Committee, Department of Biology, Central Michigan University, Mt. Pleasant, MI 48859. Review of applications will begin October 1, 2001, and continue until position is filled. Departmental information is available at website: http://www.cst.cmich.edu/ units/bio. Serving more than 27,000 students, Central Michigan University is an innovative Doctoral/ research-intensive institution recognized for strong undergraduate education and a range of focused graduate programs and research. CMU, an Affirmative Action/Équal Opportunity Institution, is strongly and actively committed to increasing diversity within its community; see website: http://www.cmich.edu/aaeo/.

PH.D. RESEARCH SCIENTIST faculty position. Oklahoma University Health Sciences Center is experiencing unprecedented growth in biomedical research. We are seeking an ASSISTANT PROFES-SOR of Research to join us in our new NIH-funded laboratory to direct and perform studies on how somatostatin modulates renal cell proliferation and extracellular matrix production. The cross-talk between somatostatin signaling pathways and those induced by various growth and fibrogenic factors will be assessed under normal and pathological conditions. For consideration, please send your curriculum vitae to: Martin A. Turman, M.D., Ph.D., 941 Stanton L. Young Boulevard, BSEB229A, Oklahoma City, OK 73104. Telephone: 405-271-4446; e-mail: martin-turman@ouhsc.edu.

HELP SHAPE THE FUTURE OF THERAPEUTICS IN NEUROSCIENCE

NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE

The National Institute of Neurological Disorders and Stroke, NiH, is seeking a Health Scientist Administrator to provide key leadership for institute-wide translational research programs focused on finding new treatments for disorders of the nervous system. Relevant experience includes drug discovery, assay development, design and use of chemical libraries/databases, gene therapy approaches, or other areas that have potential use in therapeutic development. The incumbent is affiliated with the NINDS Technology Development Program and works closely with the Anticonvulsant Screening Program, but also collaborates with and advises staff on therapeutic development in all areas of the Institute's research effort. The appointee provides guidance for neurotherapeutic development projects in the extramural research community through interactions with consultants, industry, and academic scientists.

This is a senior level, Title 42 (f) federal position. U.S. citizenship is required. Salary will be commensurate with experience. Applicants should have a Ph.D. or M.D., extensive leadership and project management experience, creativity in designing new therapeutic approaches, experience in neuroscience/pharmacology research, and a record of relevant publications. Familiarity with federal research grants/contracts is desirable. As a selective factor, applicants should have experience with therapeutic development. Applicants are **strongly encouraged** to obtain specific information concerning the knowledge, skills, and abilities needed for the position by contacting Mr. Arvelo at the address below.

Applicants should submit by Oct. 15 a letter of application (refer to Technology Development Program Title 42 vacancy), a description of how they meet the qualification criteria and selective factor above, a description of their relevant knowledge, skills, and abilities, a curriculum vitae, and a bibliography to: Mr. Luis Arvelo, NIH, NINDS Human Resources Branch, Building 31, Room 8A23, 31 Center Drive, MSC 2540, Bethesda MD 20892-2540; Tel (301) 435-6033; Fax (301) 480-0383; Email: la45j@nih.gov. For detailed information on duties, contact Dr. Robert Baughman, Tel (301) 496-1779; Email: rb175y@nih.gov.

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CHAIR OF BIOLOGY DEPARTMENT

The Department of Biology at Duke University invites applications and nominations for the position of Professor and Chair of the Department. The area of specialization is open. The Chair should have a distinguished record of scientific and professional achievement and enjoy the challenge of leading an active, large department (42 faculty), as it develops over the next several years, including in such new areas as genomics. At Duke, Biology is a broadbased department with extensive and productive undergraduate, graduate, and research programs (www.biology.duke.edu).

Appointment begins 7/1/02 or as soon thereafter as possible. Nomination letters or application letters, C.V., and the names of up to six individuals who can provide comment on the candidate should be sent to **Professor Roger Barr, Chair, Search Committee for Biology Chair, Duke University, Box 90029, Durham, NC 27708.** All applications received by 10/1/01 will be given full consideration.

Duke University

An Equal Opportunity/Affirmative Action Employer

Post Doctoral Research Fellow Salary AUD45,000 - AUD46,750

Two Year Term

An opportunity exists for a talented and enthusiastic PhD graduate in chemistry, physics, or materials science to work on projects involving the structure of polymers. The projects will require a number of characterisation techniques from amongst neutron, X-ray and light scattering, electron microscopy, and particle accelerator-based techniques.

You will work on projects relevant to the research program of the CRC for Polymers and will be expected to interact strongly with the CRC partners. The four major research areas are polymer production; blends and composites; materials processing; and recycling (see http://www.crcp.com.au for more details). You will be expected to identify problems of importance and develop research plans to address the problems, with a particular emphasis on those that can be addressed by scattering methods.

In addition to a relevant PhD, experience with small-angle neutron and/or X-ray scattering will be a great asset, as will polymer characterisation using a variety of other techniques. Exposure to a polymers industry research environment would also be advantageous Further information about this position can be obtained by contacting Dr Robert Knott on phone +612 9717 3218 or e-mail robert.knott@ansto.gov.au

Selection criteria can be obtained from the ANSTO homepage at http://www.ansto.gov.au or by contacting Leanore Hoddy on phone +612 9717 9973, or e-mail leanore.hoddy@ansto.gov.au Applications must address the selection criteria and close on 24 August 2001.



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MOLECULAR EVOLUTION FACULTY POSITIONS

The Department of Biological Sciences and the Center for Comparative Genomics at the University of Iowa invite applications for two faculty positions in the area of molecular evolution at the Associate

or Assistant Professor level. Successful candidates are expected to have an internationally visible research program that uses molecular approaches to study significant problems in evolution. These problems include, but are not limited to, genome evolution, comparative genomics, population genetics, evolution of regulatory circuits, and evolution of host-pathogen interactions in animals and plants. Under the leadership of a new head, the Department is committed to building an internationally recognized program in comparative genomics and successful candidates will participate in filling additional positions in subsequent years.

Candidates are expected to have an established record of publications in leading scientific journals. The successful candidates will occupy completely renovated research facilities and substantial start-up packages will be provided. Applicants should forward a curriculum vitae, statement of research objectives, description of teaching interests, names of three references and selected reprints or preprints to:

> Evolution Search Committee Department of Biological Sciences University of Iowa 138 Biology Bldg Iowa City, Iowa 52242-1324

Applications will be reviewed beginning October 1, 2001, until suitable candidates are identified.

The University of Iowa is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are especially encouraged to apply.

POSITIONS OPEN

ECOLOGY

The Section of Integrative Biology at the University of Texas, Austin, has strengths in evolutionary and systematic biology and in physiological, ecological, and evolutionary aspects of behavior. We are now seeking two new FACULTY to diversify and strengthen the ecological side of our section's research and teaching program beginning as early as fall 2002. We are willing to consider candidates at any academic rank. With respect to research areas, we have a particular interest in adding colleagues who work at the interface of theoretical and experimental field ecology or who work across different levels of ecology in novel ways. With respect to teaching, we seek to improve our offerings in general ecology as well as providing outstanding specialty courses including mathematical ecology and field ecology. Ecologists who would interact with UT Austin's new Environmental Sciences Institute (website: http://www.geo.utexas.edu/esi/) are encouraged to apply. The position requires a Ph.D. (awarded prior to September 2002). Applicants should send curriculum vitae, a brief statement of research and teaching interests, no more than five reprints or preprints, and have at least three letters of recommendation sent directly to: **Ecology** Search, Section of Integrative Biology, C0930, University of Texas, Austin, TX 78712-1023 U.S.A. by October 15, 2001. For more detailed information, see website: http://www.biosci. utexas.edu/jobs/. UT Austin is an Equal Employment Opportunity/Affirmative Action Employer.

TWO POSITIONS OPEN ASSISTANT/ASSOCIATE PROFESSOR LEVEL Department of Pharmacology and Neuroscience University of North Texas Health Science Center

The Department of Pharmacology and Neuroscience at the University of North Texas Health Science Center, Fort Worth, is seeking applications for two full-time, tenure-track faculty positions at the Assistant/Associate Professor level. Successful applicants will be expected to develop an independent but interactive research program, an active graduate/ postgraduate training program, and participate in the professional course offerings of the Department. The Department intends to expand its active and wellfunded research and training programs in the areas of neurobiology of aging, drug discovery, behavioral pharmacology, molecular pharmacology, and substance abuse/addiction. Applicants should submit a letter of intent, current curriculum vitae, and the names of at least three references to: Dr. James W. Simpkins, Professor and Chair, Department of Pharmacology and Neuroscience, University of North Texas Health Science Center, 3500 Camp Bowie Boulevard, Fort Worth, TX 76107-2699

The University of North Texas Health Science Center at Fort Worth enjoys a smoke-free campus and is an Equal Employment Opportunity/Affirmative Action Institute.

RESEARCH POSITION Aquatic Organic Chemistry Stroud Water Research Center

The Stroud Center, with a mission to advance knowledge of stream and river ecosystems through interdisciplinary research, seeks an outstanding Chemist to develop a research program in organic chemistry. This is a permanent position that is open to candidates at the ASSISTANT, ASSOCIATE, or SENIOR SCIENTIST level. The candidate will be expected to make major contributions to the field of stream ecology by developing a creative research program and working collaboratively with other Scientists at the Stroud Center. Candidates should forward a description of research plans; curriculum vitae; and three letters of reference by October 15, 2001, to: Organic Chemistry Search Committee, Stroud Water Research Center, 970 Spencer Road, Avondale, PA 19311. An Equal Opportunity Employer.

POSITIONS OPEN

TERRESTRIAL ECOLOGIST

Baylor University, a private, comprehensive university of over 13,000 students, seeks a Terrestrial Ecologist for a tenure-track position at the ASSISTANT PROFESSOR level beginning summer 2002. Ph.D. is required. Position responsibilities: Teach a combination of courses from the following: introductory ecology, graduate courses in evolutionary/population ecology, and/or in subdiscipline of expertise, and introductory biology for majors; establish a research program that uses current methods to examine ecological processes and involves undergraduate and graduate students; and participate in departmental and university service activities. Baylor is known for teaching and emphasizes research that involves students. Complete applications will be reviewed begining 24 September 2001 and will be accepted until the position is filled. A complete application consists of application letter, statements of teaching philosophy and research interests, curriculum vitae, reprints of up to three representative publications, graduate and undergraduate transcripts, and three letters of reference. Send materials to: Professor Ken Wilkins, Search Committee Chair, Department of Biology, Baylor University, Waco, TX 76798-7388. Telephone: 254-710-2911; FAX: 254-710-2969; e-mail: ken_wilkins@baylor. edu; website: http://www.baylor.edu/Biology/ Home_Page.html. Baylor University is a Baptist university affiliated with the Baptist General Convention of Texas. As an Affirmative Action/Equal Employment Opportunity Employer, Baylor encourages minorities, women, veterans, and persons with disabilities to apply.

ASSISTANT PROFESSORSHIPS ORGANIC CHEMISTRY AND CHEMICAL BIOLOGY Harvard University

Department of Chemistry and Chemical Biology

Applicants are invited to apply for Assistant Professorships in organic chemistry and chemical biology. Fields of particular interest include target-oriented and diversity-oriented synthetic organic chemistry, advanced organic materials, chemical genetics, mechanistically focused genomics and proteomics, and macromolecular structure and function, although candidates in all areas of organic chemistry, broadly speaking, will be considered.

Applicants should arrange to have three letters of recommendation sent independently and should provide curriculum vitae, a list of publications, and outlines of two future research projects. Applications and supporting materials should be sent to: Chair, c/o Ms. Carol Gonzaga, 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.

Two **POSTDOCTORAL POSITIONS** available October 1, 2001, to study brassinosteroid signal transduction in *Arabidopsis*. Position 0105: identification of *in vivo* autophosphorylation sites of the BRI receptor kinase. Position 0106: role of TRIP-1 in BR signaling (Jiang and Clouse, *Plant J.* 26:35-45, 2001). Must have Ph.D. in relevant field and experience in molecular biology and protein biochemistry. Apply to position number by sending curriculum vitae and e-mail addresses of three references to: **Dr. Steve Clouse, Box** 7609, North Carolina State University, **Raleigh, NC** 27695-7609 U.S.A. E-mail: **steve_clouse@ncsu.edu**. *Equal Opportunity Employer*.

POSTDOCTORAL POSITION available in Boston, Massachusetts, to study signaling pathways responsible for the control of platelet function and thrombosis. Candidates should have a Ph.D. or M.D. degree and must have a significant background in molecular biology. Send curriculum vitae and names of three references to: **Dr. Jane Freedman**, **Department of Medicine**, **Boston University Medical Center**, **715** Albany Street, W507, Boston, MA 02114. FAX: 202-687-7894; e-mail: freedmaj@ georgetown.edu.

POSITIONS OPEN

CRUSTACEAN PHYSIOLOGIST

The Center of Marine Biotechnology (COMB) of the University of Maryland Biotechnology Institute invites applications for a tenure-track ASSISTANT or ASSOCIATE PROFESSOR position in crustacean physiology. The successful candidate is expected to develop a strong, independent research program focused on molecular mechanisms and applied aspects of crustacean reproduction, molting, and/or growth. The successful candidate's program at COMB must include research and development of blue crab (Callinectes sapidus) hatchery production. A Ph.D. degree with postdoctoral training in the application of molecular/biochemical and physiological approaches is required. Candidates must demonstrate a strong research record including the publication of seminal papers on crustacean physiology. Applicants should submit a letter of intent describing your experience and overall qualifications, a description of specific research interests and future plans, detailed curriculum vitae, and the names and addresses of at least three professional references to:

Chairman, Crustacean Physiologist Search Committee Center of Marine Biotechnology University of Maryland Biotechnology Institute 701 East Pratt Street, Suite 236 Baltimore, MD 21202 U.S.A. E-mail: gerrity@umbi.umd.edu

Review of applicants will begin on October 15, 2001, and continue until the position is filled. The University of Maryland Biotechnology Institute is an Equal Opportunity/Affirmative Action Employer. Women, minorities, veterans, and candidates with disabilities are encouraged to apply.

DIRECTOR MORPHOLOGY CORE

Director: Morphology Core. The Northern California Institute for Research and Education NCIRE), along with the University of California and the Veterans Affairs Medical Center, San Francisco, are recruiting a Director of the Morphology Core for their program project in keratinocyte differentiation. The Director will be responsible for routine light and electron microscopic preparation and analysis, immunocytochemistry at the light and electron microscopic level, isotopic and nonisotopic in situ hybridization, and quantitative analysis of microscopic images using digital imaging technology in support of the five projects in this program project. The Morphology Core occupies its own well-equipped laboratory and is supported by a technician under the supervision of the Director. The successful candidate will have a Ph.D. in cell biology or related area and hands-on experience in these techniques, preferably in skin. Please send your curriculum vitae and names/telephone numbers/e-mail addresses of three references to: Daniel Bikle, M.D., Ph.D., VA Medical Center (111N), 4150 Clement Street, San Francisco, CA 94121

RESEARCH ASSOCIATE AND POSTDOCTORAL FELLOW POSITIONS

Several Research Associate and Postdoctoral Fellow positions are available to investigate the functional genomic process determining aging and agedependent diseases. Opportunities are available to work in microarray gene screening, DNA chip technology, stem cell research, and genetics of animal models as well as well-characterized human centenarian cohorts. Opportunities are also available to investigate translational control of age-dependent cardiac disorders mechanisms involved in replicative senescence as well as molecular mechanisms involved in space flight. These positions are supported by funding from NIH, DARPA, and NASA. Expertise in molecular and cell biology is required. Please send your curriculum vitae and names of three references to: Dr. Eugenia Wang, 570 South Preston Street, Department of Biochemistry and Molecular Biology, School of Medicine, University of Louisville, Louisville, KY 40202. E-mail: eugenia.wang@louisville.edu.
POSTDOCTORAL FELLOWSHIPS IN CANCER RESEARCH

The M.D. Anderson Cancer Center **Odyssey Program** sponsors high quality postdoctoral research at the University of Texas M.D. Anderson Cancer Center, Odyssey Fellowships or Odyssey Scholarships are awarded, depending upon the level of experience, to postdoctoral applicants with the strongest credentials and most promising proposals. The winners of the Odyssey competition receive up to 3 years of support to explore novel areas of clinical or basic cancer research while preparing for successful and independent careers. Provided support includes a generous stipend and a yearly research allowance for supplies, small equipment, and meeting attendance.

Application deadlines: Odyssey Fellowship applications are due October 1, 2001 (notice of intent due September 15, 2001). There is no fixed deadline for Odyssey Scholarship applications (submit notice of intent 3 weeks before submitting complete application).

For further information, consult our web site: http://www.mdanderson.org/odyssey

MDACC is an Equal Opportunity Employer, smoke-free environment.

THE UNIVERSITY OF TEXAS MD ANDERSON CANCER CENTER Making Cancer History"



PROGRAM OFFICER, MARINE MAMMAL SCIENCE AND TECHNOLOGY (Geographer/Biologist/Fishery Biologist/Physicist/Computer Scientist)

The Office of Naval Research is seeking a qualified individual to plan and manage sponsored basic/applied research, and advanced development programs and projects in the broad areas of marine mammal biology and marine ecosystem dynamics, with particular emphases on issues associated with the biology and ecology of marine mammals and other marine organisms, ecosystem modeling, acoustic oceanography, biosonar, hydrodynamics and physiology; as well as the application of information technologies to ecosystem modeling (e.g. GIS), geographic remote sensing technologies, underwater acoustics and the biological effects of sound, biosonar and acoustic signal processing, swimming hydrodynamics and energetics, and immune system function, genetics and stress diagnostics.

This is a Federal Civil Service position at the 13/14/15 level (\$53,211 - \$114,224), depending on individual qualifications. This position may be filled under the Intergovernmental Personnel Act ((PA).

For information on qualifications and how to apply, see Announcement #DE-ONR-01-0694-NR (for non-Federal applicants) or #ONR-01-0044 (for current Federal employees) at either of two web sites http://www.usajobs.opm.gov. Applications must be in http://www.usajobs.opm.gov. Applications must be in the HRSC Office by close of business 21 Sept 2001 or postmarked as of that date. For technical information contact Dr. Robert Gisiner at (703) 696-2085 or by e-mail at gisiner@onr.navy.mil.

> U.S. CITIZENSHIP REQUIRED AN EQUAL OPPORTUNITY EMPLOYER



POSTDOCTORAL POSITION IN MOUSE GENETICS OF HEARING

A postdoctoral position is available for NIH-NIDCD funded projects focused on mouse genetics of inner ear hair cells (PNAS 96: 14100; ARO 2001: 705). Projects will utilize BAC transgenic and knockout technologies to explore conditional gene targeting in hair cells. Several mouse strains have already been made and are now available for detailed analysis that could make an immediate impact in hearing research. This position is ideal for candidates who have had training in morphological and physiological analysis of inner ear but wish to expand their training in molecular and genetic techniques. Candidates from other disciplines with recent PhD and/or MD degrees and a strong interest in auditory physiology are also encouraged to apply.

St. Jude Children's Research Hospital provides a state-of-the-art research environment including a brand-new mouse facility, transgenic core, and genechip technology (http://www.stjude.org). The Department of Developmental Neurobiology is dedicated to the studies of fundamental questions in neurobiology using multifaceted approaches including molecular biochemistry, cell biology, genomics, histology, cellular electrophysiology, and system physiology (http://www.stjude.org/newhp/DevelopNeuro.html). In addition, a genome-wide recessive mouse mutagenesis program, funded by NIH, is actively underway including identification of hearing mutants using ABR and DPOAE tests (http://tnmouse.org). St. Jude offers very competitive salary, benefits, relocation package and annual personal educational fund. Interested candidates should send a C.V., statement of research interests, and three references to:

> Jian Zuo, Ph.D. Dept. of Developmental Neurobiology St. Jude Children's Research Hospital 332 North Lauderdale • Memphis, TN 38015-2794 Email: jian.zuo@stjude.org

AA/EOE



The Albert-Ludwigs-University Freiburg is establishing a new interdisciplinary center for bioinformatics with three professorships. This center is embedded in the university-wide research focus in the area of life sciences.

The Faculty of Applied Sciences, with its institutes of Computer Science and Microsystem Technology, invites applications for the position of a

Full Professor (C4) in Bioinformatics

within the new center. The prospective candidate will belong to the Institute of Computer Science and will also be an associated member in the Faculty of Biology. He/She will lead research and teaching in the field of bioinformatics. He/She will also be in charge of implementing new courses and degrees in cooperation with other universities in the upper Rhine valley area network (EUCOR). Applications, including a curriculum vitae, publications list and a letter stating the research interests should be sent by October 5, 2001 to the Dean of the Faculty of Applied Sciences, University of Freiburg, D-79110 Freiburg, Germany. http://www.ruf.uni-freiburg.de/angewandt/.

At the Faculty of Biology a

Professorship (C3) for Experimental Bioinformatics

is available. Outstanding candidates with innovative research programmes in the field of experimental bioinformatics (e.g. functional genomics, proteomics, metabolite research, computational biology) are invited to apply. The candidate will contribute to the teaching programme of bioinformatics and will be, within a center of bioinformatics, a member of the Faculty of Biology and an associated member of the Faculty of Applied Sciences. A participation in Research Programmes funded by the Deutsche Forschungs-Gemeinschaft (SFBs) and in other research cooperations is expected. Please send your applications and an outline of your recent and future research interests not later than October 5, 2001 to the Dekan der Fakultaet fuer Biologie der Albert-Ludwigs-Universitaet, Schaenzlestr. 1, D-79104 Freiburg.

A third professorship (C4) in bioinformatics and molecular genetics is in the process of appointment.

The University of Freiburg aims to increase the percentage of women in research and teaching, and therefore encourages female candidates meeting the above qualifications to apply.

SENIOR RESEARCH TECHNOLOGIST

Northwestern University has an exciting career opportunity for an experienced individual with M.S. (or similar degree) or Ph.D. to oversee research laboratories for the newly appointed Director of the Center for Endocrinology, Metabolism, and Molecular Medicine at Northwestern University Medical School. The successful candidate will conduct studies in diabetes, metabolism, and reproduction as well as supervise technicians and trainces. Research activities include studies of signal transduction in a variety of tissues and cultured cells. Preferred qualifications are Master's degree or above and experience with tissue culture, immunoblotting, isolated adipocytes, molecular biology, and signal transduction. Strong communication skills and supervisory experience are required.

We offer competitive salary, fringe benefits, and state-of-the-art facilities. Interested candidates please forward résumé to: Mary Cerceo, Northwestern University, 303 East Chicago Avenue, Tarry 15-705, Chicago, IL 60611-3008. FAX: 312-908-9032; website: http://www.northwestern.edu/ hr. Northwestern University is an Equal Opportunity/Affirmative Action Educator and Employer.

RESEARCH ASSOCIATE/SCIENTIST

We are currently seeking an individual to join our company as a Research Associate or Scientist in the electrophysiology group. This position will provide assistance in generating and controlling data for client studies as well as developing new assays. Currently, our efforts are strongly focused on cardiac ion channels that represent significant drug development liabilities, but future work may also include development of assays for various neuronal ion channels.

Requirements for this position include a B.A./B.S. or M.S. degree in a relevant scientific discipline (e.g., physiology, pharmacology, or medicinal chemistry) and a minimum of two years of laboratory experience. Individuals with a Ph.D. will also be considered. Experience in whole cell voltage clamp technique in both heterologous expression systems and native cells is required. Experience with microelectrode techniques is preferred. Excellent communication and management skills, exceptional analytical skills, a high degree of self-motivation, and ability to work as a proactive team member are required.

Cerep offers a competitive total compensation package as well as a dynamic and collegial work environment. Please send your confidential cover letter and curriculum vitae with salary requirements to the following e-mail address: jobs@cerep.com. To learn more about Cerep, please visit our website: http:// www.cerep.com. Cerep is an Equal Opportunity Employer.

We are seeking an EXECUTIVE DIRECTOR for the Gulf Coast Consortia (GCC) in Structural and Computational Biology. The GCC comprises a new cross-disciplinary research and training center encompassing many academic departments within six institutions in the greater Houston and Galveston, Texas, area: Bavlor College of Medicine, Rice University, M.D. Anderson Cancer Center, University of Houston, University of Texas Galveston Medical Branch, and University of Texas Health Science Center. The GCC integrates research groups at the interface of biology, medicine, informatics, computational science, mathematics, statistics, physics, chemistry, and engineering. The responsibilities of this position include coordinating, promoting, and managing our extensive collaborative research and training activities. Oualified applicants should have demonstrated leadership and team-building skills and be familiar with processes related to federal and private fund-raising, computational and structural biology research, technology dissemination, and education outreach activities. Ph.D. degree in a related area is desirable. Applicant should send full curriculum vitae and three letters of reference to: Anne Smith, GCC Search Committee, Rice University-MS141, 6100 Main Street, Houston, TX 77005. E-mail: asmith@bioc.rice. edu

POSITIONS OPEN

PHYSICIAN/SCIENTIST POSITIONS University of Illinois at Chicago

The Department of Medicine at University of Illinois Medical Center in Chicago (UIC) is recruiting faculty for tenure-track Physician/Scientist (ASSIST-ANT PROFESSOR) positions in its Section of Infectious Diseases and the UIC Molecular Virology research program. This centerwide initiative is supported by faculty in Microbiology-Immunology, Molecular Genetics and Biochemistry, Pharmacology and Physiology, and by Centers in Structural Biology and Gene Array Technology. Areas of virology research expansion include immunological evasion, transcriptional control, cell cycle regulation, cell death response, oncogene function, and gene therapy. The successful faculty candidate will maintain an active, independent research program in an environment supported by a generous start-up package, state-ofthe-art equipment, ample opportunities for collaboration, and the majority of time protected for research. The ideal candidate will have an M.D./Ph.D. or an M.D. with a track record in basic science research. For fullest consideration, please send curriculum vitae/résumé; brief statement of future research plans; and three letters of recommendation by September 26, 2001, to: Search Committee, Section of Infectious Diseases (MC735), Department of Medicine, University of Illinois at Chicago, 808 South Wood Street, Chicago, IL 60612. The University of Illinois is an Affirmative Action/Equal Opportunity Employer

CURATOR OF THE HERBARIUM of the University of North Carolina at Chapel Hill, a nontenure-track research, teaching, and public service position, overseeing a collection of 660,000 specimens. Curator may apply for adjunct position with the Biology Department for teaching and student committees. Send curriculum vitae and three letters of reference to: Patricia Gensel, Biology Department, CB Number 3280, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599 U.S.A. Egins August 30, 2001. UNC is an Equal Opportunity/ Affirmative Action Employer.

TWO POSTDOCTORAL POSITIONS TUMOR IMMUNOLOGY

Current areas of study: (1) role of CD4+ T lymphocytes in immunity to tumors (mouse and human systems), Immunol. Rev. 170:101, 1999; (2) antigen processing and presentation of MHC Class II restricted tumor antigens, J. Immunol. 165:5451, 2000, and J. Immunol. 167:1371, 2001; (3) immunity to metastatic disease versus primary tumor, Canc. Res. 60: 2710, 2000; and (4) enhanced immunity in mice knocked out for the Stat6 gene, J. Immunol. 165:6015, 2000. Applicants with strong backgrounds in immunology, molecular biology, cell biology, genetics, and/or cancer biology should submit a résumé, statement of research interests, and names and contact information (including e-mail addresses) for three references to: S. Ostrand-Rosenberg, Robert and Jane Meyerhoff Professor, Biological Sciences, University of Maryland, 1000 Hilltop Circle, Baltimore, MD 21250. FAX: 410-455-3875; e-mail: srosenbe@umbc.edu; website: http://research. umbc.edu/~srosenbe/.

UMBC is an Affirmative Action/Equal Opportunity Employer.

MOLECULAR BIOLOGIST: Texas Christian University seeks a tenure-track ASSISTANT PRO-FESSOR to begin fall 2002. Responsibilities include participating in team-taught courses for biology majors/premedical students, developing an upper-level specialty course, academic advising, and conducting independent research. See website: http://www. bio.tcu.edu for more information. Applicants should send curriculum vitae including a statement indicating teaching and research interests and experience and should arrange to have three letters of recommendation sent to: Dr. Phil Hartman, Box 298930, Texas Christian University, Fort Worth, TX 76129. Review of applicants will begin October 1, 2001. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

PSYCHOLINGUIST University of California, Davis Davis, California

The Department of Psychology at the University of California, Davis, invites applications for a tenuretrack position at the ASSISTANT PROFESSOR level in the area of language processing. The position begins July 2002 pending administrative approval. Specialties of interest include but are not limited to syntax or sentence processing; language acquisition (lexical or grammatical); or discourse processing using behavioral, developmental, neurological, and/or computational methods. The application of multiple paradigms is preferred. Candidates will be expected to exhibit broad teaching ability in cognitive science and/or linguistics at both the undergraduate and graduate levels. Requirements for the position include a Ph.D., an active research program, a strong commitment to quality teaching, and the potential to attract extramural funds. Interested applicants should submit curriculum vitae, a statement of research and teaching interests, representative reprints or preprints, and three letters of reference. Where possible, e-mail addresses of references should be supplied. Review of applications will commence on November 1, 2001, and will continue until the position is filled. Send applications to: Psycholinguistics Search Committee, Department of Psychology, University of Cal-ifornia, One Shields Avenue, Davis, CA 95616-8686 For information, contact the Search Committee Chair, Debra Long, at the above address or via e-mail: dllong@ucdavis.edu.

The University of California, Davis, and the Department of Psychology are interested in candidates who are committed to the highest standards of scholarship and professional activities and to the development of a campus climate that supports equality and diversity. The University of California is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT AND ASSOCIATE PROFESSORS Pharmacology and Physiology

Applications are invited for tenure-track faculty positions in the Department of Pharmacology and Physiology at the University of South Carolina School of Medicine. Retirements and the appointment of a new Department Chair have created several openings that will be filled over the next two to three years. Applicants for Assistant Professor must have a Ph.D. or M.D. and at least two years of postdoctoral experience. Successful candidates are expected to develop an independent but interactive research program and to participate in the teaching of medical and graduate students. Candidates for Associate Professor should additionally have a funded research program and faculty experience in teaching medical physiology.

Individuals who use molecular and cellular approaches to study physiological processes and complex behaviors are encouraged to apply. Ample opportunities exist for collaboration with other Investigators. Although the specific areas of research are open. preference will be given to candidates who can contribute to the growing campus emphases on neuroscience and cardiovascular biology. Applications should consist of a cover letter summarizing relevant experience, a statement of research plans and professional goals, the names of at least three references, and curriculum vitae including publication list. These items should be combined into a single Microsoft Word file and attached to an e-mail message sent to: Dr. Steven P. Wilson, Chair of the Department; e-mail: sw@sc.edu. Review of applications will begin September 20, 2001. For more information about the School of Medicine and our department, please visit our website: http://www.med.sc.edu. USC is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study the regulation of cell cycle genes in cancer cells. Ph.D. with experience in molecular biology required. Apply to: Dr. Axel H. Schonthal, Keck School of Medicine, University of Southern California, 2011 Zonal Avenue, HMR-405, Los Angeles, CA 90033. E-mail: schontha@hsc. usc.edu. Affinnative Action/Equal Opportunity Employer.



Columbian College of Arts and Sciences

Applications and nominations are invited for the position of Dean of the Columbian College of Arts and Sciences. The Dean is the educational leader and chief administrator for undergraduate and graduate programs in the arts, humanities, social sciences, and biomedical, physical, and mathematical sciences.

Founded in 1821, The George Washington University is located in the heart of the nation's capital just blocks from the White House, Kennedy Center, prominent national monuments and museums, and government agencies. In addition to the Foggy Bottom campus, there are GW campuses in northwest DC and northern Virginia. There are approximately 20,500 full- and part-time students, roughly equally divided between undergraduate and graduate programs. These students represent all 50 states and more than 100 foreign countries. The full-time faculty numbers 1,400. The George Washington University is a member of the Association of Research Libraries and is classified by the Carnegie Foundation for the Advancement of Teaching as a doctoral/research university – extensive.

With a full-time faculty of 397 and nearly 6,685 students, the Columbian College of Arts and Sciences is the largest academic unit in a comprehensive, dynamic research university.

The University seeks applicants with the vision, energy, and skills to build on our tradition of academic excellence. The person selected must be able to enhance the unique advantages afforded by GW for the continuing development of education and research programs responsible to the needs of the area, the nation and the world.

Applicants must have a distinguished record of scholarship and teaching that warrants senior appointment in a department or program within arts and sciences. Competitive applicants will have a record of substantial leadership and administrative experience in an institution with undergraduate and graduate programs, although they might currently hold positions in research, educational, cultural, or artistic institutions. Fund-raising experience is highly desirable.

Review of applications and nominations will commence October 15, 2001, and will continue until the position is filled. The preferred start date is July 1, 2002. Salary will be commensurate with experience and qualifications.

Nominations or applications with resume and a brief statement of interest should be sent to:

Columbian College Dean Search Committee Attention: Sara Bonthuis Rice Hall, Room 813 The George Washington University Washington, DC 20052

The George Washington University is an equal opportunity, affirmative action employer. The University especially encourages applications from minority and women candidates.



European Bioinformatics Institute (EBI) Hinxton, nr Cambridge, UK

The European Bioinformatics Institute (EBI), part of the European Molecular Biology Laboratory (EMBL), provides cutting-edge research, service and training in the field of Bioinformatics. The EBI is located on the Wellcome Trust Genome Campus at Hinxton near Cambridge, UK, next to the Sanger Center, Europe's largest genome sequencing centre. After receiving major funding. EMBL is looking for bioinformaticians, database and software developers, biologists and systems administrators to participate in new and current projects.

MICROARRAY INFORMATICS

EMBL

Database Administrator for Array Express Web Designer/Programmer Scientific Application Programmer (2 posts)

SWISS-PROT

Scientific Database Curator (2 posts) Developers/Bioinformaticians (6 posts)

NUCLEOTIDE SEQUENCE DATABASE Scientific Database Curator

GENE ONTOLOGY PROJECT Scientific Curator

MACROMOLECULAR STRUCTURE DATABASE

Oracle Database Administrator Outreach Coordinator Biologists/Scientific Database Curators (2 posts) Software Developers/Bioinformaticians (9 posts)

SYSTEMS & NETWORKING Systems Administrator

DATABASE APPLICATIONS

Database Programmer Oracle Database Administrator

EXTERNAL SERVICES

Bioinformatics Programmer EBI Information Services - Web Specialist

Full details of these and other jobs can be found on http://www.emblheidelberg.de/ExternalInfo/jobs/ EBI Web pages: http://www.ebi.ac.uk

MARINE FISH BIOLOGIST/ECOLOGIST

The Department of Marine Sciences at the University of South Alabama (USA) is seeking a candidate to fill a tenure-track faculty position in the areas of marine fish biology and ecology. The ideal candidate will strengthen the overall teaching and research capabilities of the growing program in marine sciences at USA. Development and maintenance of a vigorous, extramurally funded research program is expected. Candidates whose interests include the interacting influences of physical and biological processes in controlling the distribution and abundance of ecological lv important fish species or the role of fishes in trophic dynamics and ecosystem function may be given preference. Teaching expectations typically include two courses per year. The Department of Marine Sciences at USA works closely with the faculty and facilities of the Dauphin Island Sea Laboratory (website: http://www.disl.org) forming a dynamic and unique program in marine sciences

This position is expected to be filled at the ASSIST-ANT PROFESSOR level, although appointment at the Associate rank is possible for highly qualified individuals. Salary will be provided for nine months per year and a competitive start-up package will be available. Applicants should send curriculum vitae, a brief statement of teaching and research interests, selected reprints, and the names and contact information (including e-mail addresses) of three references to: Dr. Ron Kiene, Chairman, Search Committee, Department of Marine Sciences, University of South Alabama, Mobile, AL 36688. Further information on the Marine Sciences Department can be found at website: http://www.southalabama. edu/marine_sciences/index.html Review of applications will begin 15 October 2001. The University of South Alabama is an Equal Opportunity Employer.

TECHNOLOGY SPECIALIST INTELLECTURAL PROPERTY RIGHTS

A Nashville, Tennessee-based company dedicated to serving the needs of agriculture has a position immediately available for a Technology Specialist in the area of intellectual property rights. The successful candidate will assist in the management of intellectual properties associated with an international agriculture-based business in a changing and challenging environment. In addition the candidate will have a Ph.D. or equivalent experience in a relevant discipline (biochemistry, cellular biology, genetics, or molecular biology). Pharmaceutical or agricultural industrial experience, familiarity with agricultural scientific research, or familiarity with issues surrounding patent law are highly desired. The candidate must exhibit excellent communication skills in both technical and business circles. Applicant will also be expected to interact with internal and external Scientists as well as with federal, state, local, and international agencies that impact our business. Domestic and international travel will be required. Interested candidates should send their résumé with salary requirements and references to:

IPR Technology Specialist P.O. Box 23650 Nashville, TN 37202

Equal Employment Opportunity/Minorities/Females/Veterans/Disabilities.

SECTION HEAD, Formulation and Vaccine Delivery (Marietta, Pennsylvania): You will manage a group of Scientists engaged in development of stable biological vaccine formulations and make decisions on which new formulations to pursue. We seek a Ph.D.-level candidate whose work experience includes at least three years of application of pharmaceutical formulation science to development of stabilized microbiological agents in dosage formulations and at least one year of leading research projects in vaccine formulation science including supervision of subordinate Scientist on a project basis. Send curriculum vitae to: Job Code: SHNK, Human Resources, Wyeth-Ayerst, P.O. Box 304, Marietta, PA 17547-0304. FAX: 717-426-6676.

POSITIONS OPEN

SCIENTIST, POSTDOCTORAL, AND RESEARCH ASSOCIATE OPPORTUNITIES

Available in the areas of automated enzyme assay development and high-throughput screening core robotics, enzyme biochemistry, directed evolution, and infectious disease biology.

Novozymes Biotech, Inc., located in Davis, California, is a wholly owned research and development subsidiary of Novozymes A/S based in Bagsvaerd, Denmark. Novozymes A/S is the world's largest discoverer, manufacturer, and marketer of industrial enzymes. If you are looking for a challenging career opportunity, please visit our website: http://www.novozymesbiotech.com for more details.

Novozymes Biotech, Inc., is an Equal Opportunity Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

TENURED/TENURE-TRACK INVESTIGATOR Laboratory of Clinical Investigation National Institute of Allergy and Infectious Diseases

The Laboratory of Clinical Investigation (LCI) has an opportunity for a tenured or tenure-track Investigator to conduct studies that complement the existing research interests of the laboratory, specifically the immunology of autoimmune/inflammatory conditions and/or the pathogenesis of chronic infections. For more information about LCI and NIAID Intramural programs, see website: http://www.niaid. nih.gov/dir. An ideal candidate will have welldeveloped clinical interests and will initiate patientoriented research studies leading to the improved understanding and/or novel therapies of diseases in the field of interest. Candidates must be U.S. trainees or ECFMG/USMLE-certified physicians with specialty training. Salary will be dependent upon qualifications. Other incentives may be available. Curriculum vitae; bibliography; three letters of reference; a detailed statement of research interests; and selected publications must be submitted by September 1, 2001, to: Ms. Joann Martin, Office of Human Resources Management, NIAID, Building 31, Room 7A27, 31 Center Drive, MSC 2520, Bethesda, MD 20892-2520. All information provided by the applicants will remain confidential and will be viewed only by authorized officials of the NIA1D.

NIH is an Equal Opportunity Employer.

BIOINFORMATICS

Join in the excitement of working closely with Biologists to help in the process of scientific discovery. The Whitehead Institute has over 20 laboratories working in various areas of biomedical research. The Biocomputing group is looking for an energetic, innovative, computer-savvy BIOLOGIST to support Whitehead Scientists in the use of bioinformatics software for UNIX and other platforms. Responsible for recommending, supporting, and installing software; instructing Scientists in the use of bioinformatics software; assisting Scientists in the analysis of microarray and biological sequence data; and developing genomic databases. Ph.D. in biology or related field preferred. Minimum of two years of related experience. Familiarity with UNIX operating systems including Perl programming and shell scripting.

Whitehead Institute offers competitive salaries, generous benefits, interaction with the MIT community, state-of-the-art research facilities, and a convenient Kendall Square location. Please forward résumés to: Whitehead Institute for Biomedical Research, Human Resources, Nine Cambridge Center, Cambridge, MA 02142. FAX: 617-258-6294; email: resumes@wi.mit.edu; website: http://www. wi.mit.edu (for additional employment opportunities). Equal Opportunity Employer.

POSITIONS OPEN

PRINCIPAL SCIENTIST Metabolism/Bioanalytical

We are currently seeking an individual to join our company as a Principal Scientist in the metabolism and bioanalytical area. This Principal Scientist position will be responsible for the management and technical advancement of a department that performs assays in support of metabolism and solution properties of pharmaceutically relevant compounds.

Major duties and responsibilities of this Principal Scientist position include the following: Serve as a study director for client studies; serve as a scientific resource; participate in technology development; aid in the identification and evaluation of new technologies of interest; collaborate with other laboratory personnel in the development of new technologies; supervise research associates; achieve and maintain familiarity with relevant scientific concepts and new information; assist with preparation of SOPs; prepare experimental protocols, data analysis, data summaries, and technical reports; and assist in identifying patentable inventions.

Requirements for this position include a Ph.D. in a relevant scientific discipline; a minimum of 10 years of laboratory experience; and a minimum of five years of personnel management experience along with a successful track record in the pharmaceutical industry, academia, or governmental laboratory. Excellent communication and management skills, exceptional analytical skills, a high degree of self-motivation, and ability to work as a proactive team member are required.

Cerep offers a competitive total compensation package as well as a dynamic and collegial work environment. Please send your confidential cover letter and curriculum vitae with salary requirements to the following e-mail address: n.legresley@cerep.com. To learn more about Cerep, please visit our website: http://www.cerep.com. Cerep is an Equal Opportunity Employer.

TENURED SCIENTIST/ MALARIA VACCINOLOGIST Malaria Vaccine Development Unit/ Laboratory of Parasitic Diseases

The Malaria Vaccine Development Unit is searching for a Scientist with a Ph.D. or M.D. who has experience in malaria vaccine development or process development and can lead a research program as a tenured Scientist in the interphase between malaria vaccine research and development focused on decision making for the vaccine program. Full federal benefits are included. Space, technical and Postdoctoral Fellow support, supply budget, and salary are committed. Curriculum vitae; bibliography; three letters of reference; a detailed statement of research interests; and five selected publications must be postmarked by close of business October 1, 2001, and sent to: Audrey Davis, Office of Human Resources Management, NIAID, Building 31, Room 7A27 31 Center Drive, MSC 2520, Bethesda, MD 20892-2520. Contact Ms. Davis at Telephone: 301-435-8574; e-mail: adavis@niaid.nih.gov if questions. Please reference Vacancy Announcement Number NIAID-01-176. U.S. citizenship is not required. Salary will be dependent upon qualifications. NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION to study the role of chromatin structure and gene expression in DNA repair in mammalian cells, cell extracts, and yeast (e.g., *Prog. in Nucleic Acids Res. and Mol. Biol.* **62**:227, 1999; *J. Biol. Chem.* **274**:12201, 1999; *J. Biol. Chem.* **274**:12201, 1999; *J. Biol. Chem.* **274**:12201, 1999; *J. Biol. Chem.* **275**:23729, 2000; Kosmoski et al., *Proc. Natl. Acad. Sci. U.S.A.*, in press). Training in biochemistry, biophysics, molecular biology, and/or molecular genetics is preferred. Send statement of interests, résumé, and names of three references to: Dr. Michael J. Smerdon, Biochemistry and Biophysics, School of Molecular Biosciences, Washington State University, Pullman, WA 99164-4660. E-mail: smerdon@mail.wsu.edu; Telephone: 509-335-6853; FAX: 509-335-9688. *WSU is an Equal Opportunity/Affinative Action Employer.*

THE UNIVERSITY of EDINBURGH



RESEARCH GROUP LEADERS IN STEM CELL SCIENCE

The CGR is a world-class centre for multi-disciplinary research in mammalian stem cell biology. Our mission is to lay foundations for delivery of cell therapies and regenerative medicine through investigation of fundamental mechanisms of stem cell generation, maintenance and differentiation (http://helios.bto.ed.ac.uk/cgr/). We are seeking to expand our current team of research groups through recruitment of new Group Leaders at Career Development, Senior and Principal Research Fellow level. You will have a record of outstanding research achievements and will be expected to secure external Fellowship support within a year of joining the Centre. Expressions of interest will be welcomed from creative scientists working on any aspect of cell fate determination and stem cell biology, but are particularly encouraged from individuals with expertise in: adult stem cells; plasticity and transdetermination; stem cells in model organisms; proteomics approaches; bioinformatics. The CGR is a dynamic and highly interactive environment. We enjoy superb in-house facilities and instrumentation for stem cell isolation and culture, embryological and transgenic manipulations, and molecular biology. In addition we benefit from close relations with the nearby Wellcome Trust Centre for Cell Biology and the Scottish Centre for Genomic Technologies and Informatics. Research at CGR is supported by the UK Research Councils, The Wellcome Trust and The Leukaemia Research Fund

Please quote REF: 310638SI, Closing date: 14 September 2001

Please send a brief research proposal and CV including the names of three academic referees to: Dr Austin Smith (Director), Centre for Genome Research, University of Edinburgh, The King's Buildings, West Mains Road, Edinburgh EH9 3JQ. Email: P.Hope@ed.ac.uk

Visit our NEW website for further particulars and to apply online or telephone recruitment line on Tel 0131 650 2511. Committed to Equality of Opportunity.

www.jobs.ed.ac.uk

Postdoctoral Position

NIH and NSF funded position available in the field of translational recoding. The highly interactive group employs genetic, molecular biological and biochemical approaches to examine ribosome structure/function, translational fidelity, control of gene expression, mRNA stability, and virus propagation. Successful candidate must be a highly motivated Ph.D. with good people skills and strong background in molecular biology, biochemistry, and/or genetics.

Please send curriculum vitae and names of three references to:

Jonathan D. Dinman, Ph.D. **Dept. of Cell Biology and Molecular Genetics Microbiology Building** University of Maryland College Park, MD 20742

email: dinmanjd@umdnj.edu

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



EUROPEAN COMMISSION

Institute for Transuranium Elements, Karlsruhe, Germany

The Institute for Transuranium Elements, Joint Research Centre, in Karlsruhe, is almost entirely focused on R&D for the safety of the nuclear fuel cycle. Some of the Institute's installations and expertise are unique within the European Union.

ITU is a European reference centre in the field of the basic research on actinides, fuel research and the handling of long-lived radiotoxic waste, as well as a professional training centre for young scientists. Furthermore, ITU is developing measuring techniques to support the inspectorates in charge for safeguards control in Luxembourg (European Safeguards Office) and in Vienna (International Atomic Energy Agency).

We are looking for the

HEAD OF THE NUCLEAR CHEMISTRY DEPARTMENT

He/she will be responsible for the development and management of the activities of the Nuclear Chemistry Department. It implies scientific/technical support to the sectorial policies of the Commission in this field, in particular research contributions, work for third parties, analysis related to fuel cycle safety and safeguards.

The successful candidate should be a first rank scientist of international reputation with a university degree in radiochemistry, analytical chemistry or solution chemistry and a proven experience by record of scientific work and position in scientific community. A minimum of 12 years of professional experience, of which at least 7 in the field, are required. Proven management experience in research laboratories, communication abilities and good presentation skills are essential. Experience in managing international and multi-disciplinary projects, as well as in lecturing at a university, would be of advantage.

Candidates could inquire about the post by contacting the Institute's Director,

Dr Roland SCHENKEL, Director European Commission, DG Joint Research Centre Institute for Transuranium Elements Postfach 2340, D-76125 Karlsruhe, Germany

Telephone: direct line (+49-7247)951-350, switchboard 951-0. Fax: 951-591.

> E-mail: Roland.Schenkel@cec.eu.int WWW: http://itu.jrc.cec.eu.int

The selection procedures are open to nationals of one of the Member States of the European Union. Candidates must have been born after 14/09/1946. The complete list of requirements and the closing date are described in the official announcement, which is to be found on the web sites http://www.jrc.cec.eu.int and http://dbs.cordis.lu or can be requested at the address below:

> European Commission, Secretariat of the Research Selection Committees COM/R/A/16/2000, SDME 4/31 Rue de la Loi/Wetstraat 200, **B-1049** Brussels

ASSISTANT PROFESSOR HARVARD UNIVERSITY Molecular and Cellular Biology

The Department of Molecular and Cellular Biology (MCB) is seeking outstanding candidates for the position of Assistant Professor (entry-level appointment). Our department covers a broad range of topics including cellular biology, developmental biology, molecular biology, molecular evolution, molecular genetics, neurobiology, and structural biology. We are particularly interested in candidates working in the following areas: cell biological and evolutionary approaches to development, mechanistic analysis of biological action at the molecular and structural levels, and analysis of genome organization and function. Applications should include curriculum vitae, reprints of publications, and a statement of present and future research plans (one to three pages). Complete applications and three letters of recommendation solicited by the applicant should be received no later than Oc-tober 13, 2000. Mail applications to:

> MCB Search Committee Harvard University 7 Divinity Avenue Room 169 Cambridge, MA 02138

Harvard University is an Affirmative Action/Equal Opportunity Employer. We strongly encourage applications from women and minority candidates.

POSTDOCTORAL FELLOW Molecular Biology: Baculovirus Expression Vector (BEV) System

Chesapeake PERL, a fast-growing start-up company at the University of Maryland, seeks applicants for a two-year, full-time research and development position. We produce proteins in insect larvae with the BEV system. The candidate will develop transfer vectors and a system for low-cost, high-throughput protein expression and help develop purification protocols. Must have Ph.D. in related field and experience with the BEV system. Expertise in protein chemistry is highly desirable.

Send application letter and curriculum vitae to: Chesapeake PERL, 387 Technology Drive, College Park, MD 20742. For more information, contact: Nikolai van Beek; e-mail: navanbeek@ yahoo.com.

POSTDOCTORAL FELLOWS Structural Biology: Transcription and Translation

Positions are open to investigate structure-function relationships in aminoacyl-tRNA synthetases and transcriptional control of pili-encoding genes in *E. obi.* All projects combine X-ray crystallography with enzymology and molecular biology. Applicants with strong backgrounds in biochemistry or structural biology are encouraged to apply. Three-year, NIHfunded positions including benefits. Send curriculum vitae and names/addresses of two references to: Dr. John Perona, Department of Chemistry and Biochemistry, University of California at Santa Barbara, Santa Barbara, CA 93106-9510. FAX: 805-893-4120; e-mail: perona@chem.ucsb.edu; website: http://tako.chem.ucsb.edu.

RESEARCH SCIENTIST (Marietta, Pennsylvania): You will perform viral vaccine manufacturing and characterization experiments and provide cell culturing expertise to Manufacturing, Validation, and Quality Control departments. We seek a Ph.D.-level candidate with more than two years of molecular biology experience and advanced knowledge of viral vaccine development techniques, immunochemical characterization of viral vaccine candidates, PCR, RT-PCR and RNA/DNA analysis, and viral vaccine production in cell culture and embryonated chicken egg systems. Send curriculum vitae to: Job Code: MAEX1, Human Resources, Wyeth-Ayerst, P.O. Box 304, Marietta, PA 17547-0304. FAX: 717-426-6676.

POSITIONS OPEN

Four POSTDOCTORAL POSITIONS available at the Hormel Institute, University of Minnesota, Austin, Minnesota, to study the signal transduction in tumor promotion, chemoprevention, and early development (MCB 16:157; MCB 16:6427, 1996; JBC 271:9942, 1996; JBC 271:3126, 1996; JBC 272: 4187, 1997; JBC 272:9962, 1997; JBC 272:26325, 1997; *JBC* **272**:27753, 1997; *JBC* **273**:32176, 1998; *JBC* **274**:12229, 1999; *JBC* **274**:14595, 1999; *JBC* 15389, 1999; *JBC* **274:29672**, 1999; *JBC* **274:30611**, 1999; *JBC* **275:**9143, 2000; *JBC* **275:** 20444, 2000; *JBC* **275:**20980, 2000; *JBC* **275:**32250, 2000; *JBC* **276:**14572, 2001; *JBC* **276:** 12932, 2001; *JBC* **276**:11775, 2001; *JBC* **276**:20913, 2001; *JBC* **276**:25558, 2001; *PN*:45 **94**: 5826, 1997; PNAS 94:11957, 1997; PNAS 95:156, 1998; PN.48 98:5786, 2001; PN.48 98:7510, 2001; Cancer Res. 57:2873, 1997; Cancer Res. 57:4414, 1997; Cancer Res. 58:711, 1998; Cancer Res. 58:4102, 1998; Cancer Res. 59:1884, 1999; Cancer Res. 59: 3053, 1999; Cancer Res. 59:4610, 1999; Cancer Res. 61:850, 2001; Cancer Res. 61:1604, 2001; Cancer Res. 61:3908, 2001; Cancer Res. 61:4084, 2001). We are seeking self-motivated Ph.D.s with experience in biochemistry and molecular and cellular biology. Experience in signal transduction, functional genomics, *Xenopus* early development, stem cells, mouse transgenics, and knockouts is a plus. Please send your curriculum vitae and the names and telephone numbers of three references to: Dr. Zigang Dong, The Hormel Institute, University of Minnesota, 801 16th Avenue N.E., Austin, MN 55912. FAX: 507-437-9606; e-mail: ZigangDong@hi.umn. edu. These positions will remain open until qualified candidates are found. The University of Minnesota is committed to the policy that all persons shall have Equal Access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.

DIABETES SCIENTIST (OPEN RANK): The Department of Pediatrics at the University of Kentucky is recruiting a Scientist with an established career in diabetes research. Desirable areas of research focus include islet cell physiology and immunology. The ability to relocate an extramurally funded research project will be highly desirable. The position is also supported by a sizable endowment for diabetes research. There are excellent opportunities for collaboration with UK diabetes and endocrine Investigators. Laboratory space and start-up funds are available. The quality of life in the bluegrass region of Kentucky is outstanding. Interested candidates should contact: Kathryn Thrailkill, Division Head, Pediatric Endocrinology or Vipul Mankad, Chair of Pediatrics, University of Kentucky Medical Center, 800 Rose Street, Lexington, KY 40536.

SCIENTIST for manufacturer in central Ohio to develop pharmaceutical dosage forms from laboratory scale to commercial scale lots, write technical and regulatory documentation, and prepare prototype formulations for *in vitro/in vivo* screening.

Position requires a Ph.D. in pharmaceutical/sciences or related field and two years of experience in formulation development including experience in preformulation and formulation of solid oral dosage forms and knowledge of *in vitro/in viro* correlation. Salary is \$64,000 for a five-day/40-hour work

week. Send two résumés and cover letters (no telephone

calls) to: Reference Number 7984, P.O. Box 16808, Columbus, OH 43216.

An NIH-supported **POSTDOCTORAL POSI-TION** is available immediately to study protein-RNA interactions of the ELAV/ETR family of RNA processing proteins. Recent graduates with experience in gel-shift or fluorescence binding analysis of proteinnucleic acid interactions are invited to apply. Send curriculum vitae and name of three references to: Dr. Y. Shamoo, Department of Biochemistry and Cell Biology, Rice University, MS140, 6100 Main Street, Houston, TX 77005. E-mail: shamoo@ rice.edu.

POSITIONS OPEN

POSTDOCTORAL POSITIONS Regulated Cell Therapy University of Washington

We are looking for highly motivated individuals to join our laboratory to generate a new class of pharmacologically regulated cell therapies (Blood 97:2535-2540, 2001; Nature Genetics 26:64-66, 2000). The University of Washington offers a highly interactive environment as a designated NHLBI Program for Excellence in gene therapy (in collaboration with the Fred Hutchinson Cancer Research Center) and recently established a Gene and Cell Therapy core laboratory at its General Clinical Research Center. Up to three positions are available. Individuals holding M.D. and/or Ph.D. degrees with expertise in stem cell biology, signal transduction, lentiviral vectors, and immunohistochemistry will be especially well suited for these positions. Please send your curriculum vitae and the names of three references to:

C. Anthony Blau, M.D. Associate Professor Division of Hematology Associate Program Director for Gene and Cell Therapy, General Clinical Research Center Room K136B, Health Sciences Building Mail Stop 357710 University of Washington Seattle, WA 98195 Telephone: 206-685-6873 FAX: 206-543-3560 E-mail: tblau@u.washington.edu

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POSTDOCTORAL POSITION Experimental and Computational Neuroscience

The Biophysics Group (website: http://www. biophysics.lanl.gov/) in the Physics Division at Los Alamos National Laboratory seeks several Postdoctoral candidates in the areas of experimental and computational neuroscience. Existing projects include recording of fast optical transients from neural tissue and the development of associated high-speed data acquisition systems, imaging devices and optical technology, analysis of evoked MEG and fMRI signals, computational modeling of information processing within the biological neural systems, and collaborative work on the development of a retinal prosthetic device. Successful candidates could combine work in several of these areas. For further technical information, contact Dr. John George; e-mail: jsg@lanl. gov

A Ph.D. in physics, electrical engineering, biology, or a related discipline completed within the last three years or soon to be completed is required. Further details about the Postdoctoral program may be found at website: http://www.hr.lanl.gov/postdoc/. For consideration, submit a résumé and publications list with a cover letter outlining current research interests including contact information for three references to: e-mail: postdoc-jobs@lanl.gov (reference Science-PD017639) or submit two copies to: Postdoc Program Office, Science-PD017639, MS-P290, Los Alamos National Laboratory, Los Alamos, NM 87545. Los Alamos National Laboratory is operated by the University of California for the U.S. Department of Energy. Affirmative Action/Equal Opportnuity Employer.

POSTDOCTORAL POSITION available immediately to understand the mechanism and dynamics of ATP-driven DNA packaging in viruses using bacteriophage T4 model. Novel combinatorial mutagenesis, recombinant DNA, and biochemical approaches will be used. Strong background in molecular biology and biochemistry is desirable. Send curriculum vitae and names of three references to: Dr. Venigalla B. Rao, Department of Biology, 103 MCW, The Catholic University of America, 620 Michigan Avenue N.E., Washington, DC 20064. E-mail: rao@ cua.edu.

MOLECULAR GENETICIST (PLANTS) GS-440-9/11 U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL RESEARCH SERVICE

The Plant Genetic Resources Unit located in Geneva, New York will be recruiting from August 13, 2001 through September 17, 2001 to fill a permanent full-time Molecular Geneticist (Plants) position to provide professional support to a Lead Scientist on molecular genetic research studies on the grape germplasm collection. The incumbent will assess genetic identity and relationship, investigate DNA sequences, and develop markers useful at a variety of taxonomic ranks. The incumbent will also analyze genome organization and structure and the location and inheritance of genes in grape germplasm accessions. The salary range for this position is \$35,808 to \$56,332 per annum. To qualify, candidates must have U.S. citizenship; a degree in genetics or one of the basic biological sciences that included at least 9 semester hours in genetics. GS-9 requires 2 years progressively higher level graduate education leading to a master's degree or master's or equivalent graduate degree or 1 year specialized experience equivalent to at least GS-7. GS-11 requires three years of progressively higher level graduate education leading to a Ph.D. degree or Ph.D. or equivalent doctoral degree or 1 year of specialized experience equivalent to at least GS-9.

To obtain additional information and application forms, visit our web site at http://www.ars.usda.gov/afm2/divisions/hrd/ hrdhomepage/empopp.htm or call Tiffany Fisk at 315-787-2307. For more information on the research program contact Dr. Warren F. Lamboy at 315-787-2359. Applications in response to this ad must be marked with the vacancy announcement number (ARS-X1E-1399) and postmarked by September 17, 2001.

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

FACULTY OPPORTUNITIES HUFFINGTON CENTER ON AGING BAYLOR COLLEGE OF MEDICINE

Baylor College of Medicine is renowned for its strengths in basic research. The Huffington Center on Aging invites applications for tenure track faculty positions both at the senior and junior level. The Huffington Center on Aging is located in the new Alkek building within the main Baylor campus. Applicants must have an advanced degree, M.D., Ph.D., D.V.M. Individuals conducting basic and/or translational research in any aging related model organism will be given full consideration. Salary and rank will be commensurate with qualifications and experience. Successful candidates will have an appointment in a basic science department and will be expected to direct an independent, extramurally funded, research program in the Biology of Aging and participate in graduate student and postdoctoral training. They will join a team of faculty engaged in multiple aging research projects (www@hcoa.org) and a highly interactive College faculty with an enormous breadth and depth of scientific expertise. (http://public.bcm.tmc.edu/gradschool/phd-programs.html#Depts)

Applicants should send a letter of application with a curriculum vitae, a statement of future career/research objectives, and the names of at least three individuals willing to furnish letters of reference to the Chair of the search committee:

Dr. Gretchen J. Darlington Huffington Center on Aging, N803 Baylor College of Medicine One Baylor Plaza Houston, TX 77030

Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.

CHAIR DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY

Applications and nominations are invited for the position of CHAIR of the Department of Biochemistry and Molecular Biology at the University of North Dakota School of Medicine and Health Sciences. We seek an outstanding biomedical scientist with excellent extramural research support who can provide effective leadership and mentoring in research, teaching and service. The Department currently has six faculty members and the new chair will have the opportunity to immediately recruit faculty for two new positions. The Chair will oversee a department actively carrying out research in signal transduction, membrane transporter regulation, drug resistance mechanisms in human pathogens, molecular biology of SV40, enzyme and metabolic regulation, and protein/protein interactions. The Department offers M.S., Ph.D. and M.D./Ph.D. degrees. Faculty members participate in traditional graduate education and a new medical school curriculum that emphasizes patientcentered learning. Undergraduate courses are provided to pre-med and allied health students as well as other non-majors. Further information about the Department is available at: http://www.med.und.edu/bimd/biochem.html

The University of North Dakota is committed to doubling its research funding and achieving the Carnegie classification of "Doctoral/Research Universities – Extensive" by 2006. The University is located in Grand Forks and currently enrolls 11,000 students. Grand Forks is a family-friendly community located in a region offering excellent and rapidly expanding cultural, recreational, and sporting activities. To learn more about the University of North Dakota and Grand Forks visit: http://www.und.edu and http://www.grandforksgov.com.

Review of applications will begin immediately, and the search will remain open until the position is filled. Applicants should submit a detailed curriculum vitae that includes a history of research funding, statements addressing administrative philosophy and teaching interests, and the names and addresses of three references to: Dr. Edward C. Carlson, Professor and Chair of the Department of Anatomy and Cell Biology and Chair of the Search Committee, c/o Office of the Dean, School of Medicine and Health Sciences, University of North Dakota, Box 9037, Grand Forks, North Dakota, 58202-9037.

> The University of North Dakota is an Equal Opportunity/ Affirmative Action institution

International Max Planck Research School PhD Program in Structure and Function of Biological Membranes



Max Planck Institute of Biophysics Max Planck Institute of Brain Research Goethe University

Frankfurt am Main, Germany

Several PhD fellowships are available in the newly established International Max Planck Research School in Frankfurt. The two Max Planck Institutes and research groups at Frankfurt University offer a unique environment for the study of biological membranes and membrane proteins. PhD opportunities exist in internationally leading laboratories in the areas of membrane protein structure determination, membrane biochemistry, molecular biology and functional studies by electrophysiological and spectroscopic methods as well as studies of whole membranes, cells and organs.

Highly qualified candidates with degrees in biochemistry, chemistry, physics, biology, medicine or related subjects are invited to apply for the next round of admission in November 2001. Applications should preferably be submitted online via the electronic application form on the website of the Research School at www.mpibp-frankfurt.mpg.de. Alternatively, forms for written application can be downloaded from this site. Applications should arrive not later than

30 September 2001

For further details please contact

Dr. Janet Vonck MPI of Biophysics, Heinrich-Hoffmann-Straße 7 D-60528 Frankfurt am Main Germany Tel. +49+69-96769-358 Fax: +49+69-96769-359 e-mail: Janet.Vonck@mpibp-frankfurt.mpg.de

NEF IN HIV PATHOGENESIS

POSTDOCTORAL POSITION for recent Ph.D. available in the laboratory of **Dr. J. Victor Garcia** to conduct research in the analysis of Nef function. Strong background in molecular/cell biology substantiated by publications essential. Knowledge in cell signaling or retrovirology beneficial. Fluency in English required.

Send complete curriculum vitae including references to: Betty Sharp, Infectious Diseases, University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallax, TX 75390-9113. E-mail: betty.sharp@utsouthwestern.edu. The University of Texas Southwestern Medical Center at Dallas is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS available to study regulation of lipid biosynthesis (Thewke et al., JBC 273:21402-21407, 1998) and/or the processing of prenylated proteins (Kilic et al., FEBS Lett. 450:61-65, 1999). These projects involve the use of modern molecular biology and protein chemistry techniques. Preference will be given to applicants who have recently completed their Doctoral studies and have laboratory experience in molecular biology and/ or protein chemistry. The position offers a competi-tive salary and benefits plus an excellent work environment. Interested individuals should send a copy of their curriculum vitae addressed to: Dr. D. Thewke (lipid biosynthesis) or Dr. M. Sinensky (prenylation), East Tennessee State University, James H. Quillen College of Medicine, Department of Bio-chemistry and Molecular Biology, Box 70581, Johnson City, TN 37614-0581. E-mail: thewke@etsu.edu or sinensky@etsu.edu. Affirmative Action/Equal Opportunity Employer.

Full-time research position for a POSTDOC-TORAL PHYSICIAN or Ph.D. SCIENTIST in the Division of Immunology and Rheumatology, Department of Internal Medicine, University of Missouri, Columbia. Responsibilities will include participation in ongoing, federally funded research program in human autoimmunity. Individuals sought with experience and interests in laboratory-based research in the area of autoimmunity, which includes such re-search approaches as PCR, DNA sequencing, cloning, and human cellular immunology. Address inquiries and curriculum vitae to: Dr. Robert W. Hoffman, Director, Division of Immunology and Rheumatology, Department of Internal Medicine, University of Missouri, Columbia, MO 65211. E-mail: hoffmanr@health.missouri.edu. UMC is an Affirmative Action/Equal Opportunity Employer. Females and minorities are encouraged to apply.

A POSTDOCTORAL POSITION is available immediately to study function and regulation of Ca^{2+} channels and their role in Ca^{2+} signaling. The successful applicant will have an outstanding opportunity to interact with many experts in this field. Applicants must have experience in electrophysiology and molecular technques. Send curriculum vitae and letters of reference to: Dr. Shmuel Muallem, The University of Texas Southwestern Medical Center at Dallas, Department of Physiology, 5323 Harry Hines Boulevard, Dallas, TX 75390-9040. E-mail: shmuel.muallem@utsouthwestern.edu. The University of Texas Southwestern Medical Center at Dallas is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS are available immediately for individuals with experience in molecular biology. Current projects in the laboratory include high-throughput phenotypic studies in yeast, protein regulatory networks of oncogenes, and functional studies of histone modifications. Send curriculum vitae and references to: Dr. C. Wilson Xu, Sloan-Kettering Institute and Graduate School of Medical Sciences of Cornell University, 1275 York Avenue, New York, NY 10021. E-mail: w-xu@ski.mskcc.org; FAX: 212-794-4342.

POSITIONS OPEN

TWO POSTDOCTORAL FELLOW/ PH.D. SCIENTIST POSITIONS

Two **POSTDOCTORAL/JUNIOR SCIEN-TIST** positions available in leukemia research laboratory in Cancer Biology Department at Wake Forest University School of Medicine for NIH-funded project.

In the first position, the Postdoctoral/Scientist will investigate the mechanism of the liver toxicity produced by the novel diphtheria fusion protein DT388GMCSF. The candidate will develop and utilize *in vitro* and *in vivo* assays to investigate the role of Kupffer cells and sinusoidal endothelial cells in the injury. Prophylactic measures will be investigated to reduce the side effect. The outcome of these studies may be rapidly applied in ongoing clinical trials of this agent. Liver biology, animal laboratory experience, tissue culture, and molecular biology skills desirable.

In the second position, the Postdoctoral/Scientist will participate in the preclinical development of novel diphtheria fusion proteins including DT3881L3 for therapy of patients with leukemia. The candidate will learn and then participate in supervising the GMP production of diphtheria fusion proteins and use animal models to assess safety and efficacy. The outcome of these studies should be new agents for clinical testing in patients with leukemia. Protein chemistry, animal laboratory experience, tissue culture, and molecular biology skills desirable.

To apply for either position, please contact: Dr. Arthur Frankel; Telephone: 336-716-3313; e-mail: afrankel@wfubmc.edu. Affirmative Action/ Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately in the NIH/NIAID/Laboratory of Allergic Diseases to study heterotrimeric G protein signaling and regulator of G-protein signaling (RGS) proteins in inflammatory cells using biochemical techniques and knockout mice. A Ph.D. and/or M.D. and experience in molecular and cellular biology is required. Interest and/or experience in animal models is desirable. Salary based on relevant experience and education. Send cover letter, curriculum vitae, summary of past work, and names and addresses of three references to:

Dr. Kirk Druey, Laboratory of Allergic Diseases Molecular Signal Transduction Section NIAID/NIH/Twinbrook II, Room 200E 12441 Parklawn Drive Rockville, MD 20852 U.S.A. E-mail: kdruey@niaid.nih.gov Website: http://www.niaid.nih.gov/dir/labs/ LAD/molecular.htm

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PROTEIN CRYSTALLOGRAPHER

To elucidate the crystal structures of proteins and protein drug complexes and apply this information into the drug discovery process. Must have experience and expertise in protein crystallography, protein chemistry, high-energy physics, biology, and computing (Windows NT with DEC Alpha platform with SGI machines; UNIX, FORTRAN, DENZO, SAINT, QUANTA, X-PLOR, CNS, CNX, CCP4 suite, BUSTER, SHARP, SOLVE, and ARP/ WARP); and knowledge of protein expression from bacterial, insect, and mammalian cells systems. Ph.D. in physics or related field and three years of experience as a **RESEARCHER** in protein crystallography. Contact: Genetics Institute, Inc., 87 Cambridge Park Dr., Cambridge, MA 02140, Attention: LP.

POSTDOCTORAL POSITION in developmental toxicology. Person to examine the interaction of chemicals and genes in the induction of murine teratogenesis. Seeking candidate with experience in molecular biology, biochemistry, genetics, and/or developmental biology. Send curriculum vitae and names of three references to: Michael Collins, UCLA School of Public Health, CHS 71-297, 10833 Le Conte Avenue, Los Angeles, CA 90095. E-mail: mdc@ucla.edu.

POSITIONS OPEN



Pintex Pharmaceuticals is an early-stage, privately held life science company focused on the discovery of new cancer diagnostics and therapeutics.

POSTDOCTORAL ASSOCIATE X-Ray Crystallography

We are looking for a highly motivated Ph.D. with a strong background in X-ray crystallography with zero to two years of postdoctoral experience. The position will focus on the structure-aided design of potent therapeutic compounds. Must be willing to travel for data collection at outside facilities. Knowledge in organic chemistry is a plus.

Join our team and gain valuable industrial experience along with an attractive benefits and compensation package. As we grow, advancement may be possible.

The position is immediately available. Please send your curriculum vitae and names of references to:

Pintex Pharmaceuticals, Inc. 86 Rosedale Road P.O. Box 189 Watertown, MA 02472

E-mail: humanresources@pintexpharm.com No telephone calls please.

Equal Opportunity Employer.

POSTDOCTORAL POSITION IN EXPERIMENTAL BIOPHYSICS Harvard University

Applications are invited for a research position in experimental biophysics to begin in the fall of 2001 or winter of 2002. The initial appointment would be for two years with a possible renewal for one additional year. Experience with single-molecule techniques a plus. Candidates should send curriculum vitae, publication list, a description of recent research, and the names of at least three references to: Migdalia Rosa, Assistant, Physics Department, Harvard Universit ty, Cambridge MA 02138. Harvard is an Equal Opportunity/Affirmative Action Employer. We encourage applications from qualified women and/or minority group members.

ADVANCED POSTDOCTORAL FELLOW-SHIP. Laboratory of Stephen B. Liggett is seeking a Fellow with potential for subsequent faculty position at the University of Cincinnati College of Medicine. Research expertise in G protein-coupled receptor biology, pharmacogenetics, or transgenic mice preferable. Send résumé to: Stephen B. Liggett, University of Cincinnati College of Medicine, 231 Albert Sabin Way, Room G167, P.O. Box 670564, Cincinnati, OH 45267-0564. Telephone: 513-558-0484; FAX: 513-558-0835; email: stephen.liggett@uc.edu. The University of Cincinnati is an Equal Opportunity Employer and encourages the application of women and minorities.

POSTDOCTORAL POSITION in Boston is available immediately to study endothelial cell cycle regulation and anglogenesis. Candidates should have an M.D. or Ph.D. and a strong background in cellular and molecular biology. Please send curriculum vitae and three references to: Douglas W. Losordo, M.D., Division of Cardiovascular Research, St. Elizabeth's Medical Center, Tufts University, 736 Cambridge Street, Boston, MA 02135. FAX: 617-789-5029.

Two POSTDOCTORAL POSITIONS are available immediately to study the structure-functional relationship of ion channels and its impact on cellular physiology. Experience in molecular genetics, patch clamp, and functional genomics or stem cell biology is helpful. Competitive salary and fringe benefits. Please send curriculum vitae to: Chun Jiang, Ph.D., Department of Biology, Georgia State University, University Plaza, Atlanta, GA 30303. E-mail: cjiang@gsu.edu.

Opportunities

Ohio Eminent Scholarship in Developmental Neurobiology

Division of Developmental Biology

We seek an outstanding developmental neurobiologist for this position endowed by the Ohio Board of Regents. The eminent scholar will be an associate or full Professor in the Division of Developmental Biology, directed by Chris Wylie, Ph.D., and will provide academic leadership to a group of developmental neurobiologists in this division. The Ohio Eminent Scholarship will provide permanent annual endowment for this position. Teaching and administrative duties are minimal.

We offer excellent NIH-funded graduate programs in neurosciences, developmental biology and MD/PhD. This position is part of the dramatic expansion of the Developmental Biology Division to an eventual 25 members. Innovative, high-quality, federally funded research into nervous system development in any model organism will be the primary criterion for this position.

Please provide curriculum vitae, names and addresses of three references, and a 2-page description of research interests to:

Chris Wylie, Ph.D., Chair, Ohio Eminent Scholar Search Committee Division of Developmental Biology Children's Hospital Research Foundation TCHRF 3014 3333 Burnet Avenue Cincinnati, OH 45229-3039 EminentScholar@chmcc.org





Join the growing Division of Developmental Biology at Children's Hospital Research Foundation, Cincinnati, Ohio, under the directorship of Chris Wylie, Ph.D.

We seek additional faculty for the coming year. Preferred candidates are working on invertebrate model systems, but those carrying out innovative, high quality research in any system will be considered. Academic rank will be determined by candidate's credentials and experience.

We offer outstanding start-up packages, state-of-the-art research facilities, an excellent graduate program and modest teaching responsibilities.

Please provide curriculum vitae, names and addresses of three references, and a description of research interests to:

Janet Heasman, Ph.D., Chair, Search Committee Division of Developmental Biology Children's Hospital Research Foundation TCHRF 3014 3333 Burnet Avenue Cincinnati, OH 45229 DevBiol@chmcc.org

Visit our website at www.cincinnatichildrens.org Children's Hospital Medical Center is an Affirmative Action/Equal Opportunity Institution. Women and minorities are encouraged to apply.



Reporting to the Director, the Operational Director will manage the technical resources, infrastructure, and staff of the Center, and ensure it is maintained and allocated in the best interest of the scientific programs of the Center. This individual will also oversee the management of proposal development, awards management, and financial reporting for the Center programs. The technical and administrative staff of the Center will report to the Operational Director. This individual will work closely with the Division of Administration and will serve as the Center's primary contact and coordinator for activities associated with the design and construction of the Center. This position will also be responsible for coordinating programs with faculty researchers who will occupy the facility; partner with faculty and staff to attract and allocate resources for major sponsored programs; develop major research initiatives. The individual should have at least 5 years of experience in conducting research in an academic or other major institutional setting. A Ph.D. is desirable.

All applicants should send a Curriculum Vitae and a list of suitable references indicating job #200107055 to the address listed below.

Human Resources Rensselaer Polytechnic Institute 110 8th Street, Troy, NY 12180-3590

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ANNOUNCEMENTS Arthur M. Sackler COLLOQUIA OF THE NATIONAL ACADEMY OF SCIENCES ADAPTIVE AGENTS, INTELLIGENCE AND EMERGENT HUMAN ORGANIZATION: CAPTURING COMPLEXITY THROUGH AGENT-BASED MODELING

OCTOBER 4-6, 2001

Arnold and Mabel Beckman Center, Irvine, CA Organized by Brian J.L. Berry, L. Douglas Kiel, and Euel Elliott

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II. Cooperation & Competition as Factors in Emergent Human Organizations: Joshua Epstein, Peter Danielson, Dwight Read, Yoshimichi Sato

III. Economic Agents and Markets as Emergent Phenomena: Leigh Tesfatsion, Cars Hommes, Jeffrey Kephart, Michael Macy, Charles Plott

IV. Agent-Based Modeling as Public Policy Flight Simulators: John Holland, Kathleen Carley, George Gumerman, Scott Moss

V. Platforms and Methodologies for Enhancing the Social Sciences through Agent-Based Simulation: Nigel Gilbert, Robert Axtell, Eric Bonabeau, Lars-Erik Cederman, Miles Parker

Web page: www.national-academies.org/nas/colloquia Inquiries : colloquia@nas.edu





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GRANTS

REQUEST FOR APPLICATIONS Dysautonomia Foundation Inc.

Familial Dysautonomia (FD) is an autosomal recessive disorder characterized by altered intrauterine development of the autonomic and sensory nervous system. The disorder is progressive and neuronal survival also may be compromised.

Patients with FD have trouble swallowing liquids, do not produce overflow tears, and become hypotensive when they stand. They are relatively insensitive to pain and experience dramatic fluctuations in blood pressure and body temperature. They suffer episodic autonomic crises of vomiting, retching, and extremely high blood pressure (J. Ped. 110:946-948, 1987).

Mutations in the IKAP gene were recently shown to cause FD. In over 95% of patients, a single intronic base substitution that affects the splicing of the IKAP transcript was identified (*Am. J. Hum. Genet.* **68**:598-605 and 753-758, 2001). This splicing alteration may be tissue (i.e., neuron) specific. The molecular/cellular mechanisms causing FD are not understood.

The Dysautonomia Foundation is accepting applications for research grants to determine:

- 1. The function of the IKAP protein, and identification of interactive proteins, both upstream and downstream
- 2. How the loss of IKAP function affects cellular function and survival
- 3. The control of tissue specific splicing/expression and its potential correction
- 4. The role of IKAP in the development and maintenance of the autonomic and sensory nervous system
- 5. The effect of IKAP "knock-outs and/or knock-ins" in mouse models
- 6. Novel therapeutic strategies for FD

Application Procedure

Grants will be made by the Dysautonomia Foundation for a two year period for up to \$100,000/year. Support of a postdoctoral fellow will also be considered. Grants will be renewable depending on productivity. Funded researchers will be expected to freely share reagents developed from these research grants with other Dysautonomia Foundation funded investigators and to attend an annual meeting to present and discuss their results.

Please submit a five page proposal (not including figures or references) detailing the proposed project along with the CVs of the Principal and Co-Investigators to the:

Dysautonomia Foundation Inc. 633 Third Avenue 12th Floor New York, NY 10017-6706 Fax: (212) 682-7625 Email: dys212@aol.com

The application must be submitted by either post, fax or email on or before October 15, 2001. The awards will be announced on December 15, 2001. For additional information, please contact the Dysautonomia Foundation at (tel): 212-949-6644, (fax): 212-682-7625 or (email): dys212@aol.com.

REQUEST FOR PROPOSALS

The Biotechnology Research and Development Corporation (BRDC) is a for profit R&D consortium dedicated to funding basic research in the broad area of agricultural biotechnology including the use of commodity crops as feed stocks for the chemical and pharmaceutical industries. In this latter area our interests are specifically directed to the development of new biocatalytic systems for the conversion of simple and complex biopolymers. Equity holders in BRDC include some of the world's largest users and manufacturers of biobased products. BRDC has recently committed to make a significant funding commitment in the area of biocatalysis.

BRDC is seeking proposals to achieve substantial advances in two key areas of biocatalysis. These areas are biocatalytic co-factor regeneration and novel host vector systems for fermentation and biocatalysis.

BIOCATALYTIC CO-FACTOR REGENERATION

Use of enzymes that require NAD(P)(H), FAD,ATP, or CoA in industrial biocatalytic processes is limited due to the high cost of these co-factors and the limited possibilities for their *in vitro* regeneration. Stable, versatile and economic co-factor regeneration systems are needed to provide the tools that enable biocatalytic oxidations, reductions and formation of activated intermediates. Research proposals should address such conversions and may focus on:

- · Co-factor analogs and mimetics
- Novel phosphorylation systems
- Integrated processes for enzymatic co-factor regeneration

Studies that additionally involve enzyme immobilization, use of enzymes in organic solvents, and novel process configurations are preferred, but these components are not critical for overall fundability of the proposal.

NOVEL HOST-VECTOR SYSTEMS for FERMENTATION and/or BIOCATALYSIS

Efficient production of any biotechnologically derived product requires the seamless participation of several complex technologies. A key participant is the host system in which gene expression or biocatalysis takes place. Limited access to such systems can restrict rapid research progress. Robust, novel hosts, particularly yeasts or fungi, would improve the probability of research success in these areas. Research proposals should focus on the timely development of the key tools of molecular genetic manipulation in novel host microorganisms, including:

- genetic transformation
- vector system(s) containing selectable markers
- specific chromosomal insertion of heterologous DNA
- chemically controlled gene regulation mechanisms
- amenability to high throughput genetic and biochemical techniques

Capability to or availability of genome or EST DNA sequencing for host characterization is desirable.

We encourage collaborative efforts among different research laboratories and institutions that bridge disciplines (e.g. molecular biology, chemistry, biochemistry and genomics). There are additional opportunities to match BRDC funds with other funding sources to increase the magnitude of the effort. We anticipate funding one or two research projects in each area for a duration of three or more years at a total funding level of approximately \$750,000 per year.

For details on how to apply visit the BRDC web site at www.biordc.com and click on "Research Opportunities." Due to legal constraints BRDC can only fund research within the United States at government laboratories, universities and non profit research institutes.

POSTDOCTORAL POSITION available immediately to study the cellular physiology of the rat septohippocampal complex using visualized patch clamp recordings from brain slices following sterotaxic injection of retrograde tracers. Send curriculum vitae to **e-mail: meenakshi.alreja@yale.edu**.

POSTDOCTORAL POSITIONS in herpes simplex virus latency, pathogenesis, and immunology. Postdoctoral positions are available immediately to work on four separate N1H-funded herpes simplex virus projects including (1) role of the LAT antiapop tosis function on the latency/reactivation cycle, (2) Tet-on regulation of LAT to determine the time at which LAT function is critical to the latency/reactivation cycle, (3) role of a novel proapoptosis HSV-1 gene in latency, and (4) HSV-1 vaccine development using newly developed lipopeptide strategies. Recent Ph.D. and a strong background in molecular biology or immunology are essential. A background in virology, viral latency, apoptosis, viral immunology, or vaccine development is highly desirable. Send curriculum vitae, names, addresses, and telephone numbers of three references to: Dr. Steven L. Wechsler, Virology Research Laboratory, Davis Building, Room 5072, Cedars-Sinai Medical Center Research Institute/UCLA School of Medicine, 8700 Beverly Boulevard, Los Angeles, CA 90048-1869. E-mail: wechsler@cshs.org.

Cedars–Sinai welcomes and encourages diversity in the workplace. Affirmative Action/Equal Opportunity Employer.

A POSTDOCTORAL POSITION is available immediately to assist in the development of genetic methods to track the geographic origin of African elephant ivory. We are building a geographic map of African elephant microsatellite allele frequencies. The map is intended for use in assigning geographic origin to ivory in legal and illegal trade. A strong background in molecular biology is desired including DNA extraction; amplification and sequencing; construction and screening of genomic libraries; and familiarity with software to analyze DNA for structure, variability. and population characteristics. Submit résumé and three letters of reference to: Samuel K. Wasser, Ph.D., Department of Zoology, University of Washington, Box 351800, Seattle, WA 98195-1800. E-mail: wassers@u.washington.edu. The University of Washington is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION: Position available to study the actions of the helix-loop-helix transcription factor TAL1/SCL in normal and leukemic hematopoiesis. Current efforts focus on (1) interaction with transcriptional coregulators (See Mol. Cell Biol. 20:2248, 2000); (2) regulation by phosphorylation and acetylation (see EMBO J. 19:6792, 2000); and (3) identification and characterization of target genes. Please send curriculum vitae and names of three references to: Dr. Stephen Brandt, Division of Hematology-Oncology, Room 547 Preston Research Building, Vanderbilt University Medical Center, Nashville, TN 37232. FAX: 615-936-3853; e-mail: stephen.brandt@mcmail.vanderbilt.edu. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCHER

Diabetic Retinopathy Laboratory, Cedars-Sinai Medical Center, has a Postdoctoral position available now to work on four-year NIH grant on epithelial alterations in diabetic cornea. Candidate should hold a Ph.D. degree in cell/molecular biology with experience in protein and RNA work, cell culture, metalloproteinases, and gene arrays. Salary: \$40,000 per year. Send résumé to e-mail: ljubimov@eshs.org or to: Dr. Alex Ljubimov, Ophthalmology Research, Cedars-Sinai Medical Center, 8700 Beverly Boulevard, Davis 5069, Los Angeles, CA 90048.

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POSITIONS OPEN

ASSISTANT PROFESSORSHIPS AND POSTDOCTORAL FELLOWSHIPS IN NEUROSCIENCE

The Louisiana State University Health Sciences Center Neuroscience Center of Excellence is recruit ing at least two Assistant Professors in the areas of synaptic physiology and molecular neurobiology. These independent Neuroscientists will complement the Scientists and interests below. The Center is housed in a new facility that includes 36,000 square feet of research space. Well-equipped, state-of-the-art laboratories and core resources are still expanding (e.g., tandem MS, multiphoton confocal microscope). The Neuroscience Center is home to a highly competitive, interdisciplinary Ph.D. program. Faculty members hold primary appointments in various De-partments of the LSUHSC School of Medicine and receive attractive start-up packages. In addition, several other Neuroscientists with laboratories throughout the LSU Health Sciences Center campus and the University of New Orleans are jointly appointed in the Center. The wide range of joint appointments within the Center is broadly inclusive of both fundamental neurobiology and clinical neurosciences (website: http://www.neuroscience.lsuhsc.edu).

Postdoctoral Fellowship opportunities are also currently available in the following areas: **Rene Anand:** nicotinic acetylcholine receptor-mediated signaling in neuronal plasticity and survival.

Haydee Bazan: cellular and molecular signaling in wound repair and angiogenesis.

Nicolas Bazan: lipid synaptic signaling and modulation of gene expression; neuronal survival and neurodegeneration in the hippocampus and retina.

Chu Chen: neuromodulation of ionic channels and synaptic plasticity in hippocampal neurons.

Jeffrey Erickson: molecular and cellular biology of vesicular neurotransmitter transporters.

Walter Lukiw: Alzheimer's disease, neurotoxicology, and gene transcription.

Jeffery Magee: dendritic integration and synaptic physiology.

Anthony Ricci: single-cell physiology investigating calcium regulation of excitability in auditory sensory cells.

Helene Varoqui: role of glutamine transporters in glutamatergic neurotransmission.

Faculty applicants should submit curriculum vitae, a three-to-five-page research plan (Postdoctoral candidates should send a description of their accomplishments up to today and aspirations), and names with full addresses (including e-mail) of three to four references. Send applications to: Nicolas G. Bazan, M.D., Ph.D., LSU Neuroscience Center, 2020 Gravier Street, Suite D, New Orleans, LA 70112. LSU Health Sciences Center is an Equal Employment Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS

Two positions funded by the Cardiovascular Center of Excellence are available to study the signal transduction mechanisms related to the effect of nitric oxide and protein tyrosine phosphatases on migration, proliferation, and collagen synthesis by vascular smooth muscle cells. Our projects address basic science questions but also have relevance to clinical problems. Experience in the techniques of molecular biology is essential. Send curriculum vitae and the names of three references to: Dr. Aviv Hassid, Department of Physiology, University of Tennessee, 894 Union Avenue, Memphis, TN 38163. E-mail: hassid@bellsouth.net. FAX: 901-448-7126.

POSTDOCTORAL POSITION is available to investigate the role of signaling pathways in the pathogenesis of allergic disorders using gene-targeting approaches. Strong background in molecular biology and/or immunology is required. Send résumé to: Talal Chatila, M.D., Division of Immunology, Department of Pediatrics, Box 8208, Washington University School of Medicine, 660 South Euclid Avenue, St. Louis, MO 63110. E-mail: chatila@kids.wustl.edu.

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POSTDOCTORAL POSITION

A Postdoctoral position is available to carry out cell biological and biochemical studies on GTPases, guanine nucleotide exchange factors (GEP), and GTPase activating proteins (GAP) that are involved in control of cell growth in space and time. See Science 292: 1376–1378, 2001; Genes and Dev. 13:1912–1917, 1999. For further information, please check website: http://www.biosci.ohio-state.edu/~molgen/ html/park.html. Strong biochemistry or cell biology background preferred. To apply, please send curriculum vitae and three references to:

> Dr. Hay-Oak Park Department of Molecular Genetics Ohio State University Columbus, OH 43210 Telephone: 614-688-4575 E-mail: park.294@osu.edu FAX: 614-292-4466

A **POSTDOCTORAL POSITION** is available immediately in adult hematopoietic stem cell biology at the Massachusetts General Hospital, Harvard Medical School.

Areas of focus include cell cycle regulation, localization, and plasticity. Experience in primary cell culture and animal models is required with a strong background in cell or developmental biology preferred. Please send a letter of interest and curriculum vitae

David T. Scadden, M.D. Massachusetts General Hospital Harvard Medical School 149 13th Street, Room 5212

Boston, MA 02129 E-mail: scadden.david@mgh.harvard.edu

to:

POSTDOCTORAL FELLOW/ RESEARCH ASSOCIATE

To identify proteins involved in signal transduction during malignant transformation and apoptosis of leukemia, breast, and prostate cancer. Strong background in protein chemistry purification and proteomics is desirable. Individual will interact with five Ph.D.s with strong background in molecular and cellular biology. Excellent salary commensurate with experience. Send résumé and names of three references to: Andrew S. Kraft, M.D., University of Colorado Health Science Center, Chief, Division of Medical Oncology, 4200 East Ninth Avenue, B171, Denver, CO 80262. E-mail: siobhan. houston@uchsc.edu.

POSTDOCTORAL POSITION in structural biology available immediately with Drs. John Sondek and Leslie Parise to characterize an integrin and p21-activated kinase (PAK)-binding protein by X-ray crystallography. Energetic, independent candidates with a strong background in X-ray crystallography or other aspects of structural biology, signal transduction, or biochemistry are encouraged to apply. Please send or e-mail curriculum vitae and names of three references to: Dr. Leslie Parise, Department of Pharmacology, CB Number 7365, University of North Carolina, Chapel Hill, NC 27599-7365. E-mail: parise@med.unc.edu; websites: http://www.med.unc.edu/pharm/parise.htm. Equal Oppontnity/Americans With Disabilities Act Employer.

POSTDOCTORAL FELLOWSHIP IN MITOTIC CHROMOSOME DYNAMICS

The Unit of Chromosome Structure and Function, National Institute of Child Health and Human Development (NICHD), is seeking applications for a Postdoctoral Fellowship to focus on the mechanisms and cell-cycle regulation of higher-order chromatin structure, particularly biology of chromatid cohesion and chromosome condensation in human and/or yeast cells. Applicants must have a Ph.D. or M.D. and have less than five years of postdoctoral experience. The position is available October 1, 2001. Interested applicants should submit curriculum vitae, bibliography, a cover letter with a brief description of research experience and interests, and the names of three references with telephone numbers to:

Alex V. Strunnikov, Ph.D. National Institutes of Health National Institute of Child Health and Human Development Laboratory of Gene Regulation and Development 18T Library Drive, Room 106 Bethesda, MD 20892-5430 E-mail: strunnik@box-s.nih.gov Telephone: 301-402-8384 FAX: 301-402-1323 NIH is an Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE UNIVERSITY OF MISSOURI-ROLLA

The Environmental Research Center at the University of Missouri–Rolla is seeking four Postdoctoral Research Associates to assist with several federally funded research projects with expertise in biological processes, physicochemical processes, and/or analytical methods. The positions are available immediately and are for a two-year period. Salary range: \$32,000 to \$36,000. Please send curriculum vitae, three references, copies of several representative publications, and a statement of research interests to:

Dr. Craig D. Adams University of Missouri-Rolla Environmental Research Center 202 Civil Engineering Building Rolla, MO 65409

Applications may be mailed, e-mailed: adams@ umr.edu, or FAXED to: 573-341-4729. For more information, please see website: http://www. umr.edu/~environ; Telephone: 573-341-4041. UMR is an Equal Opportunity/Affirmative Action Employer.

PROTEIN NANOTECHNOLOGY

POSTDOCTORAL (Ph.D. required) and RE-SEARCH ASSOCIATE (Technician; M.S. required) positions are available in a project involving the use of assembled protein cages as nanocontainers for encapsulation (websites: http://www.chemistry.montana. edu/tdouglas.html and http://tbi.montana.edu/ Mark_Young.htm). Candidates should have experience in either protein chemistry or aqueous inorganic chemistry. Initial appointments are for one year. Send curriculum vitae and names and telephone numbers of three references to: Trevor Douglas, Department of Chemistry and Biochemistry, 108 Gaines Hall, Montana State University, Bozeman, MT 59717 Applications will be reviewed until the positions are filled. Americans With Disabilities Act/Affirmative Action/ Equal Opportunity/Veterans Preference.

POSTDOCTORAL POSITION available immediately in a laboratory studying the role of phosphorylation of the inositol 1,4,5-trisphosphate receptor in the regulation of signal transduction. Previous electrophysiology experience is required. Please send letter of interests, curriculum vitae, and the names of three references to: Dr. Alan Fein, Department of Physiology, University of Connecticut Health Center, Farmington, CT 06030-3505. FAX: 860-679-1269; e-mail: afein@neuron.uchc.edu. UCHC is an Equal Opportunity Employer; Minorities/Females/ Veterans/People With Disabilities.

POSITIONS OPEN

RESEARCH FELLOWSHIP AND POSTDOCTORAL FELLOWSHIP Positions in Cancer Immunotherapy National Cancer Institute

The Tumor Immunology Section, Surgery Branch, National Cancer Institute, has immediate openings for a full-time Research Fellowship and two Postdoctoral Training Fellowship positions to develop novel immunotherapeutic approaches against common cancers in a laboratory with a track record in this field. A background in immunology and molecular biology is required. Applicants for the Research Fellowship position must have completed at least two years of postdoctoral training in immunology, and applicants for the Postdoctoral Fellowship must have a Ph.D. or equivalent degree.

Candidates should send a letter of interest, curriculum vitae, bibliography, five letters of reference, a detailed description of research plans, and copies of three published articles or book chapters. The completed application should be mailed to:

> Patrick Hwu, M.D. Senior Investigator Tumor Immunology Section Surgery Branch, NCI National Cancer Institute Building 10, Room 2B42 Bethesda, MD 20892-1502 E-mail: Patrick_Hwu@nih.gov

Selection for this position will be based solely on merit with no discrimination for nonmerit reasons such as race, color, gender, national origin, age, religion, sexual orientation, or physical or mental disability.

POSTDOCTORAL POSITION Baylor College of Medicine

A Postdoctoral position is available immediately to study the transcriptional corepressor and coactivator activities of the oncogenic protein Ski in human melanomas (*PNAS* [*USA*] **97:5924–5929**, 2000). Seeking individuals with experience in EMSA, *in vitro* transcription-translation, site-directed mutagenesis, and yeast two-hybrid screening. Interested individuals should send inquiries and applications including curriculm vitae, a brief description of past experience and future research interests, and the names and telephone numbers of three references to:

> Estela E. Medrano, Ph.D. Huffington Center on Aging Baylor College of Medicine One Baylor Plaza N-803.01 Houston, TX 77030

Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.

An NIH-funded **POSTDOCTORAL POSI-TION** is available to study the regulation of mRNA levels by a novel nuclear mRNA degradation pathway (see **Burkard and Butler**, Mol. Cell. Biol. 20:604, 2000). The experiments use the yeast S. cerevisiae as a model system, thereby providing biochemical and genetic approaches to this problem. The laboratory consists of a small group of graduate, undergraduate, and technical staff and the principal Investigator is available for daily consultation. Candidates with a strong background in molecular biology or biochemistry should send their curriculum vitae and the names of three references to: J. Scott Butler, Ph.D., Department of Microbiology and Immunology, University of Rochester School of Medicine, Box 672, 601 Elmwood Avenue, Rochester, NY 14642. Email: btlr@uhura.cc.rochester.edu.

POSTDOCTORAL AND NONPH.D. POSI-TIONS available immediately to study synaptic physiology of the developing mammalian retina using patch clamp and Ca2+ imaging. Competitive research program and salary. Experience in electrophysiology required. Dr. Jimmy Zhou, Physiology Department, University of Arkansas for Medical Sciences, MS 505, Little Rock, AR 72205. E-mail: zhoujimmy@uams.edu.

POSITIONS OPEN

POSTDOCTORAL POSITION in experimental neurophysiology and epilepsy. The Neural Dynamics Laboratory, Krasnow Institute, at George Mason University seeks Researcher for NIH-sponsored project using electric field adaptive control of neuronal networks to study transition to epileptic seizures. Candidate should have experience in intracellular patch recording and instrumentation. Salary: \$32,500. More information at website: http://www.krasnow. gmu.edu/neuraldyn. Consideration through at least September 1, 2001. Send letter, curriculum vitae, and three references to: Dr. Steven Schiff, Krasnow Institute, MS 2A1, George Mason University, Fairfax, VA 22030. E-mail: jbarreto@gmu.edu; Telephone: 703-993-4387. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION to study in vivo autoimmune diseases models using state-of-the-art, high-field magnetic resonance imaging (MRI). Candidates should have a background in neuroimmunology and experience with animal models of demyelinating autoimmune diseases. Send curriculum vitae and the names/addresses of three references to: Dr. Eric Ahrens, Department of Biological Sciences, Carnegie Mellon University, 4400 Fifth Avenue, Pittsburgh, PA 15213. FAX: 412-268-7083; email: eta@andrew.cmu.edu.



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