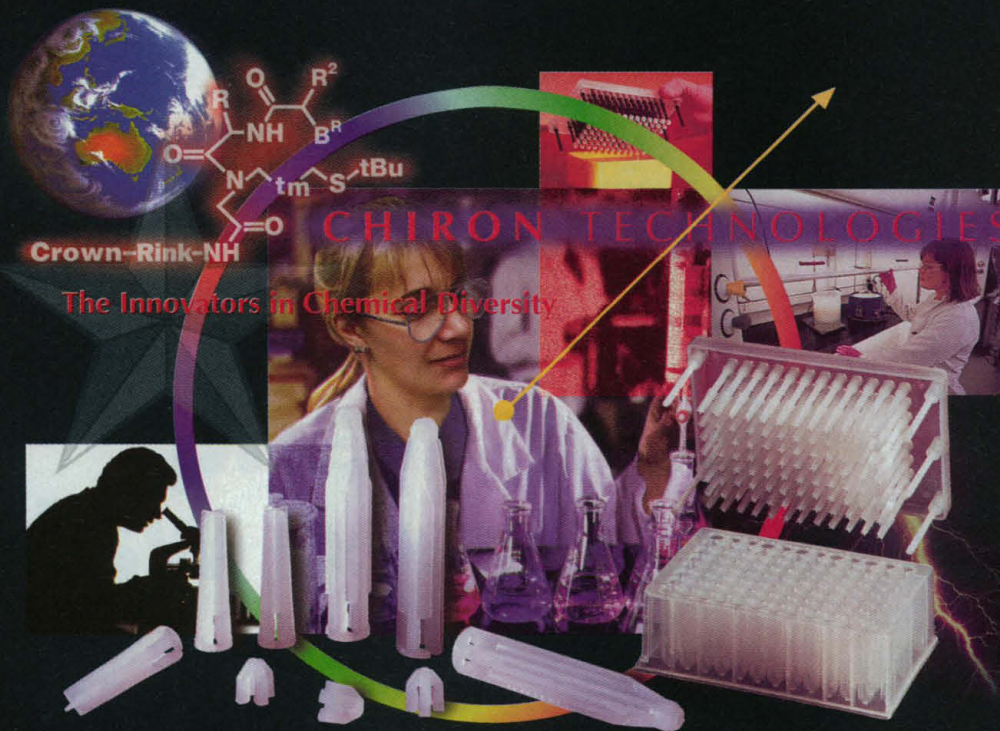


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CONTINUED ON PAGE 434

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The WEST COAST in 1998:

"An abundance of career opportunities...
A shortage of applicants..."

The following organizations have placed recruitment advertisements in the special advertising supplement beginning on page 437.

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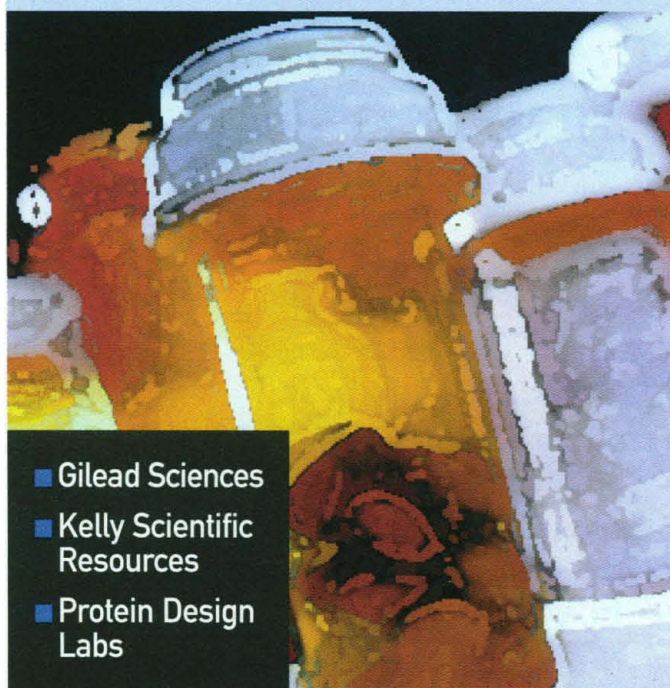
The WEST COAST in 1998:

"An abundance of career opportunities...
A shortage of applicants..."

Michael Woods

Ask almost any human resources professional or scientist in the biopharmaceutical industry for a capsule description of the West Coast job market these days, and the same dynamic, energetic portrait appears. The birthplace of biotechnology has job openings aplenty, and too few applicants. Biotechnology and pharmaceutical firms are no longer just turning to the East Coast and beckoning talented men and women westward. Increasingly, their gaze is shifting overseas, with hopes of filling empty seats at the laboratory bench with scientists from Europe and the Far East. Employers also are turning to a relatively new kind of organization on the biotech jobs scene, the dedicated temporary staffing agency.

To get a better sense of the West Coast market, we visited with Gilead Sciences and Protein Design Labs, and then got the latest on temporary scientific staffing from Kelly Scientific Resources.



- Gilead Sciences
- Kelly Scientific Resources
- Protein Design Labs



Fran Charlson, Protein Design Labs: "High Demand for Skilled Individuals"

After 13 years of human resources experience in the biopharmaceutical industry, Fran Charlson, of Protein Design Labs, Inc. (PDL) in Mountain View, California, has never seen a more robust job market for experienced and entry-level scientists and other personnel.

"The demand is high and the number of skilled individuals is low," Charlson said. "Coupled with the unemployment rate in the Silicon Valley, which is around 2 percent, it becomes very difficult to recruit new people."

PDL is developing a portfolio of humanized and human monoclonal antibodies to prevent or treat autoimmune and inflammatory diseases, transplant rejection, viral infections, and certain cancers and cardiovascular conditions. Its first humanized antibody, Zenapax (daclizumab), has been approved by the U.S. Food and Drug Administration and is being marketed by PDL partner, Hoffmann-La Roche, Inc. The company's patented antibody technology has been licensed to 17 biopharma companies.

PDL's recruitment needs expanded recently with the start of new research programs, including smaller peptide-like molecules and discovery and development of novel small molecule antimicrobial agents through identification of specific genetic pathways of infection. Research also is expanding into microbiology, combinatorial chemistry, and high-throughput screening.



Fran Charlson

Michael Woods writes frequently on the biotechnology and pharmaceutical industries.

Continued >



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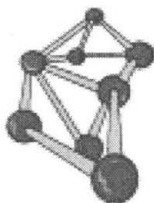
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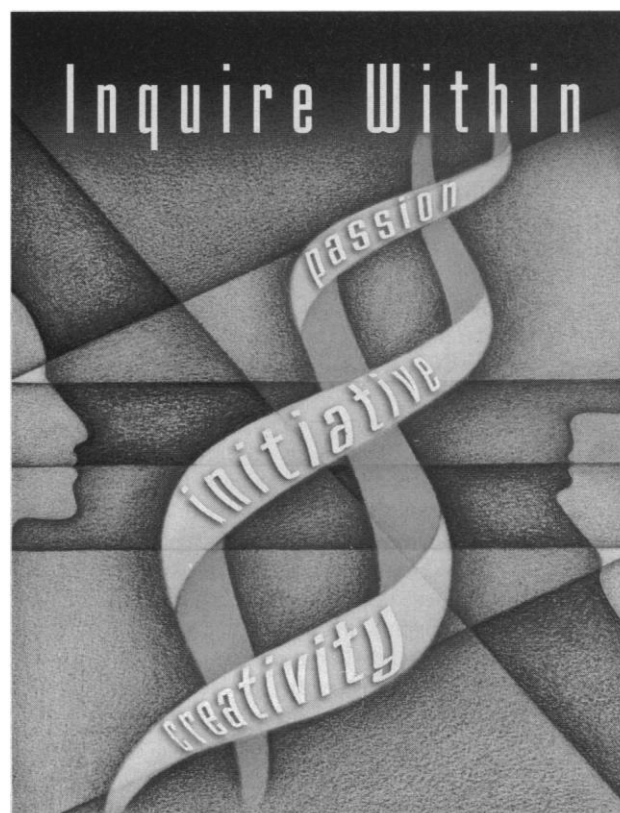
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Scientist, Pharmacokinetics

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Scientist, Metabolism

Perform drug metabolism studies in support of drug discovery/development and work closely with a team consisting of chemists and biologists. You should be a creative problem solver with a strong performance record in drug metabolism research and a proven record in your research areas. Requires a PhD degree in Chemistry/Pharmacology/Biochemistry (or a related field) with 3-5+ years' experience in the field of drug metabolism or pharmacokinetics. You must be able to proactively integrate preclinical and clinical metabolism information into all stages of the drug development process. Job Code SCI390

Scientist, Assay and Automation Technology

Collaborate with groups in Research & Development to develop and implement assays using immunochemical, cell-based and molecular approaches to support the discovery and development of new human pharmaceuticals. The successful candidate will be a laboratory scientist with keen interest in novel assay technology development and the ability to work effectively in a collaborative environment. Requires a PhD in immunology, cell biology or related

field with at least 2 years of post-doctoral experience in assay development and protein chemistry. A working knowledge of molecular biology techniques and cell biology is desirable. Strong interest and demonstrated accomplishments in novel assay technology development are essential. Successful candidate should demonstrate strong communication skills in both verbal and written form. Job Code SCI673

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You will lead a research group in the Molecular Oncology department to conduct studies leading to the development of new drugs. To qualify, you should have a PhD in Molecular Biology or in a related discipline and postdoctoral training with a strong record of publication. Additional research experience in one or more of the following areas is desirable: basic mechanisms of oncogenesis, tumor suppressor genes, cell cycle, cell death, DNA viruses. Job Code SCIMOLNC

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Provide pathology expertise to support preclinical drug development. You will work closely with the research pathology department to address preclinical safety, ADME, pharmacology and identification of mechanisms of action. You will provide toxicological and experimental pathology expertise to individual development projects to assure that all preclinical studies adequately support international clinical trials for global registration of Genentech molecules. In addition, you will collaborate on pharmacology and mechanism of action studies to support animal model development and assessment of morphologic endpoints. You should hold a DVM and PhD and be boarded by the American College of Veterinary Pathology with a minimum of 3-5 years' experience in preclinical and/or toxicological pathology. Experience in investigative or research pathology is desirable, as is scientific expertise in both small molecules and protein therapeutics. Job Code SCI173

Associate Director, Toxicologic Pathology

Supervise and coordinate toxicological pathology for preclinical drug development. You will serve as an internal preclinical expert and scientific bridge between drug development and research pathology. Oversee initiatives related to preclinical safety, ADME, pharmacology and identification of mechanisms of action. Focus on assuring that all preclinical studies adequately support international clinical trials for global registration of Genentech molecules. You will also collaborate on pharmacology and mechanism of action studies to support animal model development and assessment of morphologic endpoints. This position requires a DVM and PhD and American College of Veterinary Pathology board certification with a minimum of 7 years' experience in a preclinical and/or toxicological pathology department. Experience in investigative or research pathology is desirable. Scientific expertise in both small molecules and protein therapeutics is also a plus. Job Code SCI388

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"PDL is at a very exciting stage in its history right now," Charlson noted. "We're growing, moving into two new buildings in Fremont in the East Bay later this year, and we have a lot of job opportunities."

What kinds of personnel are in especially high demand? Charlson cited organic chemists at the Ph.D., M.S., and B.S. levels. Two of PDL's new research efforts require organic chemists, and they are in especially short supply in the San Francisco Bay area. Also needed are individuals with Ph.D.'s in formulation sciences and clinical research associates (CRAs), who might have degrees in nursing or B.S. degrees in the life sciences.

PDL, of course, is looking for individuals with outstanding academic achievement and scientific skills. Charlson also gets excited about applicants who are energetic, self-motivated, show good interpersonal and leadership skills, and have industry or other experience, such as internships. "We like to find people who specifically want to work at PDL, as opposed to those who are just looking for a job anywhere. I'm always impressed by an applicant who has taken time to research PDL and its programs, has the ability to ask insightful questions about us and the differences between PDL and our competitors."

Charlson recognizes, however, that the realities of the West Coast job market often make it difficult for applicants, especially at the entry level, to acquire such in-depth knowledge. "It's not unusual to see entry-level individuals who are considering three or four job offers at the same time," Charlson noted. "They may not have time to go beyond the information available on Web pages. Those pages are a wonderful source of information."

At the more senior levels, PDL seeks individuals with specific scientific skills and understanding of scientific theories that are part of PDL's research agenda. Industry experience, interpersonal skills, and publications also are important for these applicants.



Jennifer Broughal

Jennifer Broughal and Joni Lewis, Gilead Sciences: "A Hot Job Market in the Bay Area"

Gilead Sciences is located in the midst of the vibrant West Coast job market. Gilead focuses on discovery, development, and commercialization of drugs for important viral diseases. A currently marketed product, Vistide (cidofovir injection), is used for the treatment of CMV retinitis, a sight-threatening viral infection in patients with AIDS. Other

products are in Gilead's pipeline for other diseases caused by HIV, hepatitis B, and influenza.

What's the view of the West Coast career situation from beautiful Foster City, California? Here's a dialogue with Jennifer Broughal and Joni Lewis, of Gilead's human resources department:

Broughal: The job market is pretty hot in the Bay Area right now because we have so many biotech companies. With Gilead's emphasis on viral diseases and therapeutics, we're looking for discovery scientists with skills in virology and molecular biology and individuals in clinical research fields. There's very strong competition for these individuals. From the applicant's standpoint, this is a very good time to get a job in science.

Lewis: Looking at the West Coast job situation as a whole, the biotech market is maturing and the demand is shifting as products move through the pipeline. There's a greater demand now in the

clinical area: clinical research, medical information, biometrics, regulatory affairs. The shift probably will continue and become more pronounced during the next several years.

Broughal: We're also noticing a change in the applicant pool. It used to be that we'd get applications nationally, and maybe a few international job-seekers. Access to the Internet has resulted in increased interest from scientists abroad. We're receiving résumés from abroad almost daily. The international



Joni Lewis

science community is realizing that excellent job opportunities exist on the West Coast. I'd expect that interest to increase over the years.

Lewis: What kind of applicants do we want? People with solid scientific training and skills and the virology-molecular biology orientation. Previous industry experience would be a plus. We also like to see a team orientation — the ability to work effectively and get along well with small groups of other scientists, and an ability to adapt to change. Leadership and management skills always are a bonus.

Broughal: We try to assess these non-science skills, from the applicant's previous performance in industry or other lab settings. We call references and talk to previous coworkers and managers about the applicant's working style, habits, and general fit in a team environment.

Lewis: Applicants should do their homework and know quite a bit about Gilead Sciences. There's a great deal of information readily available on our Web page. During the initial interview, we look for a general understanding of Gilead's research orientation.

Broughal: I try to sense the fit between applicant and Gilead. One of the questions that I often ask is, "Why Gilead?" There are scores of biotech companies in the Bay Area. Why did this individual apply to Gilead? Is it our reputation? The emphasis on virology? The product pipeline? Easy commuting, because they live near Foster City?

Lewis: With such intense competition for good people on the West Coast, we use an array of recruiting approaches to reach a broad spectrum of scientists in the United States and internationally. We're developing relationships with colleges and universities, tapping career fairs, and advertising in scientific journals.

Rolf Kleiner, Kelly Scientific Resources: Temporary Employment — An Emerging Trend on the West Coast Benefits Employer and Employee

"Anyone with a good solid set of skills can find work very easily on the West Coast. The job market is strong and growing and there are plenty of attractive opportunities for people, from the entry level right up to the Ph.D. with years of experience."

As senior vice president and general manager of Kelly Scientific Resources (KSR), the scientific business unit of Kelly Services, Inc., in Troy, Michigan, Rolf Kleiner is much in tune with the nationwide biopharmaceutical job market. KSR has 27 branch offices in the United States and Canada and on-site representation at several companies. It currently employs more than 2,000 scientists per month. Kleiner launched KSR in 1995, marking the introduction of dedicated scientific staffing into traditional staffing services.

Each KSR office is staffed by scientists, including Ph.D.-level individuals, in a milieu that emphasizes the advantages of scientists

July 17, 1998

Colleagues,

I'm pleased to announce the establishment of the Novartis Agricultural Discovery Institute (NADI). The main campus of the Institute will be located in La Jolla, California. NADI will be adjacent to the Novartis Functional Genomics Institute, creating a large critical mass in genomics research. NADI will be fully funded by the The Novartis Research Foundation, eliminating the need for grants.

Our mission is to make discoveries that enable the creation of novel seeds, new methods of protecting crops, and new animal health products that enhance human life in an environmentally sustainable manner. We will work within broad academic alliances to exchange knowledge, to share our resources, and to facilitate the application of academic science to social well being. We will work closely with our colleagues in the Novartis ag biotech labs at Research Triangle Park, NC and at other sites throughout the world.

The focus of NADI is matching genes with traits, primarily through the production and exploitation of gene and protein databases, supported by tools for testing function. Protein structure and engineering will also be emphasized. Plants, fungi, bacteria, viruses, nematodes, and insects will be studied. We will take full advantage of model systems.

We have a large number of open positions to fill over the next several months. We invite applications from scientists at ALL levels with expertise in molecular genetics, protein chemistry, computational biology, chemical engineering and plant physiology. Open research positions in Genomics and Proteomics address: Sample Preparation; Gene Library Construction; Gene Sequencing; Gene Expression Profiling; Gene Mapping; Cell Fractionation; Protein Separation; Protein Identification; Protein Interactions, and Bioinformatics. Open research positions in Functional Genomics include the development of gene evaluation systems for plants, fungi, and insects. Open research positions in Discovery will address crop yield, agrochemical targets, and the creation of novel crop properties. We also have several open administrative and legal positions.

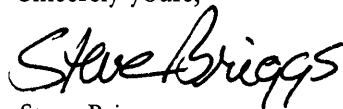
We will consider all qualified applicants for employment consistent with Novartis policies and values. We do not tolerate discrimination with respect to employment or any of the terms of conditions of employment because of race, religion, national origin, sex, disability, age or any other basis prohibited. We will strive to build a challenging, dynamic and diverse organization.

NADI possesses a unique combination of academic excellence and stable resources. San Diego is a fabulous place to live, work, and play. The Novartis Agricultural Discovery Institute offers attractive compensation and benefits.

Novartis offers a competitive salary commensurate with qualifications and experience, a comprehensive benefits package, and an environment conducive to professional achievement. Qualified candidates please paste your c.v. (including a skills list), followed by your cover letter, into the body of an e-mail and send to biotech.jobs@cp.novartis.com. Indicate position NADI-SM in the subject area. To ensure that your information is uploaded into our HR System, please do not send your resume and cover letter as attachments.

I look forward to hearing from you!

Sincerely yours,



Steve Briggs

Principals only. We are an Equal Opportunity Employer, M/F/D/V.

University of California, San Francisco Neurology Alcohol Research Program & The Ernest Gallo Clinic and Research Center

The Alcohol Research Program at UCSF is a multidisciplinary team organized to investigate fundamental mechanisms of alcohol addiction. We have developed innovative approaches in molecular and cell biology, human genetics, and behavioral pharmacology, and we have pioneered in bringing invertebrate genetics to the forefront of alcohol research. Our goal is to identify and validate new molecular targets for therapeutic intervention, which will involve significant effort in drug discovery and development in the years ahead. As part of a major expansion we seek applications from qualified and motivated individuals to pursue research in any of the specific areas described below.

Adrienne Gordon, Ph.D., Ivan Diamond, M.D., Ph.D.: Cellular and animal models to study the molecular bases of alcohol tolerance, dependence, and craving.

- Senior postdoctoral fellow/staff scientist with a background in neuroscience.
- Postdoctoral fellow with experience in biochemistry, cell biology, neuroanatomy, and/or molecular biology of signal transduction.

Ulrike Heberlein, Ph.D.: Molecular genetics of ethanol-induced behaviors in *Drosophila*.

- Research associate with experience in *Drosophila* genetics and molecular biology.

Clyde Hodge, Ph.D.: Neurobehavioral pharmacology of drug craving and reinforcement in rodent models of addiction.

- Senior postdoctoral fellow/staff scientist with a background in behavioral neuroscience or behavioral pharmacology as well as experience with mammalian models of addiction. Additional background in neuroanatomy or neurophysiology is desired.
- Postdoctoral fellow with a background in neuroscience, molecular biology, cell biology, or behavioral science.
- Research associate with experience in general *in vivo* laboratory methods as well as mouse transgenic/knockout technology.

Steve McIntire, M.D., Ph.D.: Genes required for ethanol responses and synaptic function in *C. elegans*.

- Senior postdoctoral fellow/staff scientist preferably with a background in *C. elegans* genetics and molecular biology.
- Postdoctoral fellow with experience in molecular biology, genetics, or cell biology.
- Research associate with prior experience with *C. elegans*.

Robert Messing, M.D.: Mouse gene targeting and transgene expression to examine signal transduction pathways in alcohol dependence and addiction.

- Senior postdoctoral fellow/staff scientist with a background in inducible transgene expression in mice.
- Postdoctoral fellow with a background in neuroscience or signal transduction.
- Research associate with experience in mouse breeding, histology of the nervous system, and/or molecular biology.

Michael Miles, M.D., Ph.D.: High-density oligonucleotide array analysis of central nervous system gene expression during behavioral responses to alcohol.

- Postdoctoral fellow with experience in behavioral neurobiology, molecular biology, and/or neuroanatomy.

Dorit Ron, Ph.D.: Effects of alcohol on protein anchoring and scaffolding in signal transduction.

- Postdoctoral fellow with experience in biochemistry, cell biology, neuroscience, and/or molecular biology of signal transduction.

Kirk Wilhelmsen, M.D., Ph.D., Cheryl Jay, M.D.: Mapping human genes that contribute to alcoholism.

- Senior staff scientist in bioinformatics, preferably with experience in genetics.
- Postdoctoral fellow with experience in statistical biology.
- Postdoctoral fellow with experience in linkage analysis, association studies, mutation detection, and candidate gene screening.
- Research associate with experience in molecular genetic analysis.
- Senior staff scientist with a background in assessment of addictive disorders and personality traits and experience in psychometrics.
- Postdoctoral fellow with experience in clinical studies of addiction, particularly alcoholism.

Senior postdoctoral fellows/staff scientists should have several years of postdoctoral experience in academic science or biotechnology and be interested in carrying out independent and innovative research in an interdisciplinary team environment. Postdoctoral fellows should have a Ph.D. or M.D. in the appropriate areas of research. Research associates should have a B.S. or M.S. degree and some relevant laboratory experience. Salary levels will be commensurate with experience. Applications including a curriculum vitae, summary of research experience, and names of three references should be sent by letter directly to the appropriate faculty member at the following address: **(Faculty Name), UCSF Gallo Center, Building 1, Room 101, San Francisco General Hospital, San Francisco, CA 94110.**

For further information about the Alcohol Research Program at UCSF, please visit our website at <http://egcrc.ucsf.edu>.

UCSF is an Equal Opportunity Employer.

Directed Evolution

DNA Shuffling - Molecular Breeding

Maxygen's proprietary DNA shuffling technology generates extensive molecular diversity with genes, pathways, vectors and viruses using various recombination techniques (in vitro and in vivo) in combination with low level mutagenesis and natural diversity. This diversity is screened or selected with appropriate assays to identify improved variants. These variants are then subjected to reiterative rounds of shuffling and selection/screening to yield new sequences that have desired novel properties determined by the assay. Combining this empirical approach to molecular breeding with powerful assays allows Maxygen to generate novel solutions to difficult problems that currently limit exploitation of commercially and scientifically important areas.

Group Leaders, Scientists Post-Docs, Research Associates

Maxygen has 20 open positions in several fields. The successful candidates will be innovative, motivated, creative and team-oriented individuals with a proven scientific track record. Maxygen is an independent company, created as a spin-off from Affymax Research Institute and GlaxoWellcome. Maxygen is a state-of-the-art technology center focused on development of directed evolution technology ('molecular breeding') for the optimization of DNA and protein sequences.

Enzyme/Pathway Engineering

Enzymes-Metabolic Pathways-Natural Products

Molecular Biologists, Enzymologists, Microbiologists, Microbial Geneticists

Shuffling technology development and application. Combining molecular breeding technologies and novel high throughput screening methods, Maxygen is evolving enzymes and pathways for diverse chemical applications in pharmaceuticals, natural products, speciality & commodity chemicals. Shuffling of enzymes to generate libraries of chemicals that are screened for pharmaceutical properties. Rather than using existing pathways, single enzyme families are evolved for complex biosynthesis, biotransformations and couplings of a large diversity of building blocks.

Molecular Microbiologists

Experienced with genetic manipulation of bacillus, yeast and actinomycetes.

Assay Development-*HTP Screening-Analytical Chemistry*

Biochemists with experience in enzyme and pathway reactions in microbes. HTP screening implementation and robotic automation.

Plant Scientists (10 positions)

Maxygen is establishing a scientific effort to capture the value of gene shuffling in agriculture.

Plant Biochemists/Metabolism Scientists

Expression and assays of gene libraries in hosts including bacteria, yeast, plant cells and whole plants (All levels).

Assay Development - *HTP Screening*

Target-based assays, microbial assays, plant cell & tissue assays, and whole plant assays. High throughput experience preferred.

Visit our Website at WWW.MAXYGEN.COM for additional information. Resumes, including e-mail address to: Ms. Rose Sturgess, Maxygen, 3410 Central Expressway, Santa Clara, CA 95051; e-mail cv's: david_kashyap@maxygen.com

Equal Opportunity Employer

The logo for Maxygen, featuring the word "MAXYGEN" in a bold, sans-serif font. The letters are black and set against a white background. The "X" is particularly prominent, with its two strokes crossing in the center.

with human resource management and recruiting experience evaluating and placing other scientists in jobs. Kleiner got a Master's degree in natural sciences from the Swiss Federal Institute of Technology in Zurich, and has 19 years of experience in start-ups and other firms. KSR's five offices in California are among the most active in the country, affirming the Bay Area's reputation as a national hotbed of biotech career opportunity.

When considering those opportunities, Kleiner suggests that scientists give thought to what he describes as one of the fastest growing trends on the biopharma employment scene — temporary work. "There is now a notable trend on the West Coast and elsewhere for regular temporary placements at the technician and analyst levels," he said. "Some biotech companies are hiring Ph.D's and management personnel on a temporary or project basis. In smaller, start-up companies, it is probably one of the smartest ways to hire people." Employers have access to a flexible work force that can be adjusted to meet peaks and valleys without the expense of hiring and terminating permanent employees. That conserves capital, with labor overhead matching workload, which can be an especially high priority in small start-ups.

What kinds of degrees are in demand by KSR on the West Coast? Kleiner cited opportunities throughout the life sciences, including biol-

ogy, molecular biology, biochemistry, synthetic organic chemistry, analytical chemistry, nursing, and pharmacy.

Kleiner is enthusiastic about the benefits that temporary employment brings to employees. "It fills a need in the lives of individuals who don't want to be tied down to a full-time job, and want the flexibility of working part time for fixed periods of time while caring for children or elderly," he noted. KSR also opens doors for entry-level scientists who might not have adequate experience or other qualifications to land a full-time position. "We see many, many cases in which a scientist works on a temporary basis, demonstrates the ability to excel at a job, and is hired on a permanent basis. Temp-to-permanent conversions are very common. It is the classic win-win situation."

KSR often uses an approach in which it provides temporary staff to a biopharma on a get-acquainted basis for a fixed period of time. "If the employee fits into the corporate culture, meets the job requirements, they are hired away from us and wind up being direct staff." ■



Rolf Kleiner

RATING THE WEST COAST: What's so good about a career on the West Coast? Suppose an applicant is weighing two equivalent job offers, one east, one west. What advantages does the West Coast offer that individual? Reflections from our panel:

JONI LEWIS, Gilead Sciences:

We are located in the heart of biotech country here in the Bay Area, and there are plenty of job opportunities for scientists, and job mobility. Proximity to the University of California and Stanford, and a strong network of scientific peers, is also a plus. The other advantages of working on the West Coast should be obvious. The quality of life is wonderful. We have a wide diversity of outdoor recreational activities here and others are nearby, including some of the best skiing at Lake Tahoe. San Francisco and San Jose offer all the cultural and other attractions of big, sophisticated cities.

JENNIFER BROUGHAL, Gilead Sciences:

I certainly agree with Joni, and it really gets down to individual choices. Some people in this industry prefer to live on the East Coast, or perhaps in the Research Triangle area. But there are many attractions here found in few other areas. There's a lot of energy and opportunity in biotechnology and other high-tech fields.

You work and socialize with intelligent, talented, interesting people. Then there's the sheer natural beauty of the Bay and the whole surrounding area. I couldn't think of a better place for a science career.

FRAN CHARLSON, Protein Design Labs:

It's a wonderful place. We live in one of the most creative, intellectual, energetic, beautiful, and prosperous areas of the country. The Bay Area is the birthplace of the biotech industry, and while there still is more start-up activity here than any other place, California also has many established biotechnology and pharmaceutical companies. In that kind of environment, there's very good job mobility, and less difficulty for a spouse in a two-career family to find a good job. The area is culturally diverse, and biopharmaceutical companies reflect it in their culturally diverse work forces. With Stanford and Berkeley, we have two of the best universities in the country. The climate is wonderful year-round, and people can stay active in outdoor activities through the winter. We benefit from many cultural

opportunities, including the theater, the opera, the symphony, dance, museums, and much more. We also have a number of professional sports teams. Restaurants throughout the Bay Area are wonderful. I'd tell that applicant to pick the West Coast. We have an unbeatable combination of attractions, resulting in an excellent quality of life.

ROLF KLEINER, Kelly Scientific Resources:

As someone who grew up in Southern California, I think the West Coast has huge advantages to offer in terms of quality of life. The obvious one, for example, is the climate, which makes it possible to get outside and participate in many outdoor activities 12 months of the year. There's no winter shutdown. Cultural opportunities are good, but I don't know if they are better than the East Coast. Job mobility certainly is good, but it depends a lot on your specific field. It also depends on whether you want to work in a more R&D-oriented small company, or an environment that is much more oriented toward manufacturing. Someone in biotech looking for a small start-up certainly would have a wider range of jobs to consider in the Bay Area or San Diego. An analytical chemist with a pharmaceutical background or an individual experienced in the process sciences might have better opportunities on the East Coast, where there are more large pharmaceutical companies.

HELP US DISCOVER THE NEUROPHARMACEUTICALS OF THE FUTURE

SIBIA NEUROSCIENCES, a California-based biotechnology company, has established an impressive record in the discovery of novel, small molecule therapeutics for disorders of the central nervous system. Our company's unique approach to characterizing the molecular processes involved in these disorders continues to generate prospects for the neuropharmaceuticals of the future! We currently have the following opportunities available:

CELLULAR NEUROBIOLOGY

Functional characterization of native and recombinant nicotinic acetylcholine receptors using calcium-sensitive fluorescent dyes, fluorescence imaging and microscopy. Postdoctoral experience in cellular neurobiology is essential.

BEHAVIORAL PHARMACOLOGY

Evaluation of novel compounds for the treatment of depression, schizophrenia and anxiety. PhD plus 2-4 years experience in psychopharmacology required, along with knowledge of animal behavior models and expertise in stereotaxic surgery. Expertise in operant behavior is desirable.

NEUROPHARMACOLOGY

PhD plus 2-4 years experience in the pharmacological evaluation of compounds on neurotransmitter function employing microdialysis/HPLC techniques, neurotransmitter release, radioligand-binding and voltammetric techniques.

HIGH THROUGHPUT SCREENING

Perform high throughput, automated, cell-based assays using fluorescence-based methodologies. Support drug discovery in multiple therapeutic areas. BS/MS required; relevant experience preferred.

We are also seeking experienced Scientists in several areas of investigation to support our drug discovery efforts. Candidates with a PhD, MS or BS and experience in the following specialties are invited to submit a C.V.

SYNTHETIC ORGANIC CHEMISTRY

MOLECULAR NEUROBIOLOGY

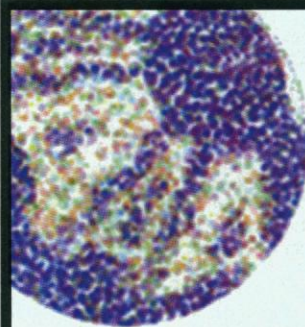
BEHAVIORAL PHARMACOLOGY

MOLECULAR PHARMACOLOGY

SIBIA Neurosciences offers a stimulating scientific workplace situated on San Diego's beautiful La Jolla coastline, together with a competitive salary and benefits package. Send your C.V. with the names of 3 references to: Lynn Alba, SIBIA Neurosciences, Inc., 505 Coast Blvd., South, Suite 300, La Jolla, CA 92037, fax (619) 452-9279, email lalba@sibia.com. See our website at www.sibia.com. EOE.

SIBIA

Neurosciences, Inc.



Bright Horizons for Scientific Discovery, Expansive Career Opportunities

and Glorious Pacific Skylines!

As an emerging force in the biopharmaceutical industry, Aviron has been very successful at discovering great talent to develop some of the world's most innovative vaccine technologies. Already in Phase II/III clinical trials, our live vaccines for parainfluenza and influenza have shown great promise and may soon save billions of dollars and thousands of lives.

With new vaccines on the horizon and expanding opportunities throughout the company, there has never been a more exciting time to consider the West Coast and a career with Aviron. We currently have 4 opportunities for experienced Scientists in our lovely Mountain View, California location.

SCIENTISTS

CELL CULTURE

You will play the lead role in developing cell culture technology for application to current pipeline products. This will involve testing and development of processes using microcarrier reactors and perfusion bioreactors for viral vaccine production. We will also rely on you to manage internal/external technology development, as well as prepare Aviron for marketed production of cell culture products. Requires a PhD in Chemical/Biochemical Engineering, Cell Biology, Virology or related field with 5 years relevant experience; an MS with equivalent experience will also be considered. Must have familiarity with cGMP. Experience at production scale and good supervisory skills preferred. Job Code: 80603

ASSAY DEVELOPMENT

We will rely on you to develop sensitive and rapid analytical methods and perform assays to monitor virus purification. Other duties will include developing analytical methods for quality control of viral vaccines and assessment of protein/carbohydrate dependent virus aggregation/inactivation. Requires a PhD in Biological Science or Analytical Sciences and 3-5 years relevant experience. Successful candidates will be knowledgeable and skilled in state-of-the-art biochemistry techniques and related instrumentation. Experience in handling live microorganisms is preferred and knowledge of good lab practices is desirable. Job Code: 80414

FORMULATION

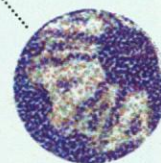
In this multi-faceted role, you will support the development of vaccine formulations that optimize performance and stability. You will also work to develop analytical methods for characterizing live virus products and collaborate with quality, operations and process development staff to develop optimal processing methods. Qualified candidates must have 3 years post-PhD experience or PhD or MS/BS with equivalent experience in Pharmacology, Biochemistry, Virology, Cell Biology or Biochemical Engineering. Requires experience with the formulation of human health-care products; experience with live virus formulation is preferred. Job Code: 80101

DEVELOPMENT

You will play the lead role in transferring processes from development staff to manufacturing, and provide ongoing support for process and equipment troubleshooting and validation efforts. Involves working with the following processes: cell culture manufacturing, downstream processing and aseptic filling. Requires a MS/BS in Biochemical/Chemical Engineering, Biochemistry or related field and 6 years experience; a PhD and 3 years experience are preferred. Must have working knowledge of biologics process development and manufacturing, familiarity with cGMP, and experience at production scale. Job Code: 80601

Join our growing team and make an impact on your life and the lives of others. If interested, please send resume to: Aviron, Attn: Human Resources, Job Code: _____, 297 N. Bernardo Ave., Mountain View, CA 94043; fax 650/919-2491, careers@aviron.com. Aviron welcomes candidates from diverse backgrounds. EOE.

Aviron



WEST COAST CAREERS

***A Reputation of Credibility...
The Highest Standards of Scientific Discovery...
An Environment that Values its People
as Highly as its Science.***

It's not just enough to be "highly competitive" anymore. AXYS Pharmaceuticals is an established leader in the integration of drug discovery technologies from gene identification through clinical development. We are focused on the discovery of small molecule therapeutics, and are currently working on several promising research collaborations with world-class pharmaceutical companies in a broad range of therapeutic areas. We currently have an excellent opportunity in our South San Francisco facility for a select group of hands-on team players to join our expanding interdisciplinary R&D team.

GROUP LEADER - Enzymology

The position requires a Ph.D.; at least 5 years of pharmaceutical research experience, including some in a supervisory role; expertise in enzyme kinetics, enzyme inhibitor characterization, protein purification, and spectrophotometric & fluorometric assay methods; a proven publication history; the ability to interact in a highly interdisciplinary environment, and to lead the research efforts of a 7-member group; and excellent written/verbal communication skills. Familiarity with proteases, high-throughput assay methods, and molecular biology methods a plus. (Job# N98-111-SCI)

SYNTHETIC/ORGANIC CHEMISTS - BS/MS & Ph.D. levels

We currently have openings in both Combinatorial and Medicinal Chemistry at all levels. Combinatorial Chemists will develop and validate synthetic methods suitable for the production of large combinatorial libraries. Medicinal Chemists will utilize protein structures and modeling, high throughput screening, and proprietary technologies to design and synthesize small molecule therapeutics. Candidates must have industrial or academic synthetic/organic experience; the ability to design/optimize multistage synthetic sequences with minimal guidance; working knowledge of purification & compound characterization (i.e. HPLC and NMR); and excellent analytical, interpersonal and written/verbal communication skills. Familiarity with combinatorial chemistry techniques a plus. (Job #N98-ACH-SCI)

C. ELEGANS BIOLOGISTS - BS/MS & Ph.D. levels

The position requires demonstrated experience in conventional recombinant DNA, PCR, hybridization, and library screening methods. Specific experience with *C. elegans* or high-throughput PCR-based mapping or screening methods a plus. Candidates must have substantial experience in *C. elegans* genetics & biology. (Job# N98-112-SCI)

SR RESEARCH ASSOC/RESEARCH ASSOC - Purification

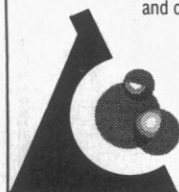
The position requires an MS in analytical/separations science; 2-5 years' experience in HPLC preparation technique; experience in reverse/normal phase HPLC in organic compound purification; and solid communication & computer skills. Must be self motivated with the ability to supervise the work of others. Experience with micro scale-kilo scale separations & high throughput HPLC preferred. Knowledge of other purification methods (ion-exchange, size exclusion, affinity chromatography) a plus. (Job# N98-099-SCI)

RESEARCH ASSOCIATE - Biochemistry

The position requires a BS/MS in a biological science; 3-5 years' relevant lab experience; experience with spectrophotometers, plate readers, and general protein handling; demonstrated knowledge of enzyme purification, handling and testing; the ability to follow established protocols; PC proficiency with MS Word & Excel; and excellent written/verbal communication skills. Prior work experience in an assay lab a definite advantage. (Job# N98-109-SCI)

We offer exceptional salaries, full benefits, and career advancement opportunities within a progressive, growing company. Please forward your resume to: AXYS Pharmaceutical, Human Resources Dept., (Attn: Job# _____), 180 Kimball Way, South San Francisco, CA 94080; email: human_resources@axyspharm.com. For additional career opportunities and company information, please visit our website. EOE

www.axyspharm.com



AXYS

CHIRON CORPORATION'S mission is to end human suffering caused by disease through the development of products that transform the practice of medicine. Since 1981 we have been at the forefront of biotechnology developing products for the diagnosis, prevention and treatment of human disease. Currently, we seek key scientists to join our development team in Emeryville, California, on the beautiful San Francisco Bay.

**SENIOR SCIENTIST
Analytical Chemistry**

You will develop and validate quantitative analyses for Chiron's protein therapeutics and vaccines. These quantitative protein separations are used by process development for both product characterization and in-process assays, and by QC for establishing product identity, purity and stability. We require a Ph.D. with 10+ years of relevant experience including the supervision of both laboratory staff and other Ph.D. level scientists. Your background should demonstrate an in-depth knowledge of the biopharmaceutical drug development process and of pharmaceutical manufacturing regulations. Effective written and verbal communication skills are critical for both Development team organization and regulatory submissions.

Send your resume to Chiron Corporation, Human Resources, Job Code 3164, 4560 Horton St., Emeryville, CA 94608. As an equal opportunity employer, Chiron honors diversity in every respect.

CHIRON

***Inspired by the Challenge.
Dedicated to the Solution.***

Gilead Sciences is an independent biopharmaceutical company that seeks to provide accelerated treatment solutions for patients and the people who care for them. We discover, develop, and commercialize proprietary therapeutics for important viral diseases from influenza to AIDS.

WE OFFER ONGOING OPPORTUNITIES IN THE FOLLOWING RESEARCH AREAS:

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Biochemistry	BS/MS/PhD
Virology	PhD
Medicinal Chemistry	BS/MS/PhD
Structural Chemistry	PhD

At Gilead, you will discover that we are as committed to opportunity as we are to scientific achievement.

Interested candidates should send a resume to: Gilead Sciences, Human Resources, 333 Lakeside Drive, Foster City, CA 94404, Fax (650) 573-4800.

Visit our website at www.gilead.com.

We are proud to be an equal opportunity employer.

**GILEAD
SCIENCES**

A CELEBRATED HISTORY, AN EXCITING DESTINY.

As we at ALZA mark our 30th year, we celebrate our achievements as an integrated, commercial pharmaceutical company. Ours is a history of innovation focused on expanding the therapeutic value of our drug delivery technology around the world. Moving forward in our role as a developer, manufacturer and marketer of innovative products, we remain committed to improving the lives and health of people everywhere. Join us as we meet our exciting destiny and create the pharmaceuticals of the future!

Destiny is not a matter of chance. It's a matter of choice. Make yours with a career move to ALZA. Located in the heart of Biotech Bay, we provide a collaborative team of dedicated scientists and professionals who have made the last 30 years something worth celebrating. Please send resume to ALZA Corporation, HR Dept., Attn: Job#SC10717, 950 Page Mill Road, PO Box 10950, Palo Alto, CA 94303-0802; fax: (650) 494-5656; email: jobs@alza.com. Job Hotline: (650) 494-5319. ALZA is proud to be an EOE.

www.alza.com

SAN FRANCISCO BAY AREA OPPORTUNITIES

Associate Director-Regulatory Affairs
Clinical Data Analysts
Clinical Program Manager
Director/Senior Director-Medical & Safety Services
Manager/Director-Biopharmaceutical R&D
Research Scientist/Statistician-Clinical Pharmacology
Staff/Research Scientist-Toxicology
Staff Scientists-Chromatography & Spectroscopy
Chemical/Process Engineers
Senior Chemists-Internal Auditor, Reviewer, & Bioanalytical



POSTDOCTORAL RESEARCH FELLOW

SF BAY AREA

Cohesion Technologies is a technology-based company focused on tissue repair and regeneration. Currently, we have a Postdoctoral Research Fellow position available immediately for an individual who has dual experience in molecular biology and biochemistry to join our research laboratory, located in Palo Alto, California.

The selected candidate will be involved in the expression, purification and activation of an enzyme in the blood coagulation pathway. The focus of this project will be the study and expression of enzymes and proteins that can be used for therapeutic benefit. Familiarity with proteolytic enzymes and working knowledge of the blood clotting cascade would be an advantage. The ability to interact and work well in a team environment is a must.

This opportunity features a competitive salary of \$35K-\$38K/year commensurate with experience plus medical benefits. Please send CV with a list of three references to: Cohesion Technologies, Human Resources, 2500 Faber Place, Palo Alto, CA 94303, or fax to the attention of Human Resources at (650) 354-4912. We are an equal opportunity employer.



POSTDOCTORAL FELLOWSHIP

DNAX Research Institute, located near Stanford University, conducts basic research in Immunology and Molecular Biology in an open, academic environment. We are looking for a motivated individual who can contribute to our enthusiastic and productive research program for a period of 2-3 years.

This postdoctoral position is available in the laboratory of Dr. Leslie McEvoy to study the regulation of leukocyte adhesion and to pursue identification and function of adhesion molecules, chemokines and receptors in homeostasis and inflammation. Join a multi-disciplinary group of researchers using multiple approaches, including *in vitro* and *in vivo* functional studies, bioinformatics and emerging techniques. Focus on the analysis of gene expression (e.g., microarray technology) to identify and study critical molecules and mechanisms involved in inflammation and autoimmunity.

Applicants should have a PhD and/or MD and experience and interest in molecular immunology, cell biology and/or vascular biology.

DNAX offers an exciting work environment, excellent benefits and competitive salaries. Qualified applicants should send a curriculum vitae, statement of research interests, one reprint, and the names/telephone numbers of 3 references to: DNAX Research Institute, Human Resources, 901 California Avenue, Palo Alto, CA 94304. DNAX is an equal opportunity employer, m/f/h/v.



Your POTENTIAL Is Our PROGRESS.

Joining Science with Success.

SCIOS is a biopharmaceutical company engaged in the discovery, development, manufacture and commercialization of novel human therapeutics, with a proprietary research and development focus on cardiorenal disorders. The recent success of our Phase III efficacy study for our lead product, NATRECOR®, produced statistically significant improvements in heart function and clinical symptoms in patients with acute congestive heart failure. And the anticipation is heightened as this and other rapidly advancing clinical results point to one of the most dynamic, exciting periods in SCIOS's history. We seek those whose potential will take us closer to realizing our goals. Join us and join Science with Success!

RESEARCH ASSOCIATES Protein Chemistry

Research

You will be responsible for purification of research quantities of proteins required by various project teams within the Cardiorenal focus area. Responsibilities will include characterization of proteins as to purity and native structure. Requires a BS or MS in Biochemistry or related discipline and 1-2 years experience devoted entirely to the purification and characterization of proteins. Preference will be given to candidates with industrial backgrounds and/or experience utilizing advanced protein characterization techniques. Good communication skills are a must. Job Code: 98-018

Process Science

You will assist in designing scalable purification schemes for recombinant therapeutic proteins and glycoproteins. In addition, you will work closely with Research to express, purify, and characterize novel proteins to support drug discovery. Requires a BA or BS with solid biochemistry experience in protein and glycoprotein purification and analysis. Industry experience a plus. Job Code: 98-042

STAFF RESEARCH ASSOCIATE Pre-Clinical

You will perform routine *in vivo* pharmacology studies related to models of heart failure. Requires a relevant Bachelor's degree and experience in routine procedures including preparation, handling, and sampling. Additional relevant skills include performing *in vitro* assays. Histology and/or echocardiography experience is a plus. Job Code: 98-040

SCIENTIST DNA/Oligo

As the head of the DNA Sequencing Group, you will manage and prioritize sequencing projects for non-EST sequencing. Responsibilities will include organization and management of high-throughput EST sequencing; evaluation/direction of contract sequencing; and assessment and adoption of new techniques and instrumentation. You will also work with Bioinformatics to develop a Laboratory Information Management System for sequencing. Requires a PhD or equivalent experience beyond a Bachelor's degree. Must have significant experience in a high-throughput DNA sequencing environment, specifically with ABI 377 sequencing. Ideal candidates have strong organizational, communication, and scientific management skills. Computer proficiency and working knowledge of LIMS are desirable. Job Code: 98-011

Competitive salaries, a superior benefits package, and a very dynamic environment support the SCIOS team. Please respond to: SCIOS, Human Resources, Job Code: _____, 2450 Bayshore Parkway, Mountain View, CA 94043; FAX to 650/962-5966; or email jobs@sciosinc.com. For more information see our website: www.sciosinc.com. EOE.

scios

WE'VE ISOLATED REMARKABLE OPPORTUNITIES



SYSTEMIX, a Novartis company, is developing a family of "living therapeutic" products for cancer, autoimmune and genetic diseases, based on the application of the hematopoietic stem cell (HSC)—the "mother cell" of the entire blood and immune system. Our goal is to provide the clinician and patient with safe, well-characterized and quality-controlled cellular products that provide real therapeutic benefit. We are presently seeking qualified individuals for the following positions:

Postdoctoral Researchers

You will conduct research for a 2-year period in HIV Gene Therapy or Cell Therapy. The HIV Gene Therapy position requires demonstrated experience in homologous recombination techniques and an interest in improving these existing methods. The Cell Therapy position, involving research in intracellular signaling in hematopoietic stem cells, requires experience in cell culture techniques and an expertise in signaling paradigms and associated biochemical/molecular techniques. A recent PhD is required for both positions. Applicants should include a brief statement of research interests, as well as 3 letters of recommendation with current CV or resume.

Manager, Cell Processing

You will be responsible for the improvement and development of new stem cell and T-cell purification processes, as well as the management of the Centralized Cell Processing group. Requires a PhD in Hematology, Immunology or related discipline with 3+ years applicable experience, as well as technical expertise in flow cytometry, hematopoietic cell culture and cell isolation systems. Job #971013.

HIV GENE THERAPY RESEARCH

Research Scientist I or II

You will develop retroviral vectors for position independent and physiologically regulated transgene expression. Requires PhD in Molecular Biology, Biochemistry or Immunology with up to 5 years post-graduate research experience. Expertise in basic molecular biology and nucleic acid analysis, as well as familiarity with mammalian tissue culture techniques are essential. Experience with gene transfer into hematopoietic cells desirable. Job #982033.

Research Scientist II or III

You will develop gene therapy strategies for delivery of soluble proteins and treatment of autoimmune diseases. Requires MD or PhD in Immunology or Hematology with up to 5 years post-graduate research experience. Expertise in biology of hematopoietic stem cells, hematopoietic stem cell assays and animal models for bone marrow transplantation is essential, as is familiarity with gene transfer into hematopoietic cells and retroviral vectors. Job #981003.

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



Visit our website at
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to learn more.

Drug Development

INHALE has developed the first commercially viable solution to a basic problem in biotherapeutics: the non-invasive delivery of a wide range of peptides, proteins, and other macromolecules. Our breakthrough in pulmonary delivery systems is based on innovations in powder processing, protein formulas, and delivery systems. We offer the following opportunities for candidates with excellent communication skills to join us in continued innovation in drug therapies:

Senior Scientist

You will perform protein research, including characterizing drug substances in solution/solid states, designing and performing formulation studies, and optimizing process parameters. Additionally, you will provide scientific input and participate in planning and implementing various projects. Requirements are a PhD in Chemistry, ChemEng or related discipline with 2+ years postdoctoral industrial experience. HPLC analysis, vibrational spectroscopy, thermal analysis and product development for protein/peptide analysis is also essential. GMP/GLP experience a plus.

Technical Leader

As the senior technical leader for the Drug Development team, you will create and implement strategies for drug development, as well as assist in producing reports and documents for regulatory agencies. Requirements are a PhD in Chemistry, Biochemistry, Pharmaceuticals, ChemEng or equivalent and 5-10 years post-PhD pharmaceutical/protein development experience. Demonstrated supervisory and leadership skills, as well as strong technical track record are also essential.

Inhale offers excellent benefits and an informal, friendly work environment. Salary commensurate with experience. Please fax/send resume and cover letter, indicating the position of your interest, to: Inhale Therapeutic Systems, Attn: Human Resources, 150 Industrial Way, San Carlos, CA 94070 or fax to (650) 631-3150. EOE.

inhale
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Imagine The Possibilities

At Berlex, we've built our reputation on FDA-approved product successes and a proven track record in the pharmaceutical industry. We are seeking individuals to join our Berlex facility located in the beautiful San Francisco Bay Area, which offers a spacious campus-like setting and is easily accessible by a network of freeways.

SCIENTIST-BIOLOGICAL RESEARCH

Utilize your expertise in molecular biology as you conduct research aimed at validating new drug screening targets identified through genomics. Qualified candidates will have a PhD, 5 years of industrial experience and an excellent publication record. Proven techniques in plasmid construction, molecular cloning, *in vivo* quantitation of RNA, mammalian cell culture, and cell-based assays are essential. Excellent interpersonal and presentation abilities, as well as strong problem-solving and independent work skills are also required. Experience in retroviral/adenoviral gene delivery a plus. Job Code: B98-020

SCIENTIST-IMMUNOLOGY

We seek a team-oriented professional to perform research for treatment of Multiple Sclerosis and other autoimmune diseases. Requirements are a PhD in Immunology or Cell Biology and 2+ years post-doctoral experience. Expertise in cellular immunology, including characterization of T-cell antigen receptors, subpopulations of T-cells, signaling pathways and leukocyte/lymphocyte functions, is needed. Excellent communication skills are also essential. Job Code: B98-019

As a US subsidiary of an international Fortune 500 company, Berlex is proud to offer competitive salaries and a generous benefits package. To apply, send your CV/resume, indicating position of interest and Job Code, to: BERLEX, HUMAN RESOURCES EMPLOYMENT, 15049 SAN PABLO AVE, RICHMOND, CA 94804-0099. Principals only, please. EOE.

BERLEX

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ENDOWED CHAIRS IN FORESTRY AND FOREST PRODUCTS

The College of Forestry at Oregon State University seeks applicants for three fully endowed Richardson chairs, one in each of the following areas:

Wood Science and Forest Products
Forest Operations and Watershed Science
Forest Biology.

Each position is 12-month, full-time, tenured, appointment as Full Professor. Each Chair appointment will be for a five-year term, with reappointment possible. Incumbents will build and lead research and graduate education programs in respective areas and will contribute to the instruction and outreach missions of the College. Applicants must have: Ph.D. or equivalent in forestry, forest products, or closely allied field of science, business or engineering with significant experience in research and/or teaching in the forestry/forest products area; be nationally or internationally recognized for their scholarship; have experience and scholarly credentials appropriate to Full Professor rank; demonstrated ability to build, manage, and financially support successful programs; have strong interpersonal and communications skills. Salary will be commensurate with qualifications and experience. Potential applicants should see <http://www.cof.orst.edu> for application details and full position descriptions. For full consideration, apply by October 1, 1998. OSU is an AA/EEO Employer and has a policy of being responsive to dual career needs.

Research Information Manager Center for Biodiversity Research & Information

Position Announcement

Primary responsibility is development, management, and coordination of Academy Research Division information management tools and databases. The successful candidate will be responsible for providing general support in information management and information technology to the Research Departments and its projects and will be responsible for implementation of unified collections database for the Research Division. This will require the selection and application of the best available software and other technologies appropriate to the task. This position also offers the opportunity to participate in the development of the integrated interfaces between various types of biological and natural historical databases. A B.S./M.S. with demonstrated experience in using and managing bioinformatics tools and databases is required. Experience with GIS, UNIX, SQL, Windows 95 and Windows NT, and Web development is required. Knowledge of PERL and C Programming highly desirable.

Strong capacity for self-motivation, excellent communications skills, and ability to work successfully in a cooperative team environment are required.

Send a letter of interest and résumé to **California Academy of Sciences, Human Resources Department #RIM, Golden Gate Park, San Francisco, CA 94118**. Open until filled. No calls please.

The California Academy of Sciences is a Natural History Museum, Aquarium, Planetarium, and Research Institution located in Golden Gate Park, San Francisco. *The California Academy of Sciences is an Equal Opportunity Employer committed to diversity.*

Opportunities with ZymoGenetics

ZymoGenetics, Inc. is a biotechnology company located in Seattle's historic Lake Union Steam Plant. Our mission is to identify protein therapeutic opportunities and to take selected projects as far as clinical proof of concept studies. We are currently seeking qualified candidates for the following position:

Computational Biologist

The Biomolecular Informatics department is seeking a full time scientist to apply computational techniques in an effort to discover and characterize novel therapeutic proteins. Responsibilities include database mining and participation in the development of the computational infrastructure necessary to gain insights into the structure, function, and expression patterns of novel proteins. Experience working in a UNIX environment and knowledge of a high level programming language is essential. Educational requirements: Ph.D. or equivalent experience in life science or computer science.

As a subsidiary of NOVO NORDISK, the world's largest producer of industrial enzymes, ZymoGenetics offers an exciting environment characteristic of a small research and development company, along with the scope and stability of a large pharmaceutical corporation. We also offer intellectual challenge, state-of-the-art facilities and a generous benefits package. Please apply by sending a cover letter noting **Job reference #21N198** and a detailed resume of your work experience and academic background to: ZymoGenetics, Inc., Attn: Human Resources; 1201 Eastlake Avenue East; Seattle, WA 98102. Fax: (206) 442-6658. EOE.

ZYMOGENETICS

PROLINX

Prolinx is a small, chemistry-driven biotechnology company working on proprietary platforms with nucleic acid-based applications in life science research, genomics, and diagnostics. Prolinx seeks individuals who are self-motivated, well organized, and possess strong communication skills.

Prolinx invites applications for the following position. Please note that there are two openings available.

Molecular Biologist/Biochemist (Ref #RD7):

These individuals will assist in the development of novel approaches to the purification and non-radioactive detection of DNA. Candidates should possess a solid knowledge of current molecular biological and biochemical techniques including: DNA amplification, manual and automated DNA cycle-sequencing, DNase I footprinting analysis and cloning (large insert vectors, plasmids, M13). Experience with DNA characterization by biophysical methods, especially fluorescence, and/or experience in high-throughput genomic analysis a plus.

Requires Ph.D. + 2 years postdoctoral experience, or an MS + 5 years industrial experience in Molecular Biology or Biochemistry.

Prolinx offers a competitive compensation and benefits package, including 401(k), company stock option plans and relocation assistance. For consideration, please send cover letter and resume, indicating appropriate Ref#. Prolinx requests that e-mailed resumes be virus-scanned Microsoft Word, Wordperfect for Windows, or RTF (rich text format) files.

Please note that applications received after August 17, 1998 will not be considered.

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E-MAIL: HR@PLINX.COM
EQUAL OPPORTUNITY EMPLOYER

Post Doctoral Scientist

- T Cell Activation -

Headquartered in the San Francisco Bay Area, **Onyx Pharmaceuticals** is a dynamic company dedicated to the development of novel therapeutics for cancer and other diseases associated with abnormal cell growth. Currently, we have a great opportunity for an experienced research professional to study the functions of Wiskott-Aldrich syndrome protein (WASP) and Cdc42Hsin T cell activation (Cell 84, 723-734, 1996).

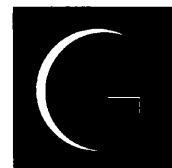
Your research will focus on pathways regulated by WASP & Cdc42Hs that will lead to the reorganization of the actin cytoskeleton and transcription activation. Candidates must possess a strong research background in T cell activation with an emphasis in signal transduction as well as demonstrated work experience in cell & molecular biology.

For consideration, please send your CV and three references to: **Onyx Pharmaceuticals, Attn: Arie Abo (Job# 98-20-AA), 3031 Research Drive, Richmond, CA 94806-5206; fax: (510) 222-9758; email: denise@onyx-pharm.com. Equal Opportunity Employer**

ONYX

PHARMACEUTICALS

Gryphon Sciences – Protein Technologies for Pharmaceutical Discovery in the Post-Genome Era



Join an exciting start-up company at the cutting edge. Gryphon Sciences uses powerful Chemical Protein Synthesis technology for rapid access to functional proteins directly from genome data and precisely labeled protein reagents for drug screening. Gryphon is commercializing its proprietary technology through collaborations with pharmaceutical, biotechnology, and genomics tool companies.

Immediate Openings:

Chemical Protein Production: Rapid, research scale synthesis of highly pure peptide segments encoded by a gene. Using Gryphon's proprietary ligation chemistries for preparation of 100 milligram amounts of full-length, purified polypeptide for folding, purification and characterization.

Senior Scientist: Ph.D. in organic chemistry with at least 5 years of experience in process chemistry. Strong background in purification and analytical techniques.

Senior Scientist: Ph.D. in biochemistry with 2-5 years of experience in protein biochemistry, strong background in protein folding and analytical characterization.

Senior Scientist: Ph.D. in biochemistry or enzymology plus 2-5 years of experience in protein assay and physical characterization techniques.

Synthetic Chemistry Technology Development: Development of novel technologies for optimized high-speed research scale synthesis of individual peptides and parallel synthesis of large numbers of peptide segments.

Senior Scientist: Ph.D. plus minimum of 5 years of experience in synthetic chemistry technology development; essential to have strong background in analytical chemistry of peptides and proteins.

We are an Equal Opportunity Employer. Interested applicants should send their CV and names of three references, including current supervisor, to Gryphon Sciences, Attention: Ms. Malia Martinez, 250 E. Grand Avenue, Suite 90, South San Francisco, CA 94080. E-mail: malia_martinez@gryphonsci.com.

Rewarding Careers with COR

Located in the San Francisco Bay Area, **COR Therapeutics, Inc.** is a publicly-held biopharmaceutical company focused on the discovery & development of novel therapeutics for the treatment of severe cardiovascular disease. Our continued growth has created an exciting career opportunity for a select group of hands-on researchers to join our expanding R&D team.

SCIENTIST *Vascular Biology*

The position requires a Ph.D., 3+ years of post-doctoral training, and a working knowledge of the intracellular pathways involved in cell migration and proliferation. A background in the area of vascular injury, atherosclerosis or angiogenesis and training in basic histology and immunohistochemistry are a must. (Job# 98031-SCI)

SCIENTIST *Analytical Development*

The position requires a Ph.D. in analytical chemistry, chemistry, biopharmaceutics or a related field. Method development experience is essential. Pharmaceutical, biotech or other related industry experience is preferred. Formulation development expertise for small molecules & proteins helpful. (Job# 97081-SCI)

SCIENTIST *Coagulation*

The position requires a Ph.D. in cell/molecular biology or related discipline; at least 4 years of post doctoral experience in an academic or industry setting; extensive knowledge of cellular or molecular biology methods; and the ability to work independently as a bench scientist and as part of a team-oriented environment. Publication in peer reviewed scientific journals is a must. (Job# 97086-SCI)

SENIOR RESEARCH ASSOCIATE *Enzymology*

The position requires a BS/MS in biochemistry, chemistry, biology or related field; at least 3 years of lab experience; and experience with protein purification from both recombinant expression systems & native tissues. Knowledge of enzyme kinetics, assay development, protein chemistry and biochemical characterization of antibodies is preferred. (Job# 97069-SCI)

COR Therapeutics, Inc. offers competitive salaries & benefits, attractive equity positions and the opportunity to make significant research contributions. To apply, please send resume & salary history to: **COR Therapeutics, Inc., Human Resources, (Attn: Job#), 256 East Grand Ave, South San Francisco, CA 94080; Fax: (650) 615-9639; Email: hr@corr.com.** COR is an equal opportunity employer.

COR

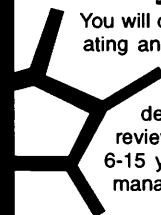
COR THERAPEUTICS, INC.

PROTEIN DESIGN LABS

FULFILLING THE PROMISE

Protein Design Labs' interdisciplinary approach to drug discovery integrates computer-based design with molecular biology, immunology and protein chemistry. We are seeking two Senior-level professionals with demonstrated communication skills to join our protein chemistry group.

SR. MANAGER/ASSOC. DIRECTOR, PROTEIN CHEMISTRY

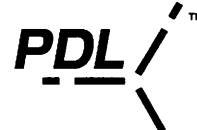


You will oversee daily operations of the protein chemistry group, including evaluating and hiring new members. Responsibilities include supervising operation and maintenance of analytical equipment, coordinating activities with research, preclinical, quality control and formulations development departments, developing new characterization methods, and writing/reviewing CMC sections for INDs/BLAs. An MS or PhD in life sciences and 6-15 years experience are required. Strong analytical, instrumentation, and management skills essential. Job Code 445.

SR. DEVELOPMENT ASSOC./ASSOC. SCIENTIST

You will be involved in new methods development and characterization of recombinant therapeutic proteins. Duties include operating our electrospray/MALDI mass spectrometer, sequencing and amino acid analysis equipment. Additionally, you will write reports, present scientific findings, assist in preparing sections for IND/BLAs submissions, and support research staff with custom analysis. Requires BS/MS in physical or life sciences and 5-12 years protein chemistry experience and knowledge of techniques used in standard analytical methods for protein characterization, including HPLC. Job Code 437.

PDL's fast-paced, highly challenging environment offers exceptional professional opportunities, competitive salaries, a comprehensive benefits package, and a desirable location in the San Francisco Bay Area. Later in 1998, we will be relocating across the bay to Fremont, CA. Visit our home page at www.pdl.com to learn about our company and other career opportunities at PDL. Please send your resume, indicating the Job Code, to: Protein Design Labs, Inc., Human Resources, 2375 Garcia Ave., Mtn. View, CA 94043, fax 650/962-0437. EOE.



California Institute of Technology Global Environmental Science

The Division of Engineering and Applied Science and the Division of Geological and Planetary Sciences at the California Institute of Technology (Caltech) jointly invite applications and nominations for a tenure-track faculty position at the assistant professor level in the area of Global Environmental Science. The term of the initial appointment is normally four years, and appointment is contingent upon completion of the Ph.D. Exceptionally well-qualified applicants may also be considered at the associate or full professor level. We are looking for an individual who has an outstanding research record and potential in a suitable scientific or engineering discipline with a primary focus on global-scale environmental systems. Candidates should also have a serious commitment to teaching in this area. Research specialties of interest include climatology, oceanography, environmental geochemistry or biogeochemistry, atmospheric sciences, dynamic meteorology, paleoclimatology, paleoceanography, and geomorphology.

Candidates should send a curriculum vitae, including the names of three references with e-mail contact information, a list of publications, and a statement of research and teaching interests to the: **Global Environmental Science Search Committee, W. M. Keck Laboratories, 138-78, California Institute of Technology, Pasadena, CA 91125.** Caltech is an Equal Opportunity/Affirmative Action employer and encourages applications from women, minorities, veterans, and disabled persons.

BEHAVIORAL ECOLOGIST

The Department of Organismic Biology, Ecology and Evolution (OBEE) at UCLA invites applications for a tenure-track Assistant Professor position in Behavioral Ecology. The department has 23 faculty, with strengths ranging from cellular to evolutionary biology of both plants and animals. Areas of particular interest for this search are: sexual selection and mate choice, life histories, and social behavior. No taxonomic group is preferred, but a research program that combines theory and experimentation is highly desirable. The successful candidate will need to develop a vigorous research program and contribute to graduate and undergraduate teaching, including off-campus, field biology courses. A Ph.D. is required and productive post-doctoral experience is preferred. Send C.V., statement of research and teaching interests, and the name and address of three references by October 1, 1998, to: **Chair, Behavioral Ecology Search, Biology-OBEE, University of California, Los Angeles, CA 90095-1606.**



Invitrogen is a growing company delivering highly innovative products for gene cloning and expression. We are committed to providing life scientists with superior products and technical information.

Scientists/Postdoctoral Scientists

The successful candidates will be expected to demonstrate innovation in the investigation of novel technologies and product ideas. A Ph.D. in biochemistry, molecular biology, or related field of life science and 0-4 years of postdoctoral experience are required.

Director of Research and Development—Genomics Division

The successful candidate will be expected to develop and manage a research program for drug discovery services using parent company technology platform.

Ten to 15 years of molecular biology research experience at increasing levels of management, both scientific and personnel. Experienced at presenting scientific programs to corporate partners for multimillion research contracts and intellectual property management including multiple patent applications and contract negotiations. Ph.D. in biochemistry, molecular biology, or related field of life science with postdoctoral experience or equivalent.

Director of Business Development—Genomics Division

The successful candidate will be responsible for developing new division business area utilizing parent company technology platform. Seven to ten years of business development experience, which includes negotiating large multimillion contracts, joint ventures or partnerships with large pharmaceutical companies. Experience in developing financial considerations and business terms for licensing and negotiating agreements. M.B.A. and degree in Molecular Biology or related field of life science.

Invitrogen Corporation offers an aggressive benefits package and a rewarding professional environment. Please submit your résumé via our website, fax, or mail. **EOE. Human Resources, 1600 Faraday Ave., Carlsbad, CA 92008; (760) 603-7207 Fax; www.invitrogen.com.**

UNIVERSITY OF WASHINGTON SCHOOL OF MEDICINE



Applications are invited for faculty appointments in eye and vision research to join a growing team of established investigators with vision-related interests. Responsibilities include independent and collaborative research with both basic scientist and clinicians, as well as teaching. The Bishop Foundation Professorship will be made at the associate professor or full professor level. Two additional positions are offered at the assistant professor level. Candidates must possess a Ph.D. or M.D. degree and a minimum of two years of postdoctoral research experience to include research in molecular and/or cell biology with a primary focus in mammalian systems. Prior vision-related research is not a requirement. Areas of specific interest might include molecular genetics, molecular regulation of eye development, gene transfer, or molecular apoptosis research. Other areas will be considered.

Applicants should send their curriculum vitae, a specific statement of research plans, and arrange for four letters of recommendation to:

Steven E. Wilson, M.D.

Professor and Chair

University of Washington School of Medicine

Department of Ophthalmology, Box 356485

Seattle, WA 98195-6485

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

SYMPOSIUM



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We're forming a **top-notch** group of **Biochemists** to make a big difference in world agriculture.

Novartis is a world leader in life sciences with prominent positions in Crop Protection, Seeds, and Animal Health. Our resources and experience enable us to continually develop new chemistries and technologies to create and improve environmentally responsible herbicides, insecticides and fungicides.

This is your chance to make a significant contribution to world agriculture in our casual dress 250 person, state-of-the-art biotechnology facility located in Research Triangle Park, NC.

Biochemists (Ph.D.)
Herbicides # 9832
Insecticides # 9833
Fungicides #9831

Several staff positions are currently being filled within the Biochemistry Department. The successful candidates will develop and implement High Throughput Assays for the discovery of novel Crop Protection solutions. They will apply their knowledge in enzyme and/or receptor biochemistry to format assays to be utilized in an automated environment. In addition, they will be responsible for the preparation and the characterization of native and recombinant proteins in order to provide the biological material necessary for the successful implementation of the assays. They will interact closely with the Genomic, Chemistry, and the Biology Units. The candidates will also serve as a reference for questions related to biochemistry support to the other Units. These positions require a knowledge of enzymology and/or receptor biology, assay development and detection methods. Expertise in protein biochemistry, purification and analysis is essential. A working knowledge of molecular biology is also strongly required.

To qualify, the candidates must have a Ph.D in Biochemistry with 2-4 years' post-doctoral experience. Relevant expertise in fungal, insect or plant physiology and a proven publication record are desired.

Biochemist (BS/MS) #9835

In this position, you will be responsible for assisting in the development and optimization of biochemical assays in support of the herbicide Discovery Project. To qualify, you must have a BS/MS in biochemistry and

2-5 years of hands-on laboratory experience. Background involving HPLC, GC, MS, CD, FPLC, UV-vs and /or fluorescence is necessary, as is expertise in assay development and high-throughput screening. Candidate should be capable of performing follow-through assays and mechanistic studies on hits, as well as proposing new screening strategies and novel assay formats. Familiarity with enzyme kinetics, including software for kinetic analysis, is preferred. Position requires excellent analytical, problem-solving and communication skills.

Analytical Chemist/Biophysicist (Ph.D.) #9838

The Biochemistry Department has an opening for an Analytical Chemist/Biophysicist to contribute to the development of tools for the discovery of novel Crop Protection solutions. The successful candidate will be responsible for the evaluation and implementation of protein analysis methods such as FTIR or CD. He/She will also be responsible for the development and evaluation of novel technologies for protein-ligand interaction analysis suitable for HTS assay development. It is expected that the incumbent will initiate contacts with the suppliers of these technologies for in-house implementation or help set up collaborative contracts with these Companies. He/She will provide support to the Biochemistry Department to allow an efficient utilization of these technologies in a HTS environment. The successful candidate will also be required to interact with our chemistry Department and serve as a resource for analytical chemistry. This position requires a strong background in analytical tools, protein chemistry and a strong interest in novel technologies. Excellent communication skills are essential and a working knowledge of molecular biology is preferred.

To qualify, the candidate must have a Ph.D and at least 2 years' of post-doctoral experience in an industrial setting with an HTS group.

Novartis offers a competitive salary commensurate with qualifications and experience, a comprehensive benefits package, and an environment conducive to professional achievement. Qualified candidates please paste your c.v. (including a skills list), followed by your cover letter, into the body of an e-mail and send to biotech.jobs@cp.novartis.com. Indicate the position #____-SM-BRI in the subject area. To ensure that your information is uploaded into our HR System, please do not send your resume and cover letter as attachments. An Equal Opportunity Employer.

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Building a winning team

IMAGINE a place where people are dedicated to a singular goal. **IMAGINE** a company intensely focused on building and supporting its **PEOPLE**.

IMAGINE Pharmacia & Upjohn.

We are a global leader in the pharmaceutical industry, dedicated to helping people lead fuller and healthier lives. We are expanding on our success by **BUILDING** a winning **TEAM** of talented and **DRIVEN** people in research centers in Italy, Sweden, and the United States.

TRANSGENICS SCIENTIST

The Transgenics Unit located in Kalamazoo, MI is seeking a candidate who will be responsible for the production of transgenic and knock-out mice. The position will assist and consult on gene targeting as an extension of Discovery Research's genomic projects, play a complementary role in bioinformatics, and support other investigators in the design of screening assays to detect conventional transgenic founder positive animals and homologous recombinant ES clones. Other responsibilities of this position include collecting blastocysts to aid in the development of ES cell lines for transfections in gene targeting assays and assisting in the preparation and digestion of DNA for ES cell transfections; egg collection; transgene microinjection; recovery surgery; superovulation of mouse colony; tail biopsy; orbital bleeding; weaning an SPF facility; and cryopreservation of cell lines. The candidate will train in-house staff in the above techniques.

The position requires a Ph.D. in Genetics, Immunology, or a closely related science, plus a minimum of 2 years research laboratory experience. Preferred candidates will have experience with targeting techniques; production of conventional and gene knock-out transgenic mice; targeting methodology; and knowledge of embryonic stem cell culture. Experience with ES transfection techniques, drug-resistant colony selection, and PCR screening techniques is highly desired.

If you desire a career based on teamwork and collaborative thought, please mail your resume to: **Pharmacia & Upjohn, Recruiting, Position #980357, 5045-88-81, 7000 Portage Road, Kalamazoo, MI 49001.** Or you may e-mail your resume (no attachments, please) to: recruit@am.pnu.com. We are an equal opportunity employer with a commitment to workplace diversity.



Pharmacia & Upjohn

The Insect Biotechnology Group is currently seeking to hire innovative individuals at the principal investigator and support scientist levels. The successful candidates will interact with a multidisciplinary team focused on the discovery and development of novel strategies for insect pest control.

PRINCIPAL INVESTIGATOR(S) Job #AG981908

The successful candidates will be expected to develop a strong research program focused on the isolation, expression, and characterization of novel insecticidal agents against agronomically important pest species. Qualifications include a Ph.D. and 2-5 years of postdoctoral experience in the biological sciences with a strong background in molecular biology and biochemistry. Experience in insect genetics, protein expression and purification, and insect physiology is highly desirable. Good communication skills and the ability to function in a multitask environment are essential.

SUPPORT SCIENTIST(S) Job #AG982521

The successful candidates will have a B.S. degree or equivalent experience and a working knowledge of classical and modern chromatographic techniques as well as basic techniques in biochemistry and/or molecular biology. Prior experience with HPLC, MS, LC-MS, protein sequencing, and electrophoretic techniques is highly desirable.

Interested applicants should reference job number and apply by mail or fax to: **E. I. du Pont de Nemours and Company, Stine-Haskell Research Center, Attention Human Resources Job #, P. O. Box 30, Newark, DE 19714. Fax 1-800-631-2206.**

**DUPONT IS AN EQUAL OPPORTUNITY
EMPLOYER**

RESEARCH & DEVELOPMENT

Wyeth-Lederle Vaccines and Pediatrics (WLVP), a member of the Wyeth-Ayerst family, is recognized internationally as a leader in the research, development and manufacture of vaccines for prevention of viral and bacterial diseases. We currently have the following immediate opportunities at our Pearl River, NY location:

PROJECT LEADER, Formulation & Process Development

Successful candidate will supervise a bioanalytical team in the development of novel assay methodologies to support Formulations, Delivery Systems, Clinical Supplies, and Stability Testing. Develop & implement validation protocols, characterize vaccine candidates, troubleshoot & perform assay investigations. Requires a Ph.D. in Biochemistry, Analytical Chemistry or related scientific discipline & 8 years of industrial work experience in a Research & Development, Analytical Testing or Process Development environment. Training in the following techniques: HPLC, GC, Immunochemical methods, derivatization methods, protein/peptide analysis & carbohydrate analysis.

GROUP LEADER, Formulation & Process Development

Successful candidate will supervise a team focused on the immune characterization of new combination vaccines. The work will involve the development and implementation of both *in vivo* and *in vitro* methodology. Requires a Ph.D. in Immunology or Biochemistry & 8 years of relevant industrial and/or academic experience, and experience working with small animals.

GROUP LEADER, Viral Vaccine Immunology

Successful candidate will supervise a team of Ph.D. & Research Associates in vaccine projects & have expertise in "cutting edge" technologies in humoral, cellular and mucosal immunology. Requires a Ph.D. in Microbiology/Immunology & 5 years industrial work experience including managerial & supervisory background. Specific hands-on experience in, *in vivo* & *in vitro* methods of viral immunology.

We offer competitive compensation and benefits, including a Savings Plan. If you wish to be considered for one of these outstanding opportunities, please send your resume including salary history, and indicating position of interest, to: Wyeth-Lederle Vaccines and Pediatrics, Human Resources, 401 No. Middletown Road- #140/402, Pearl River, New York 10965. Principals Only Please. An Equal Opportunity Employer.



**Wyeth-Lederle
Vaccines and Pediatrics**
Protecting Families Through Immunization®

MAYO CLINIC FACULTY POSITIONS IN TRANSPLANTATION BIOLOGY



Mayo Clinic is undertaking an expanded research initiative in transplantation biology. One objective of this initiative is to assemble a faculty of independent investigators who can focus diverse scientific interests on the biological and immunological hurdles to transplantation and on the development of novel approaches to overcoming those hurdles. Four scientists of the highest caliber with expertise in cellular biology, molecular or structural biology, biochemistry, immunology, or virology who might want to contribute to such an integrated program are sought. The basic science research program will include opportunities to interact with clinical and preclinical programs. To inquire, send a cover letter describing your research interests, a curriculum vitae, and the names of three references to:

**Jeffrey L. Platt, M.D.
Mayo Foundation
Medical Sciences Building
Room 2-66
Rochester, MN 55905**

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

The Search For Cures Begins With A Search For The Best.

At Pfizer, we entrust the enormous task of discovering treatments and cures for major diseases to some of the world's most gifted scientific talents. Our Fortune 100 company maintains a commitment to R&D that's unrivaled in our industry, as we've invested a total of \$9.4 billion since 1990 and expect a 1998 R&D investment of approximately \$2 billion. The only other investment that comes close is the one we make in our people.

In addition to providing competitive salaries, we offer an excellent compensation package, comprehensive flexible benefits and generous relocation support. For immediate consideration, please forward your resume and a description of relevant research, interest and experiences to: Employee Resources, Pfizer Inc, Central Research Division, Job Code #_____, Eastern Point Road, Groton, CT 06340. For more information on career opportunities available at Pfizer, please visit our Web site: <http://www.pfizer.com>. We are an equal opportunity employer dedicated to diversity M/F/D/V.

Post Doctoral Positions

• Osteoporosis Research - Steroid Hormone Receptor

Post Doctoral opportunity to conduct research utilizing molecular cloning and gene knockout models to investigate the mechanisms regulating bone remodeling. Particular emphasis will be on the mechanisms of nuclear hormone receptors including estrogen, vitamin D and androgen. This position will be 36 months in length. The first 18 months will be spent at Pfizer's Central Research Facility in Groton, CT under the direction of Dr. Thomas Brown and the second 18 months in the laboratory of Dr. Leonard Freedman, Memorial Sloan Kettering Cancer Center, New York, NY. Qualified applicants will have a recent Ph.D. with experience in molecular biology, protein expression, ES cell gene-knockout technology or bone cell biology. **Job Code: 2738**

• Diabetes Research - Mechanism of Beta Cell Dysfunction

Post Doctoral position to conduct research utilizing transgenic models and cell lines to investigate the mechanism of Beta cell dysfunction in type II diabetes. This position will be 36 months in length. The first 18 months will be spent at Pfizer's Central Research Facility in Groton, CT under the direction of Dr. Walter Soeller and the second 18 months in the laboratory of Dr. W. Zawulich, at Yale University in New Haven, CT. Qualified applicants will have a recent Ph.D. with experience in molecular biology, protein expression, transgenic model production or islet cell physiology. **Job Code: 2739**

• Metabolic Diseases - Signal Transduction/Insulin Action

Post Doctoral opportunity targeted at understanding the molecular basis of impaired insulin receptor signal transduction observed in insulin resistant states. Studies will focus on the interactions of the insulin receptor and related receptors with insulin receptor substrate (IRS) proteins. Biochemical and molecular biological approaches will be used to study these interactions and their effects on receptor functions. This position will be 36 months in length. The first 18 months will be spent at Pfizer's Central Research Facility in Groton, CT under the direction of Dr. Robert Garofalo and the second 18 months in the lab of Dr. Simeon Taylor at the National Institutes of Health. Qualified candidates will have a Ph.D. and experience with a variety of biochemical and molecular biological techniques. **Job Code: 2740**

• Exploratory Medicinal Sciences - Structure and Function of Phosphorylases

Post Doctoral position targeted at understanding the atomic basis of isozyme specific regulation of human glycogen phosphorylases by phosphorylation and allosteric effectors. These studies will focus on the X-ray structural determination of phosphorylases in different functional states and correlation of the structural results with kinetic and biochemical analyses. This position will be 36 months in length. The first 18 months will be spent at Pfizer's Central Research Facility in Groton, CT under the direction of Dr. Virginia Rath and the second 18 months in the lab of Dr. Robert Fletterick at the University of California at San Francisco. Qualified applicants will have a Ph.D. with a strong background in all aspects of X-ray crystallography as well as expertise in the expression, purification and biochemical characterization of proteins. Publications in these areas are required. **Job Code: 2741**



We're part of the cure.

Hamilton Regional Cancer Centre

Cancer Care Ontario, a provincial agency, is responsible for the development of an integrated cancer control system in Ontario. This organization advises government on the planning of the cancer system in the province, develops standards related to the delivery of cancer programs, and promotes the coordination and effectiveness of services that are provided.

As part of its mandate, Cancer Care Ontario manages the province's eight regional cancer treatment centres, including the Hamilton Regional Cancer Centre (HRCC). HRCC, with its newly expanded state-of-the-art facilities, is one of the largest and most modern cancer facilities in Canada. We are currently seeking a...

Career Scientist

Applications are invited from individuals with research interests in the area of molecular oncology. Preference will be given to applicants with strong backgrounds in molecular and cellular biology and an interest in proliferative signal transduction, and the mechanism of action of oncogenes and tumour suppression genes. Minimum requirements for the position are a PhD and/or MD degree, and three years of post-doctoral research experience. We are seeking an individual at the Senior Scientist or Scientist level.

The successful candidate will join a well-established interdisciplinary basic research group at McMaster University, investigating proliferative signal transduction, and a group at the Hamilton Regional Cancer Centre involved in molecular aspects of cell proliferation, tumour progression, and anticancer therapy. Excellent laboratory facilities are available in the Hamilton Regional Cancer Centre, where there is an opportunity for interaction with radiation and medical oncologists. Equipment and operating funds will be provided by Cancer Care Ontario for establishing an independent research programme.

Send a curriculum vitae, statement of research interests, representative publications, and names of three referees no later than August 31, 1998, to: Dr. Gurmit Singh, Director of Research, Hamilton Regional Cancer Centre, 699 Concession Street, Hamilton, Ontario, Canada L8V 5C2.

In accordance with immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. *We are an equal opportunity employer.*

Cancer Care Ontario



MAYO CLINIC Postdoctoral Position

Available immediately, is a postdoctoral opening to continue development and applications of a new micro-CT scanner in support of the laboratory's study of pathophysiological questions in small rodents. Experience in physics and/or electrical engineering is required. Some knowledge of biology is preferable. A competitive salary with an attractive fringe benefit package will be offered to the successful candidate.

Please send your curriculum vitae, a brief description of your research experience, and names and addresses of three references to:

Erik L. Ritman, M.D., Ph.D.
Department of Physiology & Biophysics
Alfred Building, 2-409
Mayo Foundation
Rochester, MN 55905
Phone: 507/255-1939; Fax: 507/255-1933

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

Be at the forefront...

...of drug discovery and development with the DuPont Pharmaceuticals Company. We are focused on meeting unmet medical needs through the discovery and development of innovative compounds leading to novel pharmaceuticals. We currently have openings at our facilities in Wilmington, DE.

Cell Biologist-Senior Research Scientist

We are seeking a PhD Cell Biologist with a minimum of 2 years of post-doctoral training, and preferably with 5 years of experience in the pharmaceutical/biotech industry. A broad-based knowledge of cell biology in the area of cell/cell interactions, cytoskeletal biology, cell signaling, and/or protein turnover is desirable. The successful candidate will join a growing group of cell biologists who participate in drug discovery efforts through the investigation of cellular responses to novel compounds. **Code: SD-NN**

Cell Biologist-Staff Scientist

We are seeking a cell biologist with a BS/MS degree and a minimum of 2 years experience in the pharmaceutical/biotech industry or in an academic laboratory. A broad-based knowledge of cell biological techniques including cell culture, contaminant testing, cell fractionation, intact cell assay development (e.g., ELISA, enzyme, cell viability), protein separation techniques (gel electrophoresis, western blotting), histological and immunohistological analysis of cells, and microscopic skills are required. The successful candidate will join a growing group of cell biologists who participate in drug discovery efforts through the investigation of cellular responses to novel compounds. **Code: SD-NN2**

Molecular Biologist-Senior Research Scientist

We are seeking a PhD level molecular biologist with a minimum of 3 years of post-doctoral experience in the analysis of gene expression. A broad-based knowledge of molecular/cellular biology along with experience in database searching and analysis is highly desirable. The successful candidate will join a molecular biology group performing gene expression analysis, gene cloning, family member cloning, and molecular evolution. This individual will utilize DNA microarray technology to examine expression patterns for a large number of genes using a variety of eukaryotic systems. **Code: SD-TB**

Protein Chemist-Staff Scientist

We are seeking a protein chemist with a BS/MS degree and a minimum of 3 years of experience in protein purification. A broad-based knowledge of protein chemistry techniques along with experience in development and optimization of novel purification procedures from natural and recombinant sources is required. Familiarity with analytical chemistry and/or molecular biology a plus. The successful candidate will join a protein chemistry group responsible for protein expression, purification and characterization.

Code: SD-RW2

We offer a competitive salary and a generous benefits package including 401K plan as well as excellent working conditions, and challenging assignments. Please send a letter of introduction and resume, including salary history, and indicating position code, to: Human Resources, DuPont Pharmaceuticals Company, Experimental Station, 400/2413, P.O. Box 80400, Wilmington, DE 19880-0400. An equal opportunity employer M/F/D/V.

DuPont Pharmaceuticals Company

Director, Southern Region

Fort Worth, Texas \$106,045 - 125,900

Vacancy Announcement NOAA#98-03

Director, Western Region

Salt Lake City, Utah \$104,577 - 124,817

Vacancy Announcement NOAA#98-16

Department of Commerce (DOC)
National Oceanic and Atmospheric
Administration (NOAA)

National Weather Service (NWS)

(Two Senior Executive Service Positions in
the Federal Government)

The incumbent will be responsible for the direction and administration of all Region activities and must possess the following in order to qualify:

1. In-depth knowledge of and experience in the physical sciences related to the provision of weather services.
2. Direct experience with and knowledge of a variety of scientific/meteorological techniques and methodologies associated with weather and river forecasting, e.g., data acquisition, analysis, prognosis, product refinements, and dissemination.
3. Experience which demonstrates a clear understanding of NWS warning services, as well as operational experience in one or more field forecast programs: agriculture, aviation, air pollution, and fire weather.
4. Experience which demonstrates the analytical skills and abilities involved in the identification and definition of service needs and requirements, the development of objectives, the evaluation of options, and the determination of final courses of action.
5. Experience which demonstrates an understanding of the application of computer technology to meteorological services.

Please contact:

301/713-0534, x206 (301/713-0973 [TDD])

Internet address:

bridget.a.clark@hrmo.noaa.gov

for an announcement package, including mailing instructions referring to the announcement number -OR-you may access the entire full-text vacancy from NOAA'S Executive Resources Homepage (see below).

Incomplete applications will be returned.

<http://www.rdc.noaa.gov/~hrmo/er-home.htm>

Both of these vacancies will
close on **August 17, 1998**

"NOAA Values A Diverse Workforce
and is an Equal Opportunity Employer"



Building a winning team

IMAGINE a place where people are dedicated to a singular goal.

IMAGINE a company intensely focused on building and supporting its **PEOPLE**.

IMAGINE Pharmacia & Upjohn.

We are among the world's largest pharmaceutical companies, employing over 30,000 people around the globe. At our Kalamazoo, Michigan research facility we are discovering innovative therapeutic agents to treat Infectious and Central Nervous System diseases. In both of these areas, our objective is to help people live longer and fuller lives.

B.S./M.S. Protein Purification and Crystallization Scientist

We are seeking a highly motivated associate scientist to join our drug discovery effort in structure-based drug design. As part of the macromolecular crystallography group, you will purify and prepare protein samples, and develop crystallization strategies for new protein targets. Experience in protein purification and crystallization of macromolecules is required. Candidates should have a B.S./M.S. in Biochemistry or related field, with a minimum of 2-3 years directly related laboratory experience or equivalent.

At Pharmacia & Upjohn you can make a difference. Not only for the sake of your career, but also for the millions of people around the world whose lives will be enhanced by the solutions you help us provide. For confidential consideration, please send your resume to: Pharmacia & Upjohn, Ad# 980262, Recruiting, 5045-88-81, 7000 Portage Road, Kalamazoo, MI 49001. Or you may e-mail your resume (no attachments, please) to: recruit@am.pnu.com. We are an equal opportunity employer with a commitment to workplace diversity.



Pharmacia & Upjohn

Cadus Pharmaceutical Corporation, a leader in functional genomics, is creating an integrated program of drug discovery. Focusing primarily on G protein-coupled receptors and their related cell signaling pathways, Cadus exploits the similarities between the yeast and human genomes to create proprietary yeast and mammalian cell-based tools of drug discovery. Cadus has openings for motivated individuals in the following areas.

RECEPTOR PHARMACOLOGY & BIOCHEMISTRY

Code: S-RPB PhD scientist with a minimum of 2 years postdoctoral research experience with a strong background in G-Protein coupled receptors pharmacology and signal transduction, and BS/MS scientist with a minimum 2 years experience and a strong background in receptor binding and second messenger system assays and yeast and/or mammalian cell culture techniques. Qualified individuals will work with a team of people exploring pharmacological and biochemical characterization of the interactions between Receptors, G-proteins and Effectors in transformed yeast and mammalian cells.

DRUG DISCOVERY/CELL BIOLOGY

CODE: S-DD PhD scientist with a minimum of 2 years postdoctoral laboratory experience with strong background in molecular biology, mammalian cell culture, and receptor signal transduction research. Previous experience in molecular target-based drug discovery is also desirable. Qualified individuals will work within the drug discovery group exploring cellular signaling pathways and designing/implementing secondary assay systems to analyze potential therapeutics.

In reward for your dedication, Cadus offers competitive salaries and benefits as well as career opportunities in a stimulating environment. Please send your CV and List of References, indicating job code to: **Cadus Pharmaceutical Corporation, 777 Old Saw Mill River Road, Tarrytown, NY 10591-6705; Email: hr@cadus.com. Check out our website at www.cadus.com. Cadus is an Equal Opportunity Employer.**

CADUS

PHARMACEUTICAL
CORPORATION

...turning the Human Genome
Project into Drug Discovery



**Tenure-Track Position
(Assistant Professor Equivalent)**

Cellular Neurophysiology

A position is available in the NIH, National Institute on Alcohol Abuse and Alcoholism, Laboratory of Molecular and Cellular Neurobiology (Chief, **Dr. Forrest F. Weight**) to develop an independent research program investigating the cellular basis of alcohol effects in the nervous system. Expertise in electrophysiological techniques for investigating the cellular physiology of membrane ion channels in mammalian neurons is required. Applicants should have a doctoral degree, several years of relevant postdoctoral experience, *and be a U.S. citizen or permanent resident.*

The deadline for receipt of applications is August 31, 1998. Applicants should submit a curriculum vitae, a detailed statement of research interests, and three letters of reference to:

**LMCN Search Committee
c/o Ms. Kathleen Hanratty
NIAAA Intramural Personnel Office
NIH, Building 31, Room 1B58
31 Center Drive, MSC 2088
Bethesda, MD 20892-2088**

Merck Research Laboratories, a division of Merck & Co. Inc., is seeking an individual to join our Fluorescence Cell Analysis Facility in a full-time temporary position.

Associate Scientist

Fluorescence Instrumentation Specialist

The successful candidate will be part of a centralized team which focuses sophisticated fluorescence technologies on drug discovery. The position will support high-throughput screening programs and basic research investigations through flow cytometry or cell-based screening through fluorescence-based imaging. The flow cytometry will involve fluorescence-activated cell sorting as well as multi-parameter flow cytometry. Specific duties include implementation of sorting protocols, operation and maintenance of an 8 parameter FACStar Plus Cell Sorter and/or other B-D flow cytometers. Cell-based screening will entail the development and implementation of fluorescent imaging screening protocols and operation and maintenance of a microscope screening system. Both roles require interaction with external collaborators as well as investigators who utilize the facility.

A minimum of a B.S. in Biology, Biochemistry, Computer Science or related field is required. Applicants with advanced degrees will also be considered. 3-5 years experience in the application of fluorescence flow cytometry and cell sorting or microscope-based imaging to biological problems and excellent computer skills are also required. In addition, computer literacy in one or more of the following platforms is essential: VAX/Open VMS, PC/Windows NT, Macintosh/MAC OS or HP/Pascal.

Merck Research Laboratories are located in Rahway, New Jersey, approximately 25 miles from New York City. Our salaries, benefits and growth potential are excellent. For consideration, applicants should send their resume to **Merck & Co., Inc., Ad #70, RY80-A5, P.O. Box 2000, Rahway, NJ 07065.** Merck Research Laboratories is an equal opportunity employer.



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HARVARD MEDICAL SCHOOL

**PROFESSOR AT HARVARD MEDICAL
SCHOOL, TO SERVE AS DIRECTOR
OF THE NEW ENGLAND REGIONAL
PRIMATE RESEARCH CENTER**

Harvard Medical School seeks a Professor of Microbiology and Molecular Genetics, to serve as Director of the New England Regional Primate Center, a regional research facility located in Southborough, Massachusetts and operated by the Medical School. Candidates for this position should ideally be recognized authorities in the fields of virology and AIDS research; however, outstanding candidates from all areas of biomedical research utilizing non-human primates will be considered. The final candidate will be expected to provide leadership in the overall direction of basic and applied research programs, in teaching and training activities, and in working with the Office of the Dean of the Medical School to develop short and long range academic plans for the Center. Candidates should have a strong record of accomplishment and publication in their research field and the background, experience, and ability to direct and administer a large interdisciplinary research facility. Interested individuals should send a letter of application and their current curriculum vitae to:

**Jeffrey Sklar, M.D., Ph.D.
Chairman of Search Committee
Department of Pathology
Brigham and Women's Hospital
75 Francis Street
Boston, MA 02115**

Harvard Medical School and the New England Regional Primate Center are equal opportunity/affirmative action employers. Women and minority candidates are particularly encouraged to apply.



**Branch Chief, Surveillance Branch, Division of HIV/AIDS Prevention,
Centers for Disease Control and Prevention (CDC)**

CDC is seeking a nationally recognized leader to direct the Surveillance Branch of the Division of HIV/AIDS Prevention-Surveillance and Epidemiology within the National center for HIV, STD, and TB Prevention. The division collects national surveillance data on HIV and AIDS; conducts special studies to evaluate risk factors for HIV transmission, to estimate HIV incidence, and to evaluate public health issues such as access to medical care and effectiveness of prevention programs; and conducts clinical trials of interventions to prevent HIV transmission (currently, in the United States). The Surveillance Branch, located in Atlanta, Georgia, monitors HIV infection, disseminates surveillance data, conducts public health surveillance system, monitors HIV morbidity and mortality, and other projects.

The Branch Chief will be responsible for: 1) providing scientific advice on establishing goals, objectives, and policy formation for research programs; 2) directing the modernization of the current HIV and AIDS surveillance system; 3) supervising and conducting research, including both theoretical and applied studies and collaborative projects in epidemiology and behavioral surveillance; 4) maintaining close ties with state and city health departments; and 5) managing a multidisciplinary expert staff.

Applicants should have substantial training and experience in development, research, and analysis of infectious diseases or epidemiologic surveillance research of HIV/AIDS; health services research; epidemiology, or a related discipline; and the ability to manage professional and support staff. A doctoral degree or equivalent professional experience is required. Depending on qualifications, the salary ranges up to \$151,800. Please send a curriculum vitae postmarked by August 11, 1998, to **Nancy Peterson RS-98-18, CDC/HRMO-K07, 4770 Buford Highway, Atlanta, GA 30341-3721, tel. (770) 488-1785.** For specific information about the position please contact **Patricia Fleming** at (404) 639-2050 or e-mail at pfl@cdc.gov, or see the information at <http://www.cdc.gov/site>. CDC is an Equal Opportunity Employer and provides a smoke-free work environment.

THE UNIVERSITY OF TEXAS MD ANDERSON CANCER CENTER

**Director of the Science Park Research Division/
Chair of the Department of Carcinogenesis
The University of Texas M. D. Anderson Cancer Center
Smithville, Texas**

Applications are invited for the position of Director of the Science Park Research Division/Chair of the Department of Carcinogenesis at The University of Texas M. D. Anderson Cancer Center. The Science Park Research Division/Department of Carcinogenesis is located in Smithville, Texas approximately 140 miles from the Cancer Center's main campus in Houston and 45 miles from Austin. The Science Park Research Division consists of approximately 200 personnel, including 22 faculty, 16 postdoctoral associates, and 25 graduate students housed in three research buildings that contain a total of 54,000 square feet of laboratory space, shared resources, and office space. Additional facilities include a Conference Center, state-of-the art animal facilities, student housing facility, and two other maintenance and support buildings for a total of 130,000 square feet. The Science Park Division currently has a level of extramural funding of 7.7 million dollars. The new Director/Chair will receive substantial resources to support further growth and development.

The Department of Carcinogenesis stands uniquely poised to contribute to furthering knowledge of the causes and prevention of cancer due to its integrated multidisciplinary nature. Applicants should have an established record of scientific excellence in research and an international reputation that will benefit the research of the faculty and the stature of the Cancer Center. The research program of the Director/Chair should complement and contribute to the research directions of the Department faculty in the broad areas of molecular mechanisms of carcinogenesis, mechanism-driven studies in cancer prevention and/or intervention, and genetic susceptibility.

Interested individuals should submit their C.V. and brief summary of research interests to: **Dr. William Klein, Chairman, Department of Carcinogenesis Search Committee, M. D. Anderson Cancer Center, 1515 Holcombe Blvd., Box 147, Houston, TX 77030.**

An Affirmative Action/Equal Opportunity Employer. Women and minority candidates are encouraged to apply.

Senior Scientist I

GENETIC THERAPY, INC.

GTI, is a leader in the research and development of human gene therapy products, for the treatment of genetic and acquired diseases. Founded in 1986, GTI and its collaborators represent one of the largest groups of scientists dedicated to research and development in the field. The Company's product development programs include: cancer, hemophilia and cardiovascular disease.

Successful candidate must have a Ph.D. in a scientific discipline and 2-5 years relevant experience, with a strong background in molecular biology; or equivalent. Individual will be joining an innovative group responsible for collaborating with both Research and Development units to provide state-of-the-art support in all areas of molecular biology. Candidate should have strong analytical and problem solving skills and expertise in assay development. Knowledge of viral (including adenoviral and lentiviral) and/or synthetic mammalian expression vectors is desired. The individual should be self-motivated and able to work independently, as well as in a team setting.

GTI, a Novartis company, offers a stimulating and challenging environment in a rapidly growing company, with competitive salaries and benefits. Please specify job code 266-030-8 when applying. Fax or send resume to:

**Genetic Therapy, Inc.
938 Clopper Road
Gaithersburg, MD 20878
Fax: (301) 208-2481**

Email: gti.jobs@pharma.novartis.com

NOVARTIS

EOE

WHERE POSSIBILITIES BECOME ACHIEVEMENTS

By merging pharmaceutical science with information technology, Eli Lilly and Company is creating unprecedented opportunities to better meet the global population's health care needs. And achieving all this is a dedicated team of professionals. Their talents and skills in a variety of arenas keep our \$8+ billion company on the cutting edge.

Medical Science Writer

Eli Lilly and Company is seeking medical writing candidates for therapeutic area publications teams. Primary responsibilities include working on-site with multiple project teams to plan publication strategies; write, edit, and review scientific manuscripts, abstracts, book chapters, and poster presentations; and coordinate review and approval processes. Qualified candidates will have an educational background in science, preferably in oncology, reproductive biology, endocrinology, or bone; excellent teamwork, leadership, and self-management skills; strong written and oral communication skills; and experience planning and writing scientific publications in peer-reviewed journals. A Bachelor's degree is required and a graduate degree is preferred. We offer a competitive salary and excellent benefits, including tuition reimbursement.

Interested qualified candidates should send a cover letter, a resume, and at least three writing samples to: David Finnell, Dept: ADSCMMW06, U.S. Recruiting and Staffing, Lilly Corporate Center, DC 1811, Indianapolis, IN 46285.

Lilly
Eli Lilly and Company

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

For other job opportunities, please access our Job Bank at <http://www.lilly.com>, or phone our Jobline 1-800-892-9121.

CULTIVATE YOUR CAREER

At Rhône-Poulenc Rorer, a global pharmaceutical leader, we sow the seeds of success. Our commitment to research and development has created new opportunities in our Collegeville, PA research center and elsewhere around the world. If you share our entrepreneurial spirit, sense of urgency, teamwork philosophy, and commitment to improving the quality of life for millions of customers, we invite you to explore the following opportunity.

TOXICOLOGIST

The Department of Drug Safety currently has a position available for a Research Investigator who will design drug safety programs, for dermal pharmacological products. You will address issues relating to carcinogenicity, phototoxicity, and safety pharmacology in support of worldwide regulatory filings, as well as design, monitor and report all non-clinical toxicology studies. Additionally you will oversee, collect, and interpret pre-clinical ADME data, as well as prepare pre-clinical sections of INDs, CTXs, NDAs, MAAs and Clinical Investigator Brochures.

We are seeking candidates with a Ph.D. in Toxicology or a related field, combined with at least 1 year of post-doctoral training and 5 years of industrial toxicology experience developing programs for product registration. Experience in dealing with regulatory authorities is a plus.

In addition to an exciting and dynamic environment, Rhône-Poulenc Rorer offers a competitive salary, an ideal location, and the opportunity for advancement. Interested, qualified candidates should forward resume to: **R&D, Rhône-Poulenc Rorer, 500 Arcola Road, P.O. Box 5096, Mailstop EXP19, Collegeville, PA 19426 or FAX to 610-454-5884, Attn: SW.** Equal Opportunity Employer M/F/D/V.

RHÔNE-POULENC RORER

Research Biologist

DuPont's Biotechnology Group is looking for a Research Biologist whose primary function will be to build a molecular analysis competency for transgenic plants.

The individual filling this position will coordinate and supervise the research of the transgenic molecular analysis group involving PCR and Southern blot analysis of transgenic plants. This includes working closely with the plant transformation group to monitor and organize tissue sample collection for analysis, designing PCR primers, analyzing PCR results, determining restriction enzymes and probes to use for Southern blots, and analyzing Southern blot results.

The work will also involve procedure optimization through automation and database development to rapidly analyze multiple diverse samples. Further work will include planning and implementing Southern blot analysis of transgenic crop products to support regulatory packages for the United States, Europe, and Japan. The person will also be responsible for writing final technical reports on the data acquired for regulatory packages and for reporting the Southern or PCR results to the trait groups. The individual will have the longer term objective of building this activity into a molecular analysis competency by applying new technology, increasing automation, and integrating the activities with those of the Biotech analytical group.

Minimum requirements include a Ph.D. in Plant Biotechnology or related field. Extensive experience necessary with basic plant molecular biology techniques, especially DNA isolation, PCR, electrophoresis, and Southern blot analysis. Ability to analyze and interpret Southern blot results, ultimately to map complex insertion patterns of the transgene. Knowledge of plant transformation and plant genetics. Helpful would be an understanding of plant biotechnology regulations and some knowledge of GLP procedures.

Ability to troubleshoot and optimize procedures. Experience with procedure automation. Excellent interpersonal skills to organize and direct a group and interact with the entire biotechnology group. Excellent organizational/recordkeeping skills. Ability to effectively organize activities in order to conduct multiple projects simultaneously.

Experience with computer software including DNA analysis packages, Microsoft Word, and Excel. Experience with the use of Web-based databases relevant to molecular biology.

Applicants should apply no later than July 31, 1998, to:

Stine-Haskell Research Center
DuPont Agricultural Products
Attention AG982567
P.O. Box 30
Newark, DE 19714
Fax: 1-800-631-2206

Dupont is an Equal Opportunity Employer.

Parke-Davis offers freedom to explore

Parke-Davis Pharmaceutical Research in Ann Arbor, MI offers the freedom to explore and impact the future of drug discovery with an exceptional opportunity.

SCIENTIST/SENIOR SCIENTIST

You will develop relevant animal models that will be used for the evaluation of agents that influence phagocytic-cell activation; focus on animal models of reperfusion injury and/or septic shock; and be responsible for high capacity primary models. You will also work with cellular models that will be used on a routine basis for proof of concept and species specificity studies; supervise technical colleagues; report experimental results to project teams and external collaborators; and work with scientists from other disciplines. A Ph.D., 3-5 years of postdoctoral experience and extensive training in relevant models of inflammation and immunity are required. A background with cellular activation models is a plus.

We offer an attractive compensation package and a positive environment that encourages continuous growth and success. Qualified candidates please mail, fax or e-mail your resume*, indicating Job Code RJB-98297, to: **Parke-Davis Resume Processing Center, P.O. Box 92242, Los Angeles, CA 90009-2242. Fax: (310) 337-3367. E-mail: parkedavis@isearch.com**

*Please submit resume on laser-quality white paper, with legible 10 point or larger type, and avoid boldface, italics, borders, etc.

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Research Scientists (Job #98-145) - Molecular Biology

Put your Ph.D. in Molecular Genetics, Biochemistry or related field and 2+ years of Post-Doctoral experience to work planning and executing a research program to identify, characterize and improve the genetic elements of a multi-step biodesulfurization pathway. To qualify, you must possess top experimental skills and a strong publication record, plus expertise in the techniques of molecular genetic analysis, the manipulation of microbial pathways, including regulated gene expression is necessary. A background to include high throughput screening methods to microbial metabolic pathway improvement is desirable.

Research Scientist (Job #98-142) - Microbiology & Fermentation Development

You'll define operating conditions conducive to the use of solvent tolerant desulfurizing bacteria in a commercial biodesulfurization process; develop and test strategies to improve performance; determine biocatalytic stability; develop and implement strategies to overcome bioreactor limitations; and conceive and execute changes in operating conditions and recommend genetic and process modifications to enhance overall performance.

Requires a Ph.D. in Biochemical Engineering or Microbiology and 3+ years of research experience relating to continuous culture, fermentation, solvent tolerance, microbial physiology, and/or biotransformations. Experience operating continuous culture or bioreactor systems is essential. Must have proven ability to plan, design and execute research experiments in a timely manner with defined goals and objectives.

Please fax or mail a resume and cover letter stating the position and job number with three relevant references to: **Human Resources Coordinator, Energy BioSystems Corporation, 4200 Research Forest Drive, The Woodlands, TX 77381. Fax (281) 364-6113.**



ENERGY BIOSYSTEMS

No phone calls please. EOE, M/F/D/V.

POSITIONS OPEN

JUNIOR FACULTY POSITION IN STRUCTURAL MOLECULAR BIOLOGY AT STANFORD SYNCHROTRON RADIATION LABORATORY

The Stanford Synchrotron Radiation Laboratory (SSRL) has a tenure-track faculty position at the **ASSISTANT PROFESSOR** level available in the field of structural molecular biology. SSRL seeks outstanding candidates who will take advantage of the unique synchrotron research opportunities available at SSRL and Stanford University. The SSRL structural molecular biology group provides support in data collection hardware and software for a large number of visiting researchers. The new faculty member will be associated with the core mission of this group and will be expected to develop, enhance, and support the scientific and technological focus in the area of macromolecular crystallography. A significant portion of the candidate's research program should feature instrumentation and software innovations that push the frontiers of synchrotron-based macromolecular crystallography (e.g., ultra-high resolution protein crystallography, direct methods, microcrystal diffraction). The person in this position will also have a role in supervising members of the structural molecular biology staff. Candidates must hold a Ph.D. or equivalent and have significant experience in all aspects of macromolecular crystallography and synchrotron science. Excellent verbal and written skills and demonstrated teamwork are essential. Candidates should send a curriculum vitae and a statement of research accomplishments and future interests, and arrange for at least three letters of recommendation to be sent to: **Chairman of the Search Committee, c/o Lisa Dunn, Stanford Synchrotron Radiation Laboratory, Stanford Linear Accelerator Center, P.O. Box 4349, M/S 69, Stanford, CA 94309.** The deadline for applications is September 15, 1998. *Stanford University is an Equal Opportunity Employer.*

STAFF SCIENTIST/PROJECT MANAGER SAN DIEGO STATE UNIVERSITY MICROCHEMICAL CORE FACILITY

Thriving academic core facility has an immediate opening for an energetic and independent scientist with post-doctoral experience. Duties will include (1) oversight of the daily operations of the core facility; (2) training and supervision of new personnel and student interns on the use of facility instruments (HPLC, ABI 377 automated sequencer, ABI oligosynthesizer); (3) development and implementation of new technologies; (4) designing and overseeing research projects; and (5) obtaining grant funding. The successful candidate should possess extensive biochemical and/or molecular expertise, and be very familiar with genome analysis software (e.g., BLAST, FASTA). Excellent communication and managerial skills are a must. We intend to fill the position by October 1998. Send cover letter outlining motivation and experience, curriculum vitae, and three reference letters to:

Dr. Anca Segall
Microchemical Core Facility Director
San Diego State University
Department of Biology
San Diego, CA 92182-4614

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PROGRAM DIRECTOR for educational outreach project. The BIOTECH Project at the University of Arizona seeks a Ph.D.-level science educator with molecular biology experience to coordinate an outreach program that helps High School Teachers prepare and teach biotechnology laboratories. This individual will develop and run summer workshops, travel to 12 to 18 Arizona high schools per year, run short workshops for Teachers at the schools, assess program outcomes, write grant proposals to expand the project, and supervise an Assistant. Participation in university teaching is possible. Candidates with experience in teacher outreach activities will be given priority. Salary will be \$35,000 to \$42,000, commensurate with qualifications. To ensure consideration, applications should be received by September 1, 1998, although applications will be accepted until the position is filled. Send curriculum vitae, statements of research experience and outreach and teaching interests, and three letters of recommendation to: **Dr. Gail D. Burd, Department of Molecular and Cellular Biology, Life Sciences South 444, The University of Arizona, Tucson, AZ 85721.** Telephone: 520-621-1544; FAX: 520-621-3709; e-mail: gburd@u.arizona.edu. *The University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer/Minorities/Women/Disabled/Veterans.*

POSITIONS OPEN

ENDOWED CHAIR in toxicology/toxicologic pathology. The Department of Anatomy, Pathology, and Pharmacology is searching for an established Research Scientist in toxicology or toxicologic pathology to fill an Endowed Chair position. The successful individual should hold an earned doctorate degree, be qualified to enter the faculty ranks as a Full Professor, have a national reputation for outstanding research in toxicology or toxicologic pathology, and have a strong history of competitive research funding and productivity. The endowment that supports this position is \$3 million dollars, with interest from the endowment available annually for support of the individual's research program. A competitive salary is supported by state funds. The successful individual is expected to develop and maintain a high-quality externally funded research program in toxicology or toxicologic pathology, to be an active participant in the graduate program of the college, and to develop collaborative research with local scientists and with scientists at other institutions. Start-up funds will be available for renovation of a large laboratory to the successful candidate's specifications. Interested individuals should send a curriculum vitae, letter stating research and graduate education goals, and names and addresses of three references to: **A. W. Confer, Head, Department of Anatomy, Pathology and Pharmacology, 250 Veterinary Medicine Building, College of Veterinary Medicine, Oklahoma State University, Stillwater, OK 74078-2007.** For full consideration, applications should be received by August 15, 1998. Inquiries can be addressed to: **Dr. Confer, e-mail: aconfer@okway.okstate.edu; Telephone: 405-744-4542.**

OSU is an Affirmative Action/Equal Employment Opportunity Employer committed to multicultural diversity.

BAILEY CHAIR IN ENVIRONMENTAL HORTICULTURE UNIVERSITY OF MINNESOTA, ST. PAUL

Applications and nominations are invited for the Gordon and Margaret Bailey Endowed Chair in environmental horticulture, a 12-month appointment beginning 1 July 1999 or as soon thereafter as possible, to be filled at the level of **ASSOCIATE** or **FULL PROFESSOR** with tenure. The Chair holder will direct a research program in environmental horticulture, addressing research goals such as woody plant and tree fruit production, culture, breeding, and over-wintering of woody plants. The Bailey Professor will be active in graduate education and will teach at least one course at the undergraduate level. S/he will engage in outreach activities to expand and strengthen interaction with the nursery industry. Applications from outstanding mid-career scientists are especially encouraged. To apply, submit a curriculum vitae, including a full list of publications; names and addresses of four references; and a brief statement of teaching, research, and public service interests pertinent to the Bailey Chair to: **John Carter, Chairman, Bailey Professorship Search Committee, Department of Horticultural Science, 305 Alderman Hall, University of Minnesota, St. Paul, MN 55108.** Nominations should be directed to the same address. Review of applications will begin December 31, 1998, and continue until the position is filled. *The University of Minnesota is an Equal Opportunity Educator and Employer.*

THE ERNA AND JAKOB MICHAEL VISITING PROFESSORSHIPS 1999-2000 THE JOSEPH MEYERHOFF VISITING PROFESSORSHIPS 1999-2000 THE ROSIE AND MAX VARON VISITING PROFESSORSHIPS 1999-2000 THE MORRIS BELKIN VISITING PROFESSORSHIP 1999-2000

The Weizmann Institute of Science, Rehovot, Israel offers a limited number of Visiting Professorships in the natural and exact sciences.

The Visiting Professorships are intended for candidates already holding the rank of Full Professor or equivalent and will be for a duration of two months to one year.

Deadline for submission of completed applications is December 31, 1998.

For further information or application forms, please contact: **The Academic Secretary, The Weizmann Institute of Science, Rehovot 76100 Israel.** FAX: 972-8-9471667; e-mail: rsmarjor@weizmann.ac.il. Applications and information are also available on the Internet at website: http://www.weizmann.ac.il/acadsec/visit_prof_home.html.

POSITIONS OPEN

DEPARTMENT OF PEDIATRICS

The Department of Pediatrics at Stanford University School of Medicine seeks applicants or nominations of candidates for a faculty appointment. This appointment will be in the University Line of the Professoriate of the School of Medicine at the **ASSOCIATE** or **PROFESSOR** level.

The candidate should have a basic research interest in cancer biology, including cellular, molecular, and/or genetic aspects of malignancy. Candidates should have Board certification in pediatrics and further training in any of the pediatric subspecialties. It is our strategy to recruit the most qualified Investigator in cancer biology to direct the academic program in cancer biology within the Department of Pediatrics. Candidates should be accomplished basic scientists with proven ability to compete for NIH-level grant support.

This faculty member will join an active program in basic science and translational research in pediatrics and become a member of our NIH-funded Child Health Research Center. The goal of the Child Health Research Center is the application of cellular, molecular, and genetic methods to unsolved problems in child health. This program is highly interactive with other clinical and basic science programs at Stanford University. Interested candidates should send a curriculum vitae to: **Alan M. Krensky, M.D., Shelagh Galligan Professor, Department of Pediatrics, Room G-312, Stanford University School of Medicine, Stanford, CA 94305-5208.** *Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.*

SCIENCE WRITER/EDITOR THE PLANT CELL

The American Society of Plant Physiologists has an immediate opening for news and reviews Editor of its journal, *The Plant Cell*. Individual bears full responsibility for content and editing of front section, including writing articles and selecting and editing articles written by others; handles all aspects of the publication of review articles; coordinates editing and production of special review issues; attends scientific meetings and has frequent contact with Plant Cellular, Molecular, and Developmental Biologists. Qualifications: demonstrated excellent writing skills, including ability to synthesize complex scientific concepts and explain them in a clear, intelligible fashion; minimum of a Master's degree in genetics or biology, with Ph.D. highly desirable; ability to communicate effectively and tactfully with authors; ability to gain rapid understanding of unfamiliar research areas and to recognize what topics in current plant biological research merit commentary. Salary commensurate with experience; excellent benefits. Send cover letter, résumé, salary history, and writing samples to:

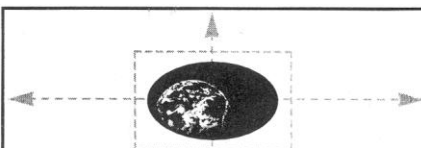
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TWO FACULTY POSITIONS IN TUMOR AND TRANSPLANT IMMUNOLOGY

The Eppley Institute for Research in Cancer of the University of Nebraska Medical Center (UNMC) is seeking Ph.D. or M.D. applicants at all levels for two tenure-track positions in the general area of tumor or transplant immunology. The Eppley Institute is involved in a multidisciplinary effort focused on research in cancer and is part of the NCI-designated UNMC/Eppley Cancer Center. In addition to directing an independent research program, the successful applicants will be able to interact with clinical faculty that are nationally recognized for the use of transplantation to treat malignant, inherited, and autoimmune diseases. Opportunities exist to collaborate in nationally funded programs of basic and clinical research in immunotherapy and immunobiology. It is also anticipated that Eppley faculty be involved in the training of graduate students and Postdoctoral Fellows through Eppley's NCI-supported Cancer Research Training Program.

Applicants should send their résumé, names of three references, and a letter detailing their research goals to: **Dr. Barry Gold, Interim Director, Eppley Institute for Research in Cancer, University of Nebraska Medical Center, 600 South 42 Street, Omaha, NE 68198-6805.** *The University of Nebraska Medical Center is an Equal Opportunity/Affirmative Action Employer.*



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Monsanto is seeking a recent Ph.D. graduate in Polymer Chemistry with a research emphasis on polymerization and synthesis. You must have experience in the chemistry of molecular imprinting, self-assembly and molecular recognition. Also, it is important that you work well within a multidisciplinary team working on the application of novel polymeric materials for life sciences. This position is expected to be a one-year employment assignment with the possibility of extension to a second year. You will be expected to publish results and present findings at scientific conferences.

We offer a competitive compensation and benefits package. For immediate consideration, please send/fax your resume to: Monsanto, OST Staffing, Mail Code: E2NB, Job Code: POLYPD, 800 N. Lindbergh Blvd., St. Louis, MO 63167 or fax: 314/694-2014. EEO/AA Employer M/F/D/V. Visit our website at www.monsanto.com.



Due to our rapid growth in the field of bioinformatics and agricultural genomics, The National Center for Genome Resources, in Santa Fe, New Mexico, is seeking a strategic thinker, capable of formulating a well-defined vision for NCGR's Agricultural Genomics Program and its bioinformatics support activities.

AGRICULTURAL CHIEF SCIENTIFIC OFFICER

Will help formulate, articulate, and implement NCGR's expanded scientific strategy in support of NCGR's goal of becoming a leader in the field of agricultural genomics. Must be a proven scientist/manager capable of anticipating where agricultural genomics is heading and the tools that will be needed to optimize the information generated. Must be capable of working effectively in interdisciplinary teams and have a demonstrated track record in identifying, developing, and fostering collaborative research agenda. **Please note: we are a bioinformatics organization with no wet labs.** Qualifications: Ph.D. in molecular biology, genetics, or in a field related to agricultural genetics; demonstrated successes in team development; both laboratory and industry (pharmaceutical, biotech, genomics) experience; comprehensive knowledge of genomics; and ability to conceive, design, and develop downstream applications.

To find out more about NCGR, you may access our home page at www.ncgr.org.

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EOE

Dean College of Literature, Science and the Arts

University of Michigan - Ann Arbor

The University of Michigan invites both nominations and applications for the position of Dean of the College of Literature, Science and the Arts. The candidate should be a nationally recognized scholar, and have the desire, ability, and vision to lead a liberal arts college in one of the nation's premier research universities with a very strong commitment to undergraduate teaching. A successful candidate will be expected to have a strong commitment to promoting diversity and affirmative action.

The Dean is expected to provide intellectual leadership for the College community, oversee the instructional program, supervise the budget and personnel administration and assume a major role in fundraising. As the chief academic, administrative and financial officer of the College, the Dean reports directly to the Provost and Executive Vice President for Academic Affairs.

Nominations and applications will be reviewed on an ongoing basis beginning September 22, 1998 and will be accepted until the position is filled. Correspondence should be addressed to:

William G. Rosenberg
Chair of the LS&A Search Advisory Committee
And Professor of History
University of Michigan
3074 Fleming Administration Building
Ann Arbor, MI 48109-1340

E-mail may be addressed to: wgr@umich.edu

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► Scientists – Protein Sciences

We seek motivated individuals to join a creative team at Millennium BioTherapeutics responsible for the production of protein reagents (tagged proteins, AP & Fc fusion proteins, antibodies, etc.) for *in vitro* studies and highly purified proteins and antibodies suitable for preclinical studies in animals. Qualifications include 2-3 years of post-doctoral experience in all aspects of the lab-scale production of recombinant proteins and antibodies, with specific involvement in the recombinant expression and purification of novel proteins. Experience in bacterial expression systems and protein refolding methodology would be desirable.

► Scientist/Senior Scientist – *in vivo* Pharmacology

Our highly successful gene discovery effort at Millennium BioTherapeutics continues to create exciting opportunities to join a team effort focused on elucidation of the function and therapeutic utility of a growing portfolio of novel proteins. This specific position requires a highly motivated, independent scientist with a good publication record to be a key member of our interdisciplinary therapeutic protein drug development effort involving animal models to test the activity of novel secreted proteins, receptors, and antibodies. Requirements include a Ph.D. in the biological sciences, with at least 3-5 years of experience in pharmacology, physiology, anatomy, or a related discipline. Extensive expertise in conducting *in vivo* studies and the evaluation of *in life* phase of studies, i.e. physiology, pathophysiology and behavior is a must.

► Scientist – Myocardial Biology

The Scientist will pursue identification of novel genes and characterization of underlying molecular mechanisms in normal and diseased myocardium. Signal transduction pathways involved in hypertrophy, contractility, and apoptosis are of particular interest. Candidates must have a Ph.D. or M.D. degree and at least two years of postdoctoral training in cell and molecular biology. Experience in the cardiovascular system, and particularly in cardiac myocyte biology, is strongly preferred. Leadership and team working skills are essential. Millennium offers a rich, highly interactive environment and access to exceptional technologies for gene discovery and functional biology.

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POSITIONS OPEN

CHAIR, DEPARTMENT OF BIOLOGICAL SCIENCES

The University of Arkansas, Fayetteville, is seeking applications and nominations for the position of Professor and Chair of a broadly based Department of Biological Sciences. The University is a land-grant institution and the major doctoral and research university in Arkansas. The Department serves more than 600 undergraduate majors and 60 graduate students in M.A., M.S., and Ph.D. programs, and has strong research in cell/molecular and ecology/evolutionary biology. A new state-of-the-art 40,000 square-foot research building is currently under construction. Further departmental information is available at <http://comp.uark.edu/~bioinfo/bisc.html>. Requirements include a doctorate in any field of biological sciences, proven administrative and interpersonal skills, sustained success in competitive funding, and a demonstrated commitment to undergraduate and graduate education. Screening of applications will begin on September 28, 1998, and will continue until the position is filled. The initial appointment as Chair is for five years. Applicants should submit a letter of interest and goals, curriculum vitae, and addresses and e-mail for five references to: **Chair, Biological Sciences Search Committee, Department of Biological Sciences, SCEN 601, University of Arkansas, Fayetteville, AR 72701.** *The University of Arkansas is an Equal Opportunity/Affirmative Action Employer. Applicants must have proof of legal authority to work in the United States at the time of hire. The Department is especially interested in applications from qualified candidates who would contribute to racial, ethnic, and gender diversity.*

CHAIR, DEPARTMENT OF BASIC MEDICAL SCIENCE SCHOOL OF MEDICINE University of Missouri-Kansas City

The University of Missouri-Kansas City (UMKC) is seeking a Chair of Basic Medical Science, a newly created department within the School of Medicine. The new Chair will be expected to provide leadership in the development and implementation of strong, innovative teaching and research programs in anatomy, biochemistry, microbiology, and physiology, and will have the opportunity to shape the future of the department. UMKC School of Medicine is an innovative six-year B.A./M.D. program that emphasizes early clinical contact and integration of clinical medicine into the basic science curriculum. Requirements of the position include a doctorate in anatomy, biochemistry, microbiology, physiology, or medicine with Board certification and academic focus in a field closely related to one of the above disciplines. The successful candidate must have a national reputation for excellence in teaching and research, and experience in a medical academic environment. Tenure status, academic rank, and salary will be of **PROFESSOR** or **ASSOCIATE PROFESSOR**. If interested, please send a letter of application, curriculum vitae, and a list of four professional references to: **Marjorie S. Sirridge, M.D., Dean, University of Missouri-Kansas City School of Medicine, 2411 Holmes Street, Kansas City, MO 64108-2792.** *UMKC is an Affirmative Action/Equal Opportunity Employer Institution.*

TENURE-TRACK FACULTY POSITIONS

The Department of Physiology and Neuroscience at the Medical University of South Carolina seeks to fill three tenure-track positions. One position will be at the level of **ASSISTANT PROFESSOR** and two will be recruited as **ASSOCIATE** or **FULL PROFESSORS**. Candidates must have a Ph.D. or M.D. or the equivalent, a minimum of two to three years of postdoctoral training, and evidence of the ability to establish and continue an extramurally funded research program. Candidates should have extensive training and research experience in molecular neurobiology, preferably with an emphasis on substance abuse, neural plasticity, or memory and learning. To apply for the position send a letter of application indicating the rank you are applying for, curriculum vitae, summary of research interest, and a list of at least three individuals to contact as references on your behalf to: **Peter Kalivas, Ph.D., Search Committee, Department of Physiology and Neuroscience, Medical University of South Carolina, 500 MUSC Complex, Suite 405, Charleston, SC 29425.** Review of applications will begin on September 1, 1998, and continue until the positions are filled. Further information can be obtained at e-mail: heissenc@musc.edu.

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

POSITIONS OPEN

NEUROPHARMACOLOGY

The Neurosciences Institute invites applications from researchers with a strong background in investigating central nervous system pharmacology for the position of **ASSOCIATE FELLOW** in experimental neurobiology. Applicants should be at the advanced Postdoctoral or Assistant Professor level. Successful candidates will be capable of developing an innovative research program and will be expected to take advantage of opportunities for scientific interactions with Fellows in experimental and theoretical neurobiology. Research at the Institute spans levels from the molecular to the behavioral.

Applications containing a statement of research interests, a curriculum vitae, and the names of three references should be sent to: **Director, The Neurosciences Institute, 10640 John Jay Hopkins Drive, San Diego, CA 92121.** Fellows receive stipends and research support commensurate with qualifications and experience.

The Institute, an independent organization at the forefront of brain research, is also the home of the Neurosciences Research Program and serves as an international meeting place for Neuroscientists; Fellows have opportunities to interact with visitors from many institutions worldwide.

ASSISTANT/ASSOCIATE PROFESSOR DEPARTMENT OF NEUROSCIENCE UNIVERSITY OF FLORIDA The Brain Institute and College of Medicine

The Department of Neuroscience, the University of Florida Brain Institute (UFBI) and the College of Medicine are seeking outstanding scientists for at least two tenure-track faculty positions at the Assistant or Associate Professor level. Funding for this search is, in part, provided by the Lucille P. Markey Charitable Trust. All candidate(s) must have a Ph.D. or M.D.-Ph.D. with adequate postdoctoral training. The successful candidates will be expected to establish and maintain, or have previously established, an outstanding, independent, and well-funded research program in the cellular and molecular pathogenesis and treatment of Parkinson's disease. They will also be expected to contribute to the education of both graduate and medical students. The salary of each position is negotiable and will be commensurate with related experience. Laboratory and office space for these positions will be provided in the new state-of-the-art UFBI ([website: http://www.ufbi.ufl.edu](http://www.ufbi.ufl.edu)).

Applicants should submit curriculum vitae, a clear statement of research goals, and arrange for three references to be sent to:

**Dr. Harry S. Nick
Chair of Search Committee
Department of Neuroscience
College of Medicine
University of Florida
P.O. Box 100244
Gainesville, FL 32610-0244**

The completed application should be received by September 15, 1998, with an anticipated start date on or after January 2, 1999. *The University of Florida is an Equal Opportunity Employer, and minorities and women are especially encouraged to apply.*

The Department of Ophthalmology at the University of Oklahoma Health Sciences Center in Oklahoma City has a tenure-track position available for appointment at the **ASSISTANT/ASSOCIATE PROFESSOR** level. Applicants using molecular, genetic, or biochemical approaches whose research focuses on growth factors and/or angiogenesis in the mammalian retina are especially invited to apply. Opportunity exists for interactions with other Investigators within the department as well as with those at the Oklahoma Center for Neuroscience and the Oklahoma Medical Research Foundation. Applicants should submit a curriculum vitae, with an accompanying summary of past and proposed research interests, and names of three references. Send all materials to: **David W. Parke II, M.D., Professor and Chairman, Department of Ophthalmology, Dean A. McGee Eye Institute, 608 Stanton L. Young Boulevard, Oklahoma City, OK 73104.** Telephone: 405-271-6363; FAX: 405-271-3013; e-mail: david-parke@ouhsc.edu.

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

POSITIONS OPEN

TENURE-TRACK FACULTY POSITION IN IMMUNOLOGY

The Department of Biological Sciences at California State University, Long Beach, invites applications for a tenure-track faculty position (**ASSISTANT PROFESSOR**) in immunology beginning fall 1999. Candidate must have a Ph.D. in the biological sciences with training and research in immunology. All areas of immunology considered with preference given to a Comparative Immunologist. Teaching responsibilities include undergraduate and graduate courses in immunology and a specialty course related to the candidate's research interests.

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

ASSISTANT/ASSOCIATE PROFESSOR MICROBIAL ECOLOGY

The University of Montana-Missoula invites applications for a tenure-track position in microbial ecology at the Assistant or Associate Professor level beginning as early as January 1999. Expertise with lower eukaryotic systems, especially fungal or protozoan, is sought to expand current research programs and curriculum in microbial ecology and environmental microbiology ([website: http://www.umt.edu/biology/dbs](http://www.umt.edu/biology/dbs)). Preference will be given to those using molecular approaches to study diversity, structure, function, and/or trophic interactions of microbial communities. The successful candidate is expected to have established (preferred) or develop a vigorous externally funded research program, teach undergraduate and graduate courses in general microbiology and microbial ecology, and mentor undergraduate and graduate students. Requirements include a doctoral degree in microbial ecology, microbiology, or related field, a strong record of research accomplishments including postdoctoral experience and teaching experience. Send letter of application, curriculum vitae, statement of teaching and research interests, and three letters of reference to: **Microbial Ecology Search Committee, Division of Biological Sciences, The University of Montana, Missoula, MT 59812.** FAX: 406-243-4184. Deadline for receipt of all materials is August 31, 1998. *The University of Montana-Missoula is an Affirmative Action/Equal Opportunity Employer.*

YALE UNIVERSITY DEPARTMENT OF CHEMISTRY

The Department of Chemistry, Yale University, invites applications for a position at the **ASSISTANT PROFESSOR** level to commence fall 1999. We seek creative Teacher-Scholars who show promise for developing outstanding research programs in the broad fields of inorganic, theoretical, and biophysical chemistry. Applicants should send curriculum vitae and a statement of research plans and arrange for the submission of three letters of recommendation. All materials should be received by 15 October 1998. Send applications to: **Professor Donald M. Crothers, Chair, Junior Faculty Search Committee, P.O. Box 208107, Yale University, New Haven, CT 06520-8107.** *Yale University is an Equal Opportunity/Affirmative Action Employer.*

LECTURER. Noncommercial, well-established biomedical corporation needs Scientists/Physicians full time to present educational seminars to health professionals. Must have scientific publications and lecturing experience. Clinical experience and knowledge of pharmacology or nutrition helpful. Excellent compensation. No need to relocate but must be willing to travel. Please send a list of topics on which you have spoken or would like to speak to: **Dr. R. Colman, Biomed Inc., 2425-B Channing Way, Suite 457, Berkeley, CA 94704.**

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- **Nicholas Reo:** NMR *in vivo*; liver metabolism/chemical toxicology.
- **John Turchi:** Eukaryotic DNA replication and repair.
- **Brenda Wilson:** Bacterial protein toxins, signal transduction mechanisms microbial pathogenesis.

Ph.D's with experience relevant to one or more areas above should send a cover letter indicating interest in a specific laboratory, a current curriculum vitae, copies of publications, and the names of three references to: **Postdoctoral Search Committee, Department of Biochemistry and Molecular Biology, Wright State University, 3640 Colonel Glenn Highway, Dayton, OH 45435.** Fellows must be U.S. citizens or permanent residents. Salaries are commensurate with experience. Consideration of applications will begin on September 1, 1998.

Additional information about the department and faculty e-mail addresses are available at: <http://www.med.wright.edu/som/academic/BMB/bmbhome.html>.

Wright State University is an Affirmative Action/Equal Employment Opportunity Employer.



NATIONAL PROGRAM LEADER for Engineering/Energy, USDA, ARS, National Program Staff, Crop Production, Product Value, and Safety, Beltsville, Maryland is seeking Agricultural or Chemical Engineer. Salary commensurate with experience (\$77,798-\$101,142). Appointment is permanent full-time position and requires U.S. citizenship.

Incumbent serves as a National Program Leader responsible for coordinating ARS' engineering and energy research programs, which involve the application of both traditional and emerging fields of engineering and physical sciences to the solutions of agricultural, food and fiber production, and processing problems. Candidates must possess 1) a Bachelor's degree or higher in professional engineering and 2) specialized experience equivalent to the next lower grade level and directly related to the position. (For specific qualifications see vacancy announcement.) For program information, contact **Judy St. John** at (301) 504-6252, fax: (301) 504-6719, or e-mail: jsj@ars.usda.gov. For application package with complete qualifications requirements and instructions, contact the **Human Resources Division**, (301) 504-1484 and request vacancy announcement number ARS-X8B-8208. Applications must be postmarked by August 24, 1998.

USDA/ARS IS AN EQUAL OPPORTUNITY EMPLOYER

www.ars.usda.gov/afm/hrd/resjobs

GLOBAL OPPORTUNITIES



CHIBA UNIVERSITY CENTER FOR FRONTIER SCIENCE Professor of Theoretical Physics

The Center for Frontier Science at Chiba University seeks nominations and applications for a 1- to 3-year appointment as a full/associate professor in theoretical physics (preferably in the area of condensed matter). The successful candidate is expected to establish an independent research program and to teach effectively at both undergraduate and graduate levels. Chiba University is a highly selective national university located 20 miles east of Tokyo. The Center for Frontier Science has recently been established to improve undergraduate education in science and also to train talented students in physics who skipped the final year of high school. The post is available from 1 March 1999 and a salary equivalent to that of a Japanese professor will be offered. A research fund of ¥1,000,000 a year will also be made available.

Please send curriculum vitae, a list of publications, copies of selected publications (5 maximum), and a brief description of the proposed research. In addition please arrange to have three letters of reference sent directly to the address below by

October 1, 1998.

**Chair, Search Committee
Center for Frontier Science, Chiba University
Yayoi-cho, Inage-ku, Chiba 263-8522, Japan**

For further information, please contact **Professor K. Ohtaka** (fax: +81-43-290-3523, e-mail: ohtaka@j90.tg.chiba-u.ac.jp).

CONFERENCE

INVITATION TO REGISTER FOR SYMPOSIUM
AND CALL FOR POSTER ABSTRACTS

EMERGING THERAPIES FOR CHRONIC VIRAL HEPATITIS

OCTOBER 2-4, 1998
MONTREAL, QUEBEC, CANADA

Dr. LORNE TYRRELL, *Symposium Chairman*
UNIVERSITY OF ALBERTA, EDMONTON, CANADA

FOCUS

- Clinical investigations into the management of chronic hepatitis B and C infections, and related liver disease
- Recent advances in anti-viral therapy, epidemiology and pathogenesis of the viral infection
- Advances in the understanding of viral replication, novel molecular and immunologic approaches towards the treatment of the disease
- *In vitro* and *in vivo* model systems

LIST OF SPEAKERS

Marc Bilodeau	Heather Davis	Robert Lanford
Baruch Blumberg	Mark Feitelson	Bruce Malcolm
Nathaniel Brown	Jenny Heathcote	Thomas Michalack
Weizhong Cai	Lee Kaplan	Samir Mounir
Richard Colonno	Brent Korba	James Rooney
Lynn Condreay	Ann Kwong	Jesse Summers
Schlomo Dagan	Daniel Lamarre	J.-P. Villeneuve
		Yu-Mei Wen

ABSTRACT DEADLINE AUGUST 31, 1998

For Registration and Other Information, Contact;

HEPATITIS SYMPOSIUM c/o Jpdl

TELEPHONE: 514-287-1070, FACSIMILE: 514-287-1248

E-MAIL: jpd@jpd.com, WEB SITE: www.hepatitis-symposium.org

POSITIONS OPEN

The Department of Materials Science and Engineering at Penn State is seeking applicants to fill a tenure-track position at the ASSISTANT/ASSOCIATE PROFESSOR level. The successful candidate will have the opportunity for a joint appointment with the Bioengineering Program at University Park and/or the Biomedical Engineering Institute at the Hershey Medical Center. The area of expertise is open but experience in the broad area of biomaterials, biocompatibility, or biosurfaces is desirable.

The candidate must have demonstrated a strong academic record, outstanding potential for independent research, and a commitment to teaching, both undergraduate and graduate students. Please send curriculum vitae with a list of publication, names of at least three references, and an abstract of research and teaching interests by September 30, 1998, to:

Richard E. Tressler, Chair
Department of Materials Science and Engineering
101 Steidle Building
University Park, PA 16802

Penn State is an Equal Opportunity/Affirmative Action Employer. Qualified minority and female candidates are encouraged to apply.

PLANT DEVELOPMENT AND SIGNALING YALE UNIVERSITY

The Molecular, Cellular, and Developmental Biology Department of Yale University invites applications for a tenured ASSOCIATE or FULL PROFESSOR in the area of plant development. We seek scholars with a record of outstanding achievement in research who are accomplished and creative teachers at both the undergraduate and graduate level. We are interested in candidates with breadth of expertise pursuing molecular, genetic, physiological, and cellular approaches to problems in plant development.

Please send curriculum vitae, description of research interest, along with the names, addresses, and telephone numbers of at least three referees by October 1, 1998, to: Plant Development Search, c/o Chair, Molecular, Cellular, and Developmental Biology Department, Yale University, Box 208103, New Haven, CT 06520-8103. Yale University is an Affirmative Action/Equal Opportunity Employer. Women and members of minority groups are urged to apply.

The Department of Biochemistry at Tufts University School of Medicine invites applications from highly qualified individuals for a TENURE-TRACK POSITION. Rank will correspond to the level of experience and qualification of the successful application. Primary criteria for appointment will be research excellence, teaching ability, potential for scientific interactions, and ability to conduct a funded independent research program. Preference will be shown to those individuals who complement existing departmental strengths in the biochemistry of DNA replication, intracellular signal transduction in normal and transformed cells, gene transcription and its regulation, and NMR-based studies of protein structure and enzyme mechanisms.

Applicants should submit a curriculum vitae, a brief statement of research interests, and the names, addresses, and telephone numbers of three referees to:

Chairperson, Search Committee
Department of Biochemistry
Tufts University School of Medicine
136 Harrison Avenue
Boston, MA 02111

Tufts is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS. The Departments of Physiology and Pharmacology of the College of Medical Sciences at Nova Southeastern University invite applications for the positions of ASSISTANT PROFESSOR in the areas of endocrine and reproductive physiology, and general, cardiovascular, or neuropsychopharmacology. The College of Medical Sciences is located in the new Health Professions Division facility on the Fort Lauderdale campus. Salaries are competitive and fringe benefits are generous. The candidates' responsibilities will include participation in team-taught courses to health profession students, scholarship, and service. Please send a letter of intent stating position desired, a résumé, copies of transcripts, and the names, addresses, and telephone numbers of three professional references to: Nova Southeastern University, Human Resources Department (HLF), 3301 College Avenue, Ft. Lauderdale, FL 33314. Nova Southeastern University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

Neurobiology RESEARCH-TRACK POSITIONS available immediately for an integrative and/or cellular Neurophysiologist to study membrane properties, synaptic integration, and plasticity in mammalian olfactory bulb and piriform cortex. Demonstrated experience and publications in intracellular or patch clamp recording in slices, and/or infrared and/or voltage/Ca-sensitive dye imaging required. Competitive salary and fringe benefits. Opportunity to interact with Neuroscientists in the department (website: <http://neurobiology.umaryland.edu/>) and the interdisciplinary Neuroscience Program (website: <http://neuroscience.umaryland.edu/>). Applicants should possess a Ph.D. and/or M.D. Excellent oral and written communication skills are required. Send curriculum vitae and names, addresses, and telephone numbers of three references to: Dr. M. Ennis/Dr. M. Shipley, Department of Anatomy and Neurobiology, University of Maryland School of Medicine, 685 West Baltimore Street, Baltimore, MD 21201. E-mail: mennis@umaryland.edu. The University of Maryland is an Affirmative Action/Equal Employment Opportunity/ADA Employer. Minorities and women are encouraged to apply.

POSTDOCTORAL POSITIONS

Postdoctoral positions are available to study the biochemistry and molecular biology of DNA replication and recombination in the bacteriophage T4 system. Candidates with a Ph.D. and experience in chemistry, biochemistry, or related fields are sought for a project involving biophysical studies of protein-DNA complexes, using techniques including fluorescence spectroscopy, analytical ultracentrifugation, and X-ray crystallography. Candidates with a Ph.D. and experience in biochemistry, molecular biology, or related fields are sought for a project involving *in vitro* reconstitution of recombination-dependent DNA synthesis and repair reactions. Send curriculum vitae, a description of research experience and interests, and three letters of recommendation to: Dr. Scott W. Morrical, Department of Biochemistry, College of Medicine, University of Vermont, Burlington, VT 05405. FAX: 802-862-8229; e-mail: smorrlica@zoo.uvm.edu.

RESEARCH ASSISTANT PROFESSOR

Opening for a Ph.D. in a relevant biomedical science discipline, such as pharmacology, physiology, or veterinary medicine. Experience in *in vivo* animal studies is essential. Also essential is administrative experience and good communication skills. Experience in bone implant work preferable. Research project involves *in vivo* studies of gene therapy for diseases of the musculoskeletal system, with an emphasis on gene therapy for skeletal lesions. Salary and benefits competitive; possible long-term position. Send résumé, cover letter, and names of three references to: Ms. C. Farrell, Loma Linda University, P.O. Box 7210, Loma Linda, CA 92354.

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

FIVE POSTDOCTORAL RESEARCH POSITIONS LABORATORY OF MOLECULAR PATHOLOGY The University of Texas Southwestern Medical Center at Dallas

Seeking scientists with expertise in molecular and cellular immunology, molecular biology, or biochemistry. For further information see our departmental website: <http://pathcuric1.swmed.edu>.

Or FAX curriculum vitae to: Margaret, FAX: 214-648-4067. An Equal Opportunity Employer.

POSITIONS OPEN

RESEARCH ASSOCIATE DEPARTMENT OF MICROBIOLOGY UNIVERSITY OF MINNESOTA Minneapolis, Minnesota

A Research Associate position is available to conduct research on iron starvation stress in the respiratory pathogen *Bordetella pertussis*. Applicants must hold the Ph.D. degree and have a minimum of five years of postdoctoral experience in bacteriology and molecular biology. Preference will be given to applicants with demonstrated expertise in pathogenic bacteriology, microbial iron metabolism, and prokaryotic gene regulation at the transcriptional level, including molecular characterization of protein-DNA interactions. This position is a 100 percent time, 12-month, annually renewable appointment to begin August 1, 1998.

Qualified candidates should send a letter of interest, curriculum vitae, reprints of relevant publications, and the names, addresses, and telephone numbers of at least three references by July 24, 1998, to:

Bordetella Research Associate Search Committee
Department of Microbiology
University of Minnesota
Box 196, 420 Delaware Street S.E.
Minneapolis, MN 55455

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

The Department of Psychiatry and Behavioral Sciences at Stanford University School of Medicine is seeking to fill the position of ASSISTANT or ASSOCIATE PROFESSOR (RESEARCH) of psychobiology. This is a non-tenure-track appointment. Requirements include a Ph.D. with at least three years of interdisciplinary postdoctoral training; potential to direct and maintain an externally sponsored program of research on behavioral and neuroendocrine aspects of squirrel monkey psychosocial development; experience with squirrel monkey breeding program/colony management; and a commitment to undergraduate and postdoctoral research training. Applicants with interests in basic psychobiological processes relevant to an understanding of stress and affective disorders on humans are especially welcome. Applicants should forward a curriculum vitae and the names of five referees to: Dr. David Spiegel, Chairman of the Search Committee, c/o Department of Psychiatry, Stanford Medical Center, Stanford, CA 94305-5718. Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.

Population Leadership Program seeks TECHNICAL ADVISOR to work in the Research Division, Office of Population USAID, Washington, D.C. Duties: provide technical assistance in support of Research Division projects and activities including providing strategic guidance in management of Division's grants and contracts; serving on technical and research review committees; serving as resource person on sexually transmitted infections; serving as technical backstop for specific contraceptive and other reproductive health technologies; assisting in drafting technical papers, reports, and study protocols; providing technical input to the operations research and biomedical portfolios. Minimum requirements: graduate degree in life sciences; medical degree with public health/epidemiology background preferred; five to ten years of experience managing or conducting reproductive health research; familiarity with family planning, contraceptive methods, and sexually transmitted infections; eligible to work in United States. Send curriculum vitae and cover letter to: James Williams, Director, Population Leadership Program, 210 High Street, Santa Cruz, CA 95060.

RESEARCH ONCOLOGIST

The Lombardi Cancer Center and the Department of Medicine at Georgetown University Medical Center invite applications for a Research Faculty position in oncology at the level of INSTRUCTOR. Must be ABIM-certified and Board-eligible in hematology/oncology with research focus in prostate cancer and cell adhesion/signal transduction with potential for independent funding. Experience with microdissection, immunohistochemistry, gene transfer techniques required. At least 80 percent of the appointee's time will be devoted to laboratory research. Submit curriculum vitae, bibliography, and three references to: Edward P. Gelmann, M.D., Lombardi Cancer Center, 3800 Reservoir Road N.W., Washington, DC 20007.

OPPORTUNITIES IN NEURO-INFLAMMATION RESEARCH

FIVE POSTDOCTORAL RESEARCH POSITIONS AT ASTRA ARCUS AB, SWEDEN



Astra is an international pharmaceutical company in a phase of rapid expansion. The company's operations are focused on research, production and marketing of pharmaceutical products through subsidiary companies in about 40 countries. Through agents and licences Astra products are available in an additional large number of countries. Astra has approximately 22,000 employees, of whom a third work in Sweden. Sales in 1997 totaled approximately SEK 45 billion (USD 5,65 billion).

Astra Arcus AB, a CNS Company within the Astra Group carries out research and development in a broad range of psychiatric and neurologic indications. Our pre-clinical research organization is engaged in drug discovery research in Sweden and USA. The Swedish unit is fully dedicated to discovery in the area of neuro-inflammation. The concentration of efforts in this important rapidly evolving area of neuroscience offers unique opportunities for dedicated scientists to excel in a broad range of disciplines relevant to inflammatory processes in the brain.

Applicants are invited for postdoctoral positions in the field of pathogenic mechanisms underlying neurodegenerative and neuroinflammatory processes, especially those in multiple sclerosis and Alzheimer disease. The appropriate candidates will join highly productive teams engaged in molecular mechanisms of neuroinflammation and the work will mainly be in exploratory research areas. A PhD in molecular biology, immunology, biochemistry or pharmacology with a demonstrated skill for innovative research and strong practical skills is required. Candidates should have a good ability for communication and interaction with national and international scientific multidisciplinary teams. Positions which are for three (3) years are available at our research site in Södertälje, 30 kilometers south of Stockholm.

IMMUNOLOGIST / BIOCHEMIST

Your work will be in the area of chemokines /cytokines receptor signalling and function. Experience in intracellular signalling/signal transduction and/or chemokine function and neurobiology is required. Expertise in different immunological and molecular biological methods as well as cell culturing techniques are welcome. You will be joining a multidisciplinary team offering excellent opportunities for expanding your own expertise and making a significant contribution to knowledge in this area. Reference number for the position is "PD 98/10".

For information, please call Hans Gunne, tel +46 8 553 284 19, Åke Dagerlind, tel +46 8 553 239 44 or Maria Anvret, tel +46 70 680 10 55.

CELL BIOLOGIST

You will be working on intracellular signal transduction pathways, with a specific focus on the role of stress kinases in neuropathological processes. You should have a strong background in signal transduction research and protein biochemistry as well as cell culture work. A knowledge of molecular biology and its application in studies of protein kinase cascades is an advantage. Previous experience with CNS research in preferred. Reference number for the position is "PD 98/11".

For information, please call Johan Luthman, tel +46 8 553 285 38 or Håkan Eriksson, tel +46 8 553 286 56.

MOLECULAR BIOLOGIST

You will join a team investigating molecular mechanisms underlying processes of neuroinflammation. An advanced experience in different molecular biological methods, especially differential display, is a pre-requisite. Experience in the fields of neuroscience and genetics will be viewed favourably. Reference number for the position is "PD 98/12".

For information, please call Hans Gunne, tel +46 8 553 284 19, Åke Dagerlind, tel +46 8 553 239 44 or Maria Anvret, tel +46 70 680 10 55.

APPLICATIONS

Please send your written resume and CV clearly marked with one of the reference numbers above to Astra Arcus, Human Resources, Tarja Leinonen, S-151 85 Södertälje, Sweden.

Closing date is August 7, 1998.



POSITIONS OPEN

POSTDOCTORAL POSITION IN CONSERVATION BIOLOGY

The USDA Forest Service, Pacific Northwest Research Station is seeking a quantitative Conservation Biologist to develop strategies and methods for assessing biological diversity at landscape and regional scales. The candidate would participate in an interdisciplinary project to build integrated landscape models of the effects of forest practices on ecological and socioeconomic components. The candidate would participate as a member of a multidisciplinary team including Forest Ecologists, Aquatic and Wildlife Biologists, Hydrologists, Economists, and policy experts. Emphasis would be on taxonomic groups not well represented in existing effort including invertebrates, nonvascular plants, fungi, amphibians. The successful candidate would (1) develop strategies for modeling rare and poorly known species and functional groups; (2) work with cooperators to conduct viability assessments for alternative forest policies. Candidates would have demonstrated expertise in zoology or botany; training and experience in conservation biology modeling; training and experience in GIS; familiarity with forest management conservation issues. To apply please send curriculum vitae, a letter indicating your research interests, and names of three references to: **Thomas A. Spies, USDA Forest Service, Pacific Northwest Research Laboratory, Corvallis, OR 97331. E-mail: spiest@fsl.orst.edu; FAX: 541-750-7354.** Materials must be received by August 28, 1998.

POSTDOCTORAL POSITION available to study mechanisms of transformation in hematopoietic neoplasms including chronic leukemia and multiple myeloma. Research involves the effect of signal transduction by tyrosine kinase fusion proteins on cell growth, adhesion, and DNA repair. Send curriculum vitae, short statement of research interests, and three references to: **Martin Carroll, M.D., c/o Diane Meredith, Department of Hematology-Oncology, University of Pennsylvania Medical Center, 510 Maloney Building, 36th and Spruce Streets, Philadelphia, PA 19104-4283.** The University of Pennsylvania is an Equal Opportunity Employer and is actively recruiting minorities.

NIH-funded POSTDOCTORAL POSITION available immediately in an interdisciplinary, multisite research group identifying serum changes associated with dietary restriction and other changes in caloric intake in rodents and humans. Long-term goals include applying this knowledge to the prediction of human disease. Background in analytical (bio)chemistry, especially with HPLC separations, preferred but not required. Salary according to experience. Send résumé and names of three references to: **Dr. Bruce Kristal, Burke Medical Research Institute, 785 Mamaroneck Avenue, White Plains, NY 10605.** Burke is an affiliate of Cornell University Medical College.

RESEARCH ASSOCIATE

We are in search of a Research Associate to join a well-established laboratory committed to the wound healing studies in the Northwestern University. A Ph.D. in cell biology, biochemistry, or molecular biology is desired. The applicant should be familiar with growth factor function and signal transduction, and have excellent scientific writing skills. Please send curriculum vitae (with e-mail address) and names of three references to: **Dr. Y. Xia, 303 East Chicago Avenue, Ward Building, Floor 19, W-145, Chicago, IL 60611.**

POSTDOCTORAL POSITION. Molecular Medicine Unit, Beth Israel Deaconess Medical Center and Harvard Medical School. We study the molecular regulation of secretion and degradation of proteins. Requires recent Ph.D. with strong background in cell and molecular biology. E-mail or send any questions or curriculum vitae with names and telephone numbers of three references to: **Steve Chuck, RW663, Beth Israel Deaconess Medical Center, 330 Brookline Avenue, Boston, MA 02215. E-mail: schuck@bidmc.harvard.edu.**

SENIOR POSTDOCTORAL FELLOW in molecular biology. Candidate should have experience in gene promoter regulation; experience in footprint analysis and electrophoretic mobility shift assay desirable. Salary is commensurate with past productivity and is in the range of \$35,000 per year. Position is in newly established Musculoskeletal Disease Center, focusing on gene therapy. Send cover letter, curriculum vitae, and names of three references to: **Dr. S. Mohan, Loma Linda University, P.O. Box 7210, Loma Linda, CA 92354.**

POSITIONS OPEN

POSTDOCTORAL TRAINEESHIPS IN MATHEMATICAL MODELING OF BIOLOGICAL SYSTEMS AND COMPUTATIONAL CHEMISTRY

Position One. Project: The research is a multidisciplinary effort addressing applications of mathematics and physics to the human respiratory system. A biological system presents unique and challenging problems to a Theoretician. This project involves the development of physiologically realistic models to describe the dosimetry of inhaled particulate matter. The related computer codes will define the complex morphology of the human respiratory tract, use computational fluid dynamics (CFD) to describe airstream patterns, and determine particle trajectories. The health effects applications will be in the risk assessment of air pollutants (inhalation toxicology) and the administration of pharmacologic drugs for the treatment of lung diseases (aerosol therapy). Qualifications: This position requires a doctoral degree in mathematics or physics, or toxicology/biology (with an associated high proficiency in computer simulations). The candidate must be familiar with protocols used in theoretical modeling (e.g., partial differential equations and related boundary value problems) and computer techniques used to achieve solutions to systems of equations. It will be highly desirable for the candidate to have knowledge of Navier-Stokes equations, be competent with different platforms (e.g., workstations, supercomputers), and be familiar with different computer languages (e.g., Fortran, C). Research Advisor: **Dr. Ted B. Martonen, Experimental Toxicology Division (MD-74), Research Triangle Park, NC 27711. Telephone: 919-541-7875; FAX: 919-541-4284; e-mail: martonen.ted@epamail.epa.gov.**

Position Two. Project: Postdoctoral research training to develop mathematical mechanistic models of toxicological processes, especially as related to developmental neurobehavioral toxicology, and to investigate issues that arise using such models in human health-effects risk assessment. The goal of this project is to explore how current health effects risk assessment methods can be improved by developing ways to formally and explicitly incorporate more mechanistic information in risk assessments that can be done with current risk assessment paradigms. Qualifications: The position requires a recent Ph.D. in biomathematics, biostatistics, biomedical engineering, biology/toxicology with experience in quantitative modeling of biological systems, and familiarity with statistical methodology. Research Advisor: **R. Woodrow Setzer, Jr., Environmental Protection Agency. Telephone: 919-541-0128; FAX: 919-541-5394; e-mail: setzer.woodrow@epamail.epa.gov.**

The EPA funding sources limit awards to U.S. citizens or permanent residents.

Preliminary applications (curriculum vitae, names and addresses of three references) for all positions should be sent to: **David J. Holbrook, Curriculum in Toxicology, University of North Carolina, Chapel Hill, NC 27599-7270. Telephone: 919-966-4685; FAX: 919-966-6357; e-mail: david.holbrook@unc.edu.** For specific information on the research training, a candidate should contact the Research Advisor for each position.

MOLECULAR GENETICIST

The National Marine Fisheries Service is seeking candidates for a permanent position studying the molecular genetics of Pacific salmon (GS-0440-12, \$49,167 to \$63,922) in Santa Cruz, California. Research will determine molecular genetic variation in salmon populations to address fishery research and management issues. Applicants must be a U.S. citizen, have earned a Ph.D. (or equivalent training and experience), and have a strong record of molecular genetics research and publication. To apply, see: **website: <http://www.usajobs.opm.gov>** (Announcement W/NMF/980392.BC closes 5 August 1998) or **Telephone: 206-526-6294** for general information. The Department of Commerce is an Equal Opportunity Employer.

POSTDOCTORAL POSITION

Available immediately for recent Ph.D. graduate with expertise in enzymology and/or molecular virology to study the mechanism of DNA replication in herpes simplex virus (*Annu. Rev. Biochem.* 66:347-384, 1997). Please send curriculum vitae and the names of three references to: **Dr. Paul E. Boehmer, Department of Biochemistry and Molecular Biology (R-629), University of Miami School of Medicine, P.O. Box 016129, Miami, FL 33101-6129.**

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

POSITIONS OPEN

CONSERVATION BIOLOGIST TENURE-TRACK

The Department of Zoology at North Carolina State University seeks applicants for **ASSISTANT PROFESSOR** of conservation biology. This tenure-track position requires teaching and advising of undergraduate and graduate students, including the department's sophomore-level core course in ecology, evolution, and behavior, and development of an externally funded research program. Candidates should show potential for excellence in teaching and demonstrated research accomplishment in conservation biology. A Ph.D. is required. Postdoctoral experience is preferred. This position is available on or after 1 November 1998. Applications will be reviewed beginning 1 August 1998 until the position is filled. A letter of application, statements of teaching philosophy and research interests, a curriculum vitae, and three letters of reference should be sent to: **Search Committee, Dr. James F. Gilliam, Department of Zoology, Box 7617, North Carolina State University, Raleigh, NC 27695.** Additional information is available on our website: **<http://www.cals.ncsu.edu/zoology/>**. NC State University is an Equal Opportunity/Affirmative Action Employer.

A **POSTDOCTORAL POSITION** is available to study neuronal nicotinic acetylcholine receptors (AChRs). This involves structure/function studies using mutagenesis and expression of cloned neuronal AChRs in *Xenopus* oocytes and permanently transfected cell lines. Investigating high-level expression of extracellular domains of AChRs for the purpose of crystallographic studies is also involved. A Ph.D. or M.D. degree with extensive experience in molecular biology is required. Experience in biochemistry, neuroscience, and pharmacology is desirable, as is publication in English language journals. Electrophysiological experience would be useful but not critical. Send curriculum vitae and names, addresses, telephone numbers, and e-mail addresses of three references to: **Dr. Jon Lindstrom, Department of Neuroscience, 217 Stemmler Hall, Medical School of the University of Pennsylvania, Philadelphia, PA 19104-6074. FAX: 215-573-2015; e-mail: jslkk@mail.med.upenn.edu.**

Further information about the laboratory and Department is available at the website: **<http://www.med.upenn.edu/nsience>**.

POSTDOCTORAL POSITION in cell biology of pulmonary hypertension is available immediately to study endothelial cell biology in monocrotaline-induced pulmonary hypertension *in vitro* and *in vivo*. The goal of this research is to determine whether previously described alterations in cell cycle, contractile cytoskeleton, and induction of apoptosis induced *in vitro* by monocrotaline pyrrole are present in the pulmonary vasculature of monocrotaline-treated rats. Applicants should be familiar with fluorescence and confocal microscopy as well as endothelial cell biology. Applicants must have a Ph.D. degree in cell biology, toxicology, or experimental pathology and must be U.S. citizens. Please send curriculum vitae including names and telephone numbers of three references to: **Dr. Dennis W. Wilson, Department of Veterinary Pathology, Microbiology, and Immunology, Haring Hall, University of California-Davis, One Shields Avenue, Davis, CA 95616. E-mail: dwwilson@ucdavis.edu.**

POSTDOCTORAL POSITION at the Beckman Research Institute on the City of Hope Campus. Postdoctoral position available with **Dr. Edouard Cantin** to study HSV latency and the role of cytokines/chemokines during infection using the mouse model. Candidate must have a strong background in viral immunology and molecular biology. Send curriculum vitae and contact information of three references to: **Scott Sparks, Senior Recruiter, City of Hope National Medical Center, 1500 East Duarte Road, Duarte, CA 91010-3000. FAX: 626-301-8182; e-mail: cohapply@smtpink.coh.org.** Equal Opportunity Employer.

POSTDOCTORAL POSITION for a **PLANT MOLECULAR BIOLOGIST** to develop promoter expression cassettes for the high-level expression of proteins in the epidermis. Applicants should send a letter stating their research interests, experience, and background, as well as copies of publications, curriculum vitae, names and telephone numbers of three references to: **Dr. Michael S. Dobres, NovaFlora, Inc., University City Science Center, Suite 350, Philadelphia, PA 19104. Telephone: 215-387-5060; FAX: 215-387-5455; e-mail: info@novaflo.com; website: <http://www.novaflo.com>.**

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PROGRAMMES AIMED AT
IDENTIFYING NOVEL
THERAPEUTICS FOR
CARDIAC DISEASES.

Investigator

ORGANIC/MEDICINAL CHEMISTRY

Working with a team of chemists, you will participate in innovative medicinal chemistry research, in close collaboration with the biology effort. You will have a PhD in organic chemistry with several years post doctoral experience. Time spent in the pharmaceutical industry is useful but not essential. We require someone with an excellent record of publications and, preferably, some experience in medicinal chemistry and molecular modelling,

and a background in combinatorial chemistry.

A high level of motivation and good communication skills are also a necessity. The work will involve liaising with scientists in other SB R&D sites in Italy, US and the UK. A competitive salary will be offered and relocation assistance will be provided. English and French speaking ability is required.

Applicants should send a letter of application, preferably written in French, CV, a photo and the name of two referees to SmithKline Beecham Laboratoires Pharmaceutiques, Service recrutement, 6 Esplanade Charles de Gaulle, 92731 Nanterre cedex - FRANCE, under reference CHIM/CG.

SB
SmithKline Beecham
Laboratoires Pharmaceutiques

TMP Worldwide

MRC

Medical Research Council

Laboratory Of Molecular Biology, Cambridge

CAREER-TRACK SCIENTIFIC POSTS

The Laboratory of Molecular Biology has a continuous programme for recruitment of outstanding scientists to independent positions leading to career scientific posts. In exceptional cases, appointments can be made directly to career posts. The Laboratory is a research institution without formal undergraduate teaching responsibilities, with core funding from the Medical Research Council to support consumables and personnel and with extensive central facilities.

The goal of the Laboratory is to interpret biological phenomena at the molecular level by a wide range of studies on the structure of proteins, nucleic acids, membranes, organelles, and viruses, as well as by research on the mechanisms and control of gene expression and the function and three-dimensional organization of cells and organisms.

Applications are sought in any area of molecular biology relevant to this goal, including: cancer biology, cell and developmental biology, immunobiology, neurobiology, proteomics and structural biology.

Research interests of current members of the laboratory are described at the website <http://www2.mrc-lmb.cam.ac.uk>. Further information about these appointments can be obtained from Dr. G. Varani: Tel. 0044-1223-402 417 Fax 0044-1223-213 556; e-mail gvl@mrc-lmb.cam.ac.uk.

Applications, including 2 copies of a full CV, a brief description of research interests and plans and the names and addresses of two professional referees can be sent at any time, but preferably, in response to this advertisement, by 15 September 1998, quoting reference LMB/CTS, to: **Bob Tillson, Personnel Manager, MRC Centre, Hills Road, Cambridge CB2 2QH, UK**

Some financial assistance with relocation may be available.

The Medical Research Council is an Equal Opportunities Employer.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE IN PLASTICITY OF NEUROENDOCRINE CELLS

A Postdoctoral position is available immediately in the study of the morphological and physiological adaptations of oxytocin and vasopressin neurons during high hormone demand. Current research is collaborative among four laboratories and is focused on understanding the cause and consequence of dendritic and synaptic restructuring of these two cell types using conventional and whole-cell recordings, single-cell identification techniques, calcium-imaging, and three-dimensional reconstruction of filled neurons. Applicants should have an advanced degree with experience in neuroscience. Stipend will be commensurate with experience. Review of applications will continue until the position is filled. Please send a curriculum vitae to: **William E. Armstrong, Ph.D., Department of Anatomy and Neurobiology, College of Medicine, The University of Tennessee, 855 Monroe Avenue, Memphis, TN 38163. E-mail: warmstr@nb.utmem.edu.**

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

POSTDOCTORAL POSITION in basic research on drug abuse. To conduct research as part of a multidisciplinary program on nicotine reinforcement in laboratory rats. NIDA-funded projects investigate the neural, endocrine, immunological, and behavioral consequences of self-administered nicotine. Collaborations include Departments of Psychology, Psychiatry, and Neuroscience and the University of Pittsburgh Cancer Institute. Responsibilities include assisting with design, execution, and publication of grant-related research and supervising students and technical staff. Send curriculum vitae, statement of research interests, and references to: **Dr. Anthony R. Caggiula, Department of Psychology, 455 Langley Hall, University of Pittsburgh, Pittsburgh, PA 15260. The University of Pittsburgh is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are especially encouraged to apply.**

AMERICAN RED CROSS

POSTDOCTORAL POSITION available immediately to study regulation of lymphocyte function and apoptosis by reactive intermediates. Research focuses on the effects of reactive oxygen species and nitric oxide on signal transduction and apoptosis using molecular tools and multiparameter FACS analysis. Training in biochemistry and cellular immunology is preferred. Applicants should submit their curriculum vitae and names of three references to: **Dr. Mark Williams, Department of Immunology, Holland Laboratory, American Red Cross, 15601 Crabbs Branch Way, Rockville, MD 20855. E-mail: willmark@usa.redcross.org. Equal Opportunity Employer/Minorities/Females/Disabled/Veterans.**

POSTDOCTORAL POSITION UNIVERSITY OF PENNSYLVANIA

A position is available to study the posttranscriptional regulation of globin gene expression, with an emphasis on the role of mRNA stability-enhancing *trans*-acting factors. Experience with protein analytic and preparative methods is essential. Send curriculum vitae, a brief description of research interests and career goals, and the names of three references to: **J. Eric Russell, M.D., Abramson Building #316F, Children's Hospital of Philadelphia, 34th and Civic Center Boulevard, Philadelphia, PA 19104.**

POSTDOCTORAL POSITION to study endothelial cell biology. Will utilize molecular techniques to study protein-protein interactions and signaling events. Experience with tissue culture, protein chemistry, recombinant techniques, microscopy, radioisotopes, and computer skills desirable. Call: **Dr. S. E. Goldblum, Telephone: 410-605-1782** and send résumé and references to same at: **Medical Service (111), VA Maryland Health Care System, 10 North Greene Street, Baltimore, MD 21201. FAX: 410-605-7914; e-mail: jalis001@umaryland.edu. Equal Opportunity Employer.**

POSTDOCTORAL POSITION available immediately for an NIH-funded project to study the development of nicotinic cholinergic signaling in embryonic mouse lung. Background in either lung development or developmental neurobiology would be helpful. Send curriculum vitae and names of three references to: **Dr. Carol Wuenschell, Center for Craniofacial Molecular Biology, University of Southern California, 2250 Alcazar Street CSA-103, Los Angeles, CA 90033.**

POSITIONS OPEN



Two **POSTDOCTORAL POSITIONS** available immediately to study gene expression and signal transduction in human chemokine receptors. Candidates must have a strong background in molecular biology or immunology, and preferably in receptor expression, mutagenesis, ligand binding, or G-protein subunit biochemistry. Send curriculum vitae/publications to: **Dr. Brett A. Premack, Department of Physiology and Molecular Biology Institute, MRL 3645, 675 Circle Drive, UCLA Medical Center, Los Angeles, CA 90095-1760.**

POSTDOCTORAL FELLOW needed starting September 1, 1998, to work on an NIA-funded project to determine the molecular mechanisms of age-related increases in macrophage cyclooxygenase expression. Emphasis will be placed on determining the signaling pathways involved in cyclooxygenase transcription, including the role of ceramide, MAP kinases, and nuclear transcription factors. Ph.D. in biochemistry, molecular biology, immunology, nutrition, or other related fields is required. Prior experience in signal transduction with regard to immune cells is highly desirable. The Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University is a state-of-the-art research facility dedicated to the study of nutrition and aging. Send résumé and three letters of recommendation to: **Dr. Simin Nikbin Meydani, Nutritional Immunology Laboratory, Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University, 711 Washington Street, Boston, MA 02111. E-mail: s_meydani_jm@hnrc.tufts.edu.**

POSTDOCTORAL POSITION to investigate the significance of location, activity, and control of nitrate reductase in plants using mutants and transformants of *Arabidopsis* and pea with engineered NR expression. Desirable experience includes manipulation of plasmids for *Agrobacterium* transformation of plants, plant transformation, measurement of mRNA and protein levels in tissues, determination of enzyme activities, and other physiological measurements. Starting date 1 September 1998; salary \$26,000. Applications including cover letter summarizing relevant experience, curriculum vitae, and names, telephone numbers, and e-mail addresses of three references should be sent to: **Dr. John Cheeseman, Department of Plant Biology, University of Illinois, 505 South Goodwin Avenue, Urbana, IL 61801. E-mail: j-cheeseman@uiuc.edu; FAX: 217-244-7246. The University of Illinois is an Equal Opportunity Employer and specifically encourages applications from women and minorities.**

POSTDOCTORAL POSITION

A Postdoctoral position is available immediately to study B cell development. Projects involve the use of transgenic mice to examine positive and negative (tolerance) signals that influence B cell survival and differentiation. A background in immunology is preferred. Send a curriculum vitae and three letters of reference to: **Dr. Stephen Clarke, Department of Microbiology and Immunology, CB#7290 804 MEJB, University of North Carolina, Chapel Hill, NC 27599. FAX: 919-962-8103; e-mail: shl@med.unc.edu.**

NIH-funded **POSTDOCTORAL POSITION** immediately available at the New York University Medical Center to study transcriptional control and cell cycle regulation in tumor development. Qualified applicants should have a Ph.D. or M.D., and expertise in cellular and molecular biology. FAX or e-mail curriculum vitae and names of three references to: **Theodore Lee, M.D., Division of Pulmonary and Critical Care Medicine, New York University Medical Center, 550 First Avenue, Room NB7N24, New York, NY 10016. E-mail: leet03@merer6.med.nyu.edu; FAX: 212-263-8902.**

POSTDOCTORAL POSITION available now to study the function of the inducible cyclooxygenase (Cox-2), including the mechanism whereby it stimulates proliferation in human colon cancer cells. Experience with protein chemistry is preferred. Collaborators include **Lawrence J. Marnett**. Send curriculum vitae and list of references to: **John A. Oates, M.D., Vanderbilt University, Division of Clinical Pharmacology, 536 MRB I, Nashville, TN 37232-6602. FAX: 615-322-4707. We are an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS and a **RESEARCH ASSISTANT PROFESSORSHIP** are available to study dynamic processes within single, living GnRH neurons and anterior pituitary cells. The specific objectives are to elucidate molecular mechanisms underlying pulsatile patterns of gene expression, stimulus-transcription coupling, and calcium coding of gene expression. Our experimental strategies include combinations of the following techniques: (1) video imaging of cells transfected with promoter-luciferase constructs for making multiple, "real-time" measurements of gene expression; (2) digital-imaging fluorescence microscopy of calcium-sensitive dyes for dynamic analysis of calcium oscillations; and (3) continuous monitoring of secretory events by fluorescence analysis of a membrane turnover dye. Salary and benefits are highly competitive and commensurate with experience. Send curriculum vitae and names and telephone numbers of three references to: **Dr. L. Stephen Frawley, Laboratory of Molecular Dynamics, Department of Cell Biology and Anatomy, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425-2204. Telephone: 843-792-3526; FAX: 843-792-0664; e-mail: frawleys@muscd.edu. Women and minorities are encouraged to apply. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION is available to study the cellular and molecular basis of wound healing in rodents. Particular emphasis is placed upon nitric oxide physiology and the regulation of gene expression by oxygen availability in the wound. Ideal candidate should have experience in molecular biology and cell culture. Knowledge of immunology and macrophage biology important. Strong written/verbal skills essential. No previous postdoctoral experience necessary. Pay scale according to NIH guidelines. Please send a curriculum vitae and the names and telephone numbers of three references to: **Jorge E. Albina, M.D., Department of Surgery, Rhode Island Hospital and Brown University, 593 Eddy Street, Providence, RI 02903. Telephone: 401-444-4296; FAX: 404-444-8052; e-mail: jorge_albina@brown.edu. RIH is a smoke-free environment.**

POSTDOCTORAL POSITION BAYLOR COLLEGE OF MEDICINE MOLECULAR AND HUMAN GENETICS

Postdoctoral position for Baylor College of Medicine in the Human Genetics Department has an available position to study the role of mammalian period genes *mper1* and *mper2* in regulation of the circadian rhythms. Position requires background experience in molecular biology, experience with cell culture and *in situ* hybridization would be desired. (*Cell* 90:1003-1011, 1997; *Cell* 91:1055-1064, 1997). Send résumés to: **Cheng Chi Lee, Ph.D., Houston, TX 77030. E-mail: ching@bcm.tmc.edu. Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE position available immediately to study the regulation of protein phosphorylation and signal transduction in retinal photoreceptor cells using normal, transgenic mice and animals with inherited blindness. Candidates with experience in recombinant DNA techniques and protein biochemistry should send curriculum vitae and three references to: **Dr. R. Lee, Molecular Neurobiology Laboratory, UCLA-Sepulveda VA Medical Center, 16111 Plummer Street, Sepulveda, CA 91343. FAX: 818-895-9554; e-mail: rlee@ucla.edu.**

POSTDOCTORAL POSITIONS in bioorganic chemistry are available immediately to investigate the structure and function of catalytic RNAs (ribozymes) and to search for new RNA catalysts using combinatorial methods. Background in organic synthesis and experience in purification/handling of nucleic acids (especially RNA) is desired. Send curriculum vitae and three letters of reference to: **Prof. Snorri Th. Sigurdsson, Department of Chemistry, University of Washington, Seattle, WA 98195-1700. E-mail: sigurdsson@chem.washington.edu. UW is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOWSHIP beginning fall 1998. Cellular biology of G protein-coupled receptors; Ph.D. or M.D.-Ph.D. with knowledge of molecular biology, Department of Medicine and Microbiology, University of California, San Francisco. Project: genetic manipulation of receptors for vasoactive intestinal peptide and selected other neuropeptides. Résumé and references to: **Edward J. Goetzl, M.D., University of California, San Francisco, UB8B, Box 0711, San Francisco, CA 94143-0711. FAX: 415-476-6915.**

Plant Molecular Biology

In our central research division in Leverkusen a job opportunity has arisen for a research scientist in the field of plant molecular biology.

Our Profile

Bayer is a globally active, research-based company in the fields of chemicals and life sciences, headquartered in Leverkusen/Germany. With total annual sales of DM 55 billion and an annual R&D budget of DM 4 billion in 1997, we can offer a very attractive working environment for highly motivated people. (For more details refer to <http://www.bayer.com>).

Your Task

You will be working in a genomics project in the area of herbicide research. In a young and multidisciplinary team you will establish screening tools in close cooperation with molecular biologists, biochemists, and partners in the field of analytics, chemistry, and bioinformatics.

Your Profile

As a research scientist with a Ph.D. in Biological Sciences you have gained significant professional expertise in some of the following areas:

- Molecular biology
- Plant genetics and plant genomics
- Plant transformation systems
- Differential screening technologies
- Heterologous protein expression and purification
- Experience with enzymatic and/or cell-based assays
- Array and DNA-chip technologies

You have excellent communication skills and enjoy working in a multidisciplinary team.

Your Application

If your background and personal experience fit this profile, please send your complete application (including a CV, a brief description of research experience, a list of publications, names of references) and ref. No. 577 to:

BAYER AG
Personalmarketing
Frau Redmer
Hauptstr. 119
D-51368 Leverkusen
Germany



CITY HOSPITAL NHS TRUST-BIRMINGHAM UNIVERSITY DEPARTMENT OF MEDICINE Ph.D. STUDENTSHIP FIXED TERM UP TO 3 YEARS

Applications are invited for a Ph.D. Studentship to work in the Academic Departments of Gynaecological Oncology and the Haemostasis, Thrombosis, and Vascular Biology Unit at City Hospital NHS Trust.

Applicants should be postgraduates who are keen to undertake a laboratory-based project leading toward a Ph.D. thesis, studying endothelial cell activation, platelet activation, and angiogenesis in ovarian cancer. The project will involve laboratory work, including ELISA, tissue culture, immunohistochemistry, and other relevant research areas.

The studentship is a full-time funded project for up to 3 years for a keen, enthusiastic scientist wishing to join a dynamic research team.

You will be joining a team which has an established interest in gynaecological malignancies and cardiovascular disease with a fully equipped laboratory for work in thrombogenesis, atherogenesis, angiogenesis, and vascular biology.

For informal enquiries or to arrange a visit, contact **Mr. Sean Keho**, Senior Lecturer in Gynaecological Oncology on 0121 507 5335/5075.

Application form and information pack can be obtained from the **Recruitment Officer, Human Resources Directorate, City Hospital NHS Trust, Dudley Road, Birmingham, B18 7QH** on 0121 507 4670.

Closing date for completed application 31st JULY 1998.

Interview date: 13th August 1998.

The Trust is in the process of prohibiting smoking for staff and patients within all its buildings and grounds. The Trust is working towards Equal Opportunity in Employment and welcomes applications from all sec-



KAROLINSKA INSTITUTET Stockholm

Postdoctoral Fellowship Positions

Positions are open in an extensive multidisciplinary research project dealing with molecular biology, genetics, and pathology of basement membranes. The work is carried out in the Division of Matrix Biology headed by **Professor Kary Tryggvason**. The research group utilizes a broad range of methods in molecular and cellular biology, genetics, transgenic animals, and protein chemistry, and is located in a new laboratory facility with state-of-the-art equipment. We are seeking outstanding candidates to work on the following projects:

1. Signal transduction and molecular interactions of the novel receptor nephrin, a key component of the kidney filtration barrier (*Mol. Cell.* 1: 575-582, 1998). One position.
2. Positional cloning of genes predisposing to diabetic complications of basement membranes. Two positions.

Applicants must have research training relevant to the above-mentioned projects and should submit a CV with two letters of reference to **Professor Karl Tryggvason, Division of Matrix Biology, Department of Medical Biochemistry and Biophysics, Karolinska Institute, Stockholm S-17177 Sweden**. For information, contact **KT**, fax: 46-8-316165, or e-mail: >karl.tryggvason@mbb.ki.se<.

POSITIONS OPEN

POSTDOCTORAL RESEARCH OPPORTUNITIES

The University of Miami School of Medicine, Department of Microbiology and Immunology, invites candidates with Ph.D. or M.D. degrees to apply for Postdoctoral positions in molecular mechanisms of the adaptive immune response with emphasis on apoptosis and cytotoxicity, cytokines and cellular activation, and molecular pathogenesis. Start date spring 1999. A strong, research-oriented faculty and outstanding facilities and environment will nurture science careers of motivated applicants within a vibrant community. For further information about preceptors see our website: <http://chroma.med.miami.edu/micro/>. Interested applicants please send complete curriculum vitae, including brief research summary, thesis title, and mentor, and the names and addresses of three references to:

Dr. Eckhard R. Podack, Professor
Department of Microbiology and Immunology
University of Miami School of Medicine
P.O. Box 016960 (R-138)
Miami, FL 33101

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

POSTDOCTORAL FELLOWSHIP in cell biology. A position is available in the Department of Biochemistry and Molecular Biology at Mayo Clinic for a recent Ph.D. (or M.D.-Ph.D.) to study lipid traffic in animal cells. Research topics include (i) the use of molecular techniques to study proteins involved in sphingolipid synthesis or transport, and (ii) the use of fluorescent lipid analogs to study intracellular transport of lipids, with particular emphasis on the endocytic pathway and lysosomal storage diseases. Applicants should have experience with cell biological and molecular techniques, or image analysis and quantitative fluorescence microscopy. Send curriculum vitae and three letters of recommendation to: **Richard E. Pagano, Ph.D., Mayo Clinic and Foundation, 621-C Guggenheim Building, 200 First Street S.W., Rochester, MN 55905. FAX: 507-266-4413; e-mail: pagano.richard@mayo.edu.** Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.

POSTDOCTORAL POSITION

Postdoctoral position immediately available for a NIH-funded project to study the function of nuclear retinoid receptors in skin differentiation and tumorigenesis. Postdoctoral Fellow will conduct experiments in involving site-specific inducible gene targeting (Cre-Lox) and organotypic skin cell cultures. Basic molecular and cell biology skills required. Preference given for experience in gene targeting and/or skin cell biology. Salary commensurate with experience. Send curriculum vitae and names of three references to: **Dr. John L. Clifford, Ph.D., University of Texas-M. D. Anderson Cancer Center, Department of Clinical Cancer Prevention, Box 236, Houston, TX 77030.** The University of Texas M. D. Anderson is an Equal Employment Opportunity Employer. Minority and female candidates are strongly encouraged to apply.

POSTDOCTORAL POSITION IN DEVELOPMENTAL NEUROBIOLOGY

Available immediately to investigate patterning and cell fate in the mammalian telencephalon. Projects include: role of *Wnt* genes in the developing cerebral cortex; regulation of a neural/epithelial cell fate decision in the telencephalon; control of neuronal cell identity in the embryonic hippocampus. Write to: **Elizabeth Grove, Department of Pharmacology and Physical Sciences, Committees on Neurobiology and Developmental Biology, University of Chicago, MC0926, Chicago, IL 60637. E-mail: egrove@drugs.bsd.uchicago.edu.** The University of Chicago is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS. Two Postdoctoral positions are open to conduct research in the areas of (1) oxidative/chemical stress-activated transcription factors and regulation of drug-metabolizing enzyme genes expression; and (2) functional characterization of novel tumor suppressor genes that are lost in oxidative stress-induced neoplasia. A working knowledge of molecular and cell biology is essential for these projects. Please send curriculum vitae and a list of three references to: **Anil Jaiswal, Department of Pharmacology, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030.** Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS

The Johns Hopkins University Program on Protein and Lipid Traffic and Dynamics in Epithelial Cells.

Postdoctoral Fellowships are available in four laboratories that collaborate in the study of molecular traffic in polarized epithelial cells. Members of the program and their areas of interest are:

Michael Edidin, Department of Biology: distribution, traffic, and mobility of lipid-anchored membrane proteins, glycolipids, and cholesterol studied using biochemical, biophysical, and advanced imaging techniques.

Ann Hubbard, Department of Cell Biology: basolateral-to-apical transcytosis; the nuclear-Golgi-apical plasma membrane axis in polarized epithelial cells, studied using biochemical and morphological and imaging assays.

Carolyn Machamer, Department of Cell Biology: sphingolipid trafficking; lipids of the Golgi complex of polarized epithelial cells. Previous experience with lipid biochemistry is preferred.

Trina Schroer, Department of Biology: microtubule nucleation and organization in polarized epithelial cells; cytoskeletal basis of sorting between endocytic and transcytotic pathways, studied using live cell imaging, cell microinjection, and organelle isolation.

For more information or to contact us see website: http://www.bio.jhu.edu/epithelial_cells/home.html. Contact: **Michael Edidin**, Department of Biology, The Johns Hopkins University, 3400 North Charles Street, Baltimore, MD 21218. E-mail: edidin@jhu.edu.

The Johns Hopkins University is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

The National Institute of Environmental Health Sciences (NIEHS) Marine and Freshwater Biomedical Sciences Center seeks Postdoctoral Trainees for interdisciplinary research in several ongoing projects. *Candidate must be a U.S. citizen or permanent resident.* Only those candidates whose research interests involve state-of-the-art approaches and link the research interests of two or more Center Investigators will be considered. The names and interests of Center Investigators are available at website: www.rsmas.miami.edu. Applicants should send a curriculum vitae, statement of research interests, undergraduate and graduate transcripts (unofficial acceptable), selected reprints, and names and addresses (including e-mail) of three references to: **Dr. Patrick J. Walsh, National Institute of Environmental Health Sciences, Marine and Freshwater Biomedical Sciences Center, University of Miami, Rosenstiel School of Marine and Atmospheric Science, 4600 Rickenbacker Causeway, Miami, FL 33149.**

POSTDOCTORAL SCIENTIST POSITION

IMMUNOLOGISTS and VIROLOGISTS with a Doctoral degree are invited to apply for a Postdoctoral position at Southwest Foundation for Biomedical Research in San Antonio, Texas, where a new laboratory is being established in the Department of Virology and Immunology. The position will be available beginning in November 1998. The main focus of our research will be to develop *in vivo* and *in vitro* models for anti-HIV/SIV activity of cytokine and antibody genes (see: *Nature Medicine* 3:659-664, 1998; *J. Immunol.* 160:1489-1496, 1998; *J. Immunol.* in September 1 issue, 1998). If you are interested, please forward your curriculum vitae and three letters of recommendation to: **Southwest Foundation for Biomedical Research, Director of Human Resources (828), P.O. Box 760549, San Antonio, TX 78245-6549.** For information or questions contact: **Dr. Paul Zhou, e-mail: zhou@yoda.nidr.nih.gov.**

Equal Opportunity Employer.

POSTDOCTORAL RESEARCH POSITION

The Division of Medical Genetics, Emory University School of Medicine is seeking a motivated, productive Investigator with interest and skills in analyzing the regulation of human gene expression. Knowledge of mammalian cell culture and protein biochemistry is a plus. Send curriculum vitae, a brief statement of career goals, and names of three references to: **Louis J. Elsas II, M.D., Department of Pediatrics, Division of Medical Genetics, Emory University School of Medicine, 2040 Ridgewood Drive, Atlanta, GA 30322. FAX: 404-727-5783.**

Emory University is an Equal Employment Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION

Recent Ph.D. wanted for NIH-funded position to characterize the calcitriol-associated membrane complex involved in thrombospondin signaling of focal adhesion disassembly. Thrombospondin is a counter-adhesive matrix protein-induced cytoskeletal reorganization via a PI 3-kinase and pertussis toxin-sensitive pathway (*J. Biol. Chem.* 273:1755, 1998). Studies will involve identification and characterization of a G-protein-linked membrane component utilizing protein chemistry, expression/mutagenesis, and cell biological/microscopy techniques. Candidate can participate in the supporting activities of the UAB Cell Adhesion and Matrix Center. Send curriculum vitae and references to: **Dr. J. E. Murphy-Ullrich, Department of Pathology, University of Alabama at Birmingham, G038 Volker Hall, Birmingham, AL 35294-0019. Telephone: 205-934-0415; e-mail: murphy@path.uab.edu.**

POSTDOCTORAL POSITIONS (three) to study the function of tumor suppressor gene DCC and genetic alterations in prostate cancer. These projects are aimed to understand the signaling mechanism in DCC-induced apoptosis and cell cycle arrest, and to determine the alterations in gene expression during prostate tumor progression. Candidates should have a background in molecular biology. Background in the field of apoptosis and/or cell cycle, as well as knowledge in yeast two-hybrid screening, phage display, SAGE analysis are preferable. Send curriculum vitae and three references to: **Dr. Yong Q. Chen, Department of Pathology, Wayne State University School of Medicine, 540 East Canfield, Detroit, MI 48201. E-mail: yqchen@med.wayne.edu; FAX: 313-577-0057.** WSU is Equal Employment Opportunity/Affirmative Action.

POSTDOCTORAL and RESEARCH COORDINATOR positions available to study structure-function of ion channels, including elucidating the determinants required for membrane targeting and function of potassium channels. The laboratory has a particular interest in the role of glycosylation and phosphorylation in channel function. Postdoctoral candidates must have demonstrated expertise in whole-cell and single-channel patch-clamp recording/analysis techniques. Research Coordinator candidates must be expert Molecular Biologists and a graduate degree is preferred. Send letter describing research experience, curriculum vitae, and names of references to: **Dr. W. B. Thornhill, c/o Dr. B. Rubin, Department of Biological Sciences, Fordham University, Bronx, NY 10458.** Also e-mail your curriculum vitae to e-mail: thornhill@inka.mssm.edu.

POSTDOCTORAL/RESEARCH ASSOCIATE position available in the Indiana University Division of Pulmonary/Critical Care Medicine with opportunities for participation in NIH-funded training grant and Vascular Biology Center. Studies will involve cellular and molecular mechanisms of vascular endothelial dysfunction. Solid skills in molecular biology, protein chemistry, or signal transduction required. Interested applicants should send curriculum vitae with three references to: **Dr. Mike Hart, 1001 West 10th Street, WD-OPW-425, Indianapolis, IN 46202. E-mail: cmhart@iupui.edu.** Indiana University is an Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE position available immediately for an NIH-funded study of tumor-host interactions, and particularly immunologic aspects of tumor cell survival mediated by glycoconjugates. Candidates should have two years of postdoctoral experience and publications demonstrating training in tumor immunology. Experience with animal tumor models is desired. Please send curriculum vitae and three references to: **Stephan Ladisch, M.D., Scientific Director, Children's Research Institute, Children's National Medical Center, Washington, DC 20010. FAX: 202-884-3929.**

POSTDOCTORAL POSITION. A position is immediately available at the Joslin Diabetes Center and Harvard Medical School. Research is based on discoveries made by the laboratory concerning the regulation of and roles for a critically important regulator of oxidative stress, glucose 6-phosphate dehydrogenase. Project requires a strong background in molecular biology and biochemistry. Funding for this position is available through an NIH training grant.

Send curriculum vitae, cover letter, and three reference letters to: **Dr. Robert C. Stanton, Chief, Renal Division, Joslin Diabetes Center, Boston, MA 02215. FAX: 617-732-2467; e-mail: rstanton@joslin.harvard.edu.**

POSITIONS OPEN

MOLECULAR TUMOR BIOLOGY AND EXPERIMENTAL THERAPEUTICS

A **POSTDOCTORAL POSITION** is available to study genes and proteins involved in cancer cell signal transduction pathways, or in an area of experimental cancer therapeutics. Recent Ph.D. with experience in molecular biology and toxicology/pharmacology or biochemistry is desirable. Please send curriculum vitae and three references to: **Usha Kasid, Ph.D., Associate Professor, Room E208, The Research Building, Georgetown University Medical Center, 3970 Reservoir Road N.W., Washington, DC 20007. An Equal Opportunity/Affirmative Action Employer.**

STEM CELL AND HEMATOLOGY TRAINING CASE WESTERN RESERVE UNIVERSITY

NIH-funded **POSTDOCTORAL RESEARCH** program positions for individuals holding M.D., M.D.-Ph.D., and Ph.D. degrees. Research focus in hematopoietic and stromal stem cells, gene therapy, regulation of differentiation, marrow transplant immunology, iron metabolism, and leukemogenesis.

Send curriculum vitae, names of three references, and statement of research interest to: **Dr. Stanton Gerson, School of Medicine (BRB), Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106-4937. Must be U.S. citizen or permanent resident. Minorities and women are encouraged to apply.**

GLOBAL OPPORTUNITIES

ARC SENIOR RESEARCH ASSOCIATE/ ARC POSTDOCTORAL RESEARCH ASSOCIATE THE FLINDERS UNIVERSITY OF SOUTH AUSTRALIA

Senior Research Associate:
AUD\$45,361 to \$53,740 Per Annum
Postdoctoral Research Associate:
AUD\$40,282 to \$43,152 Per Annum

Ref 98116: This fixed-term appointment is available from November 1998 for three years in the Department of Medicine, School of Medicine, Faculty of Health Sciences. The successful applicant will investigate the amino acid content of nerve fibers that synapse on retrogradely or immunocytochemically labelled central neurons. Amino acids will be localized on ultrathin sections using postembedding immunogold labelling. All required methods are routine in the employer's laboratory.

Essential criteria include a Ph.D. degree, experience with preparation and sectioning of nervous tissue for electron microscopy, some experience with immunocytochemistry, and a good command of spoken and written English. Level of appointment will be determined in accordance with qualifications and relevant experience.

Further information, including other essential and desirable selection criteria, must be obtained from: **Dr. I. Llewellyn-Smith, FAX: 61-8-8204-5268; e-mail: ida.llewellyn-smith@flinders.edu.au.** Appointment will be based on the selection criteria and applicants must address the selection criteria in their applications.

Applications, quoting the reference number, and giving qualifications, experience, and the names, addresses, and FAX numbers of three referees of whom confidential inquiries may be made, should be lodged with: **The Manager, Human Resources, Flinders University, GPO Box 2100, Adelaide, South Australia 5001 Australia. FAX: 61-8-8201-3131 by Friday, 21 August 1998.** The University reserves the right not to make an appointment or to invite applications. *Equal Opportunity is University policy.*

POSTDOCTORAL POSITIONS IN GENE THERAPY, TRANSCRIPTION, OR HPV

Postdoctoral positions are available to study genetic cancer gene therapy transcription in human cells, or HPV pathogenesis. Experience in antisense E6 E7 and IL-12 preferred. Send curriculum vitae including description of research experience to: **Dr. Woong Shick Ahn, M.D., Associate Professor, College of Medicine, The Catholic University of Korea, Department of Obstetrics and Gynecology, Kangnam St. Mary's Hospital 505, BanpoDong, Seoch-Gu, Seoul 137-040 Korea. Telephone: 02-535-6880; FAX: 02-535-6880; e-mail: ahnws@cmc.cuk.ac.kr.** Applicants are encouraged to send the information by e-mail or by FAX.

COURSES & TRAINING

INTERESTED IN CLINICAL OR POSTDOCTORAL RESEARCH TRAINING?

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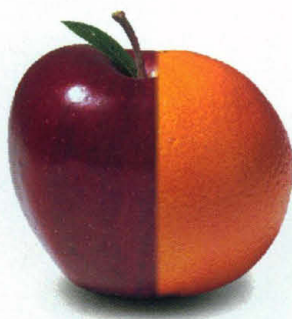
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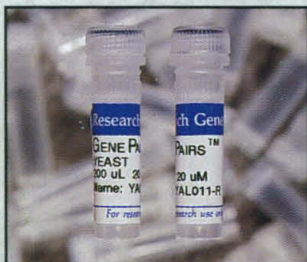
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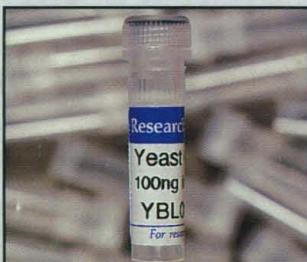
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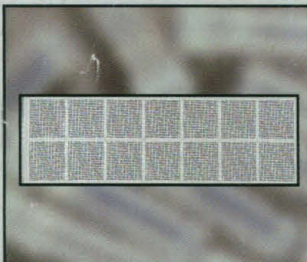
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