

MAP YOUR FUTURE with Academic Press Career Resources

Alternative Careers in Science

Leaving the Ivory Tower

Edited by

Cynthia Robbins-Roth

"The health care revolution is having profound effects on the nation's academic medical centers, creating threats and opportunities for researchers. While secure positions in academia may be harder to come by, the biotechnology and pharmaceutical industries are flourishing. As one who has traveled the halls of academe and industry, I can attest to the viability of such transitions as well as the quality of opportunity in both sectors. This book will provide an excellent tool for scientists and scientists-in-training to better understand industry and the nature of research outside the Ivory Tower."

—RALPH SNYDERMAN, M.D., James B. Duke
Professor of Medicine, Chancellor for Health Affairs,
Dean, School of Medicine, and CEO,
Duke University Medical Center & Health System

"Alternative Careers in Science is a first-class guide for graduate students and postdoctorates who are considering careers outside the lab... I wish that someone had published this kind of guide 15 years ago when I was considering my own transition to a non-research career."

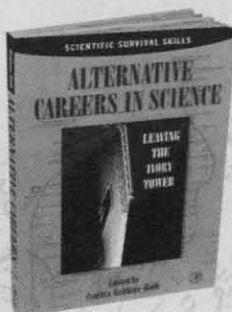
—WALTER SCHAFFER, Ph.D., NIH Research Training Officer

KEY FEATURES

- Illustrates a typical day's scenario
- Explains what career opportunities stem from a position
- Describes the basic job, qualifications, responsibilities, and expectations
- Covers how long to expect to be in a training phase
- Shows existing steps in the promotion ladder and salary ranges
- Presents a different career track in each chapter
- Allows scientists to compare career opportunities

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March 1998, c. 250 pp./ISBN: 0-12-589375-2



Career Renewal

Tools for Scientists and Technical Professionals

Stephen Rosen and Celia Paul

"To those familiar with the popular career development literature, this is a variation of *What Color is Your Parachute?*, but geared for scientists and engineers. What especially distinguishes their book, besides their use of science metaphors, is the case studies of scientists and other technical professionals making career changes... If you want to take a brief and private time out to think about what matters in your career and life, and how well your current situation matches your values and skills and interests, Rosen and Paul provide tools for organizing your thoughts and feelings."

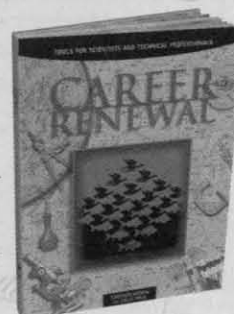
—IEEE SPECTRUM

BENEFITS

- Serves as a guide for scientists, engineers, and technical professionals to find a different and satisfying career by identifying career options in any field
- Features numerous personal case histories of those who have successfully made the transition from academia into the business world
- Helps identify your strengths through numerous assessment surveys developed for and by science professionals
- Discusses career selection criteria, supplemental references, the use and misuse of the Internet in a job search, and examples of appropriate on-line searches
- Offers extensive resume help with complete discussions of how to research and develop an appropriate resume
- Contains career resources on professional networking, mentoring, recruiters, preparing for interviews, and salary negotiations
- Written by a Ph.D. scientist and experienced career counselor

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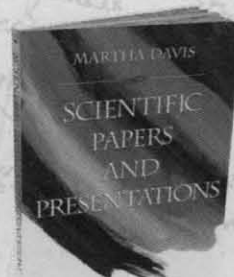
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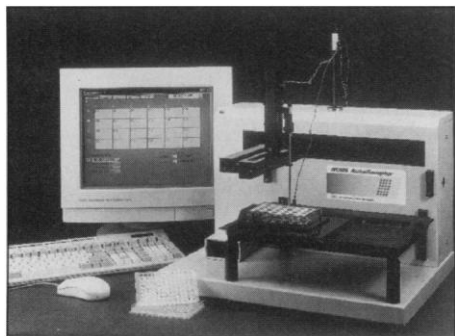
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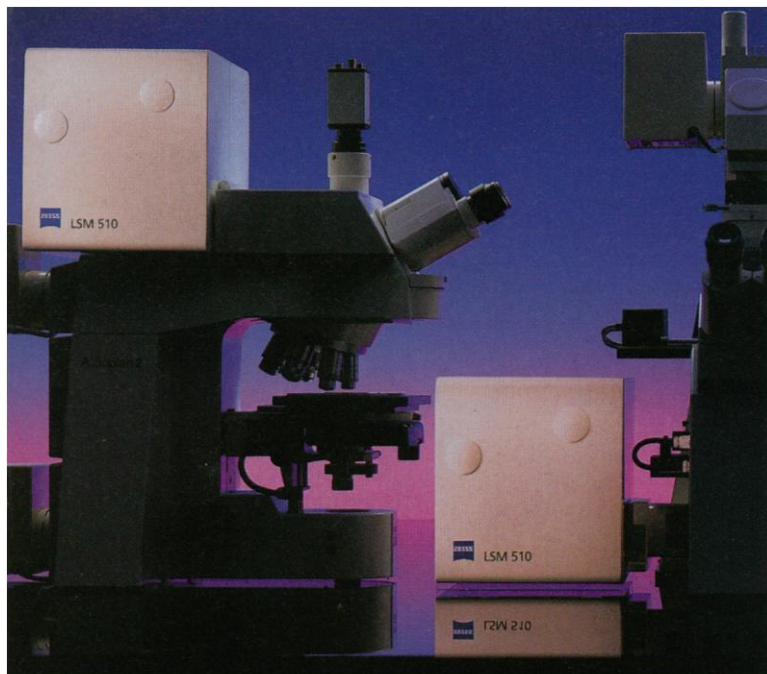
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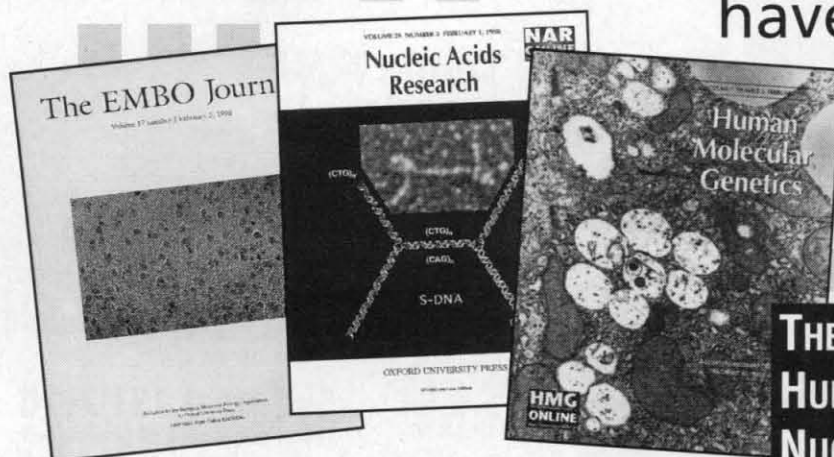
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careers in pharmaceuticals and biotechnology

Heading Toward a New Century of Opportunities

by Michael Woods



Dynamic. Exciting. Fast paced. Ever changing. Ask the experts for descriptions of the biopharmaceutical industry, and those terms always seem to fly. From most accounts, 1998 promises to be another year cast in the same mold. Job-seekers can anticipate abundant opportunities, mobility to move up the ladder or into new and fulfilling career niches, and demand that outpaces supply—especially in key fields.

New technologies have created strong demand in combinatorial chemistry and high-throughput screening, structure-function rational drug design, genomics, functional genomics, bioinformatics. The product pipeline also is driving demand. As companies move products further toward the market, demand will grow for individuals skilled in fields like process sciences and regulatory affairs.

Yes, it's an applicant's market in many regions. But job-seekers still need excellent scientific skills—and more. Aptitude in influencing and communicating as part of an interdisciplinary team. Good, basic knowledge of the company and the individuals who would be supervisors and coworkers. Flexibility to shift research focus on a dime, with shifting trends in the biopharma industry.

The opening months of 1998 gave every indication that mergers and mega-mergers may foster further job-market dynamism. Glaxo Wellcome PLC and SmithKline Beecham PLC announced merger talks at the end of January. It would create a new colossus: the world's largest pharmaceutical company, with a market value of \$170 billion and annual sales of \$27 billion. In late February, however, SmithKline and Glaxo announced a decision to discontinue merger talks.

Below we hear about biopharmaceutical careers from experts at Search Masters International; Agouron Pharmaceuticals, Inc.; Genentech, Inc.; Bayer Biotechnology; and Parke-Davis Pharmaceutical Research.

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Michael Woods writes frequently on the biotechnology and pharmaceutical industries.



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DISCOVERY PROTEIN BIOCHEMIST

You will be part of a team focused on drug discovery and preformulation support of protein-based drug candidates. We require a Ph.D. along with lab experience in analytical protein chemistry, particularly in protein conformational analysis. Additional experience in protein analysis using circular dichroism, fluorimetry and UV spectroscopy is required. Knowledge of additional biophysical analysis techniques such as FT-IR and BioCore analysis is beneficial. **Job Code: PBD-PCA**

DISCOVERY PROTEIN BIOCHEMIST

Working as part of a multi-disciplinary team, you will focus on enhancing the stability and in vivo efficacy of proteins through chemical modifications or alternative approaches. We require a Ph.D. and lab experience in analytical protein chemistry, particularly in protein modification and the structural characterization of proteins. A knowledge of novel approaches to protein drug delivery is beneficial. **Job Code: PBD-PM**

RESEARCH BIOLOGIST

Working in the areas of Cardiovascular & Diabetic Disease Research, you will conduct biomedical research aimed at identifying novel therapeutic agents to treat diabetes mellitus. This will involve designing, performing and interpreting experiments using cellular models to identify new treatment approaches. We require an MS/BS in Biology, Biochemistry or Pharmacology along with 3-5 years of experience in mammalian cell culture techniques. Experience with enzyme assays or molecular techniques is desired. **Job Code: RB-EF**

CELLULAR CARDIOVASCULAR SCIENTIST

You will conduct research to determine novel therapeutic approaches for the treatment of cardiac diseases, with an emphasis on heart failure. Additionally, you will plan and implement experiments; perform cell culture, biochemical and molecular assays; design experiments; and interpret/present data. We require an MS/BS and 3-5 years of experience along with the ability to learn new techniques. **Job Code: CCS-EF**

HISTOLOGIST

You will conduct research to determine novel therapeutic approaches for the treatment of cardiac diseases, with an emphasis on heart failure. Additionally, you will plan and implement experiments and perform extensive histology and animal experimentation. We require an MS/BS and 3-5 years of experience, along with the ability to learn new techniques. **Job Code: HEF**

ANIMAL PHARMACOLOGIST

You will conduct research to determine novel therapeutic approaches for the treatment of cardiac diseases, with an emphasis on heart failure. Additionally, you will plan and implement animal experiments. We require a BS and 3-5 years of experience, along with the ability to learn new techniques. You'll also need small animal surgical skills. **Job Code: AP-EF**

NUTRITION AND CONSUMER SECTOR

We are developing new ways to deliver health, nutrition and taste benefits in food and food ingredients to consumers around the world.

ENDOCRINOLOGISTS

We're seeking candidates with a Ph.D. and 3-5 years research experience in endocrinology or a related discipline and experience in the study of hormonal regulation of whole body metabolism. Preference for candidates with experience in one of the following: animal models of estrogen action; nuclear receptor biology; adipose biology; and regulation of lipid and lipoprotein metabolism. **Job Code: NCP-E**

INFLAMMATION SCIENTISTS/FATTY ACID BIOCHEMISTS

We're seeking candidates at the Ph.D., M.S., and B.S. levels with degrees in pharmacology, nutrition, or biochemistry and experience in inflammation and/or lipid biochemistry. Ideal candidates will be experienced in animal models related to inflammation, the effects of nutritional intervention on inflammation, essential fatty acid (notably arachidonic acid) biochemistry and metabolism, and immunology. **Job Code: NCP-IS**

DIRECTOR, FOOD BIOTECHNOLOGY

You will develop and lead a multi-disciplinary team to discover and apply biotechnology to agriculture-based food ingredients to improve their functionality, flavor, or nutritional benefits. This will involve developing rapid means to screen new food ingredients, especially proteins, for functionality in food systems, adapting methods for small scale analysis, providing technical advice, and inventing and patenting new food ingredients, grains and processing technology. We require a Ph.D. in Food Chemistry or Protein Chemistry along with 5+ years of research experience. Proven technical leadership ability is a must, as is expertise in laboratory management and people development. Seeking an established leader with an extensive publication record. **Job Code: NCP-FB**

POST-DOCTORAL SCIENTISTS

You will work in the emerging area of nutrition science. Your experience should be in the areas of secondary metabolism or micronutrient metabolic engineering in plants; protein engineering to create new functionality in plant proteins; genomics technology; gene expression analysis; or bioinformatics and functional genomics. **Job Code: NCP-PDS**

PHYSICAL CHEMIST, FATS AND OILS

Working in Chicago, you will plan, organize and conduct research on the physical chemistry of new and unique fats and oils for food applications. Additionally, you will develop protocols, file patent disclosures, present research, and lead the activities of scientists and support staff. We require a BS with 10 years of experience in chemistry, chemical engineering or food science, or an MS with 7 years, or a Ph.D. with 5 years. Expertise in thermal analysis, NMR calorimetry and other tools utilized for fat and oil characterization are a must. **Job Code: JF-PCFO**

PROTEIN CHEMIST

Working in Chicago, you will plan, organize and conduct research on the physical chemistry of new and unique food proteins. Additionally, you will develop protocols, file patent disclosures, present research, and lead the activities of scientists and support staff. We require a BS with 10 years of experience in chemistry, chemical engineering or food science, or an MS with 7 years, or a Ph.D. with 5 years. Expertise in extraction, refining and the application of food proteins is a must, as is additional understanding of the physical chemistry of proteins in food systems. **Job Code: JF-PC**

If you are interested in the Chicago-based positions (the above two only), please send your cover letter, resume and three references to: **Monsanto Life Sciences, Attn.: Job Code: _____ (select from above), Merchandise Mart, Ste. 900, 200 World Trade Center, Chicago, IL 60654.**

If you are interested in the St. Louis-based positions (all other positions), please send your cover letter, resume and three references to: **Monsanto Life Sciences, Attn.: Job Code: _____ (select from above), 700 Chesterfield Village Parkway, Mail Zone: 8B5B, St. Louis, MO 63198.**

All candidates must possess strong communication skills and the ability to work in a multi-disciplinary team based environment. EEO/AA Employer M/F/D/V. Please visit our website at www.monsanto.com

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SEARLE

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Bristol-Myers Squibb

Pharmaceutical Research Institute

Bristol-Myers Squibb Pharmaceutical Research Institute is a recognized leader in discovering and developing novel, cost-effective pharmaceutical therapies that improve health and quality of life. We invite you to join our highly collaborative multi-disciplinary team in the following areas. Positions are available at our facilities in New Jersey and Connecticut.

Clinical Pharmacology

Director, Clinical Pharmacology - M.D. or M.D./Ph.D. in clinical pharmacology or related field to plan, execute and report Phase I and clinical pharmacology studies. Positions available in Cardiovascular/Metabolism, Neurology and Immunology/Rheumatology. **Code: PRSP23TB**

Biostatistics

Ph.D. Statisticians - Two types of positions are available in our Princeton, NJ; Wallingford, CT; and Waterloo, Belgium sites.

Clinical statisticians - To collaborate in the design, conduct and analysis reporting of clinical trials in CV, Oncology, AI, AV, Immunology, Neurosciences and Clinical Pharmacology. **Code: PRSP23JGA**

Non-clinical statisticians - To collaborate with scientists in Drug Discovery. **Code: PRSP23JGB**

Clinical Quality Assurance

B.S./M.S. in biomedical sciences or related field with 2+ years of quality assurance and/or auditing experience and complete knowledge of the clinical drug development process and applicable regulations, guidelines and good clinical practices. **Code: PRSP23SW**

Research Applications Group

Technical Leaders/Laboratory Automation - Ph.D. in biology, chemistry, engineering or related field desired, as is interest and knowledge in one or more of four therapeutic areas (Cardiovascular Diseases; Immunology and Inflammation; Metabolic Diseases; and Oncology). These individuals will provide technical leadership and service for laboratory automation and computer applications in our Drug Discovery departments. **Code: PRSM23RB**

Neuroscience

Clinical Research - M.D. - Board-certified neurologist with 3+ years industrial experience to develop and monitor clinical trials for neurological compounds. **Code: PRDS23GD**

Urogenital Disorders - Ph.D. in Pharmacology or Physiology with experience in *in vitro* and/or *in vivo* smooth muscle techniques to guide drug discovery efforts in the area of Urogenital disorders. **Code: PRRH23NL3**

Urogenital Disorders - B.S./M.S. scientist to develop and apply *in vitro* or *in vivo* smooth muscle assays. Experience with single cell electrophysiology, fluorescence assays, tissue culture, force measurements or *in vivo* urogenital models would be useful. **Code: PRRH23NL4**

Behavioral Pharmacology - B.S./M.S. scientists to implement and perform behavioral paradigms used in the discovery of novel drugs for the treatment of psychobiological and neurological disorders. **Code: PRRH23FY1**

Receptors - B.S./M.S. scientist to support neurochemical studies and pharmacological characterization of receptors, perform routine assays and develop new test methodologies. Experience with cell culture techniques, radioligand binding, radioimmunoassays, second messenger assays, imaging or robotics would be useful. **Code: PRRH23FY2**

Oncology

Clinical Scientist - B.A./B.S./R.N. with 3-5 years clinical experience or M.S. with 2 years experience to monitor experimental trials of innovative cancer therapies. Nurse or data manager experience in pharmaceutical industry or clinical study site desired. **Code: PRDS23RC**

Immunology, Inflammation and Pulmonary Clinical Research

Director, Immunosuppression - M.D. in Rheumatology or Allergy/Immunology to plan and direct clinical research programs for both NCEs and biologics, with particular emphasis on rheumatoid arthritis and organ transplant. **Code: PRSP23MSA**

Director, Inflammatory Diseases - M.D. in Pulmonary or Allergy/Immunology to plan and direct clinical research programs for both NCEs and biologics, with particular emphasis on asthma, allergic rhinitis and inflammatory bowel disease. **Code: PRSP23MSB**

Cardiovascular

Medical Director - Board-eligible M.D. Pharmaceutical research experience preferred, as is experience in heart failure or thrombosis. Able to work well in teams and lead clinical drug development efforts. **Code: PRSP23HPA**

Medical Director - Board-eligible M.D. Pharmaceutical research experience preferred, as is experience in the development of antihypertensive therapies. Able to work well in teams and lead clinical drug development efforts. **Code: PRSP23HPB**

Clinical Scientist - B.A./B.S./R.N. with experience in nutrition, diabetes, hyperlipidemia and/or other metabolic diseases. Experience as a nurse, dietitian or pharmacist desired. **Code: PRST23BP**

Bristol-Myers Squibb uses resume scanning technology. Please submit on plain white bond paper, using standard type and fonts (no italics, graphics or staples please), with Code # to:

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

Infectious Diseases

Molecular Virology/Biochemistry

Seeking experience with positive RNA viral replication, RT-PCR and RNA transfection experience, DNA cloning and sequencing experience for the following:

Ph.D. Scientists - in Molecular Biology, Virology or Biochemistry to conduct independent research to define novel targets for antiviral intervention, participate in the design and/or identification of antiviral leads and collaborate with other research groups for the development of drug candidates. **Code: PRRH23PL**

B.S./M.S. Scientists - to participate in antiviral drug discovery research. Requires proficiency with standard molecular biological and cell culture techniques. Experience in biochemistry, enzymology, protein purification or recombinant protein expression is preferred. **Code: PRHD23SW**

Clinical Scientist - B.A./B.S./R.N. with experience in clinical trials in the area of anti-infectives. **Code: PRRH23JM**

Bristol-Myers Squibb uses resume scanning technology. Please submit on plain white bond paper, using standard type and fonts (no italics, graphics or staples please), with Code # to:

**Bristol-Myers Squibb Company
Pharmaceutical Research Institute
P.O. Box 5101
Wallingford, CT 06492-7661
FAX: 203-284-7762**

Equal Opportunity Employer, M/F/D/V

Pharmaceutical Opportunities

As a leading research-driven pharmaceutical products and services company, Merck & Co., Inc. discovers, develops, manufactures and markets a broad range of innovative products. We improve the lives of people around the world by providing society with superior products, services, innovations and solutions. We're presently seeking dedicated professionals with a passion for discovery to join us in the following positions:

Assay Development Molecular Biologist

The successful candidate will be responsible for developing cell-based assays using reporter gene technology. Expertise with mammalian cell culture, signal transduction analysis and strong molecular biology skills are essential. This individual will be working with projects involving novel whole cell assay systems for GPCR and intracellular receptors. A Ph.D. degree or equivalent with 3-5 years of research experience in mammalian cell biology and gene expression is required. Industrial experience is desirable. Good interpersonal skills are necessary to function as part of this highly-interactive team. **Please indicate Ad # B-142 for this position.**

Senior Research Biochemist

The selected candidate will have extensive experience in analysis of receptor-mediated signal transduction. Experience with G protein-coupled receptors is preferred. Excellent communication skills and the ability to work in a team environment are necessary. A Ph.D. degree or equivalent in Biochemistry or Pharmacology with a minimum of two years of relevant postdoctoral training is required. **Please indicate Ad # B-140 for this position.**

Senior Molecular Biology/Genetics Opportunities

Several positions are available in our Neurological Genetics group for Ph.D. level scientists. The successful candidates will be responsible for running new projects within the group. Requirements include a Ph.D. or equivalent, with two or more years of post-doctoral training preferred. An established record of independent scientific achievement, specifically in positional cloning projects or other methods of disease gene identification, is required. Experience in neurogenetics, neurodegenerative disease research, or other areas of neuroscience is preferred. Both positions will allow and require independent and creative approaches to challenging genetics problems. Excellent communication, organization and problem solving skills are essential. **Please indicate Ad # B-141 for this position.**

Biologist/Staff Biologist

The Genetic and Cellular Toxicology unit in the Department of Safety Assessment has an immediate opening for a highly motivated person with a B.S. or M.S. in Biology, Biochemistry, and/or Molecular Biology. A strong academic record, experience in the fields of genetic toxicology, molecular biology and molecular carcinogenesis/cancer research are preferred. Responsibilities include performance of *in vitro* and *in vivo* tests for DNA damage and research on mechanisms of chemical carcinogenesis. **Please indicate Ad # D-139 for this position.**

Bioanalytical Chemist

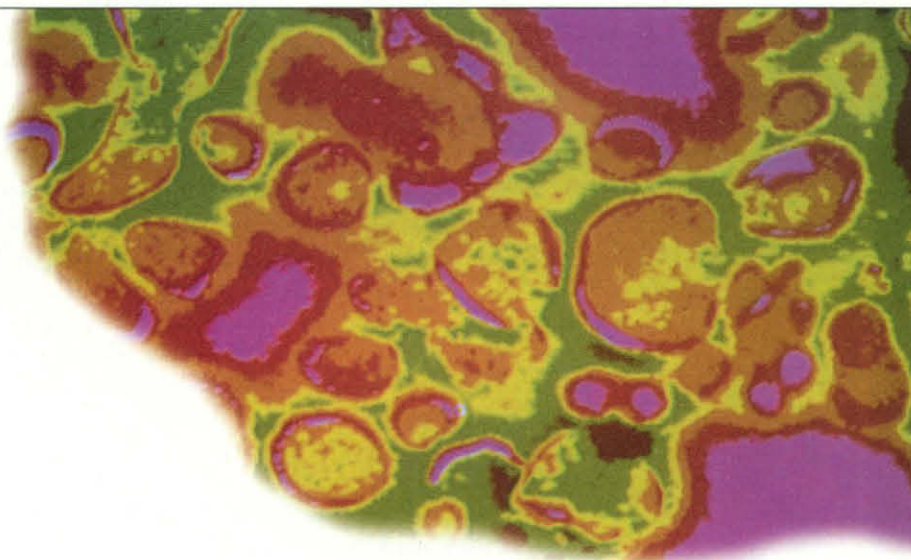
The successful candidate will be responsible for the development and validation of methods for product characterization and release testing of multi-component vaccine formulations, in the Department of Bioprocess and Bioanalytical Research. Qualifications include: a B.S., M.S. degree or equivalent in biochemistry or a related field. The candidate should possess strong experimental, communication and documentation skills. Also desirable are 1-4 years of relevant laboratory experience in performing HPLC and immunochemical methods as well as an interest in laboratory automation and project coordination. **Please refer to Ad # B-144 for this position.**

Excellent salary and benefit programs accompany these positions at our modern research facilities located 25 miles northwest of Philadelphia. Please send *curriculum vitae* with cover letter and the names of three references, indicating appropriate Ad #, to: **Ad # ____, MRL Human Resources, WP42-2, Merck Research Laboratories, P. O. Box 4, West Point, PA 19486.** Only candidates considered for interviews will receive responses. EOE, Principals only, M/F/D/V.



<http://www.merck.com>

This is an immunofluorescent cancer cell from a tumor. Today, with some seven million new cases of cancer diagnosed worldwide each year, Roche scientists are developing innovative therapies to treat several forms of the disease. They include breast, colon and kidney cancer, as well as non-Hodgkin's lymphoma and malignant melanoma.



eXPLORING THE FRONTIERS OF BIOMEDICAL SCIENCE

Globally active, research-driven, responsible

Vision, foresight and **the pursuit of scientific excellence** have made Roche a world leader in biomedical innovation. We were among the first companies to recognize the importance of **biotechnology** in biomedical science, which has led to the development and manufacturing of recombinant drugs, including the first human interferon.

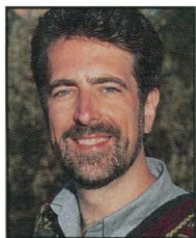
Today, Roche scientists at our New Jersey research center are concentrating on pharmaceutical discovery projects in oncology, metabolic disorders and inflammation/autoimmune diseases. Roche is also devoting significant resources to **new and emerging technologies** that will keep us competitive well into the future. They include **rational drug design, genomics, combinatorial chemistry and bioinformatics**.

The rigorous and relentless pursuit of biomedical **innovation** is both the foundation of our reputation and the strategic key to our future success. And the **creative talent** and **ingenuity** of our scientists are what drive us toward our ultimate goal - **effective treatments that extend and enhance people's lives**.

For more information about career opportunities, see our ad for *in vivo* pharmacologists in the recruitment section.



David Jensen of Search Masters International: Abundant Demand Across the Spectrum in 1998



David G. Jensen

"There are many opportunities and alternative careers for scientists in industry today. Biotech and pharmaceutical companies go through a continual cycle of birth, growth, and turning concepts into products that go to market. There are careers at every stage."

David G. Jensen has 15 years of experience on the interface between the biopharma industry and the pool of job candidates so critical for its success. Jensen is founder and managing partner of Search Masters International (SMI), a retained search firm based in Sedona, Arizona. SMI's clients range from the smallest and newest start-ups to the biopharma giants with global presence. Most are short of people in key areas.

What are those key areas?

The "hot-button" careers industry-wide include fields that combine life science with computer programming and database management, such as genomics and bioinformatics. Jensen foresees especially strong demand in a newly emerging career called proteomics, which involves the study of gene expression at the protein level. "Basically, it's wet-lab gel science combined with bioinformatics. While bioinformatics blends molecular biology and database development, here's a skill area where the protein chemist meets bioinformatics. Fewer people are being trained in proteins, yet it is potentially an even bigger area than bioinformatics. There could be shortages in this area somewhere down the road."

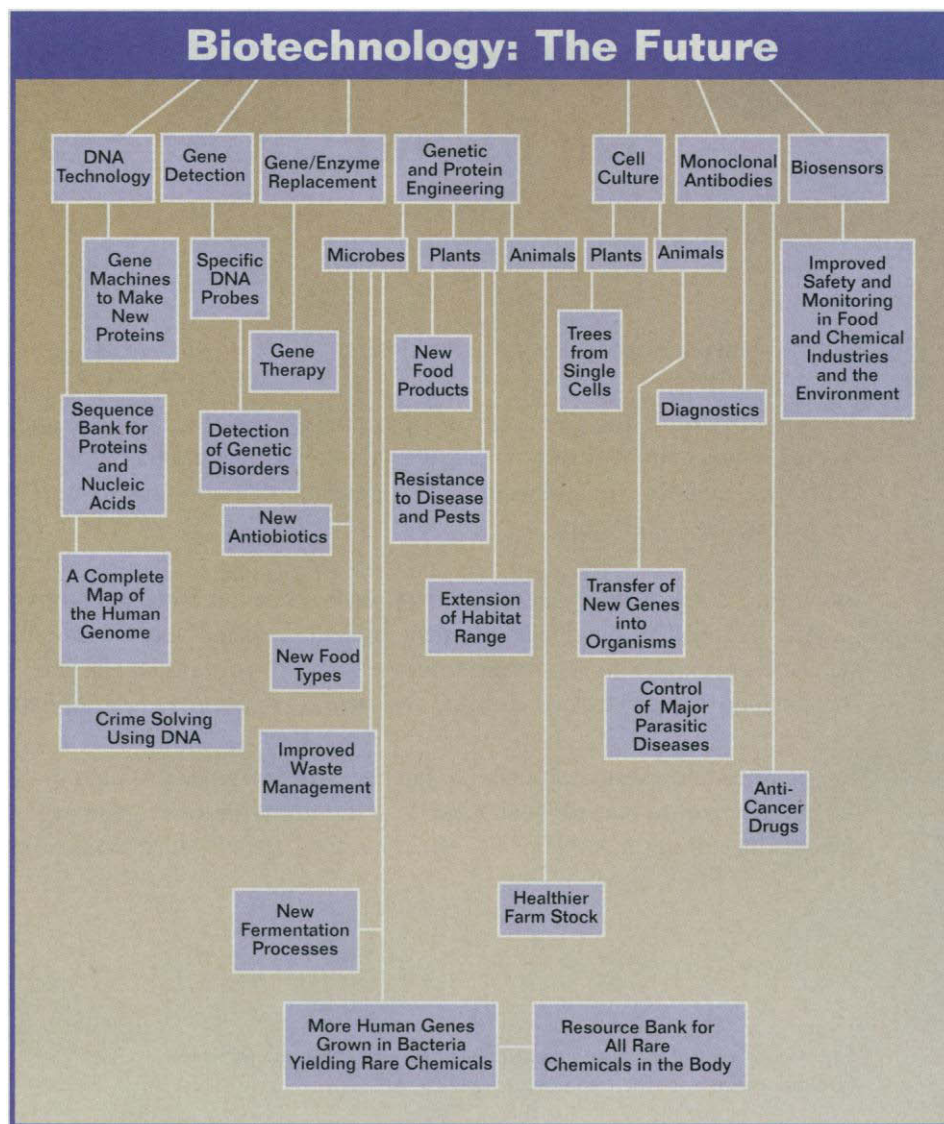
Big demand also exists for personnel who Jensen describes as "niche scientists." Many companies in the 20-50 employee range work in very specific areas of a broad science like molecular biology or cell biology. "Young companies are more prone

than ever to hire people in the particular niche in which they work. Molecular biology is a good career choice, but there are many different flavors of molecular biology. Companies don't ask us to find a molecular biologist or a cell biologist. They want a person with specific skills in these fields—gene expression, vector development, or whatever they specialize in."

Demand for process scientists also is growing as young companies finally develop a potential product, and fast-track it for marketing. They want people who can scale up production of a biomolecule from bench top to commercial quantities: Ph.D.

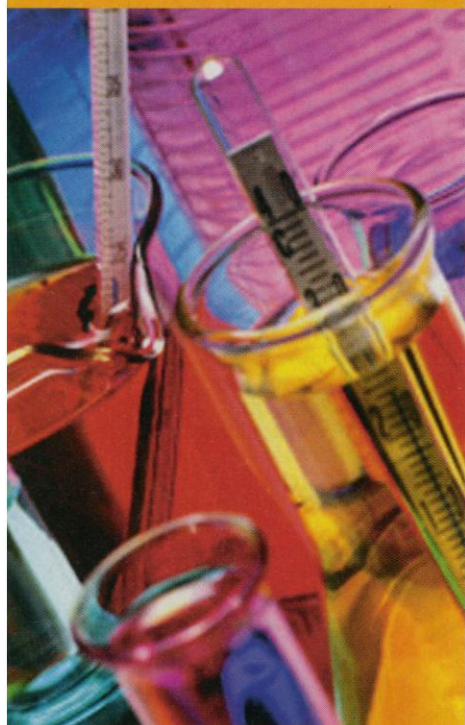
biologists, microbiologists, chemical engineers, biochemical engineers, protein chemists with experience in downstream processing of molecules. "Many people begin in research with a shake-flask and 2-liter fermenter, and expand into larger-scale production," Jensen noted.

About half of the companies that turn to SMI for new talent aren't even seeking a research scientist. They want personnel for jobs in operations, manufacturing, quality assurance, business development, technology transfer, and related fields that blend science and business. Jensen has advice for the scientist hoping to



continued ►

Scientists



Discover the extraordinary benefits of living in one of the nations' most vibrant metro areas. See for yourself why the Triangle was ranked the 5th best city in the country by Fortune magazine for working and raising a family. And why Novartis is number one in the world for careers in the life sciences.



Scientific careers come full circle in the Triangle

Innovative. Progressive. Responsive. This best describes the philosophy at Novartis. As a world leader in healthcare, agriculture and nutrition, we are committed to discovering, developing, manufacturing and marketing products that help meet our customer's needs and improve their quality of life. Several Scientist positions at various levels are currently being filled in a rapidly-expanding genomics unit of Novartis Agribusiness Biotechnology. Applicants with experience/ interest in gene expression, filter and micro-array (chip) technology, recombinant DNA, cDNA and genomic library construction, bioinformatics, DNA sequencing, laboratory automation, insect genomics, fungal genomics, or plant genomics are encouraged to apply. Research will be focused on crop protection as well as improvement.

Bioinformatics Team Members - Job # 9812

As an active contributor to the development and expansion of our bioinformatics group, you will be responsible for adapting software to facilitate the assembly, analysis, annotation and function of DNA and protein sequence information. You will also sequence data of agriculturally important plants, pests, plant pathogens and model organisms, write script files for analysis of proprietary and public sequence information, search databases for useful crop protection information and assist in the creation of NetBrowser-accessible tools for our bioinformatics intranet use.

To qualify, you must have a BS/MS degree in computer science and/or equivalent bioinformatics experience. Working knowledge of PC, Mac and UNIX tools is essential, as is demonstrated proficiency in annotation and/or DNA and protein sequence assembly and analysis. Background in any of the following is highly desirable: shell scripts, perl scripts, intranet site development, network-accessible DNA analysis tools and BioLIMs. The team-oriented candidates we seek will also possess excellent analytical, communication and interpersonal abilities.

Genomics Molecular Biologists - Job # 9808

You will be responsible for developing effective recombinant DNA approaches toward achieving gene discovery objectives. This will entail generating sequencing libraries, collaborating with bioinformatics researchers on gene discovery methods, and actively contributing to efforts at creating novel recombinant DNA techniques.

To qualify, you must have a PhD or equivalent experience in bioinformatics and experience with various methods of recombinant DNA and sterile techniques. Working knowledge of PC software tools is essential; familiarity with UNIX-based software and systems is preferred. Background in any of the following is desirable: gene discovery approaches, microbiology, DNA sequencing and BioLIMs. The team-oriented candidates we seek will possess superior analytical and organizational skills as well as the demonstrated ability to communicate effectively.

Natural Products Molecular Biologist - Job # 9809

You will be responsible for developing large fragment DNA cloning approaches for unculturable and culturable microbes. This will include creating filter array technologies for large fragment libraries from microbial populations, contributing to taxonomic classification efforts, assisting with recombinant DNA approaches toward improving gene discovery methods, and training molecular biologists in recombinant DNA techniques.

To qualify, you must have a BA/MA/MS degree in biological sciences, molecular biology or a related discipline and experience with various methods of recombinant DNA. Background in any of the following is highly desirable: large fragment cloning, gene discovery approaches, sequence analysis software tools, UNIX-based software/systems, microbiology and DNA sequencing and filter arraying approaches. The team-oriented candidate we seek will possess excellent analytical, decision-making, problem-solving and organizational skills as well.

Bioinformatics Scientists - Job # 9811

As an active contributor to the development and expansion of our bioinformatics group, you will be responsible for adapting software to facilitate the assembly, analysis, annotation and function of DNA and protein sequence information. You will also sequence data of agriculturally important plants, pests, plant pathogens and model organisms, write script files for analysis of proprietary and public sequence information, search databases for useful crop protection information and assist in the creation of NetBrowser-accessible tools for our bioinformatics intranet use.

To qualify, you must have a PhD in bioinformatics and experience in annotation and/or DNA and protein sequence assembly and analysis. Working knowledge of PC, Mac and UNIX tools is essential; background in any of the following is highly desirable: shell scripts, perl scripts, intranet site development, network-accessible DNA analysis tools and BioLIMs. The team-oriented candidates we seek will possess superior analytical, decision-making and problem-solving abilities. Strong communication and interpersonal skills are also necessary.

Novartis offers a competitive salary commensurate with qualifications and experience, a comprehensive benefits package, and an environment conducive to professional achievement. Qualified candidates should forward a resume and cover letter (which should include the job number) and a list of three (3) references to: Novartis Crop Protection Inc., Biotechnology and Genomics Center, HR, PO Box 12257, Research Triangle Park, NC 27709-2257; e-mail (ASCII format) to: biotech.jobs@cp.novartis.com. Principles only. We are an equal opportunity employer m/f/d/v.



MDS Panlabs

An MDS Pharmaceutical Services Company

MDS Panlabs is a 28-year-old global contract research organization focused on drug discovery, pharmacology, biotechnology, bioanalytics, and biosafety serving the pharmaceutical and biotechnology industries. The following positions are available in our Pharmacology Services Division. MDS Panlabs Pharmacology Services is the international leader in preclinical pharmacology testing, providing the most comprehensive contract pharmacology testing anywhere. We are seeking highly self-motivated individuals with strong initiative, superior interpersonal skills, and excellent written and verbal communication capabilities.

REGIONAL DIRECTOR, PHARMACOLOGY

Japan (consultative sales position) - Position #98-5

The person selected will represent MDS Panlabs as a consultative sales person for our Pharmacology Services in Japan. Qualified candidates must be fluent in Japanese and English. The person may reside in Seattle, WA, with frequent trips to Japan or be a resident of Tokyo or Osaka. 50% travel required. This position requires a Ph.D. in classical or molecular pharmacology or a related discipline with appropriate postdoctoral training and a minimum of three years of industrial experience in pharmacology. Sales, technology transfer, business development, consulting, or managerial experience would be a plus.

REGIONAL DIRECTOR, PHARMACOLOGY

Midwest USA (consultative sales position) - Position #98-6

The person selected will represent MDS Panlabs as a consultative sales person for our Pharmacology Services in the Midwest and Southwest from Chicago, IL. 50% travel required. This position requires a Ph.D. in classical or molecular pharmacology or a related discipline with appropriate postdoctoral training and a minimum of three years of industrial experience in pharmacology. Sales, technology transfer, business development, consulting, or managerial experience would be a plus.

TECHNICAL DIRECTOR, PHARMACOLOGY

Bothell, Washington - Position #98-7

Qualified candidates must be fluent in Chinese and English. The Technical Director will be responsible for liaison between our offices in the U.S. and laboratories in Taipei, R.O.C. This position will serve as a technical resource for our clients and will write reports for clients on studies conducted in Taiwan. This position requires a Ph.D. in classical or molecular pharmacology or a related discipline with appropriate postdoctoral training and a minimum of three years of industrial experience in pharmacology. This position is located in Bothell, Washington (a suburb of Seattle) and requires 25-50% travel.

Ph.D. SCIENTIST/SR. SCIENTIST, MOLECULAR PHARMACOLOGY - BIOCHEMICAL PHARMACOLOGY ASSAY DEVELOPMENT

Bothell, Washington - Position #98-8

The qualified candidate will be able to design, implement, and interpret results from relevant experiments that contribute to

overall project goals. Duties include methods development and validation of a broad variety of molecular pharmacological testing assays including measurements of radioligand binding, enzyme kinetics and inhibition, and cellular responses to pharmacologically active entities and preparation of SOPs, and prioritization and assessment of assay targets. Skills in molecular biology desirable. Emphasis on developing assays related to allergy/inflammation/cancer. Must be able to act as a resource in technical consultations with pharmaceutical industry clients. A Ph.D. in immunology, pharmacology, molecular biology, biochemistry, or related discipline with 2-5 years of experience in immunology or immunopharmacology is required. Requires 10% travel.

Ph.D. SENIOR SCIENTIST, CELL BIOLOGY

Panlabs Taiwan Ltd., Taipei, Taiwan, R.O.C. - Position #98-9

The qualified candidate must be fluent in Chinese and English. The primary responsibilities will include maintenance and expansion of existing cell culture facilities, supervising the establishment and running of functional cellular assays for lead discovery and profiling, and developing and implementing cellular assays for assessing *in vitro* toxicity. This position is located in Taipei.

Ph.D. SENIOR SCIENTIST, ONCOLOGY

Panlabs Taiwan Ltd., Taipei, Taiwan, R.O.C. - Position #98-10

The qualified candidate must be fluent in Chinese and English. The primary responsibilities will include the establishment of various xenograft tumor models and *in vitro* cytotoxicity screens. Further, the qualified candidate should be able to establish other models relevant to modern tumor therapy strategies targeting metastasis, apoptosis, and angiogenesis. This position is located in Taipei.

Ph.D. SENIOR SCIENTIST, SAFETY PHARMACOLOGY

MDS Panlabs Neurotech S.A., Geneva, Switzerland - Position #98-11

The qualified candidate must possess a Swiss work permit and be fluent in English and French. The position is located in Geneva, Switzerland. The primary responsibilities will be to conduct studies in GLP Safety Pharmacology. The position requires a Ph.D. in pharmacology with appropriate postdoctoral training and a minimum of three years industrial experience in preclinical cardiovascular pharmacology, preferably with specific experience in GLP Safety Pharmacology.

To apply, please send a full curriculum vitae and cover letter referring to the position of interest to:

MDS Panlabs
Attn: Human Resources
(Position # _____)
11804 North Creek Parkway South
Bothell, WA 98011-8805 USA
Fax: 425-487-3787
panlabs@panlabs.com
www.panlabs.com

MDS Panlabs is an Equal Opportunity Employer.

We regret we are unable to respond to each résumé. Only those selected for an interview will be contacted.

Pfizer.

Building On The Accomplishments Of Scientific Excellence.

Throughout the world, the success of Pfizer Central Research's ability to discover and develop new therapies is generating major growth. Our latest expansion includes a million square feet of lab space encompassing three new drug discovery buildings in Groton, CT, Sandwich, UK, and Nagoya, Japan, effectively doubling our capacity to discover new drugs. Our accomplishments are reflected in one of the strongest pipelines in the industry today, with no fewer than 17 drugs in late stage development or registration. It is a fact that has also garnered the highest recognition from the industry. In *Fortune* magazine's recent global survey, Pfizer was ranked first among pharmaceutical and health care companies worldwide.

We have distinguished ourselves for scientific excellence, the result of a truly collaborative environment that embraces virtually every scientific discipline. Our vast resources and full spectrum of opportunity can elevate your career to new levels of excellence. Join us at Pfizer, where world-class drug discovery is a reflection of world-class talent.

For immediate consideration, please forward your CV, indicating position of interest, to:
Employee Resources, Pfizer Pharmaceuticals, Inc., Job Code # _____, Central Research Division, Eastern Point Road, Groton, CT 06340. For more information on current career opportunities, please visit our Web site: www.pfizer.com.

We are an equal opportunity employer dedicated to diversity M/F/D/V.

Pfizer Central Research
Personnel Dept
Ramsgate Road
Sandwich, Kent CT13 9NJ
UNITED KINGDOM

Pfizer Pharmaceuticals
(Nagoya Plant/Research)
5-Gotchi, Taketoyo-Cho
Chita-Gun
Aichi-Ken 470-23, JAPAN

For information on positions at these locations, contact addresses listed above.

BIOLOGICAL RESEARCH

Discovery Research Scientist - Infectious Diseases Biology

Explore the biochemistry and molecular biology of newly identified bacterial processes as a part of our drug discovery program. Primary responsibilities include cloning, purification and characterization of novel antibacterial drug targets and incorporation of these into our drug discovery process. Additionally, you will develop *in vitro* assay systems to assess enzyme kinetics and characterize the inhibition patterns exhibited by experimental compounds. A Ph.D. in Biochemistry, Microbiology, Molecular Biology or a related field, and a strong background in Biochemistry and Molecular Biology, preferably in Bacterial Systems, are required. **Job Code: 2537**

BS/MS Scientist - Allergy and Respiratory Group

A BS/MS Scientist is sought to develop models, test hypotheses and perform assays. Experience in *in vivo* pharmacology, physiology or a related discipline is required. Experience with cell infiltration models, monitoring of physiological parameters and measurement of cytokines and mediators in biological fluids is desired. **Job Code: 2538**

MOLECULAR SCIENCES

BS/MS Scientist - Inflammation

Utilizing various tools of molecular biology to identify and implement new targets in the area of inflammation, you will work in a team setting performing, interpreting and communicating experimental protocols and results with minimal laboratory supervision. A BS/MS or equivalent in Molecular Biology or Biochemistry and experience with DNA cloning, protein biochemistry, and tissue culture required. Ability to dissect novel signaling pathways preferred. **Job Code: 2539**

DRUG METABOLISM

Ph.D. Research Scientist - In Vitro

Supervise the characterization and application of molecular approaches to drug metabolism research, including mammalian recombinant drug-metabolizing enzymes, transgenic/knockout models, pharmacophore/molecular models and establishment of external collaborations to acquire and develop new drug metabolism technologies. You will also oversee the correct application and interpretation of *in vitro* metabolism techniques and education of departmental personnel. Ph.D. or equivalent degree in Chemistry, Biochemistry or a related field is required. Postdoctoral experience in expression and characterization of recombinant drug-metabolizing enzymes, development and application of molecular and pharmacophore models of drug metabolizing enzymes, pharmacokinetics and industrial drug discovery preferred. **Job Code: 2540**

BS/MS Scientist - In Vitro

Develop and apply high-throughput *in vitro* techniques for the study of drug absorption and metabolism. BS/MS or equivalent degree in Biochemistry or a related field in the Biological Sciences is required. Significant experience in *in vitro* drug metabolism and absorption studies with mammalian enzymes and cell lines, enzyme kinetics, and the development and application of high-throughput screening technologies is highly desirable. **Job Code: 2542**

MEDICINAL CHEMISTRY

BS/MS/Ph.D. Scientist

Qualified candidates will have a degree in a relevant field and a strong theoretical background in synthetic organic chemistry, including advanced courses. Knowledge and experience in isolation, separation, organic reaction mechanisms, and identification techniques utilizing IR, NMR, and Mass Spectroscopy are required. Research experience, particularly in undergraduate research, is highly desirable. **Job Code: 2541**



We're part of the cure.

Industry Experience—A Human Resources Perspective Dan Bortfeld, Parke-Davis Pharmaceutical Research



Dan Bortfeld

When we're evaluating candidates with equivalent scientific skills, the individual with experience in a pharmaceutical or biotech company definitely has an edge.

The industry experience itself is important, whether it's in discovery science, information technology, or clinical research. But it goes beyond that. An HR person can look at this kind of candidate with some degree of assurance about key requirements for a successful career in the biopharmaceutical industry. For example, the successful individual with several years of experience has probably demonstrated the ability to work in a team environment. Academic research experience is also highly sought after. Typically, there would be a focus on the end result of research, identification of a compound with the potential to go to market. Solid communication and other people skills are critical.

People with industry experience have great opportunities. In addition, we actively recruit individuals right out of school—M.S. and Ph.D.-level organic chemists, synthetic chemists, and molecular biologists. Competition will continue to be especially strong for people in key fields that combine science degrees with a computer background. Bioinformatics. Genomics. Combinatorial chemistry. Cheminformatics.

You don't have to be the biggest company to offer good opportunities for people just starting a career, or continuing an established career. With about 2,500 colleagues in research, we've made a big impact. Parke-Davis discovered and developed Lipitor, which has been called the most successful new product introduction in the history of the pharmaceutical industry. It is the first drug with sales exceeding \$1 billion in its first year on the market.

Growth, discovery, impact. It's happening at a fast pace. In this industry, you can make the kind of human difference that's rare in other careers. Here you can help develop a product that may improve the quality of life, or save lives. The science, the products, the future all say that the biopharmaceutical industry is a great place to be right now.

move from research to business: add an MBA to that doctorate or Master's in science. Lots of people with combined degrees are competing for these jobs. Many companies provide assistance in pursuing an MBA, so Jensen advocates waiting until you can add that MBA to some industrial experience for much more impact.

When the Headhunters Call

What should you do when a biopharma headhunter comes calling? Feel a little flattered. Maybe you've made it as the "center of influence" in your field. Invest a few minutes, even if the job is not person-

ally appealing. If it is, express your interest clearly. David Jensen, managing director of Search Masters International, explains:

Companies pay recruiters to provide a short list of names of highly qualified people available for a specific job. We find those people by making calls to senior scientists who I term the "Center of Influence" for a particular field. Suppose we're searching for an expert in toxin discovery, natural toxins with biomedical applications inherent in bacteria and other organisms. We have in our database names of leading scientists in the field. They may be professors at prestigious universities anywhere in the world. How

do we determine the center of influence? We monitor the literature for people who have published a lot and been cited frequently in a field. We watch speakers listed in current and future symposia.

The search itself is a pyramid-shaped project. We start at the apex of a field, describe the person we're seeking, and ask advice. That usually produces two or three names. We talk to them and ask their advice. The network broadens and fans and eventually we've talked with 400 people. Maybe 40 have expressed a personal interest in the job and forwarded a c.v. That leads to in-depth interviews and screening. Eventually we forward a list of three to four people to our client for their interviews. Our database now contains 40,000 contacts we've collected in this way.

Do I have advice for people who get a call? You bet. Don't take the contact lightly and dismiss it with the quick response, "No, I don't know anybody like that. Thank you. Good-bye. Click." Most recruiters will never make another call to an individual like that. Try to leave the door open just a crack so that you still get those calls. An interesting position may open, and you'll have a chance for it. A simple two- or three-minute recommendation or referral to other people in the field is all that it takes.

If you're interested in the job yourself, express it. Often scientists don't express any enthusiasm in their voice. Recruiters naturally gravitate to people who seem genuinely interested in a position. It can give you an important edge in the early stages of the search process.

Seeking the Best Available People: Julie Oleynick of Genentech, Inc.

After a continuous career in the human resources side of the biopharma industry, Julie Oleynick is more excited than ever about the sheer scope of career opportunities and the impact that scientists can make in industrial jobs.

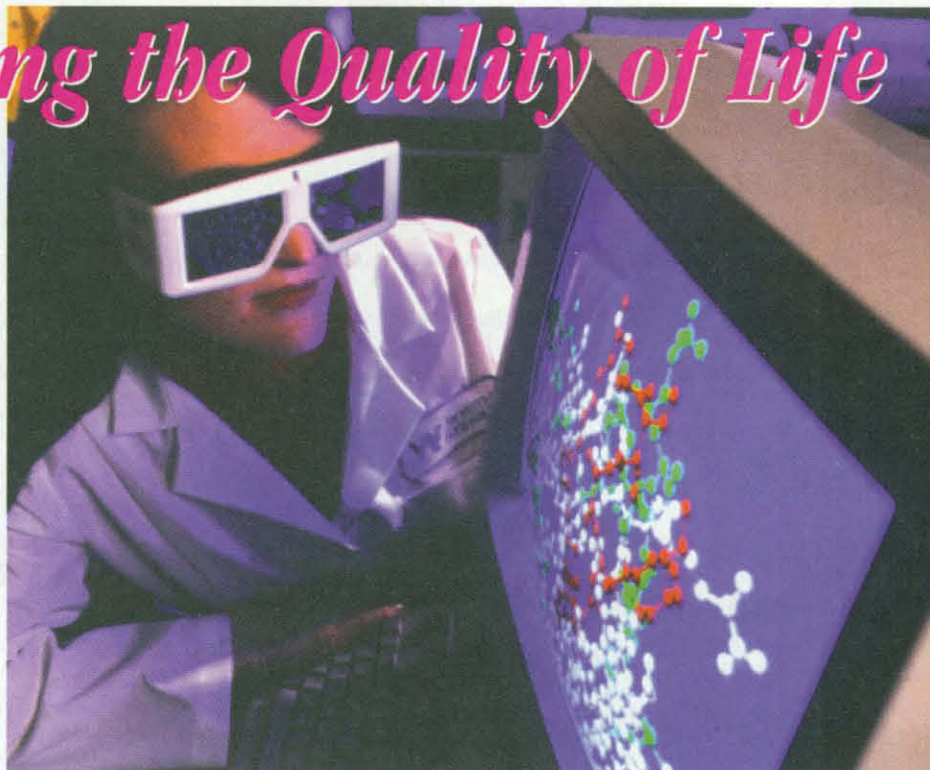
"Right now, biotech and pharmaceuticals offer really hot areas," says Oleynick, who is with the human resources department at

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Dedicated
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technology
to reach the
ultimate goal
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Through our extensive R&D efforts, we are working to discover and develop innovative, safer and more effective pharmaceuticals to meet tomorrow's health care challenges.

As we approach the 21st century, our skilled and dedicated employees remain our most important asset. To be considered for opportunities, please forward resumes and inquiries to our Global Headquarters:

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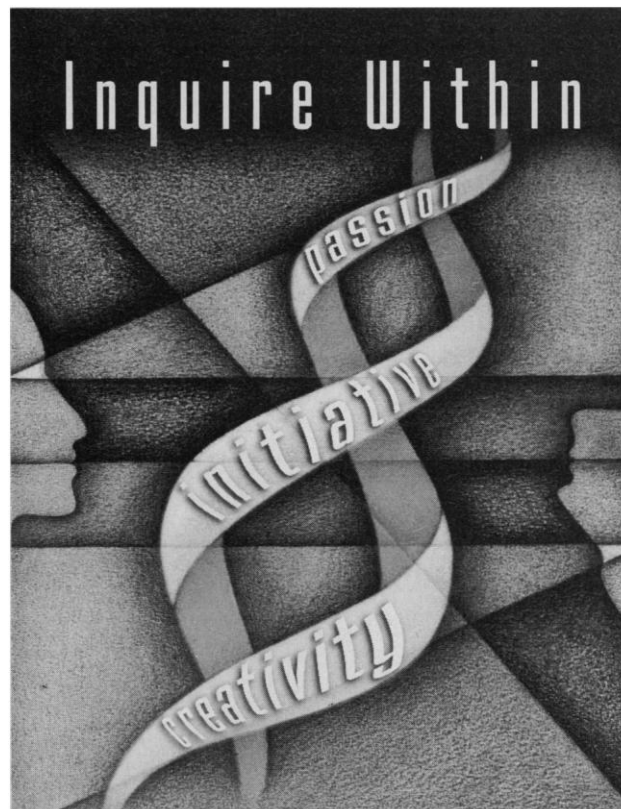
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Genentech's people share some pretty uncommon traits. Not surprising when you consider the scope of our mission – creating breakthrough medicines for conditions like cystic fibrosis, stroke, growth disorders, cancer and heart attacks. It demands a very special kind of person. Someone who will take risks, accept responsibility, and constantly seek creative solutions.

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POSTDOCTORAL OPPORTUNITIES

The Genentech Postdoctoral Program consists of more than 50 researchers and is a vibrant and intensive environment for advanced scientific training. Conduct basic research in areas of our scientific interest. Publish in scientific journals. Attend and present work at scientific meetings. As one of the nation's most prolific scientific facilities, publishing at a rate of approximately 250 papers a year, Genentech offers an exceptional range of postdoctoral opportunities. With close to 3,000 patents and another 2,000 pending, Genentech also offers a proven pathway for your work to reach its true benefactor, the patient. The following opportunities are available for candidates with a Ph.D. and/or M.D. and a strong background in the appropriate field:

Antibody & Bioassay Technology

This postdoctoral fellowship will focus on the biology and structure-function of Apo-2 and Apo-2 ligand. In addition, mAbs to Apo-2 will be evaluated and engineered to induce apoptosis. Experience in molecular biology, immunology or related areas is preferred. See *J. Immunol.* 156:1782 (1998); *Methods in Enzymology* 288:15 (1997); *Cancer Research* 56:663 (1996); *J. Immunol.* 155:2587 (1995); *J. Immunol.* 153:5682 (1994). Manager: Dr. Jin Kim. Job Code: SCI229

Cardiovascular Research

This postdoctoral fellowship will investigate the regulation of blood vessel growth by vascular endothelial growth factor (VEGF) and by novel factors applying molecular, cellular and in vivo approaches. Requires a strong background in molecular biology or cellular biology. See *Nature* 362:841-844 (1993); *Nature* 380:439-442 (1996); *EMBO J.* 15:4919-4927 (1996); *Endocr. Rev.* 18:4-25 (1997); *Nature Med.* 3:336-340 (1998). Manager: Dr. Napoleon Ferrara. Job Code: SCI033

Protein Chemistry

This postdoctoral fellowship involves high-sensitivity determination of protein identities and post-translational modifications from gels. Capillary electrophoresis-mass spectrometry and other microfluidics-based techniques will be incorporated in selected proteomics projects. See *Electrophoresis* 18:349-359 (1997). Manager: Dr. John Stults. Job Code: SCI075

Bioorganic Chemistry and Immunology Research

This postdoctoral fellowship will focus on protein structural analysis and design in the application of re-engineered proteins to small-molecule drug discovery. Requires a Ph.D. degree in Chemistry or Biochemistry with an emphasis in peptide and protein structural analysis. Experience in biophysical chemistry, molecular biology, protein chemistry or peptide synthesis is desirable. See *Science* 260:1937-42 (1993); *J. Amer. Chem. Soc.* 116: 5069-83 (1994); *J. Immunol.* 157:4986-4995 (1996); *Biochemistry* 36:4775-4781 (1997); *J. Med. Chem.* 40:3359-68 (1997). Managers: Dr. James Marsters and Dr. Leonard Presta. Job Code: SCI078

Neuroscience

This postdoctoral fellowship is in the area of developmental neurobiology. The research will utilize advanced molecular, cellular and genetic approaches to identify and study genes that control commitment differentiation and survival of neurons in the central nervous system. See *Cell* 80:95 (1995); *Nature* 373:339 (1995); *Science* 267:455 (1995); *Nature* 384:126 (1996); *Nature* 382:76, 80 (1996); *Nature* 387:717 (1997); *Neuron* 19:15-26 (1997). Manager: Dr. Arnon Rosenthal. Job Code: SCI225

Protein Engineering

This postdoctoral fellowship will focus on investigating molecular and biochemical aspects of protein/protein and protein/ligand interactions. Areas of general interest include mechanistic enzymology of serine proteases and nucleases, high affinity ligand selection and reduction of molecular epitopes. Experience in diversity methods, molecular biology, protein chemistry, structural biology, enzymology is preferred. See *Protein Sci.* 7:628 (1998); *Biochemistry* 36:6624 (1997); *Biochemistry* 36:5607 (1997); *Proc. Natl. Acad. Sci. USA* 93:8225 (1996); *J. Biol. Chem.* 270:25411 (1995). Manager: Dr. Robert Lazarus. Job Code: SCILAZ.

Molecular Oncology

This postdoctoral fellowship will focus on analyzing the role of protein tyrosine phosphatases in the regulation of the cytoskeleton during interphase and mitosis. Experience with molecular and cell biology techniques is preferred. See *Blood* 88(4):1156-1157 (1996); *J. Biol. Chem.* 272(11):7264-7277 (1997); *J. Cell Biol.* 138(4):845-860 (1997); *J. Biol. Chem.* 273(2):989-996 (1998); *J. Biol. Chem.* 273(10):5765-5770 (1998). Manager: Dr. Larry Lasky. Job Code: SCI179

Our progressive benefits package includes full medical/dental/vision, 3 weeks vacation, stock purchase plan and health club membership. Send your resume, indicating Job Code, to: Genentech, Inc., Human Resources, PO Box 1950, South San Francisco, CA 94083-1950. Please use plain type faces. You may e-mail your resume indicating Job Code to jobs@gene.com (ASCII files only with a maximum line width of 76 characters). We cannot accept faxed resumes.

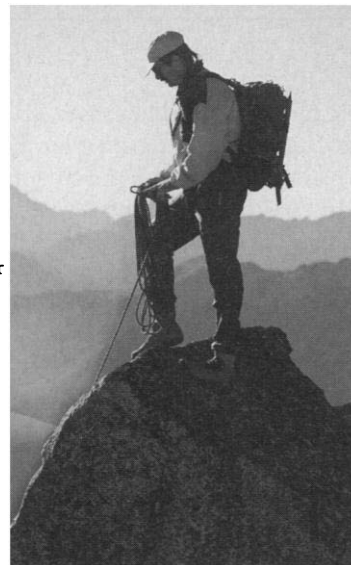
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The Untapped Power of DISCOVERY

Established in 1993, **SCRIPTGEN** has become a leading molecular therapeutics company by developing unique drug discovery technologies that represent breakthrough advances in the race to develop effective therapies. Our proprietary, affinity-based screening system, ATLAS (Any Target Ligand Affinity Screen) allows novel protein targets to be screened in a high throughput mode, and our SCAN (Screen for Compounds with an Affinity for Nucleic Acid) as well as RNA transcripts technologies are facilitating the discovery of important drugs that regulate RNA. The success of these technologies has created expansion opportunities in our research organization.



Ph.D. Biochemist/Molecular Biologist Participate in innovative drug design program. 2+ years of postdoctoral experience in molecular biology and protein biochemistry required. Experience with site-directed mutagenesis, protein expression (*E. coli*, mammalian and insect cells), cell culture, protein folding, and immunoassays preferred. **Job Code: AFF12**

MS/BS Biochemist/Molecular Biologist Participate in innovative drug design program. 2-5+ years of laboratory experience in molecular biology and protein biochemistry including molecular cloning, site-directed mutagenesis, and protein purification required. Experience with protein folding, immunoassays, and protein expression systems preferred. **Job Code: AFF13**

MS/BS Immunologist/Cell Biologist Develop monoclonal antibodies in novel, highly-collaborative drug discovery programs. 2-5+ years of laboratory experience in monoclonal antibody production and immunoassay techniques required. Experience with standard biochemical techniques including gel electrophoresis, protein purification, and measurement of enzymatic and binding activities strongly preferred. **Job Code: AFF14**

MS/BS Protein Biophysicist Biophysical characterization of macromolecular targets in interdisciplinary drug discovery programs. 3-5+ years of laboratory experience in biophysics. Requires facility with protein biochemical methods (e.g. protein expression and purification, gel electrophoresis, and enzymatic and binding assays) and experience with biophysical techniques (e.g. CD and fluorescent spectroscopy, and calorimetry). Experience with protein folding and RNA biochemistry preferred. **Job Code: AFF15**

MS/Ph.D. Biophysical/Bioanalytical Chemists Development of novel technologies for characterization of small molecular interactions. 3+ years of laboratory experience including the application of mass spectroscopy to the analysis of small organic molecules required. Experience with protein chemistry, bioanalytical techniques, assay development, and drug discovery and a firm grounding in biochemistry strongly preferred. **Job Code: AFF17**

MS/Ph.D. Biochemist Contribute to a dynamic growing effort in development of homogeneous high-throughput drug discovery technologies. 3-5+ years of laboratory experience including fluorescence spectroscopy required. Experience with development of fluorescently labeled macromolecules, assay development, fluorescence polarization, and FRET strongly preferred. **Job Code: AFF19**

BS/MS Biochemists/Protein Chemists Development of novel drug discovery technologies. 1-2+ years of experience in protein chemistry or related field. Experience in analysis of protein-protein interactions, enzyme-antibody conjugation, and assay development highly desirable. **Job Code: AFF20**

BS/MS Biochemists Conduct drug discovery research in an interdisciplinary antiviral drug discovery program. 2-5+ years of laboratory experience in molecular biology and biochemistry, including molecular cloning, protein expression, purification and characterization required. Expertise in bacterial, baculoviral, and yeast expression systems is desirable. **Job Code: AFF21**

MS/BS Biochemists Develop binding assays and elaborate drug candidates in innovative drug design programs. 2-5+ years of laboratory experience in biochemical methods (including analytical techniques, protein chemistry and measurement of enzymatic and ligand binding activities) required. Experience with drug discovery, high-throughput screens, protein folding, immunoassays, and mathematical modeling in data analysis preferred. **Job Code: AFF22**

Ph.D. Bacteriologist Conduct and manage research in a rapidly growing antibacterial drug discovery program. At least two years of post-doctoral experience in microbiology, genetics, molecular biology or related field with significant experience in the study of bacterial genetics and biochemistry required. Experience in drug discovery research and/or the genetics of pathogenic bacteria is highly desirable. **Job Code: BAC4**

MS Chemist/Biochemist — Manager of Compound Distribution Responsibilities include: managing a large compound library, distributing compounds for screening, compounds quality control and library diversification. MS and strong knowledge in chemistry or biochemistry are required. Computer-literacy, good communication skills, facility for interaction with scientists from different disciplines, and some management skills essential. **Job Code: CH3**

MS/BS Molecular Geneticists Characterize antifungal therapeutic targets and perform mechanism of action studies on novel antifungal compounds. MS or BS in biochemistry, molecular biology, genetics, microbiology or related discipline and at least two years of working experience in molecular cloning techniques, (especially in microbial systems) required. Experience with protein purification or biochemical assay development highly desirable. **Job Code: FGL11**

MS/BS Biochemists, Protein Purification Provide hands-on support in maintaining a preparative scale protein purification facility. Requires BS or MS with 3+ years of experience with the purification of native and recombinant enzymes using manual and automated chromatographic systems. Experience with construction and use of recombinant protein expression systems, enzyme assay methods, or the operation and maintenance of microbial fermentors is highly desirable. **Job Code: PP3**

Postdoctoral Positions

Two-year postdoctoral positions are available in several areas:
HBV and HCV replication (**Job Code: PD11**)
Cytokine receptor biochemistry/cell biology (**Job Code: PD12**)
Biophysical characterization of proteins (**Job Code: PD12**)

Development of homogeneous fluorescent assays (**Job Code: PD13**)
Membrane protein biochemistry (**Job Code: PD14**)
HBV antiviral mechanism-of-action studies (**Job Code: PD15**)
Protein folding (**Job Code: PD16**)

SCRIPTGEN offers competitive salaries and benefits, along with equity participation. Please send resume, indicating appropriate Job Code, to: SCRIPTGEN Pharmaceuticals, Inc., 200 Boston Avenue, Medford, MA 02155. FAX: 781.393-8354. E-mail: hr@scriptgen.com **Inclusion of Job Code is essential for consideration.** An equal opportunity employer, m/f/d/v.

SCRIPTGEN



Genentech, Inc., South San Francisco, California. "Companies are competing for the best people to fill jobs. The jobs range from discovery research through product development, process sciences, and marketing."

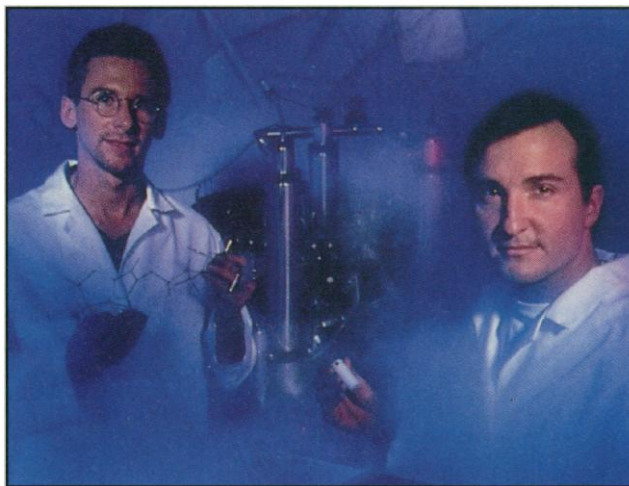
Oleynick foresees strong demand, for instance, in careers that involve a drug's transition from laboratory bench to market. There's growing emphasis industry-wide on rapidly moving products out of the development pipeline, into clinical trials, commercial-scale production, and general clinical use. "There definitely will be more opportunities for people capable of helping a biotech company get a product into the market faster, more efficiently, and more globally," Oleynick said.

To launch new products, biotech companies will need scientists with skills in molecular biology, protein science, analytical chemistry, and pharmaceutical development areas such as epidemiologists, clinical scientists, toxicologists, and pharmacy-related disciplines. Especially attractive will be clinical research associates with clinical trial experience.

Oleynick regards sales, marketing, and regulatory affairs careers as an excellent way to apply scientific training. All of these positions require grounding in the life sciences. These jobs offer scientists the opportunity to apply their knowledge in final product stages. What kinds of degrees open the door to these fields? Demand exists throughout the educational spectrum, from the B.S. level to Ph.D's and M.D's. Especially attractive are people with combined degrees coupling a science background with an MBA.

On the discovery research side, intense competition continues for Ph.D's with strong research track records in industry or academe. Among the hot fields are molecular biology, combinatorial chemistry, genomics, and biochemistry.

One defining trait of the biopharmaceutical industry has been the tendency for many companies to develop a need for the same kinds of employees at the same time. With no end in sight to competition for top employees, biopharmaceutical companies must continue to make themselves attractive as possible.



Agouron's chemists played an important role in the synthesis and scale-up of the company's HIV protease inhibitor, and helped drive one of the fastest drug development programs in U.S. pharmaceutical history.

Oleynick advises job candidates to look beyond pay scale and benefits to the company's reputation with employees and in the marketplace. Is it known for taking good care of employees? Is there a pleasant, nurturing work environment? What's in the product pipeline, and what level of risk comes with a job?

Careers in Protein Structure-Based Design: Lisa Kanetake of Agouron Pharmaceuticals, Inc.

Ask human resources folks how mergers and acquisitions affect the biopharmaceutical job market, and many respond like Lisa Kanetake, manager, human resources at Agouron Pharmaceuticals, Inc., La Jolla, California.

"Although mergers can be initially disconcerting, they can be a positive event. We have benefited when mergers and acquisitions have occurred in the industry making experienced scientists and other talent available.

"Fast-growing organizations, like Agouron, can recruit already trained staff who can hit the ground running. The scientists, of course, benefit from joining a fast-paced, growing environment where there is much to accomplish and much opportunity."

Agouron's discovery research emphasizes protein structure-based drug design: Protein x-ray crystallography enables sci-

entists to determine the three-dimensional atomic structures of target proteins and the drugs that bind to them. This approach integrates crystallography and synthetic organic chemistry with genetic engineering techniques used to identify, purify, and modify the protein targets. Although the technology distinguishes Agouron from most other biopharmaceutical companies, it relies on many of the hot scientific specialties in great demand industry-wide.

What are those fields?

Kanetake sees career prospects in the pharmaceutical industry for medicinal chemists (synthetic organic chemists), combinatorial chemists, chemical engineers, and high-throughput screeners. For development careers, process chemistry, pharmaceutical development, clinical affairs, and regulatory affairs opportunities continue to be growing areas. Few HR people would argue with Kanetake's choice for two of the hottest branches of chemistry today: combinatorial chemists and biochemists.

"These individuals are difficult to recruit. The talent pool is quite small, especially those individuals with experience in robotics and high-throughput screening. Many companies are competing to find these scientists. A Ph.D. with these skills can look forward to many job offers, and constant calls from recruiters."

Clinical research is another hot area, and the demand should expand as companies

continued ►

BREAKTHROUGH TECHNOLOGIES

Hoechst Marion Roussel, a major force in the global pharmaceutical industry, is committed to building a world-class team of scientists dedicated to Drug Innovation & Approval. The continuing achievements of our scientific teams have created a number of exciting and challenging career opportunities at our research centers throughout North America.

Our scientists participate on US Drug Innovation Teams pursuing novel therapeutic targets for the treatment of Alzheimer's disease, asthma, cancer, schizophrenia, and stroke. We are looking for scientists who are driven by their desire to make a difference. Those with excellent technical achievements, proven communications & interpersonal skills, and leadership qualities, will contribute to our team environments and proliferate our success.

CHEMICAL DEVELOPMENT CENTER - Cincinnati, OHIO

• Radio-Synthesis Chemist:

Ph.D. with more than 3 years organic synthesis experience in discovery chemistry or chemical development. Specific strengths in micro-synthesis, the use of vacuum lines, and analytical & documentation skills are essential. The successful candidate will be responsible for the conception, design and performance of experiments to synthesize compounds labeled with ^3H , ^{14}C , ^{125}I , and ^{35}S critical for our new lead discovery efforts. [CN-1]

• Development Chemist:

Ph.D. in organic chemistry preferably with either post doctoral or industrial experience. Specific experience in one or more of the following areas will be considered a plus: asymmetric synthesis, enzymatic reactions, preparative chiral chromatography, resolution technology, organofluorine chemistry, and/or catalysis related to organic synthesis. The successful candidate will plan, design, and conduct advanced research experiments on chemical development, and participate on interdisciplinary project teams. [CN-2]

• Associate Development Chemist:

BS/MS in chemistry with 3-5 years of experience and a minimum of 3 years experience in organic synthesis, synthetic methodology or mechanistic organic chemistry. Must have a proven record of experimentation achievement, strong synthetic organic chemistry knowledge, as well as the ability to perform literature searches for defined compounds and/or appropriate laboratory techniques. The successful candidate will perform research and analysis of data and have superior documentation and communication skills. [CN-3]

SELECTIDE CORPORATION - Tucson, ARIZONA

As a critical component in Hoechst Marion Roussel's DiSA organization, SELECTIDE is a leader in combinatorial chemistry and automated screening technologies for discovery research.

• Research Biochemist: Nanotechnology & Assay Miniaturization Group:

BS or MS in biological or physical science, with a minimum of 3 years experience in biological assays. Additional strength in image analysis, microfluidics, fluorescent bioassay development, or transcription reporter assays is highly desired. The successful candidate will screen combinatorial libraries for drug discovery, evaluate instrumentation, and develop new techniques for performing biological high throughput assays in very small volumes. [AR-1]

• Robotics/Miniaturization Engineer:

BS, MS or Ph.D. in mechanical, electrical, or chemical engineering, and a minimum of 3 years experience performing advanced instrument design, automated liquid handling, or the programming of complex robotic systems. A working knowledge of Visual Basic or a similar programming language is essential. The successful candidate will be responsible for applied development research to support the evaluation of new instrumentation and the development of custom instrumentation for new screening technologies. [AR-2]

• Assoc. Chemist or Chemical Engineer: Chemistry Automation Group

BS/MS in chemical engineering or chemistry, with 0-3 years industrial experience in either process control or miniaturization (chemical engineers), or liquid handling robotics (chemists), is required. An extensive knowledge of Visual Basic or related programming language, and good organic chemistry skills are essential. The successful candidate will implement, troubleshoot, maintain, and design instruments related to automated chemical synthesis; participate in the process development for chemical library synthesis and purification; and, synthesize combinatorial libraries using robotics and related technologies. [AR-3]

DRUG INNOVATION & APPROVAL CENTER - Bridgewater, NEW JERSEY

• Assoc. Scientist, Profiling & Screening:

Ph.D. in biochemistry, molecular biology, pharmacology or a related field with a minimum of 3 years experience. Specific strengths in developing & running in vitro receptor or enzyme assays including kinetic measurements, as well as a strong understanding of the kinetic and mathematical descriptions of these assays. The successful candidate will provide expertise and leadership to the Profiling & Screening group for the automation, validation, and execution of enzyme & receptor binding assays, and will also function as the key department interface to the disease groups supported. [PS-1]

• Assoc. Research Biologist, Profiling & Screening:

BS/MS in cell or molecular biology with a minimum 2 years experience in a molecular or cellular biology laboratory. Experience with cell culture, automated compound screening, and proven molecular biology techniques is essential. The successful candidate will develop, implement, and validate cell based transcription assays for automated screening, and will collaborate with the U.S. based disease groups. [PS-2]

• Biologist, Profiling and Screening:

BS in cell biology or molecular biology with laboratory experience evident. Your ability to work with a wide variety of assays and manage laboratory time is essential. The successful candidate will maintain and care for the cell lines utilized in automated screening, including equipment maintenance and the timely preparation of needed cell cultures. [PS-3]

• Medicinal Chemist, Automated Synthesis & New Technologies:


Ph.D. in organic chemistry with an additional 2 plus years of laboratory experience in synthetic organic chemistry. The successful candidate will use the latest in automation equipment for high-throughput synthesis and purification. You will be a member of a team responsible for tasks in one of the following areas: development of new chemistry methods for solution and solid phase parallel synthesis, initial SAR development of screening leads and investigations into the latest technologies for medicinal chemistry. [MC-1]

Attracting and retaining the industry's top talent is a high priority at Hoechst Marion Roussel. That is why we offer one of the most outstanding and comprehensive compensation and benefits packages in the pharmaceutical industry today. Our total rewards package includes competitive compensation and bonus programs, flexible medical and dental plans, tuition assistance, income protection plans, and generous retirement plans that have been cited as the best in the industry. For consideration, mail your resume (suitable for scanning) including salary history/requirements and JOB CODE to: Reference # 1998BW0008, Staffing Manager, D103-H, Hoechst Marion Roussel, Routes 202/206, P.O. Box 6800, Bridgewater, New Jersey 08807-0800, or e-mail: jobs @ hmri.com. For additional company information, we invite you to visit our website: www.hmri.com. An affirmative action employer M/F/D/V/.

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Zeneca Pharmaceuticals is a worldwide leader in the discovery, development and marketing of important new therapeutic agents in seven key categories, including cardiovascular, oncology, respiratory, CNS and anti-infectives. We are always looking for the brightest and best scientists who are willing to join our pharmaceutical research team and devote themselves to the discovery and development of innovative products in these fields. Openings currently available for:

PHARMACEUTICAL SCIENTIST Work with a Drug Delivery Group in developing formulations for research compounds. Formulations may be solution or non-solution for oral or non-oral routes of administration. The position requires a BS/MS degree in pharmacy, chemistry or other chemical science and a minimum of 2 years' experience conducting solution formulation studies, preferably with new chemical entities. Laboratory skills and good working knowledge of applied pharmaceuticals and GLP/GMP regulations are required. (Job Code KC-609)

SYNTHETIC CHEMISTS Join a team of scientists in our Medicinal Chemistry Department involved in the synthesis, isolation and characterization of novel organic compounds as candidates for drug discovery in a wide variety of therapeutic areas. Requires at least a BS degree in organic chemistry and a strong background in organic synthesis, including the ability to conduct multistep synthetic sequences, chromatographic purifications, and spectral interpretations. Other positions require additional experience with combinatorial libraries and solid-phase synthesis. (Job Code DW-98-01)

RESEARCH PHARMACOKINETICISTS Position requires ability to characterize the pharmacokinetic behavior of New Chemical Entities (NCEs) and relate pharmacokinetics to pharmacodynamic endpoints. Applicants need PhD degree in biopharmaceutics, pharmacokinetics or a related discipline; experience with a variety of computer applications such as WinNONLIN, NONMEM, TopFit, SAS and Excel; knowledge of compartmental and noncompartmental methods of analysis, physiological-based modeling, population pharmacokinetics, experimental design and statistical analysis. (Job Code AF-901)

IMMUNOLOGIST Help develop cellular assays of immune cell function, supporting multidisciplinary drug discovery teams, and contribute significantly to new drug discovery opportunities in areas of inflammation/immunology. Candidates must have a PhD degree in immunology or related discipline and 2-5 years' postdoctoral experience in cellular immunology, with skill in cellular model of T-cell differentiation and function. Skill in molecular biology is highly desirable. (Job Code DW-98-03A)

STAFF SCIENTISTS Openings for scientists to work in a multidisciplinary team environment on new drug discovery projects for pulmonary or CNS diseases. These positions require a BS/MS degree in biological sciences and 3-7 years' laboratory experience in molecular biology. Expertise in gene cloning, protein expression in heterologous systems and assay development skills are essential. Familiarity with cell biology or receptor binding assays is desirable. (Job Code DW-98-03B)

NEUROSCIENTIST We seek a Neuroscientist with a PhD in pharmacology, neuroscience or related discipline and demonstrable skills in multiple in vivo models of neurodegeneration and neurochemical/biochemical assays. Knowledge of molecular mechanisms of neurodegeneration and experience in a pharmaceutical setting are preferred. Will participate in multidisciplinary teams, oversee evaluation of compounds in relevant animal models and contribute significantly to CNS drug discovery. (Job Code DW-98-03C)

Zeneca Pharmaceuticals offers competitive salaries, comprehensive flexible benefits, and opportunities for growth with one of the world's leading pharmaceutical organizations. To apply, please send your resume/c.v. and salary requirements, specifying the Job Code Number for the position in which you are interested, to: Darla Wilson, OW3, Human Resources, Zeneca Pharmaceuticals, 1800 Concord Pike, P.O. Box 15437, Wilmington DE 19850-5437. FAX: 302-886-7124. E-Mail: jennifer.brooks@phwilm.zeneca.com An Equal Opportunity Employer M/F/D/V.

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Ontogeny, Inc.

Ontogeny, a leader in the emerging field of developmental biology, is seeking highly motivated scientists to join an interactive group of researchers in a stimulating and challenging environment. Our rapidly growing company applies molecular and cellular biological techniques to studying tissue development and repair. Our current focus is to expand discovery efforts while aggressively pursuing our existing research and development projects. This has created a variety of exciting career opportunities.

In Ontogeny's on-going quest to build a company of distinction, we are continually creating a team of highly motivated, committed individuals. In acknowledgment of the expertise you bring to the company, we offer a competitive compensation package, including an incentive stock plan, challenging projects, and an exciting, positive atmosphere. If interested in joining the Ontogeny team, please respond by sending your resume to:

Marlene A. Thayer
Director, Human Resources
45 Moulton Street
Cambridge, MA 02138
Fax: 617/876-0866

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Bone/Cartilag Research, Group Leader

We are seeking a dynamic leader with a background in the development of bone and cartilage to direct a strong group working on novel therapies for bone and cartilage disorders. A Ph.D. is required with five years post-doctoral experience, preferably in developmental biology. Familiarity with protein engineering, transgenic mice and animal disease models is required. *Job Code: BCS*

Developmental Biology

Several positions are available to study inducing molecules and signaling pathways within embryonic tissues. Background in ES cells, neurobiology, hematopoiesis, diabetes, cardiac or kidney development, or angiogenesis will be especially useful. Experience with developing zebrafish and *Xenopus* is a plus. A Ph.D. is required, with post-doctoral experience in developmental biology preferred. *Job Code: DBS*

Neurobiology

These individuals will join a group devoted to discovering the therapeutic utility of novel molecules using pre-clinical models of neurological disease. One position requires a Ph.D. in neurobiology, neuropharmacology, or related field and post-doctoral experience is strongly preferred. Qualified candidates must have extensive experience in relevant animal models and demonstrated competence in histological analysis. Candidates at the M.S./B.S. level (2-3 years experience) must have expertise in small animal stereotactic surgery, and experience with histological methods and/or cell culture. Familiarity with molecular biology and protein chemistry is a plus. *Job Code: NBS*

Skin/Hair Research

This individual will join a group studying the biology of skin and hair growth. Knowledge of mammalian cell culture, especially of keratinocytes is required, and some experience with immunohistochemistry, histology, microdissection and animal disease models is a plus. Candidate should have a B.S. degree with a minimum of three years experience. *Job Code: SHS*

Molecular Biology

Molecular biologists with varied expertise (Ph.D./M.S./B.S.) sought to participate in a group dedicated to the discovery of new genes important in developmental processes. Experience with one or more of the following is required: (a) library construction, subtraction and normalization methodologies, array technology; (b) cloning of differentially expressed genes; (c) immunohistochemical techniques and *in situ* hybridization. For research associate positions, familiarity with basic techniques of protein biochemistry and tissue cultures a plus. *Job Code: MBS*

DNA Sequencing

For our expanding DNA sequencing facility, familiarity with high capacity sequencing systems, including automated template preparation and sequencing reaction technology, and sequence proofreading and finishing is required. Candidates should possess excellent organizational skills. Experience with ABI 377 sequencers is highly desirable. *Job Code: DNAS*

Computational Biology

We are seeking a scientist to analyze sequence data for the interpretation of function and the determination of gene expression patterns. This position requires a Ph.D. in a biological science, expertise with sequence databases, and the computational tools used to analyze these sequences in a UNIX environment. Programming skills for the manipulation of databases is preferred. *Job Code: CBS*

Protein Biochemistry

We are seeking qualified individuals with hands-on experience in medium to large scale bacterial and insect cell protein expression and purification. Knowledge of cell-surface receptors and intracellular signaling pathways would be valuable. Candidates must have a Ph.D. with several years post-doctoral or industry experience in protein chemistry. *Job Code: PBS*

Lab Manager

This new position is for an individual with a B.S./M.S. degree to manage our expanding laboratory facility. Excellent organizational, managerial and teamwork skills are key. Supervision of laboratory personnel required. Prior experience with managing a facility is advantageous, and knowledge of cell and molecular biology is preferred. *Job Code: LMS*

The Fine Art of Impressing the Interviewer: Two applicants both have excellent scientific skills. What other traits might give one an edge in landing a lucrative job? We posed that question to our panel:

David Jensen, Search Masters International: "It happens regularly. One person is an ideal fit. The other is close, but doesn't quite meet the criteria. The job often goes to the individual who does a little self-promoting. Scientists often are uncomfortable doing that. But you can't just sit there and think your research will speak for itself. By self-promoting, I mean being able to talk about your strengths and accomplishments in a positive, matter-of-fact way. Most companies use the philosophy that past performance predicts future behavior. So talk about those accomplishments."

"Before the interview, ask why this company wants a scientist with your skills. Usually, they have a problem of some kind and need a person to solve it. Make it clear during the interview how your own scientific background, your ability to influence and communicate, and your other skills can solve that problem."

"Be prepared to talk about yourself, not just your science. The interviewer will try to get a sense of the personal chemistry, how you might fit into the corporate culture. Several kinds of questions might come up. Tell me about your advisor and what kind of person he was. Who was your best boss and your worst boss in the past. What did you like and dislike about a job in the past?"

Lisa Kanetake, Agouron: "What impresses me as a recruiter? An applicant who has done homework and comes in with knowledge about our company. I would say that only about 10 percent of the candidates have a strong grasp of what Agouron does. Candidates should know the basics, the main fields of research, products, pipeline and how their scientific discipline might contribute."

"This information is easily available on the Web. Most companies have Corporate Communications groups that post annual reports, press releases, and job opportunities. Or ask the HR department to provide you with some company information. Do homework on the company, and on the individuals from the group or team that you would join."

"Have some knowledge about the person hosting you, or the person who would be your supervisor. It's extremely impressive for a candidate to be aware of the group's publications, to know where individuals have received their degrees or perhaps where they've served their postdoctoral positions. One way is to read the papers published by the group. Talk to other people in the field. Would I help an applicant find this information if asked? Absolutely, but I'd be more impressed if the candidate did the research, which shows initiative and helps them stand out above the rest."

Julie Oleynick, Genentech: "One factor would be an understanding of the business impact of a scientist's research. We have scientists conducting novel research, making important basic research contributions, being published widely. How does that research apply to one of our fields of interest? How does it translate into a final product?"

"Another is the person's ability to communicate clearly. Discovery scientists must interact with members of their own group and also across departments and disciplines. Will this person be able to explain the significance of a bench-top discovery to scientists in other fields, or non-scientists in regulatory affairs?"

"Some of the really impressive candidates are researchers who go beyond doing homework on Genentech, on the company and its culture. They research the interviewer. When they're interviewing with a scientist, they know what the scientist has published. They've read the publications and understand research directions and how their skills may contribute."

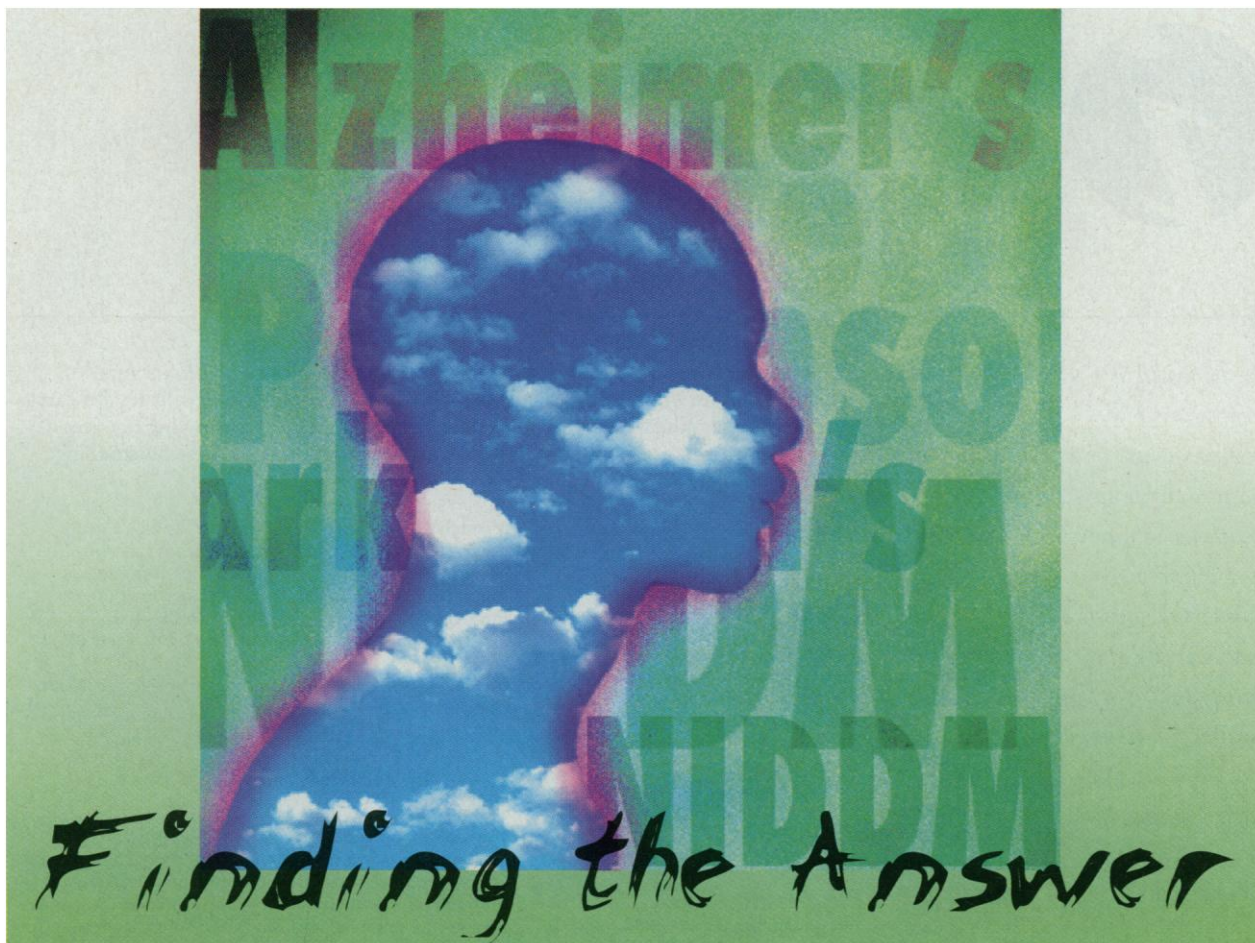
"Flexibility also is important. In industry, a scientist may not spend an entire career working in one department or on one project. The biotech industry is dynamic and changes rapidly. Scientists may have to change their research interest with the industry. These are cardinal traits of the biotech industry, and applicants should have a basic understanding of how it works."

Michael Yoon, Bayer Biotechnology: "HR is sometimes considered the keeper of the corporate culture. We always want good scientists, of course. But we want good people that fit well into the corporate environment. Behavioral competencies are a very important consideration. We once called these interpersonal skills, but they involve a little more. These relate to an individual's ability to get along with coworkers, resolve differences, work as part of a team, communicate with people, influence coworkers in ways that help get a job done. We really do evaluate people on these points. An applicant may be an excellent scientist, absolutely brilliant, but may have poor interpersonal skills. In the future, that individual will be at a distinct disadvantage, as corporations move toward matrix structures."

"I'm also impressed by individuals with other traits that help get the job done and bring products to market. Initiative, assertiveness, a sense of urgency, a team player who can work without a lot of direct supervision, a problem-solver."

"Interviewers do a lot of probing to gauge how an applicant measures up in terms of behavioral competencies. Job-seekers are prepared to talk about their academic background and science. They also should be ready with examples of how they've worked successfully with others and demonstrated these skills."

continued ►



Follow the science with MitoKor. We are a leading pharmacogenetics company focused on developing therapeutics and metrics for diseases related to abnormalities in mitochondrial function. We invite you to participate in our groundbreaking research targeted toward Alzheimer's Disease, Parkinson's Disease, Diabetes Mellitus and other age-related degenerative diseases. We are actively seeking exceptional individuals for the following career opportunities:

Vice President, Therapeutics Research: A creative and dynamic individual will lead a state-of-the-art drug target discovery program. This program encompasses drug discovery, genomics, comparative gene and protein expression, cell biology, biochemistry and cellular energetics.

Director, Functional Genetics: You will lead a team focused on comparative gene expression and gene function using models of mitochondrial disease. Experience in directing mammalian protein expression in the context of drug discovery is valued.

Director, Informatics: An opportunity to work at the cutting-edge of drug discovery, pharmacogenetics, comparative gene and protein expression and informatics. You will lead a team focused on merging information from diverse sources to define new paths to the treatment and detection of late onset degenerative disease.

Director, Therapeutics/Pharmacogenetics: Your experience in developing diagnostic products using modern genetic principles is desired. Especially important is an understanding of products designed to stratify patient populations and drive medical management of disease.

In addition, we are seeking outstanding scientists, including postdoctoral fellows, in the following areas: **Pharmacogenetics, Protein Biochemistry, Molecular Biology, Bio-organic and Medicinal Chemistry, Cellular Energetics.** The selected individuals will have strong interest and experience in one or more of the following areas: apoptosis, insulin secretion/beta cell function, mammalian gene expression, differential display, cellular energetics, protein biochemistry, epidemiology/biostatistics, high throughput screening, bioanalytics, medicinal chemistry or proteomics.

MitoKor offers excellent opportunities with competitive compensation and a comprehensive benefits package and an environment that promotes scientific creativity. For immediate consideration, please send or fax your resume to: **MitoKor, Attn: SCI300, 11494 Sorrento Valley Road, San Diego, CA 92121. Fax (760) 741-3737. E-mail: dewaltd@mitokor.com** EOE.



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In the world of healthcare, few companies are in a position to do so much for so many as Hoffmann-La Roche. Our mission is to identify and satisfy the healthcare needs of the world. In our never-ending quest for innovative products, we exercise imagination, ingenuity and an uncompromising pursuit of discovery.

Whether discovering and developing drugs that treat Metabolic, Inflammatory and Autoimmune diseases or making advances in the world of Oncology, the scientists in our Nutley, New Jersey Research Center are at the forefront of the industry. More importantly, they are leaders in improving the lives of people around the world. If you'd like to join them in their efforts, consider one of these outstanding opportunities we now have available.

Metabolic Diseases

You will establish an *in vivo* Pharmacology group to support Metabolic Diseases discovery teams. This will involve creating an infrastructure to provide focus, set priorities and assign resources to Discovery programs; partnering with biologists and chemists to jointly maintain, design and establish effective animal models of type II diabetes (NIDDM) and obesity in order to evaluate lead compounds and licensing candidates; and collaborating with the Drug Metabolism, Toxicology, Pathology and other non-clinical development areas with an emphasis on increasing the speed of lead compound identification and development. Dept. Code: 98SS06PB

Oncology

The Oncology Discovery Team has a diversified research program focusing on therapeutic agents, including targets in cell cycle regulation, cytotoxics, anti-metastasis/anti-angiogenesis, apoptosis, and cachexia/supportive care management. Immediate responsibilities will be in support of an exciting drug candidate which is entering clinical trials. You will interact with a wide range of project teams contributing to the strategic plans for drug discovery as well as collaborate with dedicated groups in Drug Metabolism, Pharmacokinetics, Toxicology/Pathology, and Galenics. The future potential exists for you to generate your own

research proposal and lead a multidisciplinary drug discovery program. Qualifications include a strong background in tumor biology and rodent models of cancer; and the ability to design and perform *in vivo* mechanistic and proof of principle studies with experience in the evaluation of therapeutic agents in animal models of cancer. Experience with the preparation of IND/NDA applications preferred. Dept. Code: 98SS07BW

Inflammation/Autoimmune Diseases

You will establish a laboratory that will provide supporting *in vitro* assays and conduct *in vivo* studies in animal models of acute and chronic inflammation, immune responses and autoimmune diseases. This will involve interacting extensively with project leaders in the selection, development, and evaluation of appropriate models to support project and departmental goals and collaborating with personnel in Drug Metabolism, Pharmacokinetics, Toxicology and Pathology. You will need training in pharmacology, physiology or immunology. Research expertise in inflammatory cytokines and enzymes, cell activation and signal transduction pathways, and leukocyte adhesion molecules; and apoptosis experience with animal models of arthritis, autoimmune diseases, or respiratory diseases are highly desirable. Dept. Code: 98SS08KI

All positions require a Ph.D. or equivalent in pharmacological/biological sciences; 3-5 years' experience in pharmacology; demonstrated leadership in the establishment of animal models for specific therapeutic areas; and excellent organizational and conflict resolution skills.

At Roche, we not only offer employees competitive salaries and comprehensive benefits, but we also offer a unique campus-like facility, a state-of-the-art fitness center and on-site child care. For consideration, please forward your resume, indicating Dept. Code for position of interest on envelope and resume, to: R&D Human Resources, Hoffmann-La Roche, 340 Kingsland Street, Bldg. 76/508, Nutley, NJ 07110. We appreciate your interest in Hoffmann-La Roche but can only respond to qualified candidates. Hoffmann-La Roche is an equal opportunity employer fully committed to diversity in the workplace.



Where INNOVATION RULES

Innovation is priority one at Millennium. Always has been. Always will be. That's because we knew that our distinctly different approach combining genetics, genomics, and bioinformatics would create a uniquely powerful discovery process. And we realized that our strategic partnerships with major pharmaceutical companies would accelerate discovery and development – making breakthrough therapies available faster for such major under-served diseases as obesity, type II diabetes, cardiovascular diseases, cancer, central nervous system disorders, and many more.

Today, the innovation and excitement continues with the creation of three new subsidiaries – Millennium BioTherapeutics, Millennium Predictive Medicine, and Millennium Information, Inc. – designed specifically to enhance the discovery process in their specialized areas. We have also entered into a unique agreement with the Monsanto Company to create Cereon Genomics L.L.C. – a wholly-owned Monsanto subsidiary which will apply our technologies to the discovery and development of genomics-based plant and agricultural products.

And there's no end in sight. Given the challenges still to be faced...and the breakthroughs still to be discovered in biotechnology, we know that there is much more excitement, growth, and success to come. That's why there's no better time than now to bring your spirit of innovation and success to a company that reflects it, and rewards it.

► Senior Manager, Technology Acquisition

Work within technology development to identify technologies and potential collaborations in relevant areas and negotiate contractual arrangements to these technologies. Knowledge of modern technologies relative to early stages of drug discovery required. Qualifications: Ph.D. or equivalent experience in molecular biology, chemistry, process technology or software plus 2+ years of business development or technology acquisition experience is ideal. **Job Code: TAH**

► Senior Manager, Business Development

Work with business, marketing and research functions to develop an integrated product and technology strategy. Manage the evaluation, structuring and negotiation of relationships with third parties to access information technology, data generation technology and product development opportunities. Qualifications: 2-4 years in business development with background in information technology and/or pharmaceutical industries. MBA desirable. **Job Code: BDH**

► Managers – Technology Licensing

Work with scientific/business development staff to identify technologies and potential collaborations in relevant areas and negotiate contractual arrangements to these technologies. Knowledge of research approaches in molecular biology and/or experience with technology transfer/licensing from academic/research institutes and between companies is ideal. Requires Ph.D and 1-2 years' postdoctoral training. **Job Code: TLH**

► Scientist – Mouse Genetics

This scientist will be involved with the identification and validation of human disease genes using genetic mapping of candidate genes. Must have prior experience in genetic mapping, radiation hybrid panel mapping and comparative mapping. You will work closely with our informatics group in the development and enhancement of the in-house mapping databases. You should have molecular biology experience, PCR, DNA preparation, Southern blots, sequencing, with preference given to a person with DNA chip technology experience. Specific interest in disease areas would be a plus. A Ph.D. and two years' postdoctoral experience is required. **Job Code: MGK**

► Associate Scientist – Vector Biology

This candidate should have a strong background in molecular and cellular biology for setting up in vitro assays and extending them to in vivo mouse models. The skills involved are mammalian cell culture, mammalian gene transfer and gene and protein expression analysis. Ideally, you should have a Ph.D. in molecular/cellular biology and several years postdoctoral experience in virology or a mouse transgenic/knockout lab. **Job Code: VBK**

► PostDoctoral Fellow – Neurobiology

Participate with a team of scientists working in the area of neurological diseases. You must have exceptional skills in the areas of immunohistochemistry, in situ hybridization, small animal surgery, necropsy/tissue processing with experience in transgenic and knock out mice. Developmental analysis is highly desirable. Candidates completing a Ph.D. or who are currently in a postdoctoral position are encouraged to apply in any of the following areas: cell biology, biochemistry, anatomy, or developmental biology. **Job Code: NBK**

► Scientist – Predictive Medicine

Lead a research group which is focused on the identification of molecular markers predictive of onset, progression and outcome of prostate cancer. Apply array-based transcriptional profiling, subtractive cloning, candidate gene analysis to discover diagnostic and prognostic markers. Previous experience with array-based transcriptional profiling is highly desirable. Familiarity with mutation detection technology and/or previous experience in the oncology field would also be beneficial. A Ph.D. in molecular biology or genetics and several years' postdoctoral experience is required. **Job Code: PMK**

► Scientist – Phage Display

You will be responsible for the phage display effort at a growing subsidiary company involved in the research and development of novel secreted proteins. In this role, you will integrate phage display into the functional genomics effort of the company. Successful candidates must have prior experience in phage display (peptide or antibody), basic molecular biology skills, antibody characterization skills such as ELISA, FACS analysis, antibody purification, cellular immunology assays and BioCore analysis. A Ph.D. and 2-6 years' postdoctoral experience are preferred. **Job Code: PDK**

► Scientist – Transcriptional Profiling

This scientist will interface with the disease biology groups and generate transcriptional profiles for a broad library of normal and diseased tissues from RNA samples. You will lead a group that applies array-based transcriptional profiling methods. This position involves designing and executing experiments, managing the dataflow, and identifying new targets. We require a very strong molecular and cellular biology background; especially RNA profiling techniques such as northern blotting, RNase protection, RT-PCR, differential display and microarrays. Knowledge of statistical data analysis tools very important. Programming skills at the scripting level would be a plus. **Job Code: TPK**

► Scientist – High Throughput Screening

This scientist will be responsible for the last stage development and automation of high throughput cell-based assays, primarily using mammalian cell lines, and the successful implementation and completion of the assays. Must have prior experience with mammalian cell culture and large and small scale Mammalian reporter gene assay using multiple detection methodologies and lab automation. A Ph.D. in Cell Biology or Molecular Biology and 2 - 5 years' postdoctoral experience in Biotech or Pharma are preferred. **Job Code: HTK**

► Scientist – Biocombinational Micro Biologist

Primary responsibilities will be the generation of transgenic fungal strains for drug screening. The successful candidate will be responsible for developing novel technologies in the biocombinatorial drug discovery field, preparation of scientific publications, and advising research associates. Requires a Ph.D. and at least 2 years of relevant post doctoral experience with fungal systems, biocombinatorial drug discovery, and microbial secondary metabolism, as well as a broad range of molecular techniques. **Job Code: TKG**

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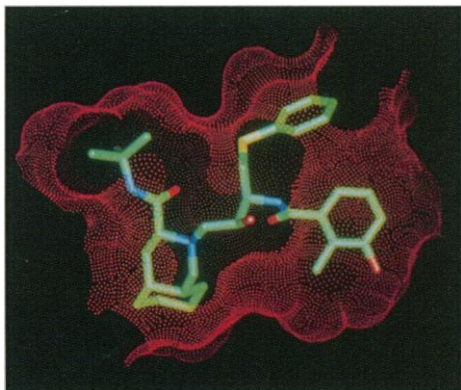
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MILLENNIUM PHARMACEUTICALS, INC.

We are an equal opportunity employer committed to discovering the individual in everyone.



Agouron's first commercial product, an HIV protease inhibitor, was cleared by the FDA last year for marketing in the United States as a product for treatment of HIV infection in adults and children, and is now also marketed in many countries worldwide.

move more products through the pipeline, be they pharmaceuticals, devices, or diagnostics. Only a small fraction of these jobs require the M.D. or M.D.-Ph.D. combination. Many clinical research careers are available for B.S., M.S., and Ph.D.-level scientists, especially those with experience in clinical trials, and individuals with backgrounds in nursing or pharmacy.

With the concentration of start-up companies in the San Diego area, competition for key staff is especially intense, Kanetake noted. Increasingly, recruiters must draw on talent from other parts of the country. Joining a start-up has many advantages, including being involved in decision-making groups that make a real impact on the project and the company, the opportunity to create without the bureaucracy of a larger organization, a very fast pace, and potential for advancement. In return, these dynamic companies require flexibility, willingness to refocus research interests, relocation, and risk-taking in the early stages of a firm's development. According to Kanetake, "Organizations, like Agouron, can be the most satisfying and exciting times of your career, when you are truly part of the process of researching, developing, and commercializing a drug."

How can a company make itself attrac-

tive to job candidates? Agouron recognizes that its success in a highly competitive environment depends on the talent and commitment of employees. Kanetake advised applicants to prepare and ask questions beyond pay, benefits, and stock. "Ask about the culture, look at the work environment, ask about the supervisor's style of management, find examples of projects and how they've contributed to the projects."

When asked about the future for a scientist just starting a career in the biopharmaceutical industry, Kanetake responded with a single word: "Exciting." That, she added, should be the feeling that a company engenders in candidates.

Kicking and Vying for Talent: Michael Yoon of Bayer Biotechnology

Michael Yoon, a human resources manager at Bayer Biotechnology, Inc., in Berkeley, California, says that the biotech industry enters 1998 in a more solid position than ever before. Reorganizations and downsizings of years past have produced a stronger industry overall, with a proven ability to deliver products to market.

"The technology definitely has started to catch up with the promises of the 1980s and early 1990s. There's a new sense of excitement, and it's creating a strong job market. A whole lot of companies in the Bay area are kicking and vying for a very finite pool of talent. We actually have bidding wars out here for people in key careers."

Topping the list of hot science jobs at Bayer during the last year are Ph.D.'s in the life sciences or chemistry who possess computer and database management skills for bioinformatics and related careers. Yoon cites the application of computers to biopharma discovery research as one of several factors that have impacted the job market in recent years. The other is introduction of highly improved instrumentation for probing the structure and function of proteins.

In what other fields does demand exceed supply? Yoon cites a continuing

need for molecular biologists with skills in genetic transcription, translocation, gene probes, and gene sequencing. Healthy demand should continue into the 21st century for molecular biologists and other scientists with experience in protein structure and protein engineering. Pharmacologists and toxicologists remain hard-to-find personnel.

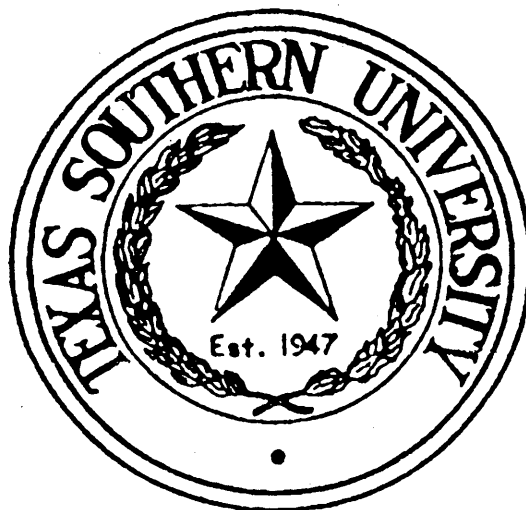
Yoon is excited about the growing number of non-research jobs available for individuals whose backgrounds and skills span the worlds of science and business. These include individuals with the Ph.D.-MBA combination to work in strategic planning, regulatory affairs, marketing, and related fields.

Some of these positions in the future will be filled internally, as existing employees shift to new careers. The typical employee who moves into one of these positions from bench-level research prepares over a period of years, often by taking courses. Yoon advises new scientific discipline employees to keep an open mind with career options. Consider taking a few graduate courses in business, management, or another non-science field. It may spark interest in a science-business field, and lead to a whole new career that can be just as fulfilling as full-time science.

"Demand for these careers should be hot for years ahead," Yoon said. "I'd definitely advise current graduate and undergraduate science students to be aware of the situation, and maybe take a few business courses as electives." ■

Participate in Career Workshops:

Join us for an online discussion group on careers in genetics at the Science Professional Network Web page (www.sciencemag.org). Click on Science Professional Network, and then click on Career Workshops. Vicki Rosen of the Genetics Institute will be available to answer your questions from 6 March through 2 April.



TEXAS SOUTHERN UNIVERSITY

Director of the Center of Cardiovascular Diseases

Texas Southern University invites applications for the position of Director of the Center of Cardiovascular Diseases at Texas Southern University with opportunities to engage in collaborative research ventures with research partners in the Texas Medical Center, including the Baylor College of Medicine, The University of Texas at Houston School of Public Health, The University of Texas Houston Health Science Center, and The University of Houston. The Center of Cardiovascular Diseases at Texas Southern University is an initiative of Texas Southern University and the National Heart, Lung, and Blood Institute and is designed to expand and strengthen the University's biomedical research capabilities so that Texas Southern University can make significant contributions to the improvement of the cardiovascular health status of all Americans, especially African Americans.

Established in 1947, Texas Southern University is a free-standing public institution. Texas Southern University officially became "A Special Purpose Institution of Higher Education for Urban Programming" in June, 1973. Providing "higher education for urban programming" requires that the University addresses itself to the needs of all segments of the urban population, particularly disadvantaged minorities who comprise a major portion of the population of most cities. The mission of Texas Southern University is to academically prepare and develop diverse, predominantly African American students to discover solutions to health and other problems disproportionately affecting urban minorities through scholarship, research, and outreach programs to the community.

The Director of the Center of Cardiovascular Diseases will assemble, organize, implement, and manage a basic biomedical research program that is consistent with the University's unique mission. The Director will expand and enhance the University's research projects in cardiovascular diseases and create a Center that will provide intensive laboratory training experiences for graduate and undergraduate students. The Direc-

tor will initiate and foster collaborative research and educational arrangements within the University and within the academic community in Houston; create a nationally recognized research program; provide opportunities for structured and supportive faculty development; and enhance the University's research infrastructure. The Director will also seek additional funds to strengthen the research enterprise; work with existing faculty and research associates; and recruit new faculty and research associates. Resources available to a Director include core molecular biology and tissue culture laboratories, state-of-the-art research instrumentation, and opportunities to collaborate with investigators in several University research centers.

The candidate must be an established scientist with major research interests in cardiovascular diseases and disorders that principally and disproportionately affect African Americans. Candidates for the position must have proven scientific leadership capabilities and a track record of successful grantsmanship and teaching experience. The candidate must have a doctoral degree (Ph.D., M.D./Ph.D.) and meet the University's requirements for a tenure-track faculty appointment at a rank of Associate Professor or Professor.

Texas Southern University is located in Houston, Texas, only minutes away from the largest medical center in the world, the Texas Medical Center.

Applications from women and minorities are strongly encouraged.

Letters of interest and a curriculum vitae must be received by April 30, 1998 and addressed to:

**The Recruitment Committee
c/o Dr. Barbara E. Hayes
College of Pharmacy and Health Sciences
Texas Southern University
3100 Cleburne Avenue
Houston, TX 77004**

Geron has recently cloned the key protein component of human telomerase and shown that it extends the lifespan of normal cells. Geron is the first biotechnology company to focus exclusively on the new advances in molecular and cellular gerontology for the treatment of age-related conditions such as skin atrophy, atherosclerosis, immune and hematopoietic dysfunction, and cancer. The company wishes to expand its efforts in gene therapy to complement our drug discovery efforts.

Scientist - Nuclear Transfer

Develop techniques for transferring nuclei and transfecting telomerase into mammalian and primate oocyte, cytoplasm and ES systems. Study the effects of such techniques on differentiation, nuclear reprogramming and MHC antigen expression. Requires: Ph.D. in Cell Biology or related discipline and strong experience in nuclear transfer, embryology, and molecular biology techniques. Experience with embryonic stem cells a plus. (01-98)

Bioinformatics Staff Scientist

In concert with drug discovery project teams, develops or integrates bioinformatic approaches to drug discovery. Responsible for computational sequence analysis methods for database searches and the analysis of resulting data. Requires: Ph.D. or industrial experience in biological sciences. In-depth knowledge of computational analysis and its biological relevance to drug discovery. Background in database management and utility programming in a UNIX/Mac environment desired. (02-98)

Scientist - Screening & Assay Development

Develop cell-based assays for high throughput screening in support of Geron's drug discovery programs. Requires: Ph.D. in Cell Biology, or related discipline and strong experience in assay development. Experience with robotics highly desirable. (04-98)

Scientist - Molecular Biology

Identify and develop appropriate technology for efficient gene delivery in vivo and ex vivo. Initial focus would be on viral vectors for pre-clinical and clinical applications. Requires: Ph.D. in Molecular Biology and related discipline with a proven track record in viral vector design and delivery. Experience with primary human cells is desirable. (30-97)

Postdoctoral Positions:

• Biochemistry and Biology of Cancer and Aging

Study the molecular biology and biochemistry of aging and cancer. Ongoing projects involve investigating the biochemistry of telomerase or the interaction of the telomerase RNA and protein components with other telomere components and the cellular systems regulating growth and division. Requires strong background in molecular biology, biochemistry, or cell biology. (19/20-97)

• Primordial Stem Cells

Study primate derived embryonic stem/germ cells and their growth and differentiation into multiple lineages for cell therapy and gene therapy applications. Requires: Ph.D. degree in Cell Biology or related discipline. Strong background in cell growth embryology and gene regulation necessary. Proficiency in molecular biology techniques and flow cytometry highly desirable. (03-98)

Geron is conveniently located in Menlo Park, California. We offer a competitive compensation and benefits package, and a dynamic working environment. If interested in pursuing a position please contact:

Geron Corporation
Human Resources
230 Constitution Drive
Menlo Park, CA 94025
or e-mail us at hr@geron.com
Fax: 650-473-7750



SCIENCE CAREER FAIR

PALO ALTO, CA, 20-21 MARCH 1998
STANFORD UNIVERSITY CAMPUS
TRESIDDER MEMORIAL UNION
LAGUNITA DRIVE

EXHIBITOR GUIDE

20 March: 11am-4pm

21 March: 11am-3pm

The following organizations are interviewing at the 20-21 March SCIENCE Career Fair. See their recruitment ads in this issue for details on scientific career opportunities.

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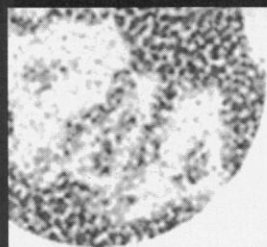
Participating organizations as of 3/5/98

**Next
SCIENCE Career Fair:**
Cambridge, MA

MIT campus
21-22 August 1998
Stratton Student Center

For more information:
Please call (202) 326-7018,
or access
SCIENCE Career Fair
Information Online:
www.sciencemag.org
(Choose SCIENCE Professional
Network from the menu.)

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You Could Be Aviron's Next Great Discovery

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 a career with Aviron.

RESEARCH ASSOCIATES
Research and Development
SCIENTISTS
Research and Development
FORMULATION SCIENTIST
QA SPECIALIST

QA SUPERVISOR
QC TECHNICIAN
QC ASSOCIATE
CELL CULTURE ASSOCIATE
REGULATORY AFFAIRS MANAGER
REGULATORY AFFAIRS ASSOCIATE
DIRECTOR, REGULATORY AFFAIRS
CLINICAL RESEARCH ASSOCIATE
STATISTICIAN
MATERIALS MANAGER
DIRECTOR OF OPERATIONS
DIRECTOR OF INFORMATION TECHNOLOGY
CONTROLLER
PURCHASING MANAGER
GENERAL ACCOUNTING MANAGER
DIRECTOR, CORPORATE COMMUNICATIONS
ADMINISTRATIVE ASSISTANTS

Stop by our Booth at the SCIENCE Career Fair on March 20-21 at the Stanford University Campus in Palo Alto, CA.

www.aviron.com

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, 297 N. Bernardo Ave., Mountain View, CA 94043; fax 650/919-2491, careers@aviron.com. Aviron welcomes candidates from diverse backgrounds. EOE.



SCIENCE CAREER FAIR

BIOTECHNOLOGY

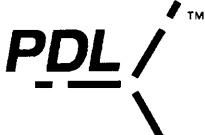
PROTEIN DESIGN LABS

Protein Design Labs' interdisciplinary approach to drug discovery integrates computer-based design with molecular biology, immunology and protein chemistry. We have the following opportunity available:

SCIENTIST/STAFF SCIENTIST

Heading up a group of 4 scientific and technical staff, you will be responsible for analytical methods development, characterization of therapeutic antibodies and degradation procedures. Duties include preparing product characterization sections of INDs for FDA submission, and contributing to the completion of milestones associated with specific scientific projects and experiments. The ideal candidate will possess a PhD in Chemistry or Biochemistry with 2-5 years industrial experience in protein structure elucidation. Demonstrated ability to manage/supervise personnel and projects and experience with HPLC and gel electrophoresis are essential. Familiarity with the operation of an HPLC/Mass Spectrometer is preferred and analytical methods development skills are needed. Must possess excellent written and verbal communication skills and computer literacy, as you will be working with a variety of computers.

PDL's fast-paced, highly challenging environment offers exceptional professional opportunities, competitive salaries and a comprehensive benefits package. Later in 1998, we will be relocating just across the San Francisco Bay to Fremont. Visit our home page at www.pdl.com to learn about our company and other career opportunities at PDL. Please send your resume to: Protein Design Labs, Inc., Human Resources, Job Code 396, 2375 Garcia Ave., Mountain View, CA 94043, fax 650/962-0437. EOE.



SCIENCE CAREER FAIR



GENETRACE

GeneTrace Systems is a fast-growing biotechnology company that has pioneered the application of mass spectrometry for combinatorial library screening, biomedical research and genomics. The Company utilizes a novel tool set for high-throughput genetic analysis including genetic mapping, sequencing and gene-expression analysis.

GeneTrace Systems is currently seeking individuals at both junior and senior levels in the following areas having experience in at least some of the listed skills:

Biochemistry/Molecular Biology	Computer Science/Informatics
Gene Expression	Database Administration
Genetic Mapping	Programming: C/C++, Perl, Visual Basic
Cell Culture	Network Administration
PCR, Sequencing, Cloning	LIMS
Automation	Bioinformatics
Mass Spectrometry	
Operations	Engineering
Developmental Chemist	Mechanical: Automation, Fluidics
QA/QC	EE/CS: Data Acquisition and Analysis
Purchasing	Organic Chemistry
	Nucleotide/Oligonucleotide synthesis

GeneTrace Systems offers excellent opportunities for professional growth and a highly competitive salary and benefits package including stock options. The Company is currently located in Menlo Park, CA, and will be relocating across the San Francisco Bay to Alameda, CA in the Spring of 1998.

To apply, please reference the area of interest and send or fax your resume to: GeneTrace Systems Inc.
333 Ravenswood Avenue
Menlo Park, CA 94025
FAX (650) 859-2654

GeneTrace systems is an equal-opportunity employer.

INDUSTRIAL BIOTECHNOLOGY SERVING THE WORLD IN PALO ALTO, CALIFORNIA

See us during the *Science Career Fair*
March 20-21 in Palo Alto at the Stanford University Campus.

As a global biotechnology company with revenues of \$275 million, Genencor International develops and markets innovative enzymes and biochemicals that are highly efficient and environmentally sound. Our investment in the future can be seen in our new R&D facility, which combines basic research, pilot plant development and robotics under one roof and was recently recognized as "Laboratory of the Year" by the publishers of Research & Development magazine. Currently, we have a variety of opportunities for candidates to join our impressive research environment in Palo Alto:

- Postdoctoral Scientists
- Scientists II
- Research Assistants

We offer a competitive compensation and benefits package, including 3 weeks of paid vacation and a generous 401(k) matching plan. To receive consideration, you must indicate the position/area of your interest on your CV/resume. Please submit to Genencor International, Inc., by email: genencor@isearch.com (no attachments, please), fax (310) 337-3369 or mail: National Resume Processing Center, PO Box 92074, Job Code SCI313, Los Angeles, CA 90009-2074. Background checks will be conducted. An equal opportunity employer M/F/D/V.

GENENCOR
INTERNATIONAL®



Protogene Laboratories, Inc. is a private company with opportunities for B.S., M.S., and Ph.D. scientists interested in DNA Microarrays and high throughput pharmaceutical synthesis.

Protogene has opportunities for chemists, molecular biologists, instrumentation engineers, and software programmers (C++). In 1996, Protogene became the world's largest manufacturer of synthetic DNA using robotics technology licensed from Stanford. Since then, Protogene has developed and patented important processes for chemical synthesis of DNA microarray "chips", and is seeking motivated individuals who can develop both chemical and biological procedures for DNA synthesis, expression profiling, mutation analysis, and other applications. Knowledge of genomics and DNA database applications highly desirable. A minimum of 2 years postgraduate experience in research is required.

Please e-mail or fax a CV to the address below. Also see you at the Stanford career fair!

Protogene Laboratories, Inc.
1454 Page Mill Road
Palo Alto, CA 94304
Fax: 650-842-7110
e-mail: mole@protogene.com

Quality Control Specialist Analytical Chemistry

AXYS Pharmaceuticals, formerly known as Arris Pharmaceutical Corporation, is a progressive, well-established biopharmaceutical company located in the San Francisco Bay Area. Using an innovative, team-oriented approach to drug discovery, we're focused on the discovery & development of diverse small molecule therapeutics for existing markets where present therapies have significant limitations. We're working on some extremely promising projects, creating a rare opportunity for a gifted QC professional to help us pioneer the future of drug discovery.

As a key member of our analytical group, you will develop, validate and perform high throughput analysis for quality control of our combinatorial library products. Ideal candidates will possess an MS in chemistry along with 3-5 years of relevant industrial experience. Prior QC & HPLC operation/maintenance experience is required. Supervisory experience in a QC environment is preferred, as is knowledge of GLPs & GMPs. For additional employment opportunities or more information about the company, please stop by and see us at the Science Career Fair being held on March 20 & 21 at Stanford University, or visit our web site at www.axyspharm.com.

We offer attractive salaries & benefits, generous equity participation and the opportunity to make significant contributions in breakthrough areas of drug discovery. To apply, please forward your resume to:

AXYS Pharmaceutical
Human Resources Dept.
(Attn: Job# SCI0313-QC)
180 Kimball Way
South San Francisco, CA 94080
email: human_resources@arris.com
www.axyspharm.com

THE
CUTTING
EDGE
OF DRUG
DISCOVERY

AXYS
Pharmaceutical

EOE

PENNSTATE



College of Medicine

POSTDOCTORAL FELLOW REGULATION OF GENE EXPRESSION

A Postdoctoral Fellow position is available at the Weis Center for Research in the Laboratory of Dr. Lawrence I. Rothblum. The Postdoctoral Fellow will study the mechanisms of transcription by RNA polymerase I as well as the signaling pathways involved in the regulation of ribosomal DNA transcription (see Mol. Cell Biol. 16:557-563, 1996; Nature 374:177-180, 1995). The successful candidate will have experience in one or more of the following areas: in-vitro transcription, enzyme/protein purification, recombinant DNA/protein expression, cell culture, and protein-protein or protein-nucleic acid interactions. The Weis Center for Research in Danville, PA is in a semi-rural area with convenient access to the major metropolitan areas of New York and Baltimore. The Center provides modern, fully equipped research facilities for 90 faculty and research personnel. Interested individuals should send their curriculum vitae and the names of three references to: **Lawrence Rothblum, Ph.D., c/o Mrs. Barbara A. Brown, Administrative Assistant, Henry Hood Research Program, Sigfried and Janet Weis Center for Research, 100 North Academy Avenue, Box SCI, Danville, PA 17822-2601. AA/EOE**



**East Stroudsburg
University of
Pennsylvania**

**BIOLOGICAL SCIENCES
DEPARTMENT**

Human Physiologist Assistant Professor, full-time tenure track position beginning with the fall semester 1998. The successful candidate will teach Human Anatomy and Physiology, comparative animal physiology, introductory level courses and may participate in Pre-Med. advising. Ph.D. is required. The applicant should have a strong commitment to teaching undergraduates. Teaching experience is preferred. Final determination will require an interview and include teaching or lecture demonstrations. Applicants should specify the human physiologist position and submit current curriculum vita, transcripts, and three letters of reference by April 10, 1998 to: G. Milewski, Search and Screen Chairperson, Department of Biological Sciences, East Stroudsburg University, 200 Prospect Street, East Stroudsburg, PA 18301-2999.

ESU is an equal opportunity employer. Minorities and women are strongly encouraged to apply.



**DEPUTY DIRECTOR
NATIONAL INSTITUTE OF MENTAL HEALTH
NATIONAL INSTITUTES OF HEALTH**

Nominations and applications are invited for the position of Deputy Director, National Institute of Mental Health (NIMH), located in Rockville, Maryland. This program is the largest scientific research center in the world focused on mental health, mental illness, and behavioral and brain research. Its diverse research programs are staffed with over 900 employees in various scientific, technical, and administrative occupations. The FY 1998 budget exceeds \$750 million.

The Deputy Director, NIMH shares responsibility with the Institute Director for the management of all scientific, fiscal, and personnel resources. The Deputy is involved in planning and directing basic and clinical research programs, supervising the training of scientists, implementing national science policy, and administering and evaluating mental health programs.

Minimum qualification requirements include a degree of Doctor of Medicine, Doctor of Philosophy, Doctor of Osteopathy, or a Bachelor's or higher degree in an academic field related to the health sciences, and progressively responsible experience in developing, administering, and evaluating biomedical research programs.

The person selected for the position may receive a career appointment to the Executive Service with an annual salary range of \$106,412 to \$125,900. Physicians may be eligible for a Physician's Comparability Allowance up to \$20,000 per annum. And, a recruitment bonus of up to 25% of base pay may be available. Alternately, this position may be filled through an appointment in the Public Health Service Commissioned Corps.

Further information about the position and qualification requirements may be obtained by contacting **Pat Middleton at (301) 443-9094**. Applications materials should be submitted to:

**Ms. Pat Middleton
National Institute of Mental Health Personnel
Parklawn Building, Room 7C15
5600 Fishers Lane
Rockville, MD 20857**

Completed applications must be postmarked by the closing date of the vacancy announcement, April 30, 1998.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

Join the USA QIAGEN team...



Take advantage of expanding business opportunities in the molecular biology research markets! QIAGEN, the worldwide leader in nucleic acid purification, is seeking highly motivated and talented individuals to join our team. QIAGEN is committed to providing high quality, innovative purification products to the molecular biology and molecular diagnostic research communities.

Technical Support Specialists. Responsibilities include providing technical support for all products at QIAGEN, which include nucleic acid purification, protein expression and purification, amplification enzymes, and transfection products, as well as support for any related applications. Additional duties include providing technical and nontechnical training, writing and editing technical literature, giving seminars and workshops, and attending scientific meetings. Some travel may be required. Ph.D./M.S. degree in molecular biology or related discipline and at least 2 years of laboratory experience required. Broad molecular biology experience and outstanding verbal and written communication skills required. Experience in transfection or recombinant protein expression and purification is desirable. (Reference TSS-0398).

Send résumé to: **QIAGEN Inc., (Ref. TSS-0398) HR Dept., 28159 Avenue Stanford, Valencia, CA 91355. Fax to: (805) 295-7963. No calls, please.**

**Faculty Position
Division of Basic Sciences
Department of Pediatrics
National Jewish Medical and Research Center**

The Division announces the availability of faculty positions for individuals who will establish competitive research programs in molecular and cellular biology. This may include developmental biology, immunology, molecular and/or human genetics and the proteome as it exploits genome technology. Areas of particular interest include gene targeting, cytokine biology, cell adhesion, transcriptional control and structural biology.

Candidates should have a Ph.D and/or M.D. degree, at least two years of post doctoral experience, and a proven record of outstanding research. An excellent start-up package will allow the successful candidate to rapidly develop an independent research program.

Please send a curriculum vitae, research statement, and three letters of reference to:

Gary L. Johnson, Ph.D

Chair, Search Committee

Director, Program in Molecular Signal Transduction

Division of Basic Sciences

National Jewish Medical and Research Center

1400 Jackson St.

Denver, CO 80206

An AA/EEO Employer

**NATIONAL
JEWISH
Medical and Research Center**

Join A Select Team!

Vysis is a leading Genomic Disease Management company that develops, commercializes and markets clinical products that provide information critical to the evaluation and management of cancer, prenatal disorders and other genetic diseases. We're seeking self-motivated individuals with good problem-solving and communication skills to join a team of scientists and engineers. We currently have openings in our Research & Development division.

SCIENTIST — Assay Development:

This position focuses on the application of molecular methods for the development of assays. Ph.D. in biochemistry or biological science with 4+ years postdoctoral experience in molecular biology or biochemistry is required, along with additional expertise in immunohistochemistry, gene expression, protein chemistry, factorial design and statistical analysis. Experience in the study of human disease and/or mammalian disease models is preferred.

SCIENTIST — Enzyme Purification:

This position requires a Molecular Biologist or Biochemist with experience in large-scale enzyme purification. An M.S. and significant relative experience is required; Ph.D. preferred. Responsibilities include the production of enzymes and completing research and development for Q-beta assays.

BIOCHEMIST or MOLECULAR BIOLOGIST:

This position develops methodologies for the detection of small aberrations within the human genome. We require a Ph.D. and 2+ years postdoctorate experience, as well as experience in several of the following areas: fluorescence spectroscopy, high sensitivity detection methods, DNA amplification techniques, DNA and protein conjugation chemistry, analytical chemistry/biology techniques, and instrument design/modification.

SENIOR INSTRUMENTATION ENGINEER:

This position participates in the automation of FISH assays. Duties include developing technical design concepts and project plans, interfacing with outside engineering firms, and leading internal research and development efforts. We require appropriate qualifications in microbiology, biochemistry, mechanical engineering or related field and 5+ years experience developing automated immunoassays or related fluid handling systems.

SENIOR NUCLEIC ACID BIOCHEMIST — DNA Array-Based Assays:

This position participates in the research and development of DNA array-based assays, along with the development of small instrumentation for fluid handling, methods and instrumentation for assay enhancement and for DNA array device manufacture. We require a Ph.D. in genetics, biochemistry, molecular biology, microbiology or related science and either postdoctoral or industrial experience. Demonstrated proficiency in DNA-based research and diagnostics is essential.

SCIENTIST

— DNA Array-Based Assays:

This position develops DNA array-based assays for the detection of human genetic disease; specific responsibilities include developing DNA chips for the detection of microdeletions and aneuploidies for prenatal screening. We require a Master's in biology, molecular biology, microbiology, biochemistry or related science and a solid background in human genetics, cancer, and/or cytogenetics. Postdoctoral or industrial experience is preferred. Broad laboratory experience in nucleic acid techniques, genetic engineering, and molecular biology of the human genome is essential.

Respond by submitting a cover letter, curriculum vitae and salary history to: **Vysis, Inc., Human Resources Director, 3100 Woodcreek Drive, Downers Grove, Illinois 60515. Fax: (630) 271-7008. www.vysis.com. EOE M/F/D/V.**



HARVARD MEDICAL SCHOOL
and
MASSACHUSETTS GENERAL HOSPITAL



are actively recruiting

Postdoctoral Research Fellows

with backgrounds in

**Biomedical Engineering
Physics/Biophysics
Molecular Biology
Optical Imaging**

**Oncology
Pathology
Physiology
Immunology**

The Edwin L. Steele Laboratory (MGH/HMS) is committed to improving detection and treatment of cancer through a better understanding of tumor pathophysiology and barriers to delivery of therapeutic agents. There are nine openings for postdoctoral fellows in any of our six main research areas:

Angiogenesis & blood flow
Metabolic microenvironment
Mathematical modeling

Transvascular transport
Interstitial transport
Cell transport

Individuals must possess a Ph.D. and/or M.D., research experience, strong organizational, interpersonal, communication, and computer skills and be prepared to work in a dynamic team environment (two year minimum commitment). Applicants should send a C.V. indicating their area of expertise, a career statement and three reference letters to: **Rakesh K. Jain, Department of Radiation Oncology, Massachusetts General Hospital, Boston, MA 02114.**



For more information about the research activities of the Steele Laboratory, please visit our web site at <<http://steele.mgh.harvard.edu/steele/positions.html>>.

The Massachusetts General Hospital is an Affirmative Action/Equal Opportunity Employer. Applications from women and members of minority groups are encouraged.

Scientist Positions Available

KOSAN

Biosciences, Inc. is an early stage biotechnology company developing "Combinatorial Biosynthesis" — the generation of novel organic molecules and drugs by genetic engineering of biosynthetic pathways. All positions require a Ph.D., preferably with postdoctoral or equivalent industrial experience. We seek highly motivated and resourceful scientists and senior scientists in the following areas:

Molecular Biology. General molecular biology experience is required. Responsibilities: cloning, characterization, mutagenesis, and expression of genes encoding biosynthetic pathways.

Microbial Genetics. General microbial genetics experience is required. Experience with *Actinomyces* or microbial physiology is desirable. Responsibilities: developing genetic methods to improve expression of biosynthetic enzymes and production of secondary metabolites.

Chemistry. Synthetic organic chemistry experience is required. Responsibilities: developing methodologies for synthesis and synthetic modifications of natural metabolites.

Fermentation Biology. Experience with *Actinomyces* fermentation and knowledge of microbial physiology are preferred. Responsibilities: yield improvement of recombinant organisms and establishing a fermentation facility for the production of secondary metabolites in stirred fermentors.

We offer an exciting research environment and a competitive salary and benefits package. Qualified candidates should mail their résumé, a list of references, and a cover letter indicating position of interest to:

**Recruitment
Kosan Biosciences, Inc.
1450 Rollins Road
Burlingame, CA 94010.**

CONFERENCE



4TH ANNUAL CONFERENCE & EXHIBITION

September 21-24, 1998

The Baltimore Convention Center, Baltimore, MD USA

Call for Papers

Abstracts for oral presentation are being accepted through June 1, 1998 and will be selected on the basis of originality and merit. Papers received after this date will be considered for poster presentation. Abstracts should be submitted via email or disk in MS Word or Ascii format (include print out also) to the SBS Office for review.

Short Courses

Topics: Automation, Genomics and Assay Design

Technical Program and Commercial Exhibits

Monday, September 21, 1998

Session 1: Functional Genomics and Lead Generation

Tuesday, September 22, 1998

Session 2a: Engineered Cell Lines for HTS
Session 2b: Tracking Chemical Diversity

Wednesday, September 23, 1998

Session 3: Future Trends in Automation
Session 4: Detection Strategies

Thursday, September 24, 1998

Session 5: High Throughput Toxicity/DMPK Assays
Session 6: Case Studies in Discovery of Drugs from HTS-Taking Leads to the Clinic



Additional Information

Society for Biomolecular Screening, 36 Tamarack Avenue, Suite 348, Danbury, CT 06811 USA
Tel: (203) 743-1336 • Fax: (203) 748-7557 • Email: sbsemail@aol.com



WWW.SBSONLINE.ORG

SYMPOSIUM

Announcing...

**The Fourth National Health and Environmental Effects
Research Laboratory (NHEERL) Symposium on Research
Advances in Risk Assessment**

*Extrapolation in Human
Health and Ecological
Risk Assessments*



April 27-30, 1998
Cary, North Carolina

Risk-based environmental decisions are rarely based on effects information measured directly in humans or entire ecological systems. More typically, assessments of risk are based on extrapolations of measured endpoints to the effects of concern. Such extrapolations are a major source of uncertainty in human health and ecological risk assessments. Potential integration of health and ecological risk research to improve extrapolation approaches will be explored in the Fourth NHEERL Symposium Series on Research Advances in Risk Assessment. The Symposium will focus on the methods, models, and data employed to extrapolate across biological organization, spatial scales, and through time. Key health and ecological effects research issues will be highlighted. Presentations and discussions will identify commonalities in research approaches and methodologies for conducting extrapolations, with the fundamental goal of reducing uncertainties in human health and ecological risk assessments. The format will include invited platform presentations, panel discussions, and contributed poster presentations.

For poster presentations, guidelines, and/or Symposium information, contact: Laurel Consulting Group, 14504 Greenview Drive, Suite 500, Laurel, MD 20708, attention: Ms. Chris Waddell. Telephone: (301) 490-5500. Fax: (301) 490-7260. Email: cwaddell@lcnnet.com.

Sponsored by: The National Health and Environmental Effects Research Laboratory (NHEERL), U.S. Environmental Protection Agency

CHATHAM COLLEGE Visiting Assistant Professor Environmental Studies

Chatham College invites nominations and applications for a one-year Visiting Assistant Professor of Environmental Studies position to begin in August 1998. A specialization in ecological economics and environmental policy development is preferred. The candidate should be prepared to teach courses in ecological economics, natural resource accounting, integrating environmental economics in policy development, and contribute to courses in risk assessment. Chatham College also values interdisciplinary activity, in teaching as well as program options for students, and applicants must be willing to assume the interdisciplinary perspective in response to college and departmental needs. Specifically, the candidate will be asked to participate in some team-teaching and development of an environmental major.

Preferred candidates must have a Ph.D., or have completed requirements for a Ph.D., although A.B.D. candidates will also be considered.

Founded in 1869, Chatham College is a private, nonsectarian institution, offering baccalaureate degrees only to women. Master's degrees offered to women and men. The College, a pioneer in curricular progress, is dedicated to enabling its graduates to make an impact on the world around them. Students and staff have easy access to Pittsburgh's dynamic cultural and entertainment opportunities and can share in educational and social offerings of nine other area colleges and universities.

Please send a curriculum vitae, cover letter describing your interest and qualifications for this position, and names and contacts of four references to: Chatham College, Human Resources Department, Job #248 Woodland Road, Pittsburgh, PA 15232.

the future happens here first

Roche

Bioscience

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

We proudly offer ongoing career opportunities for Research Associates and Scientists in most areas of modern biology and chemistry. To learn more about these and other opportunities currently available, please visit us on the Web at: www.roche.com/bioscience.

Located in the San Francisco Bay Area--close to Stanford University and near scores of biotechnology companies--Roche Bioscience is proud to offer competitive salaries and a full benefits package, which includes incentive bonuses, relocation assistance, 401(k) and pension plans. Our progressive environment also features an on-site Fitness Center to help our employees maintain the best possible quality of life. If you would like to explore our opportunities firsthand, apply today by sending your resume to: Roche Bioscience, 3401 Hillview Avenue, Job Code: SCI0313-LY, Palo Alto, CA 94304. Fax 650/424-8159. As an equal opportunity employer, we are committed to workforce diversity.

NOVARTIS

Innovative. Progressive. Responsive. This best describes our philosophy at Novartis Pharmaceuticals Corporation. Resulting from the merger of Ciba and Sandoz, Novartis is now the largest pharmaceutical company in the world. And we will continue to grow by discovering, researching, developing and manufacturing innovative prescription drugs that treat a wide variety of diseases and conditions (including organ transplantation, cardiovascular diseases, schizophrenia, cancer, epilepsy and arthritis)...we are helping millions of people live longer, healthier lives. To do this effectively, we are investing over \$1 billion annually in pharmaceutical research and development.

We are also dedicated to providing a stimulating environment that is conducive to professional growth. We invite you to investigate the following opportunities at our state-of-the-art northern New Jersey location:

Postdoctoral Fellow Computer Aided Molecular Modeling Research

With a focus on Core Technologies, you will conduct studies involving de novo protein structure prediction methods; as you enhance your expertise in some area (such as using sequence based NMR restraint and/or other approaches to develop tertiary and quaternary structural models to predict topological elements, domain regions, folding patterns, surface residues, loop structures, etc.) through critical reviews and examination of alternate approaches and testing with in-house protein projects. Qualifications include a Ph.D. in Chemistry, Molecular Biology, Biochemistry or a related discipline, along with a high level of expertise in de novo protein structure prediction or protein homology modeling; extensive and critical knowledge of other approaches is expected. Skills in the use of common Computer Aided Molecular Design resources within a UNIX environment are required; knowledge of biophysical principles and literature of protein structure is essential. Strong interpersonal skills are important. Our postdoctoral assignments, which encourage creative thinking and offer ample opportunities for publication and research presentation, are for one year and may be renewable for a second year by mutual agreement.

PRINCIPALS ONLY: send your resume/curriculum vitae and letter of interest, indicating GC-PD068 on resume AND envelope, to: R&D Staffing, Novartis Pharmaceuticals Corporation, 556 Morris Avenue, Building G2, Summit, NJ 07901. We are an equal opportunity employer M/F/D/V. We appreciate your interest in our Company. Unfortunately, we will only be able to respond to those candidates chosen for interviews or additional follow-up.

GRANT

NEUROSCIENCE THE EJLB FOUNDATION SCHOLAR RESEARCH PROGRAMME

The EJLB Foundation awards each year up to seven (7) grants for research projects in all areas of neuroscience that pertain directly or indirectly to schizophrenia and mental diseases. Specific areas of support in the past have included: developmental neurobiology, synaptic mechanisms, systems and cognitive neuroscience, and clinical studies on the genetic and physiopathologic aspects of neurological and psychiatric disorders.

Eligibility for such grants is restricted to young scientists who are pursuing an independent research career and have given evidence of having significant potential. It is also a requirement that these scientists (i) have earned an M.D. and/or a Ph.D. degree; (ii) have completed their postgraduate training; and (iii) have been admitted after June 15, 1993, as faculty members of a leading university, or an affiliated nonprofit research centre, in Canada or elsewhere in the world.

Each grant is of CAN\$300,000, is disbursed over three (3) years, and is nonrenewable. The next closing date for receipt of letters of intent is May 1, 1998.

Full details regarding this programme and required letter of intent forms may be obtained from:

The EJLB Foundation
1350 Sherbrooke Street West-Suite 1050,
Montréal, Québec H3G 1J1 CANADA.
Fax (for inquiries only) 514-843-4080.

OREAD

Single-Source Drug Development & Manufacturing

Due to our rapid growth, Oread, a recognized leader in contract drug development & manufacturing, is seeking experienced candidates for the following positions.

FORMULATION SCIENTIST

BS/MS/Ph.D. in Pharmaceutics, Pharmaceutical Sciences or related degree & have 1+ yrs pharmaceutical industry exp in parenterals, solid dosages or liquid form. Positions available in Lawrence, KS & Palo Alto, CA.

PHARMACEUTICAL ANALYSIS

BA/BS/MS/Ph.D. in relevant scientific field with 3+ yrs pharmaceutical industry exp. Qualified candidates must be able to evaluate physical properties & chem reactivities of potential drugs & apply that to analytical product development. (KS & CA)

For consideration please fax or mail resume to:

Oread
Attn: Human Resources
3401P Hillview Avenue
Palo Alto, CA 94304-1351

• No Calls Please/EOE •

FAX (650) 813-4600

Please check out our web page at:
www.oread.com

SYMPOSIUM

NATIONAL INSTITUTES OF HEALTH NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES Mini-Symposium

**Molecular Basis
for the Prevention of Colon,
Breast, and other Cancers by
Aspirin and other NSAIDs**

**May 14-15, 1998
Research Triangle Park, NC**

Program

Prostaglandin H synthase (cox) and colon cancer

Dr. Michael Thun
Dr. Raymond DuBois
Dr. Lawrence Marnett

Mouse models for colon cancer-Cox/Apc

Dr. William Dove
Dr. Jilly F. Evans
Dr. Pat Chulada
Dr. Robert Langenbach

Biological consequences of cox-2 over-expression

Dr. Raymond DuBois
Dr. Hideki Kamitani
Dr. Thomas Eling
Dr. Steven Shiff

Inhibition of prostaglandin H synthase and tumor development

Dr. Monica Bertagnoli
Dr. Karen Siebert
Dr. Bandaru S. Reddy
Dr. Gary A. Piazza

Lipid metabolites—other cancers

Dr. Robert Langenbach
Dr. Kenneth V. Honn

Breast Cancer and lipid metabolites

Dr. J. Dirk Iglehart
Dr. David P. Rose
Dr. Fredika M. Robertson

NSAID Drugs and Breast Cancer

Dr. Ernest Hawk
Dr. Randall Harris
Dr. Kathleen Egan

**Application Deadline: April 1, 1998
For Information and Application Forms:**

**Carol Penberthy
NIEHS
P.O. Box 12233, Maildrop A2-01
Research Triangle Park, NC 27709
Telephone: (919) 541-7797
FAX: (919) 541-0146**

Your credentials as a research scientist are impressive. Now build on your success with American Cyanamid Company, whose impressive innovations are recognized throughout the world. As a member of our team, you can share in the success of a research-driven life sciences company that continues to earn respect for its discovery, development and manufacture of agricultural and crop protection products. Consider how you can advance your expertise in one of the following positions:

YEAST MOLECULAR BIOLOGIST

Join us in the discovery of new crop protection and pharmaceutical products through the design and development of mechanism-based screens in yeast that are implemented on high throughput robotics systems. We offer you the opportunity to conduct advanced laboratory research and to collaborate with other laboratories involved in many aspects of the research. To meet the demands of this position, you must have a Master's degree and experience in Yeast Genetics, Molecular Biology and Cell Biology. We also require strong multi-tasking skills and the ability to achieve in a team environment. **Job Code: S01**

MOLECULAR BIOLOGIST ENTOMOLOGY, BIOCHEMISTRY

Meet the challenge of cloning and expressing insect genes for assay development, mode of action research and screen development. The scope of your responsibilities on our 10-member team also may encompass electrophysiology or biochemistry (arthropod venom purification and testing). To succeed, you must have a degree (a Master's is preferred) in Molecular Biology and at least 2 years of laboratory experience that demonstrates your command of insect biology or physiology. **Job Code: S02**

PRODUCT DEVELOPMENT MANAGERS

As we expand the scope and size of our IMI® Crops program, we can offer you a leading role in the development of crops that are tolerant to imidazolinone herbicides. We'll rely on you to identify and implement genetic strategies to achieve herbicide tolerance in major crops, manage seed partner relationships, and coordinate seed increases in line with herbicide registration and business timelines. Your impact will extend to overseeing the completion of regulatory studies in accordance with registration requirements, managing a field trial program, and coordinating the activities of cooperator and company scientists to ensure that we achieve our product development objectives. To meet these challenges, you must have an MS or PhD in Cell Biology (transformation), Molecular Biology or Plant Breeding along with a record of at least 5 years of R&D success. **Job Code: S03**

PLANT MOLECULAR BIOLOGIST

Join our Target Gene Identification Group in meeting a range of challenges and enjoy the opportunity to advance your achievements in collaboration with molecular biologists, plant physiologists, biochemists, and cell biologists and share in our continued success in the identification and isolation of genes used in crop protection. To meet the demands of this position, you must have a PhD and 2 years of postdoctoral experience in an area of Plant Molecular Biology. Strong computer skills and a command of bioinformatics are essential; a background in genomic approaches to gene discovery, gene mutagenesis/tagging, expression array technologies, and BAC/YAC libraries is preferred. **Job Code S08**

Located in Princeton, NJ, American Cyanamid's state of the art research facility is situated midway between New York and Philadelphia. Princeton is a major research hub as well as a local cultural and educational center. We offer competitive compensation, comprehensive benefits and the opportunity for professional growth. For immediate consideration, please forward your resume, indicating appropriate Job Code, to: **American Cyanamid Company, Human Resources, P.O. Box 400, Princeton, NJ 08543-0400; Fax: (609) 275-3502; or e-mail: princeton_resume@pt.cyanamid.com** Principals only. Equal Opportunity Employer M/F/D/V.





National Center for Genome Resources

Due to our rapid growth in the field of bioinformatics, NCGR in Santa Fe, New Mexico, is seeking the following individuals:

Vice President of Bioinformatics and Biotechnology

Highly motivated scientist needed to direct our organization's national and international effort in genomics. Will set direction for our experienced database and software development staff and scientists in developing cutting-edge bioinformatics tools and programs. Required: Ph.D. in molecular biology, genetics, or related field and relevant post-doctoral experience, first-hand experience in managing genomic projects or genomic data, experience in bioinformatics and large-scale databases. Strong people management skills are a must.

Computational Biologists

Will design, develop and implement algorithms and software systems for translating and integrating genomic data into information useful to bench biologists, chemists and others. Required: Ph.D. in related field or demonstrated skills in algorithm development; broad understanding of, and experience in, bioinformatics (acquisition, storage, and analysis of biological data); comprehensive knowledge of genomics, including DNA sequencing; experience with database curation and user support; knowledge of SQL; excellent communication skills.

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

E-mail to: hr@ncgr.org (in ascii format) or send via fax to: 1-505-995-4461

Send via mail to: NCGR, 1800-A Old Pecos Trail, Santa Fe, NM 87505

EOE

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:

MOLECULAR/YEAST BIOLOGY

Code: S-MYB BS/MS scientists with a minimum of 2 years experience or Ph.D. scientists with a minimum of 3 years postdoctoral research experience in molecular biology for a project expressing mammalian signal transduction proteins in yeast. Background in cellular and molecular biology or biochemistry is required. Experience with yeast and protein analysis is preferred.

DRUG DISCOVERY/CELL BIOLOGY

Code: S-DD BS/MS scientists with a minimum of 1 year 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.

GENOMICS EXPERT

Code: S-G Ph.D. scientists with minimum 2 years post doctoral experience in molecular biology and cloning full length cDNA. Experience in cloning vector construction, isolation of cDNAs from large genomic clones or degenerate PCR methodologies is desirable.

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.

*...turning the Human Genome Project
into Drug Discovery*

CADUS

**PHARMACEUTICAL
CORPORATION**



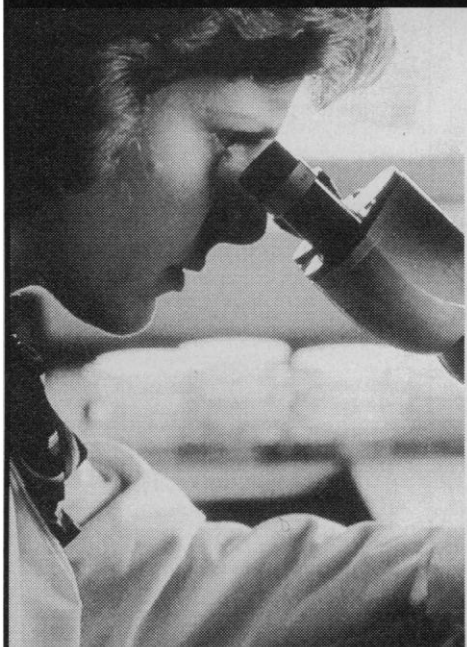
Three Assistant Professor Positions

The University of Mississippi, Department of Biology invites applications for three Assistant Professor positions (tenure-track) to complement the department research focus in ecology and evolution. All three positions require the Ph.D. in biological sciences or a related discipline and demonstrated evidence of excellence in research and teaching. It is expected that successful candidates will establish an extramurally funded research program involving the training of doctoral students. In addition to the specific duties listed below, the successful candidate in each position will teach freshmen biology (majors or non-majors) on rotation, advise undergraduate students, direct undergraduate research, and provide service to the department and the university.

(1) **Vertebrate ecological physiology**—We seek someone with a strong background in basic physiology with research experience related to the evolution and ecology of basic physiological mechanisms at the cellular or whole-animal level. Successful candidate will teach general physiology for upper-division undergraduate students in a newly renovated physiology lab complex and graduate courses in speciality. Position available August 1998 or January 1999. Review of applications to begin 1 April 1998. (2) **Plant systematics**—Preference will be given to candidates using modern techniques to address systematic problems in plants. A strong background in evolutionary theory is expected. Familiarity with habitats of the southeastern U.S. and/or the neotropics is highly desirable. The successful candidate will teach undergraduate courses in systematics, botany, plant diversity, and graduate courses in area of speciality and will be strongly encouraged to participate in a new summer teaching program in Belize. Candidates who will participate in the growth and development of the University of Mississippi Herbarium and develop collaborations with the National Center for the Development of Natural Products at the University of Mississippi are preferred. Position available January 1999 or August 1999. Review of applications to begin 1 August 1998. (3) This position will be filled with an individual in either the area of **conservation ecology** or in the area of **evolutionary ecology**, two areas in which we wish to expand our research activities. Preference will be given to candidates who strongly complement existing research programs in the department. Position available January 1999 or August 1999. Review of applications to begin 1 August 1998.

Candidates should send (1) curriculum vitae, (2) up to 5 reprints or preprints of recent work, (3) statement of research and teaching interests and philosophy, (4) evidence of teaching experience and effectiveness, and (5) names and postal and e-mail addresses of three references. Send applications to **Dr. Rebecca Holberton** (vertebrate physiology); **Dr. Stephen Brewer** (plant systematics); **Dr. Stephen Threlkeld** (conservation ecology or evolutionary ecology), at **Department of Biology, University of Mississippi, University, Mississippi 38677 U.S.A.** Review of applications will continue until positions are filled. Candidates are strongly encouraged to consult the department web page (<http://www.olemiss.edu/depts/biology/>). *Women and minorities are especially encouraged to apply. The University of Mississippi is an Affirmative Action/Americans with Disabilities Act/Equal Opportunity Employer.*

THE NATIONAL CANCER INSTITUTE
ANNOUNCES ITS
SCHOLARS PROGRAM



A CAREER DEVELOPMENT PROGRAM PROVIDING
OUTSTANDING NEW INVESTIGATORS

AN OPPORTUNITY TO ESTABLISH A FIRST
INDEPENDENT RESEARCH PROGRAM

- Scholars receive up to 4 years of support at the NCI, followed by up to 2 years of support in an extramural institution through a K22 Career Transition Award.
- U.S. citizens or resident aliens with no more than 5 years of post-doctoral research training in the areas of basic, clinical, or population based biomedical research are invited to apply.
- Applications are due April 24, 1998.

For more details, contact:

Vincent J. Cairoli, Cancer Training Branch, National Cancer Institute
301-496-8580 ■ 301-402-4472 (Fax) ■ VC14Z@nih.gov ■ <http://www.nci.nih.gov>

United States Department of Agriculture

Opportunities for...

RESEARCH SCIENTISTS & POSTDOCTORAL RESEARCH ASSOCIATES



The Agricultural Research Service is an agency within the U.S. Department of Agriculture that provides the means for solving food and farm problems. Our research assures that Americans have the best quality and supply of food and fiber (leather, cotton, wool, timber). The ARS mission is to plan, develop and continue research for new knowledge and technologies, including six research objectives: 1) Natural Resources; 2) Plant Science; 3) Animal Science; 4) New Uses for Farm Commodities; 5) Nutrition; and 6) Data Systems.

Opportunities exist nationwide in many research areas, including:

- Human Nutrition
- Genetics
- Immunology
- Virology
- Biochemistry
- Chemistry
- Microbiology
- Animal Science
- Entomology
- Plant Physiology
- Plant Pathology
- Agronomy
- Soil Science
- Engineering

Individual vacancies will be advertised and announcements can be accessed on the ARS Home Page at:
<http://www.ars.usda.gov>.

Research Scientist appointments may be permanent or temporary and require U.S. citizenship.

Postdoctoral Research Associate opportunities are initially for up to 2 years. There are some employment restrictions for non-U.S. citizens.

If access is unavailable via internet, you may call or write for written descriptions of positions and application procedures:

Susan Dixon
Human Resources Division
USDA/ARS/REDS
Building 3
5601 Sunnyside Avenue
Beltsville, MD 20705-5100
301-344-8057
sdixon@ars.usda.gov

ARS is an Equal Opportunity
Employer



**St. Jude Children's
Research Hospital**

ALSAC - Danny Thomas, Founder

Postdoctoral Fellowships in Cancer Biology

Two postdoctoral fellowships supported by an NIH/NCI Training Grant in Cancer Biology are currently available. Candidates with an interest in using basic research to understand the biology of cancer and who have recently completed their Ph.D., M.D., or Pharm.D. training are urged to apply. The St. Jude Cancer Center contains several interdepartmental programs comprised of basic scientists and clinicians. Fellows will work under the direction of a research scientist in one of the following cancer related programs: hematological malignancies, molecular oncogenesis, neurobiology & brain tumors, signal transduction, solid malignancies, transplantation & gene therapy, and viral oncogenesis & tumor immunology. Only U.S. citizens and permanent residents are eligible for these positions. Minority candidates are particularly urged to apply.

Applicants should provide a curriculum vitae along with a brief description of research interests and have three letters of reference sent to:

Linda M. Hendershot, Ph.D.
Program Director
Department of Tumor Cell Biology
St. Jude Children's Research Hospital
332 N. Lauderdale
Memphis, TN 38105-2794

All information must be received by May 1, 1998. St. Jude is an equal opportunity/affirmative action employer.

POSTDOCTORAL POSITIONS IN CANCER MOLECULAR BIOLOGY

Strang Cancer Prevention Center is dedicated to interdisciplinary research to prevent cancer and promote cure through early detection. It is affiliated with Cornell University Medical College and is situated on The Rockefeller University campus, providing a unique research environment. We are currently seeking energetic and enthusiastic individuals with PhD training in molecular biology/biochemistry/genetics and a record of productive research. Two positions are available immediately for the following projects:

1. Mechanisms of signaling by **Wnt proteins** in cell transformation and cancer. For further information, visit <http://www.med.cornell.edu/GS/fac/brown.html> or contact Dr. Anthony Brown at ambrown@mail.med.cornell.edu
2. The breast and ovarian cancer susceptibility gene product **BRCA1** and its role in transcription activation. Experience in the field of transcription would be an advantage. For further information, see Proc. Natl. Acad. Sci. 93:13595-13599 (1996) or contact Dr. Alvaro Monteiro at monteia@rockvax.rockefeller.edu

Applications with a CV and names of three references should be sent to: **A.M.C. Brown, PhD, Associate Director of Research, Strang Cancer Research Laboratory, Box 231 - The Rockefeller University, 1230 York Avenue, New York, NY 10021.**

Strang Cancer Prevention Center is an equal opportunity employer.

 **Strang**
Cancer Research Laboratory

MOLECULAR BIOLOGIST/ ASSAY DEVELOPMENT

Third Wave Technologies, Inc., a rapidly growing biotechnology company developing novel DNA and RNA based assays for genome and transcription analyses, is recruiting for several molecular assay development positions. Applicants should have a B.S. to Ph.D. in molecular biology, medical microbiology, biochemistry, or a related field, as well as at least one to five years of experience developing DNA probe assays for the detection of infectious diseases, genetic disorders, cancer, or gene expression. Candidates should have demonstrated knowledge of all mechanics of nucleic acid hybridization and amplification technologies. Ability to supervise and successfully lead a group of scientists is desired for senior-level positions. Third Wave Technologies, Inc. offers an attractive benefit and relocation package including stock options. Qualified candidates should send their résumé to:

Human Resources Department
Third Wave Technologies, Inc.
502 South Rosa Road
Madison, WI 53719
www.twt.com



The State University of New York at Buffalo Biological NMR Spectroscopy

The State University of New York at Buffalo seeks to fill at least one tenure-track/tenured faculty position of Open Rank. The area of specialization of the candidates should be in the application of NMR spectroscopy to problems in structural biology. The successful candidate is expected to establish an independent research program in this research area, to attract significant funding from national agencies, and to fully participate in graduate and undergraduate teaching and service. The primary appointment will be in the Department of Chemistry with opportunities for secondary appointments in the Departments of Biological Sciences, Biochemistry, and Physiology and Biophysics. Rank will be commensurate with experience and national stature. The candidate will be the primary user of Varian 600 and 750 MHz spectrometers installed in 1996/97. The position allows opportunities for collaborative research with other scientists in the newly formed Center for Structural Biology, including x-ray crystallographers in the Hauptman-Woodward Medical Research Institute and researchers at the Roswell Park Cancer Institute. Minimum qualifications are a Ph.D. in chemistry, biochemistry, biophysics, or a biological science with a strong background in NMR spectroscopy as applied to solution phase structures of biomolecules. Postdoctoral experience is highly recommended.

Candidates should send a curriculum vitae and a detailed description of research and teaching plans and should arrange for three (3) letters of recommendation to be forwarded to:

Chair, Structural Biology Search Committee
Department of Chemistry
State University of New York at Buffalo
Buffalo, NY 14260-3000

The University is particularly interested in considering applications from women, underrepresented minorities, or disabled persons. Applications will be considered immediately upon receipt, with a closing date of May 1, 1998.

SUNY at Buffalo is an Equal Opportunity/Affirmative Action Employer.

BIG CHALLENGES. GREAT SCIENCE.

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

CLINICAL PHARMACOKINETICIST, CLINICAL PHARMACOLOGY

Selected candidates will support our clinical research group; provide pharmacokinetic and pharmacodynamic support in all phases of clinical drug development for anti-viral and anti-cancer compounds; and perform study design and protocol writing, data analysis, report writing and assembly of pharmacokinetic sections for New Drug Applications. Qualified candidates will have a PharmD or PhD in pharmacological sciences with an emphasis on training in pharmacokinetics. Prior experience will ideally include 3-6 years' experience in a clinical research or similar environment. Code 410/BK2

PHD, MS AND BS SCIENTISTS, VIROLOGY

We are seeking experienced PhD, MS and BS level virologists to plan and implement research aimed at the discovery, evaluation and development of novel therapeutic anti-HIV agents. Candidates should have experience in infectious HIV cell-based assays, molecular biology, biochemistry, and have the desire to work in multi-disciplinary research teams. Code 125/AP

PHD, MS AND BS SCIENTISTS, PHARMACOLOGY RESEARCH

We are seeking a pharmacologist with expertise in ophthalmology and angiogenesis. The individual will be responsible for supporting discovery research and development of lead compounds for the clinic. Competency in basic vision research and animal model development required. Experience in angiogenesis, cellular and molecular biology, and pharmacokinetics preferred. Applicant must have excellent oral and written communication skills, computer literacy and be willing to travel 35% of the time. Code 125/DS

MS/BS SCIENTIST, CELL BIOLOGY

We are seeking a highly motivated biologist to help with our mammalian cell culture experiments and assays. Prior laboratory experience and additional knowledge of molecular biology and biochemistry techniques would also be helpful. Requirements include a MS or BS in cell biology, molecular biology, biochemistry or a related discipline, and an enthusiasm for research. Code 102/MZH

MS/BS BIOCHEMIST

We are seeking an experienced MS/BS biochemist to develop a variety of high-throughput screening assays. The successful candidate will have experience with assay development, drug screening, and adapting novel techniques to HTS. Direct knowledge of robotics is a plus. A degree in biochemistry or related field is preferred. Code 135/BL

Agouron offers competitive salaries and benefits.

Please send a detailed resume and salary history referencing code to: Human Resources, Code (see above), Agouron Pharmaceuticals, Inc., 3301 N. Torrey Pines Court, La Jolla, CA 92037; email: jobs@agouron.com; web site: <http://www.agouron.com>. EOE.



Agouron
Pharmaceuticals, Inc.



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

ALLERGY DISEASES DISCOVERY RESEARCH

AT SCHERING-PLOUGH

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

PRINCIPAL SCIENTIST Pulmonary Research

As a member of our Department of Allergy, you will join a group of scientists working on different aspects of lung function with the goal of developing therapeutic agents for airway disease. The motivated scientist we seek will be responsible for performing *in vivo* pharmacology studies emphasizing *in vivo* measurement of lung function. To qualify, you will need a PhD in Animal Physiology or a related area and some postdoctoral training. Previous experience in inflammatory research is desirable, but not essential.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to apply on-line at <http://www.sp-research.com> or send a scannable resume and cover letter referencing Department DD9884/RC-PC, original copy only, to: Schering-Plough Research Institute, MS #1250, 2015 Galloping Hill Road, Kenilworth, NJ 07033-0539. We are an equal opportunity employer. *We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.*



Schering-Plough
Research Institute

Using Science for Human Advantage

NeoRx Corporation, a Seattle based, publicly held biotechnology company, develops targeted biopharmaceuticals that detect and treat cancer and cardiovascular diseases.

Scientist Pharmacology

We are currently seeking an innovative, experienced scientist to contribute to NeoRx's research and development projects by providing pharmacokinetic analysis support and pre-clinical testing of novel therapeutics.

Primary responsibilities associated with this position are:

- Analyze patient samples for pharmacokinetic behavior of test agents to include: method development, analysis of patient samples and analysis of the data in the context of the clinical trial objectives.
- Collaborate with clinical trial site professionals and attend clinical meetings.
- Perform bioanalytical assessment of in vivo and in vitro metabolism, distribution and excretion of both proteinaceous and synthetic small molecule drug candidates in animal models.
- Develop and use analytical methodology using biochemical and spectroscopic characterization, as well as chromatographic and immunoassay techniques to support this assessment.
- Provide written preclinical pharmacokinetic, pharmacology and safety reports to support regulatory filings.
- Design, execute and interpret in vivo (in accordance with IACUC guidelines) and in vitro experiments.
- Develop and incorporate appropriate animal disease models.

Position qualifications:

The successful candidate will possess a Ph.D. or equivalent experience in a relevant field of science such as Biochemistry, Chemistry, Medicinal Chemistry, Pharmaceutics, Biology or Medical Sciences.

Scientist Immunologist

We are currently seeking a scientist who will plan and carry out the pre-clinical testing of novel therapeutic agents in the Molecular Biology group. The candidate will assist in product development teams and assess potential new opportunities.

Primary responsibilities associated with this position are:

- Design and implement animal models for testing novel therapeutics in various disease models.
- Participate in the evaluation and planning of potential new technologies or business opportunities.
- Provide in vitro support in immunology and histopathology for animal experiments.
- Help organize and compile scientific documents for communication with collaborators, clinical investigators, publication in scientific journals, poster sessions or abstracts.
- Keep legible, organized records of experiments performed, including reports and documents in a format acceptable for submission to a scientific journal.

Position qualifications:

The successful candidate will possess a Ph.D. and D.V.M, MD or Nursing background.

Interested candidates are invited to forward their resume with a cover letter in strict confidence to: Denise Lucero, NeoRx Corporation, 410 W. Harrison St., Seattle, WA 98119.

NEORX

An Equal Opportunity Employer M/F/H/V



HOWARD HUGHES MEDICAL INSTITUTE

EDITORIAL MANAGER PRINT & ELECTRONIC

The Howard Hughes Medical Institute conducts scientific research at leading academic medical centers throughout the United States and has a grants program that promotes science education, research and teaching careers.

We are seeking an Editorial Manager for our Grants Department to be responsible for:

- Ensuring publication quality standards for print and/or web materials including articles, directories, reports and publicity materials
- Planning publications from design to production
- Managing project schedules and budgets
- Selecting and supervising writers, editors, photographers, graphic designers and printers

Qualified candidates will have:

- Bachelor's degree in a Biological Science (Ph.D. preferred); background in English, Communications or Information Systems a plus
- 2-5 years experience managing a publications program (scientific or academic environment preferred)
- Demonstrated management skills with multiple projects and tight deadlines
- Excellent written/verbal communication and interpersonal skills
- Computer proficiency to include databases and scheduling software: familiarity with QuarkXPress, Illustrator, Photoshop, Acrobat a plus
- Knowledge of print design and related web design terminology

HHMI offers a competitive salary and excellent benefits package. Please send your resume and salary requirements to: **HHMI, Attn: HR-G, 4000 Jones Bridge Road, Chevy Chase, MD 20815-6789.** No phone calls please. EOF.

www.hhmi.org



UNIVERSITY OF RHODE ISLAND

Faculty Positions with the University of Rhode Island's Marine and Environmental Programs

Applications are invited for tenure-track faculty appointments in the following areas:

• **Air/Sea Exchange Chemistry**, Graduate School of Oceanography, John Merrill, Search Chair, Log #091229.

• **Light Stable Isotope Marine Geochemistry**, Graduate School of Oceanography, Steven D'Hondt, Search Chair, Log #091234 (this position subject to final budgetary approval).

• **Numerical Ocean Modeling (Coupling of Ocean Dynamics to Biology, Biogeochemistry, or the Atmosphere)**, Graduate School of Oceanography, Brian Heikes, Search Chair, Log #091225.

• **Experimental Economics and Environmental/Resource Economics**, Department of Environmental and Natural Resource Economics, James Opaluch, Search Chair, Log #191171.

• **Marine Vertebrate Biology**, Department of Biological Sciences, Richard Koske, Search Chair, Log #021322.

For complete position descriptions including job qualifications, application procedures, and timelines, visit our website at <http://www.gso.uri.edu/faculty/facintro.html> or call the office of the Vice Provost for Marine Programs, 401-874-2957.

Send applications: c/o Chair Name, Search Committee Chair, (Log #), P.O. Box G, University of Rhode Island, Kingston, RI 02881.

An Affirmative Action/Equal Opportunity Employer

**Basic Research on Animal Models of
Retroviral Pathogenesis
at the National Cancer Institute
Frederick Cancer Research and
Development Center
Frederick, Maryland
Announcement Number:
CA-97-1109-AM**

The National Cancer Institute is seeking scientists conducting basic or translational research employing and/or developing small animal model systems to study retrovirus pathogenesis, genetic diversity, and viral population dynamics. The successful candidate(s) will join a new program at the NCI-Frederick Cancer Research and Development Center (NCI-FCRDC) that will emphasize basic, clinical, and translational research on human retrovirus pathogenesis, retroviral genetic diversity and drug resistance, the biochemistry of viral enzymes, the mechanisms of genetic variation, small animal studies, and medicinal chemistry. In collaboration with **Dr. John Coffin**, this NCI-FCRDC program is the focal point of a major retrovirus research center in an excellent research environment with very strong support personnel and services and extensive opportunities for collaborations within and outside the NCI community. The NCI-FCRDC and the National Institutes of Health Animal Center in nearby Poolesville, Maryland have excellent facilities and services, as well as caretaking, technical and veterinary staffs, to support rodent and non-human private studies.

Successful candidates must be self-directed scientists with a Ph.D. and/or medical degree who will conduct independent, investigator-initiated studies. A fully equipped laboratory and technical support will be provided. The positions may be filled at any level—from Tenure-Track Investigator (Assistant Professor) to Senior Investigator (Full Professor), including Medical Officer with potential physician special pay. The total annual compensation will be commensurate with experience, accomplishments, and education.

To apply, please forward a curriculum vitae, bibliography, the names and addresses of 5 referees, and a detailed description of research interests to:

Dr. Marjorie C. Strobel (1109-AM)
Executive Secretary
NCI-FCRDC
Retrovirology Search Committee
Building 428, Room 39
Miller Drive
Frederick, MD 21702-1201

Applications may also be faxed to (301) 846-6092. The Search Committee will begin reviewing complete applications by April 1, 1998. All applications must be postmarked by May 1, 1998; late applications cannot be considered. For additional information, please call **Susan Nelson**, at (301) 846-5936 or (301) 846-1302.

Selection for these positions will be based on merit without discrimination for non-merit reasons such as race, color, religion, gender, national origin, politics, marital status, physical or mental disability, age, sexual orientation, or membership or nonmembership in an employee organization.

**THE NATIONAL CANCER INSTITUTE IS
AN EQUAL OPPORTUNITY EMPLOYER.**

POSTDOCTORAL FELLOWSHIP

IN NEW DRUG DEVELOPMENT

The Department of Clinical and Scientific Affairs (CSA), Pfizer Central Research, New York City announces its annual competition for a Postdoctoral Fellowship in New Drug Development.

The Department of Clinical and Scientific Affairs has a broad range of activities. It is responsible for designing and conducting clinical development programs for Pfizer-discovered compounds, as well as investigating and developing new claims and indications for marketed compounds. CSA also designs and conducts clinical development programs for new formulations and dosage forms of existing products.

This fellowship program is designed to provide diverse scientific training in the process of new drug development. The postdoctoral fellow will become a member of a pharmaceutical project team, and gain experience in the design and implementation of clinical research programs. While no laboratory or clinical studies are actually conducted at Pfizer in New York, the fellow will interact with specialists in his/her chosen field to have studies performed at contract laboratories, universities, and with individual investigators.

One fellowship will be awarded for clinical research related to new drug development in one of the following areas: allergy, central nervous system, gastroenterology, microbiology/infectious disease, and urology. Candidates should possess a doctoral degree (eg PhD), have a broad background in pharmacology/physiology, have no more than one year of non-industry postdoctoral experience, and **be authorized to engage in employment in the US**. Some prior experience with clinical trials or the drug development process is desirable, but not a prerequisite. Salary will be based on qualifications and experience.

Initial applications should include: 1) curriculum vitae containing education and training, research experience, awards, and a list of publications; 2) a statement describing research interests and experience, and how the proposed postdoctoral fellowship training relates to career goals; 3) one scientific reprint, which best describes the applicant's research results. The deadline for application is Friday, May 1, 1998.

For prompt consideration, please submit a scannable (no italics, graphics or staples) resume to: **Employee Resources, c/o Imaging Services, 235 East 42nd Street, 4th floor, Mail Stop #42, New York, NY 10017. Please indicate Reference Ad Code # 98-0002908 on both resume and envelope.** Pfizer is an equal opportunity employer.



SIGA Pharmaceuticals Don't Miss a Great Opportunity!

SIGA Pharmaceuticals Inc., an exciting new biotech company whose research and development activities are located in Corvallis, Oregon is currently seeking qualified individuals to fill five new positions at the Research Scientist I level. SIGA is at the cutting edge in new vaccine technology and novel anti-infectives and will provide qualified scientists with an opportunity unparalleled in today's industry setting.

Qualified applicants will have a Ph.D. in Microbiology, Molecular Biology, Immunology, or a related life science. Two years postdoctoral experience is required and experience working in an industry setting is preferred. The best applicants will be self-motivated, have strong interpersonal and organizational skills, the ability to work in a dynamic group setting, and the desire to succeed.

Research Scientist I — Vaccine Development (VDRS1) — Bacteriologist

The successful candidate will have responsibility for new antigen discovery, optimizing current vaccine candidates, and the design of animal studies to assess these candidates. Experience in molecular pathogenesis, antigen identification and isolation, and immunology are preferred. Oversight and training of junior scientists will be required.

Research Scientist I — Vaccine Development (VDRS2) — Immunologist

The successful candidate will have responsibility for the design and implementation of studies to enhance and dissect the immune response to various vaccine candidates. Experience in all facets of immunology, particularly mucosal immunology and cytokine networks therein, as applied to vaccine research, is desired. Oversight and training of junior scientists will be required.

Research Scientist I — Drug Discovery (DDRS1) — Molecular Biologist

The successful candidate will be responsible for identification and characterization of novel antimicrobial targets, assist in assay development and high-throughput screening of inhibitor libraries. Oversight and training of junior scientists will be required.

Research Scientist I — Drug Discovery (DDRS2) — Biochemist

The successful candidate will be responsible for biochemical characterization and purification of novel antimicrobial candidates, assay development, implementation and high-throughput screening. Oversight and training of junior scientists will be required.

Research Scientist I — Drug Discovery (DDRS3) — Structural Biologist

The successful candidate will be responsible for biochemical and structural characterization of novel antimicrobials. You should be familiar with cutting-edge technology in molecular modeling, structure-based design, and rational drug design. Oversight and training of junior scientists will be required.

SIGA offers a competitive salary and excellent benefits package and, in Northwestern Oregon, an unsurpassed quality of life. If you seek a challenge and would like to take part in the dynamic growth of a future leader in the development of novel pharmaceuticals for the clinic, please forward two copies of your CV and the names, addresses (street and e-mail) and phone numbers of three references to: **SIGA Pharmaceuticals, Inc., Research and Development Division, 4575 SW Research Way, Suite 230, Corvallis, OR 97333, Attn: Dennis E. Hruby, Ph.D.**

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OSI Pharmaceuticals, Inc. is an integrated drug discovery company with a mission to discover and develop novel pharmaceutical products. We have combined sophisticated molecular biology with industry pioneering robotics to become the leader in the field of small molecule drug discovery by automated high-throughput screening.

Research Scientist

This scientist will be responsible for target identification and selection, assay development, screening, drug discovery follow-up and the supervision of 1-2 Research Associates.

Minimum requirements for this position are 2-5 years of post-doctoral experience and broad training in pharmacology, biochemistry and animal biology. Must possess excellent written and oral presentation skills for communicating with internal/external collaborators. Experience in skin biology and hair growth field a plus.

OSI Pharmaceuticals offers a superb benefits package including stock options and opportunities for career development. Qualified candidates may send resumes to: **Director, Human Resources, OSI Pharmaceuticals, Inc., 106 Charles Lindbergh Blvd., Uniondale, NY 11553; Fax (516) 222-0114; e-mail: employment@osip.com.** Equal Opportunity Employer M/F/D/V.



OSI Pharmaceuticals

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NATIONAL JEWISH Medical and Research Center

Faculty Position

The Division of Basic Immunology at National Jewish Medical and Research Center invites applications for a faculty position at the Assistant or Associate Professor level. Individuals working in Immunology or related disciplines are encouraged to apply. Candidates should have a Ph.D. and/or M.D. degree, at least two years of postdoctoral experience, and a record of outstanding research. Interested individuals should send a curriculum vitae, a statement of research interests, and the names of three references to:

Dr. Philippa Marrack
Chair, Search Committee
Division of Basic Immunology
Department of Medicine
National Jewish Medical and Research Center
1400 Jackson Street
Denver, CO 80206

The National Jewish Medical and Research Center is an Affirmative Action/Equal Opportunity Employer.

Scientists

Advanced BioScience Laboratories, Inc., a wholly owned subsidiary of Organon Teknika Corp., is seeking highly qualified scientists to become part of its expanding Nucleic Acid Diagnostics Program. ABL/Organon Teknika is committed to the world-wide development of its proprietary NASBA technology in the field of nucleic acid diagnostics. Candidates at the scientist level are being sought with the following credentials:

Molecular Immunology

The candidate should have a PhD with at least 3 years of experience in molecular biology, with emphasis in amplification technologies. Areas of expertise should include cytokines/chemokines, cellular immunology, and immunodeficiency. The focus will be on the development and application of NASBA technology in the study of immune regulation in disease states.

Molecular Biology

The candidate should have a PhD with at least 1 year of experience with amplification methodologies and automated sequencing technology. The position will involve the development of NASBA technology for sequencing applications. Focus will be on applications with existing technologies as well as the development of new technologies.

At Advanced BioScience Laboratories, you'll find everything that makes a career worthwhile: important work, an energetic and team based environment, and an excellent salary and benefits package. Please send your resume to: **Advanced BioScience Laboratories, 5510 Nicholson Lane, Kensington, MD 20895-1078; or FAX: (301) 984-3608.** An Equal Opportunity Employer M/F/D/V.

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Schumpert Medical Center

Endowed Chair in Neurobiology

The Louisiana State University Medical Center in Shreveport (LSUMC-S) is seeking nominations and applications for the Schumpert Medical Center Endowed Chair in Neurobiology. The Chair will be a nationally recognized expert in the field of neurosciences. The primary goal of the Chair is to develop, promote, and foster research in a clearly focused and clinically relevant area of neurobiology. Neurobiology, cardiovascular sciences, and molecular biology are areas of research emphasis at LSUMC-S. Hence, applicants with research interests that bridge neurobiology with cardiovascular sciences and/or molecular biology are particularly desirable.

The successful candidate will hold a Ph.D. and/or M.D. degree, qualify for a senior-level tenured faculty appointment, have a strong record of national research funding, be familiar with new and emerging methodologies and technologies in biomedical research, possess administrative and leadership abilities, and be innovative and visionary. The package for the Schumpert Chair in Neurobiology will include:

- a nationally competitive salary supported by state funds,
- two junior faculty positions supported from state funds,
- \$1 million seed package for acquisition of research equipment, supplies, and technical support for the Chair and junior faculty recruits,
- annual interest on the \$2 million Schumpert Chair endowment,
- faculty appointment in an academic Department, with an opportunity to train Ph.D. students,
- excellent space for the research team in the new Biomedical Research Institute (BRI).

The application review process will start April 1, 1998, and continue until the position is filled. The position will be available beginning in fall, 1998. Please send applications and nominations to:

D. Neil Granger, Ph.D.
Associate Dean for Research
Office of Research
LSU Medical Center
1501 Kings Highway
Shreveport, LA 71130-3932
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We currently seek qualified, highly-motivated Scientists to join our team-oriented, interdisciplinary research environment in the following areas:

SENIOR SCIENTIST, MOLECULAR BIOLOGY

Identify and characterize novel genes from complex biological systems. Requires Ph.D. with 3+ years of postdoctoral experience. Demonstrated knowledge of gene expression profiling methodologies, such as differential display, SAGE or array-based technologies is essential. Familiarity with *in situ* hybridization is preferred. **Job Code SW184.**

SENIOR SCIENTIST, PHARMACOLOGY

Position will focus on the evaluation of experimental protein therapeutics. Requires Ph.D., DVM or MD with 4+ years of experience. Knowledge of preclinical evaluation and development, as well as expertise in pharmacology, physiology or related field is essential. Oncology research experience preferred. **Job Code SW243.**

RESEARCH ASSOCIATES, MOLECULAR BIOLOGY

Several posts are available for individuals with experience in state-of-the-art molecular biology. Requires BS in a biological science and 2+ years of relevant experience. Background should include experience in one or more of the following methodologies: cDNA cloning, library construction, PCR, expression cloning, *in situ* hybridization, and Southern and Northern blotting. **Job Code SW231/232/234.**

All positions require exceptional communication skills and the ability to work in a team environment.

Bayer offers an attractive compensation package... and there's one more fact. If you're ready to join us, there's no better time than now. For immediate consideration, please forward your resume, WHICH MUST INCLUDE JOB CODE, to: **Human Resources, Bayer Corporation, Pharmaceutical Division, P.O. Box 1986, Berkeley, CA 94701.** No agencies or phone calls please. For more information on Bayer, search: <http://www.careermosaic.com/cml/bayer/>

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SIBIA NEUROSCIENCES, INC. is expanding its interdisciplinary research and development on therapeutics for diseases and disorders of the central nervous system. We have established an impressive record in the development of innovative technologies integral to the field of neuroscience and the biopharmaceutical industry. We are accepting C.V.s from experienced Scientists in several areas of investigation to support our drug discovery efforts.

PhD, MOLECULAR BIOLOGY

Two-three years postdoctoral and at least two years relevant research experience in an academic or industrial setting required. Specific experience should include identification, cloning, and expression of CNS receptor and ion channels, as well as *in situ* hybridization and immunohistochemical mapping techniques in the nervous system. Knowledge of transgenic and knock-out mice desirable.

PhD, LAB HEAD, NEUROPHARMACOLOGY

Eight-ten years postdoctoral experience, including five in the pharmaceutical industry (major pharma or biotechnology) required. Your essential scientific experience should include: neuropharmacology of major CNS monoamine and cholinergic systems; *in vitro* models of pain and analgesia; stereotaxic surgery and microdialysis. Must have experience in management, supervision of laboratory personnel, data analysis and interpretation, report generation, manuscript presentation, and meeting organization. Excellent team building and interpersonal skills are essential.

BS/MS, PSYCHOPHARMACOLOGY

Must have experience with rodent pain models, general knowledge of behavioral pharmacology, and experience with data analysis and rodent surgery (including intrathecal catheterization and stereotaxic brain surgery) are essential. Knowledge of histology and immunocytochemistry techniques desirable.

BS/MS, NEUROPHARMACOLOGY

We now have two positions requiring a BS with four-six years or MS with two-four years experience in neuroscience/neuropharmacology and background including one or more of the following: neurotransmitter release related to analgesia; stereotaxic surgery; *in situ* hybridization; animal models of migraine and related techniques; neuronal cultures.

One position has an emphasis on neuroprotection. The primary responsibility will be to establish models and evaluate potential neuroprotective and neurotrophic effects of test compounds using *in vitro*, *in vivo*, and *ex vivo* molecular and biochemical techniques related to cell death.

The other position has an emphasis on psychiatric disorders and pain with responsibility for establishing *in vitro* and *in vivo* models of neurotransmitter release and relevant second messenger systems.

PATENT ATTORNEY

Five or more years experience preparing and prosecuting life science and/or chemistry-related patents in a biotechnology, pharmaceutical or law firm environment. Ideal candidates should possess, in addition to a JD, an advanced degree in Molecular or Cell Biology, Chemistry, Biochemistry, or Pharmacology.

Located on San Diego's beautiful La Jolla coastline, SIBIA Neurosciences offers not only a challenging environment in an aesthetically pleasing setting, but also 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, phone (619) 452-5892 or fax (619) 452-9279; email lalba@sibia.com; website www.sibia.com. EOE.

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POSITIONS OPEN

PROFESSOR AND HEAD DEPARTMENT OF ANATOMY, PHYSIOLOGY, AND PHARMACOLOGY

Applications and nominations are solicited for the position of Professor and Head of the Department of Anatomy, Physiology, and Pharmacology, Auburn University College of Veterinary Medicine. The Department was recently formed by merger of the Departments of Anatomy and Histology, and Physiology and Pharmacology. Departmental personnel currently include 21 tenure-track faculty members. Activities of the faculty include instruction in veterinary and graduate curricula, research programs, diagnostic services, and outreach.

Essential qualifications for the position are a Ph.D. or D.V.M. degree with research training in a relevant biomedical discipline and strong records of research and teaching accomplishments. Preference will be given to individuals who hold both Ph.D. and D.V.M. (or equivalent) degrees. In addition, preference will be given to individuals who have demonstrated administrative abilities, have experience with veterinary medical or biomedical teaching, and have a history of sustained extramural funding, and currently direct an active research program in an area that complements a current departmental interest. The successful candidate will be expected to provide leadership/participation in professional and graduate education; promote the development of high quality research; facilitate faculty development in areas of teaching and research; represent the Department and faculty within the College and University; and relate trends in veterinary medicine to strategic planning and the mission of the College.

Applications must include a letter describing teaching, research, and administrative philosophies and a vision of the Department's role in the College and University, curriculum vitae, and the names, addresses, and telephone numbers of three references. Review of applications will begin March 1, 1998, and will continue until a candidate is recommended for appointment. Position is available October 1, 1998. Send applications, nominations, and inquiries to: Dr. Lauren G. Wolfe, Search Committee Chair, College of Veterinary Medicine, Auburn University, AL 36849. Telephone: 334-844-4539; FAX: 334-844-2652.

Auburn University is an Affirmative Action/Equal Employment Opportunity Employer and Educational Institution. Minorities and women are encouraged to apply.

ENDOWED CHAIR PROFESSORSHIP IN BIOINFORMATICS

The School of Biomedical Engineering, Science, and Health Systems at Drexel University and the Coriell Institute for Medical Research invite nominations and applications for the newly established Endowed Calhoun/Coriell Chair Professorship in Bioinformatics. The successful candidate will be a visionary and energetic leader with an outstanding record of research and academic accomplishments in bioinformatics and will hold a Senior faculty position both at Drexel University and the Coriell Institute. S/he will be expected to establish joint research and educational initiatives in bioinformatics. Preference will be given to candidates who take a systems view of complex genetic behavior with the aim of developing a new understanding of the impact of defects on human health. Send nominations and applications to: Banu Onaral, Director, School of Biomedical Engineering, Science, and Health Systems, Drexel University, 3141 Chestnut Street, Philadelphia, PA 19104. E-mail: onaral@cbis.ece.drexel.edu. For additional information, visit our website: www.biomed.drexel.edu. Drexel University and the Coriell Institute are Equal Opportunity/Affirmative Action Employers.

YALE UNIVERSITY DEPARTMENT OF CHEMISTRY

The Department of Chemistry of Yale University solicits applications for a tenured position in organometallic chemistry. An outstanding teacher-scholar's research interests should complement those of the current tenured faculty. An internal candidate is under consideration for the position, which is expected to be filled for the academic year 1998-99.

Applicants should submit curriculum vitae and a list of publications to: Donald M. Crothers, Chair, Senior Physical Search Committee, Department of Chemistry, Yale University, 225 Prospect Street, New Haven, CT 06520-8107 by March 30, 1998. Yale University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN



FACULTY POSITION EXPERIMENTAL PATHOLOGY BROWN UNIVERSITY School of Medicine

The Department of Pathology and Laboratory Medicine at Brown University School of Medicine invites applications for a three-year renewable, tenure-track, campus-based position as **ASSISTANT PROFESSOR**. The candidate is expected to develop and maintain a productive, independent, externally funded research program in basic mechanisms of human disease. Preference will be given to candidates with research training in environmental toxicology or cancer biology who can serve as predoctoral and Postdoctoral Research Mentors for a training program in environmental pathology funded by the National Institute of Environmental Health Sciences. Board certification in pathology or ability to teach systemic pathology is desirable. Teaching responsibilities include teaching, training, and advising undergraduate, graduate, and medical students. Candidates should have an M.D. or M.D.-Ph.D. degree and two to three years of postdoctoral or residency research training. Modern research laboratories, core facilities, and start-up funds are available. Applications received by May 1, 1998, will receive full consideration. Applicants should send a curriculum vitae, recent publications, a description of career objectives and future research plans, and three letters of recommendation to: Agnes B. Kane, M.D., Ph.D., Professor and Chair, Department of Pathology and Laboratory Medicine, Brown University School of Medicine, Box G-B5, Providence, RI 02912. Women, minorities, and protected persons are encouraged to apply. Brown University is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN TRANSPLANTATION BIOLOGY RESEARCH THE LERNER RESEARCH INSTITUTE of the Cleveland Clinic Foundation

We are seeking an individual at the level of **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** to develop a basic laboratory research program in transplantation biology which is jointly sponsored by the Department of Immunology and the Department of Urology. The successful candidate (Ph.D. or M.D.) will possess, or exhibit the potential to develop, an outstanding national reputation as a Basic Scientist using state-of-the-art cellular/molecular approaches to study transplantation biology. Candidates using an established model to study chronic rejection or xenotransplantation are particularly encouraged to apply for this position. Generous start-up support and a highly competitive salary and fringe benefits will be provided. Lerner Research Institute of the Cleveland Clinic, comprising over 90 independent investigators and over 600 employees, has a long-standing commitment to excellence in basic and applied biomedical research with an annual budget in excess of \$50 million. The Department of Urology is a nationally recognized center of excellence for kidney disease and transplantation.

Send curriculum vitae and names and addresses of three references to: Dr. Andrew C. Novick, Chairman, Department of Urology, A100, Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195.

The Cleveland Clinic Foundation is an Equal Opportunity Employer.

FACULTY RESEARCH

The Division of Nephrology at Duke University is seeking an individual for a tenure-track position in basic science research. We are seeking interactive individuals who are committed to leading a vigorous independent research program. We are particularly interested in candidates with interest in vascular biology and immunology, but qualified Investigators with other areas of interest are encouraged to apply. Faculty appointment will be at the **ASSISTANT/ASSOCIATE PROFESSOR** level based on qualifications. Send written inquiries with current curriculum vitae to: Thomas M. Coffman, M.D., Division of Nephrology, Box 3014, Duke University Medical Center, Durham, NC 27710. Minorities and women are encouraged to apply. Duke University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITION DEPARTMENT OF PHARMACOLOGY AND PHYSIOLOGY University of Rochester

The Department of Pharmacology and Physiology at the University of Rochester Medical Center invites applications for a tenure-track position to be filled at the **ASSISTANT PROFESSOR** level or **HIGHER**. Applicants must have earned the Ph.D. or M.D. degree, and have completed significant postdoctoral training. Preference will be given to applicants with research interests in intracellular signal transduction pathways associated with cell damage and death, apoptosis, or the cell cycle, including candidates who are studying the involvement of protein phosphorylation and small GTP-binding proteins. The University of Rochester Medical Center has recently embarked on an exciting strategic plan, which includes recruitment of new faculty, construction of a new biomedical research building, and significant growth in the interdisciplinary areas of aging and development, cancer, and vaccine biology. Applicants whose research interests relate to these areas are particularly encouraged to apply. The successful candidate will be expected to develop an independent, extramurally funded research program and to participate fully in graduate and professional teaching programs. Review of candidates will begin immediately and will continue until the position is filled. Applicants should send their curriculum vitae, three recent reprints, a statement of research interests and plans, and the names of three referees to: Dr. Trevor J. Shuttleworth, Chair, Faculty Search Committee, Department of Pharmacology and Physiology, University of Rochester Medical Center, 601 Elmwood Avenue, Box 711, Rochester, NY 14642. For information about the Department, see website: <http://www.urmc.rochester.edu/smd/phph/>. The University of Rochester is an Equal Opportunity/Affirmative Action Employer; applications from women and under-represented minorities are encouraged.

TENURE-TRACK FACULTY POSITION AVAILABLE Department of Basic Medical Sciences Purdue University Morphological Science

The Department of Basic Medical Sciences invites applications for a tenure-track **ASSISTANT or ASSOCIATE PROFESSOR** possessing a Ph.D. or equivalent degree who has relevant postdoctoral experience. The selected candidate is expected to: (1) develop or possess an extramurally funded research program that complements existing departmental (e.g., signal transduction, developmental biology/cellular differentiation, neurologic response to trauma) or university (biomedical engineering, neuroscience) programs and (2) assume teaching responsibilities in graduate courses in morphological sciences for bioengineering students and/or professional students in the medical or veterinary program. Principal research interests should revolve around molecular/cell biology or tissue engineering.

Applicants should send a curriculum vitae, a brief description of career goals, relevant reprints, and a list of three references (including address, telephone, FAX, and e-mail) to: Dr. David C. Van Sickle, Search Chairman, School of Veterinary Medicine, Purdue University, West Lafayette, IN 47907-1246. Review of the applications will be ongoing and continue until the position is filled. Anticipated starting date is July 1, 1998.

Additional information is available via e-mail: bmsanatomy@vet.purdue.edu; website: www.vet.purdue.edu/depts/bms.

Purdue University is an Equal Opportunity/Affirmative Action Employer and encourages applications from minorities and women.

YALE UNIVERSITY DEPARTMENT OF CHEMISTRY

The Department of Chemistry of Yale University solicits applications for a tenured position in synthetic organic chemistry. An outstanding teacher-scholar's research interests should complement those of the current tenured faculty. An internal candidate is under consideration for the position, which is expected to be filled for the academic year 1998-99.

Applicants should submit curriculum vitae and a list of publications to: Donald M. Crothers, Chair, Senior Physical Search Committee, Department of Chemistry, Yale University, 225 Prospect Street, New Haven, CT 06520-8107 by March 30, 1998. Yale University is an Equal Opportunity/Affirmative Action Employer.

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Associate Product Manager/Consumables: MS degree or equivalent, as well as experience in molecular biology or related field. Self-motivated individual with skills in organization, with a strong background in DNA amplification or sequencing. Prior business experience preferred. Code DT-1

Marketing Manager: BA/MA degree required, as well as experience in developing marketing collateral and/or managing trade shows. Experience with Macs/Pagemaker a must. Code JH-1

Senior Software Engineer: MS degree or equivalent in EE or CE, as well as five years experience in developing and maintaining microprocessor/microcontroller products with embedded control systems. Responsible for development and maintenance of real-time and servo control software, as well as data acquisition and analysis software. Code TL-1

Field Service Engineer: BSEE or equivalent, with minimum of three years experience in electronics. In-house as well as field troubleshooting/repair to the component level; customer training and telephone support; maintaining failure analysis database. Communications skills a plus, some travel required. Code ES-2

OTHER POSITIONS, OTHER PLACES

Pacific-rim Distributor Manager: Must have an MS or PhD degree or equivalent research experience in molecular biology with a strong technical background in DNA amplification and sequencing and demonstrated excellence in sales/marketing. Experience in high-throughput molecular biology applications preferred. Boston or SF based, extensive travel. Code SK-1

Send résumé & cover letter with proper code to:



MJ RESEARCH, INC.
Human Resources, Code xx
149 Grove Street
Watertown MA 02172 USA

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SCIENTIST/SENIOR SCIENTIST

GENETIC TOXICOLOGIST

As a member of Molecular Toxicology, you'll direct and conduct various tests and genetic toxicology studies on new drugs, as well as investigate underlying mechanisms for genotoxicity. You'll also take part in an exciting new initiative to develop high throughput genotoxicity assays for the assessment of drugs in the discovery phase of development. Additional opportunities will be available to direct other types of toxicology studies and to participate in drug discovery/development matrix. Qualifications include a Ph.D., 2+ years' bench experience in genetic toxicology and GLP experience, and/or applicable skills in genetic toxicology. Job Code: CJM-97362

POSTDOCTORAL RESEARCH POSITION

PHARMACOKINETICS, DYNAMICS & METABOLISM

As a member of the Pharmacokinetics, Dynamics and Metabolism Department, you will be responsible for assimilating quantitative kinetic information from in vitro drug metabolism systems to predict human drug disposition. The qualified candidate will be responsible for determining intrinsic clearance of selected drugs and developing a model to predict human hepatic clearance employing human liver microsomes and human hepatocyte suspensions. Experience in developing such models or knowledge of current models that integrate intrinsic clearance with physiological parameters that influence clearance would be beneficial. The qualified candidate should possess a Ph.D. degree in Pharmacokinetics, Drug Metabolism or related field and have a background in enzyme kinetics and HPLC drug analysis. Excellent written and verbal communication skills are essential. Job Code: RJB-985318

POSTDOCTORAL RESEARCH POSITION

ANGIOGENESIS MECHANISMS

A postdoctoral position is available to study mechanisms of angiogenesis/angiostasis with emphasis on identification and characterization of anti-angiogenic factors under various environments (ischemia, diabetes, aging). A Ph.D. in Cell and/or Molecular Biology or related field with an interest in mechanisms of revascularization is necessary. Expertise in gene expression, immunohistochemistry and in situ hybridization is desirable. Job Code: RJB-974304

POSTDOCTORAL FELLOW

NEUROSCIENCE THERAPEUTICS

Be part of our talented Neuroscience Department as you pursue your postdoctoral training conducting in vivo surgical, physiological recording and behavioral assessments associated with experimentation on rodent models of acute traumatic brain injury. In addition, you will participate in subsequent histological, immunohistochemical and biochemical analysis of tissue or microdialysis samples harvested at various post-traumatic timepoints. Qualifications include a Ph.D. in Neurochemistry, Neuropharmacology or other neuroscientific discipline. Job Code: RJB-985325

SCIENTIST

GENOMICS RESEARCH

You'll conduct gene expression profiling research in multiple preclinical therapeutic areas as part of the Genomics program in the Molecular Biology Department. You'll also perform array hybridization experimental methods, technology innovation and assessment and the design of gene function analysis strategies in collaboration with Scientists in genomics, bioinformatics and therapeutics research. A Ph.D. in Genetics, Biochemistry or related life sciences disciplines or equivalent education/experience in genomic research and expression profiling technologies required. Computer literacy, quantitative skills and the ability to work in a team environment are essential. Job Code: CJM-980037

ASSOCIATE SCIENTIST

CHEMOKINE RESEARCH

Our laboratory is currently focused on the identification of novel compounds as potential anti-inflammatory agents. A BS with 5-7 years' laboratory experience or an MS with 2-4 years' experience is required. A background with cell/tissue culture techniques, radioisotope handling and receptor binding assays essential. Skills in molecular biology along with a familiarity with Microsoft software is desirable. Job Code: CJM-MY

Qualified candidates mail, fax or e-mail a resume (Please submit resume on laser-quality white paper, with legible 10 point or larger type, and avoid boldface, italics, borders, etc.) indicating the Job Code of interest, to: **Parke-Davis Resume Processing Center, P.O. Box 92242, Los Angeles, CA 90009-2242. Fax: (310) 337-3367. E-mail: parkedavis@lsearch.com**



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- Med Ad News September 1997

POSITIONS OPEN

FACULTY POSITION PAIN NEUROSCIENTIST University of Texas Health Science Center at San Antonio

The Department of Endodontics invites applications at the **ASSISTANT PROFESSOR** level for a full-time, tenure-track position available immediately in the Dental School of the University of Texas Health Science Center at San Antonio. Applicants should possess a Ph.D., M.D., or D.D.S. and relevant postdoctoral experience in electrophysiological methods including patch clamp and extracellular recording from *in vitro* or *in vivo* systems. The ideal candidate will have a research focus on pharmacological regulation of nociceptive sensory neurons, particularly within the trigeminal system, and possess additional expertise in histological and/or molecular biological methodologies. The successful candidate will complement an ongoing interdepartmental research program committed to the study of pain and inflammation. Requests for cross-appointments in appropriate basic science departments will be strongly supported. Duties of the position include research (70 percent), teaching of graduate and undergraduate professional students (20 percent) as well as Departmental, School, and University service (10 percent). Candidates who have demonstrated excellence in the ability to teach and to attract extramural funding will be given highest consideration. Priority will be given to applications received by April 30, 1998.

Interested individuals should send a letter of application, including a statement of research plans, curriculum vitae, not more than two significant papers or reprints, and three letters of recommendation to: **Dr. Christopher M. Flores, Chair, Department of Endodontics Search Committee, University of Texas Health Science Center, 7703 Floyd Curl Drive, San Antonio, TX 78284-7892.**

The University of Texas Health Science Center at San Antonio is an Equal Opportunity/Affirmative Action Employer.

CHAIRPERSON DEPARTMENT OF MOLECULAR AND CELLULAR BIOCHEMISTRY Loyola University Chicago

Loyola University Chicago, Stritch School of Medicine is seeking an outstanding scientist to lead its Department of Molecular and Cellular Biochemistry. We are looking for an accomplished scientific leader who has a strong research program and who is experienced in, and enthusiastic about, medical and graduate education. The Department of Molecular and Cellular Biochemistry currently has six tenured faculty members. The new Chair will have the opportunity to recruit several additional faculty members.

The successful candidate will adopt the leadership role in defining the future course and development of the department. The candidate must have a national reputation for excellence in scholarship, teaching, and research and have demonstrated expertise in guiding the independent research efforts of younger scientists. The candidate is expected to hold a Ph.D. and/or M.D. degree.

Interested candidates should send a curriculum vitae to: **Dr. Katherine Knight, Chair of the Search Committee, Department of Microbiology and Immunology, Loyola University Medical Center, 2160 South First Avenue, Building 105, Maywood, IL 60153.**

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

FACULTY POSITION YALE UNIVERSITY DEPARTMENT OF MOLECULAR BIOPHYSICS AND BIOCHEMISTRY

The Department of Molecular Biophysics and Biochemistry is seeking candidates at the **ASSISTANT PROFESSOR** level in the fields of high-resolution cryo-electron microscopy and macromolecular solution NMR. Our department spans a broad range of areas from structural to molecular biology, and is located in both the Faculty of Arts and Sciences and the School of Medicine of the University. Applications should include a curriculum vitae, a statement of research interests, reprints or preprints, and three letters of references to be forwarded separately. Completed applications should be sent to: **Faculty Search Committee, Department of Molecular Biophysics and Biochemistry, Yale University, 266 Whitney Avenue, P.O. Box 208114, New Haven, CT 06520-8114. Telephone: 203-432-5593. Application deadline: April 1, 1998. Yale University is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN



FACULTY POSITION IN RENAL CELL BIOLOGY/ PHYSIOLOGY RESEARCH The Lerner Institute Cleveland Clinic

We are seeking an individual at the level of **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** to establish a basic laboratory research program in renal cell biology/physiology. The position is jointly sponsored by the Research Institute and the Department of Urology—a partnership that has previously established research programs in renal cell carcinoma and transplantation. The successful candidate (Ph.D. or M.D.) will possess, or exhibit the potential to develop, an outstanding national reputation as a Basic Scientist using state-of-the-art cellular/molecular approaches to study kidney function or renal diseases. Generous start-up support and a highly competitive salary and fringe benefits will be provided. The Cleveland Clinic Research Institute, comprising over 90 independent investigators and over 600 employees, has a long-standing commitment to excellence in basic and applied biomedical research with an annual budget in excess of \$50 million. The Department of Urology is a nationally recognized center of excellence for kidney disease.

Send curriculum vitae and names and addresses of three references to: **Dr. Paul E. DiCorleto, Chair, Department of Cell Biology, NC10, Cleveland Clinic Research Institute, 9500 Euclid Avenue, Cleveland, OH 44195.**

The Cleveland Clinic Foundation is an Equal Opportunity Employer.

DIVISION OF MEDICAL ONCOLOGY/ CANCER CENTER EXPERIMENTAL THERAPEUTICS PROGRAM Department of Pharmaceutical Sciences University of Colorado Health Sciences Center (UCHSC) Denver, Colorado

The Division of Medical Oncology seeks M.D.-Ph.D., M.D., or Ph.D. tenure-eligible **ASSISTANT or ASSOCIATE PROFESSOR** to focus on the clinical and pre-clinical pharmacology and pharmacokinetic/pharmacodynamic parameters of antineoplastic agent therapy. The applicant will develop a funded research program based on the development of novel anticancer agents and/or the exploration of new targets for cancer therapy. The position involves close interaction with the School of Pharmacy programs in toxicology and pharmaceutical biotechnology. UCHSC is an NIH-funded Comprehensive Cancer Center with a funded lung cancer SPORE. Send letter of interest, curriculum vitae, and the names of three references to: **Dr. Andrew S. Kraft, Chief, Division of Medical Oncology, University of Colorado Health Sciences Center, 4200 East 9th Avenue, Denver, CO 80262. UCHSC is an Equal Opportunity/Affirmative Action Employer.**

FACULTY POSITION. King College, Tennessee. Biology, Ph.D., fall 1998. Teaching responsibilities include cell biology, mammalian physiology, human anatomy and physiology, and comparative vertebrate anatomy and development. King College is a four-year Christian liberal arts college in the Presbyterian tradition. Send curriculum vitae, statement of teaching and research interests, and statement of Christian faith to: **Dr. William Wade, Acting Dean of the Faculty, King College, 1350 King College Road, Bristol, TN 37620-2699. King College is an Equal Opportunity Employer.**

Keck Graduate Institute of Applied Life Sciences, founded in 1997 as a member of the Claremont Colleges consortium in California, is recruiting an innovative and interdisciplinary **FOUNDING FACULTY**. Fields of particular interest include bioinstrumentation, biochemical process engineering, and bioinformatics. Further information at website: www.kgi.edu. Contact: **Bonnie Busenberg, 1263 North Dartmouth, Claremont, CA 91711. Telephone: 909-607-7853; e-mail: bonnie_busenberg@kgi.edu.**

POSITIONS OPEN

FACULTY POSITION IN RETROVIROLOGY

The Department of Microbiology and Immunology and the Sylvester Comprehensive Cancer Center at the University of Miami invite applications for a tenure-track faculty position at the **ASSISTANT or ASSOCIATE PROFESSOR** level for Investigators with research interests in the development of a program in HIV-related malignancies. Applicants should have a Ph.D. or M.D. degree. Those who wish to be considered for the position at the level of Associate Professor should also have an established, funded research program. Special consideration will be given to individuals who are particularly interested in the mechanisms of viral oncogenesis, transcriptional regulation, and/or signal transduction. The chief criteria for candidates are proven excellence in research and the potential to develop an externally funded research program.

This individual will work closely with researchers and clinicians at the Sylvester Cancer Center's HIV-related malignancies program.

Interested applicants should send a current curriculum vitae, a statement describing research achievement and future research plans, and names and addresses of three references to:

**Dr. William Harrington, Jr.
c/o Desiree Uptgrew
Sylvester Comprehensive Cancer Center
University of Miami School of Medicine
P.O. Box 01932 (M-877)
Miami, FL 33101**

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

TENURE-TRACK IMMUNOLOGIST FACULTY POSITION

**Department of Microbiology and Immunology
Stanford University School of Medicine**

The Department of Microbiology and Immunology invites applicants for appointment to a full-time tenure-track position as **ASSISTANT, ASSOCIATE, or FULL PROFESSOR**. Candidates should be prepared to or should have established an independent laboratory research program in one of the major subdisciplines of immunology, including B and T cell development, host defense, tolerance, inflammation, immediate hypersensitivity, transplantation, and autoimmunity. Individuals filling this position will play a major role in the graduate training and teaching programs of the Department, and in the graduate and postdoctoral training programs of the Program in Immunology at Stanford. The position offers an excellent environment in immunology, host-parasite interactions, and other basic biomedical sciences; outstanding scientific resources; and a wide variety of potential research collaborations. Applicants are encouraged to submit a curriculum vitae, bibliography, a brief (one to two pages) description of research interests and future plans, and at least three names of references by April 15, 1998, to:

**Dr. Hugh McDevitt
Chair, Immunology Search Committee
Department of Microbiology and Immunology
Stanford University School of Medicine
300 Pasteur Drive, Fairchild D345
Stanford, CA 94305-5124**

Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.

ASSISTANT PROFESSOR. CONSERVATION BIOLOGIST/TERRESTRIAL VERTEBRATE ECOLOGIST. Tenure-track, nine-month appointment to begin August 15, 1998, to teach general ecology, conservation biology, wildlife policy, and introductory biology courses. In addition to a 12-hour per semester teaching assignment, research through active participation in the undergraduate wildlife and biology M.S. programs is expected. Essential qualifications include the Ph.D. degree, evidence of excellent teaching and communication skills, and a strong commitment to develop and continue an active research program involving both undergraduates and graduates. Send letter of application, résumé, unofficial transcripts, statements of teaching philosophy and research interests, and three letters of recommendation to: **Dr. Robert B. Frederick, Department of Biological Sciences, Eastern Kentucky University, Richmond, KY 40474-3124. Closing date for applications is April 10, 1998. Eastern Kentucky University is an Equal Opportunity/Affirmative Action Employer. Members of minority groups and women are strongly encouraged to apply.**



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PharMingen, a rapidly growing biotech company engaged in the development, manufacture & marketing of quality biomedical research products, has several exciting positions available. PharMingen offers a competitive compensation & benefits package, including a matching 401(k) plan & a stimulating work environment. Please send resume & salary requirements indicating the position of interest by referencing the job number to: Human Resources, PharMingen, 10975 Torreyana Road, San Diego, CA 92121 or fax to (619) 812-8888. Resumes without salary requirements may not be considered. EOE

Please visit our website @ www.pharmingen.com

TECHNICAL APPLICATION SPECIALIST (#310)

Min 4-5 yrs lab exp in biomedical science. Exp w/flow cytometry, ELISA, immunology or molecular bio techniques pref. Previous mktg & sales background desirable. Resp incl educating, training & providing technical field appl support to customers & sales staff, troubleshooting & resolving technical issues in the field & via telephone. Approx 50%-70% travel req. Exc oral/written communication, organization, planning, analytical, troubleshooting & problem solving skills. B.S. in biology/related science req. M.S. or higher desirable.

TECHNICAL SERVICE SCIENTISTS (#275 & #285)

Challenging opport for scientists w/strong theoretical bkgnd & hands-on exp in immunology or cytokine biology. Resp incl respndng to cust tech inqs, providing advncd tech support, assist w/writing/editing technical mktg literature & interaction w/prod devl & QC depts. Ph.D./MS in immunology or related science & a min of 5 yrs lab exp req.

SCIENTISTS

•**Cell Biology (#242):** Ph.D. in Cell Bio/Immunology. Min 3 yrs post doc w/strong mol bio techniques. Extensive exp in all forms of amino assays. Prior industry exp a plus. Demonstrated ability to initiate/complete projects as evidenced by publications. Strong oral & written communication skills a must.

•**Recombinant Protein Purification (#262):** Ph.D. w/3 yrs exp w/strong protein purification background using various chromatography techniques & analytical instrumentation req. Resp incl recomb protein purification process development. Ph.D. in chemistry/biochem or related science req.

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Osiris Therapeutics, Inc. has positions available offering candidates exciting opportunities to develop novel therapeutic products for the regeneration of diseased or injured tissue. Using proprietary Mesenchymal Stem Cell (MSC) technology, Osiris is now moving programs into clinical product development.

Cell Manufacturing Process Development

Scientist and associate-level positions are available in groups responsible for the development of efficient methods for the isolation, culture-expansion and formulation of MSCs for clinical applications. Positions require experience in the application of techniques such as immunomagnetic selection, bioreactor cell expansion and formulation for the cGMP manufacture of MSC-based cellular products.

Job Code BD-PD005 for Scientist; BD-PD008/009 for associate-level positions

cGMP Cell Processing Operations

Associate-level positions are available in Cell Processing Operations, the group responsible for the cGMP manufacture of the MSC-based product for clinical trials. Position requires at least 2 years experience in GMP cell culture operations involving primary cell isolation (e.g., centrifugation, immunomagnetic selection) and cell expansion (mammalian cell culture, bioreactors).

Job Code RD-MAN002/003



OSIRIS

Assay Methods Development

A scientist-level position is available in the group responsible for the development and validation of biological and biochemical assays for use in quality control, product development and clinical programs. The position requires a Ph.D. and a minimum of 3 years experience in development of cell and biochemical assays in the pharmaceutical industry. **Job Code BD-AMD001**

Flow Cytometry Associate

An associate-level position is open in the core facility responsible for all aspects of flow cytometry. Position requires B.S. in biological sciences and at least 2 years of FACS experience. Experience in clinical hematology would be an advantage. **Job Code MM-FACS001**

Quality Control Scientist

A scientist-level (M.S. or Ph.D.) position is available in the QC Bio-Analytical Lab supporting GMP manufacturing and product development activities. Joining a team of other QC professionals, responsibilities will include hands-on execution of biological (in vitro colony/functional, FACS), biochemical (ELISA, HPLC, electrophoresis) and safety assays. This position requires 3+ years of experience in an FDA-regulated biopharmaceutical quality control lab. **Job Code WBJ-QC001**

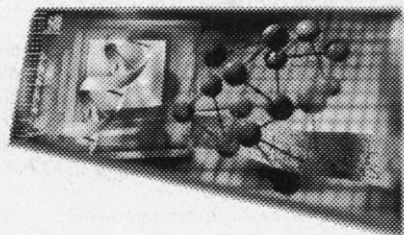
Research Scientist

A scientist-level position is available in the area of cardiac muscle augmentation using cell therapy. This position requires a Ph.D. with several years experience preferred. Candidates should have a diverse background in cell biology, biochemistry and molecular biology with particular expertise in heart muscle. Small animal physiology and surgical experience helpful. Excellent organizational and communication skills are essential. **Job Code MP-CR001**

Research Associate

An associate-level position is available for an individual to participate in the cloning of cDNAs and constructing retroviral vectors for use in progenitor cell research. Additional responsibilities include generating and maintaining high-titer retroviral stock for immunology experiments, maintaining cultures of retroviral packaging cell lines and other research projects as required. **Job Code KM-IM001**

Osiris Therapeutics is an equal opportunity employer which offers a competitive salary and benefit package. **Quoting the relevant Job Code, send resume and salary requirements to Human Resources, Osiris Therapeutics, Inc., 2001 Aliceanna Street, MD 21231-2001.**



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

CNS DISCOVERY RESEARCH AT SCHERING-PLOUGH

At Schering-Plough Research Institute in Kenilworth, NJ, scientists are discovering innovative therapeutic agents that challenge humankind's most debilitating diseases. If you are seeking an opportunity to be on the cutting edge of pharmaceutical discovery, become part of an advanced multidisciplinary research group focused on CNS disorders.

SCIENTIST *Safety Pharmacology*

We seek a highly motivated team player to be responsible for performing *in vivo* experiments in a variety of GI and/or kidney functions. To qualify, you will need a BS degree in Biology or a related field and at least 7 years of experience, or an MS degree and at least 5 years of experience. Background must include prior laboratory experience using *in vivo* techniques and radiolabeled substances. Previous experience with models of gastrointestinal/renal function is required; familiarity with telemetry system is preferred.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to apply on-line at <http://www.sp-research.com> or send a scannable resume and cover letter, original copy only, referencing Dept. DD9811-PJC-BG, to: Schering-Plough Research Institute, MS #1250, 2015 Galloping Hill Road, Kenilworth, NJ 07033-0539. We are an equal opportunity employer. We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.



**Schering-Plough
Research Institute**

Using Science for Human Advantage

Opportunities with ZymoGenetics

ZymoGenetics, Inc., a local biotechnology company located in Seattle's historic Lake Union Steam Plant, is seeking qualified candidates for the following positions:

Scientist/Senior Scientist

We are seeking a Scientist/Senior Scientist for our Department of Cardiovascular Biology to lead in the discovery and physiological evaluation of cardiovascular therapeutics. Candidate must have a Ph.D. in physiology (or equivalent degree) with a minimum of 5 years post-graduate experience developing *in vivo* and *ex vivo* models of heart function relevant to AMI, CHF and CT surgical procedures. Candidate should also have a broad knowledge of mammalian physiology with demonstrated scientific accomplishments in elucidating cellular mechanisms of drug action. Experience with primary cell culture and cell biology is also desirable. **Job ref #38N198**

Research Associate II/III

The exploratory Biology group is seeking a Research Associate II/III to support our work in developing novel protein therapeutics. The primary responsibilities of this person will be to perform *in vitro* and *in vivo* analysis of protein candidates in a variety of bioassay formats. This will include extensive use of mammalian cell culture techniques and establishing primary cell culture systems. Applicants should have a strong background in cell biology and experience in mammalian cell culture, and bioassay development animal surgery. Versatility and flexibility are essential. The successful candidate must have good organizational skills and should be proficient in data analysis and presentation. Education requirements: BA/BS and 2+ years experience. **Job ref #33N198**

Research Associate II/III

The exploratory Biology group is seeking a Research Associate II/III to support our work in developing novel protein therapeutics. The primary responsibilities of this person will be to perform *in vitro* and *in vivo* analysis of protein candidates in a variety of bioassay formats. This will include extensive use of mammalian cell culture techniques and establishing primary cell culture systems. Applicants should have a strong background in cell biology and experience in mammalian cell culture. Experience in bioassay development is preferred. Versatility and flexibility are essential. The successful candidate must have good organizational skills and should be proficient in data analysis and presentation. Education requirements: BA/BS and 0-2 years experience. **Job ref #33N298**

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 #** and a detailed resume of your work experience and academic background to: ZymoGenetics, Inc., Human Resources, 1201 Eastlake Ave. East, Seattle, WA 98102. ZymoGenetics is committed to equal opportunity and diversity.

ZYMOGENETICS

Building Tomorrow's Gene Regulating Drugs... Today.

Genelabs Technologies, Inc. is a biopharmaceutical company focused on the discovery of small molecule drugs that act by binding to DNA or RNA to regulate gene expression or inactive pathogens. Our lead research program is based on a proprietary enabling technology, *Merlin™*, used to create gene-specific, small organic, DNA-binding molecules. A recently developed technology, *VIRIA™* is being applied to the discovery of novel anti-viral RNA-binding compounds. Our development efforts are focused on its lead compound, GL701, which is in Phase III clinical trials as a new therapy for systemic lupus erythematosus. Genelabs is currently seeking qualified research professionals for the following positions:

Research Director Biology

You will manage the team involved in the functional area of Molecular Biology, and serve as the primary liaison to external agencies & organizations for our biology research program. The position requires a Ph.D. and/or M.D. in the life sciences and at least 5 years of biotech industry experience, including management of a research team. Qualified candidates will possess a proven record of innovative scientific achievement, and will be expected to maintain superior standards of integrity in both science and business. Applicants must have excellent organizational, team building and communications/platform skills. The position requires expertise in nucleic acid binding compounds and/or transcriptional regulation, cell based assay systems and genomics. (Job# SC-9633)

Sr. Research Associate HTS

You will design, develop and automate novel biochemical assays to screen directed libraries for potential gene-regulating molecules, characterize existing systems, and provide secondary information on potential lead compounds. The position requires a BS/MS in biochemistry, molecular biology or related field; 2 years' experience with assay development techniques; and expertise with robotic equipment. Proficiency with Oracle, Visual Basic, Excel and Access is desirable. (Job# SC-9802)

Sr. Research Associate Biochemistry

Utilizing biochemical methods and our patented *MERLIN™* technology, you will characterize potential lead compounds as part of our gene-regulating small molecule drug program. Responsibilities include footprinting of drug/DNA complexes, PCR amplification & sub-cloning of DNA, and electrophoresis of DNA & DNA/protein complexes. You will also help develop novel biochemical assays to characterize binding of small molecules to DNA. The position requires a BS/MS in biochemistry, molecular biology or a related field along with 2-5 years' experience working on structure/function relationships in nucleic acids. (Job# SC-9803)

HTS Database Program Manager

In addition to providing programming & database support to our high throughput screening group, you will develop & maintain an Oracle database, integrate data from high throughput screening & chemistry systems, and program/customize software for data maintenance & analyses that will identify gene-regulating small molecules from our database. Requirements include: knowledge of general molecular biology/chemistry/biochemistry techniques & principles; experience with Access, Visual Basic, and Excel; familiarity with object oriented programming techniques; the ability to work with robotic systems in conjunction with high throughput screening; a firm grasp of Oracle; experience administering an Oracle 7 database; knowledge of distributed computing in terms of network & client/server databases; and strong knowledge of SQL programming. (Job# SC-9801)

We offer attractive compensation, full medical benefits and generous equity participation in a challenging research environment that recognizes and rewards achievement. To apply, please send resume to:

Genelabs Technologies, Inc.
HR Dept., Attn: Job#
505 Penobscot Drive
Redwood City, CA 94063
Fax: (650) 368-0709



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www.
genelabs.com

Hoechst-ARIAD Genomics Center, LLC

The Hoechst-ARIAD Genomics Center, a joint venture between ARIAD and Hoechst Marion Roussel, located at ARIAD's corporate headquarters in Cambridge, MA, employs advanced technologies to analyze gene function with the goal of identifying novel drug targets and therapeutic proteins. The Center combines the resources of one of the largest global pharmaceutical companies with the entrepreneurial environment of a leading discovery research organization to create a preeminent position in the field of functional genomics.

Bioinformatics is a cornerstone of our research efforts. We are rapidly expanding our activities in this strategic area and are seeking highly motivated scientists to join our interdisciplinary team.

Bioinformatics Research Scientists

As a member of our Bioinformatics Research Group, you will perform research in any of the following areas: advanced methods for analyzing gene expression information (including statistical and AI approaches), quantitative and qualitative modeling of molecular interactions, knowledge discovery in databases. You should have a Ph.D. in Computer Science, Life Sciences, Statistics, Mathematics or similar and a proven record in independent research.

Bioinformatics Scientist

You will be responsible for the advanced analysis of gene expression data, including the development of novel algorithms and software for this purpose. Your background should include a Ph.D. in the Life Sciences or Statistics, complemented by significant hands-on experience in scientific computing. Ideally, you have demonstrated expertise in the analysis of expression data generated by technologies such as EST sequencing, DNA chips and filter-based hybridization. Good programming skills are highly desirable.

Bioinformatics Scientist

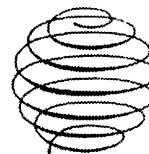
You will work closely with our laboratory scientists, our software development team and external groups to provide solutions to the computational problems of high-throughput sequencing, including sample tracking, data management and large-scale data analysis. A strong background in informatics (C, Java, Perl, SQL) should complement a B.S./M.S. or Ph.D. in Life Sciences or vice versa. Ideally, you will have significant experience with the generation and analysis of large sequence data sets.

Software and Database Manager

Your primary responsibility is the maintenance of our bioinformatics tools and databases. You will also track the field and identify new relevant software and databases and evaluate their value to our research programs. Additionally, you will be responsible for providing general bioinformatics support to project teams. This position also offers the opportunity to participate in the development of integrated interfaces to genomic data. A B.S./M.S. with demonstrated experience in effectively using and managing bioinformatics tools and databases is required. Experience with UNIX, ORACLE/SQL, Perl and web development is highly desirable.

For all these positions, self-motivation, excellent communications skills and the ability to work in a team are a prerequisite.

ARIAD offers a highly competitive salary and benefits package, including incentive stock participation. Interested individuals should write, fax or email a curriculum vitae to: ARIAD Pharmaceuticals, Inc., Attn: Dept. JT, 26 Landsdowne Street, Cambridge, MA 02139 or fax to 617-252-0851; or you may email to tringali@ariad.com. We are an Equal Opportunity Employer.



ARIAD

Cato Research Ltd. (CRL),

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CRL engages in the planning and execution of regulatory strategy for pharmaceutical and biological product development. Our goal is to assist clients in developing and gaining regulatory approval for products in conventional and cutting-edge therapeutic areas and novel drug delivery technologies.

Our company has exciting non-laboratory opportunities for self-starters with scientific backgrounds who want to learn and grow in a creative environment. These positions require excellent written and verbal communication skills, strong initiative and interpersonal abilities, and sound critical and analytical thinking. Clinical Research positions require an M.D. or Ph.D. with expertise in toxicology, pharmacokinetics, infectious disease, immunology, oncology, pharmacology or other biological sciences.

■ Clinical Research Scientists

We are seeking individuals with clinical and scientific training to provide leadership in ensuring that client contracts are met. These opportunities require the ability to design, direct, coordinate and manage drug development and regulatory activities. The ideal candidate will have 5-8 years of experience in the pharmaceutical or biotech industry and knowledge of the entire drug development process. All locations.

■ Clinical Research Fellows

The Fellows receive training in the scientific, regulatory, medical and financial aspects of pharmaceutical drug development. The ideal candidates will possess a Ph.D. in Biological Sciences and the ability to manage multiple tasks. All locations.

■ Pharmaceutical Scientists

These opportunities require the ability to direct, coordinate, and manage complex CMC activities. Knowledge of GMP, IND, NDA, and PAI requirements are essential. These key individuals should have experience in at least 3 of the following areas: biotechnology product development, analytical development, CMC documentation, research QC/QA, regulatory compliance, clinical trial material preparation, or dosage form development. The ideal candidates will have a BS/MS with 5+ years of relevant experience, or a Ph.D. with 3+ years of relevant experience. NC location only.

If you are an excellent communicator and a team player with problem-solving skills, and wish to expand your career, you will find these opportunities challenging and professionally rewarding.

Cato Research Ltd. offers complete salary and benefits packages. For application to all CRL offices, please send your resume, cover letter and writing sample to: **Job 700, Cato Research Ltd., 200 Westpark Corp. Ctr., 4364 S. Alston Ave., Durham, NC 27713-2280.** No phone calls, please. EOE

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We are accepting applications from people with experience in the life sciences, preferably with experience in manual and/or automated DNA sequencing, and 1-2 years' industry experience. Candidate will have a minimum of a BS Degree; MS or Ph.D. preferred; be a team player, self-starter and highly motivated.

If you are interested in a career in the biotech industry, please submit your resume to:

Amersham Pharmacia Biotech Inc.
2202 North Bartlett Avenue
Milwaukee, WI 53202
Fax 414-227-3620

Please indicate "CODE 2CM" on subject line of cover letter.

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CHAIR OF THE DEPARTMENT OF IMMUNOLOGY

Roswell Park Cancer Institute

Applications and nominations are being accepted for the Chair of the Department of Immunology. At this time the Department's roster includes 18 Research Scientists, 11 postdoctoral fellows and 16 predoctoral and a supporting staff of 21 individuals. Substantial resources for recruitment of new faculty are available. Major Institutional shared resources offer unique additional opportunities for research.

A solid record of research and academic experience in basic and/or clinical immunology, demonstrated skills and willingness to lead a scientific and related graduate studies department, and an interest in developing a strong translational research component in collaboration with clinical departments is required. Send Curriculum Vitae to: **Enrico Mihich, M.D., Chair, Department of Experimental Therapeutics, Roswell Park Cancer Institute, Elm and Carlton Streets, Buffalo, NY 14263.** Roswell Park is an M/F/H/V Affirmative Action Employer.

**ROSWELL
PARK**
CANCER INSTITUTE

Cancer Epidemiologist

A tenure track position is available immediately in the Division of Cancer Epidemiology and Genetics, National Cancer Institute (NCI), National Institutes of Health (NIH), for a scientific investigator with expertise and experience in molecular epidemiology. Candidates should have a doctorate in epidemiology or public health, or an MD/DVM with at least a master's degree in epidemiology. S/he should have demonstrated experience and advanced understanding of epidemiological methods. Experience in the design, conduct, and analysis of epidemiological studies is also required. Candidates should have a strong understanding of molecular biological processes and should have demonstrable experience in epidemiological studies with large biospecimen collections. Prior knowledge and experience in the study of female tumors are highly desirable. The successful candidate will develop an independent research program focused on assessing complex interrelationships of endogenous and exogenous factors in multi-stage carcinogenesis. The current aim is to develop an independent program in the molecular epidemiologic study of breast, ovarian or endometrial cancers. Interested individuals should send a cover letter, curriculum vitae, brief summary of research interests and experience, copies of selected publications, and three letters of reference to: **Ms. Mary Kaczaniuk, Administrative Officer, Division of Cancer Epidemiology and Genetics, National Cancer Institute, Executive Plaza North, Room 539, Bethesda, MD 20892-7374.** The closing date for applications is May 15, 1998. NIH is an Equal Opportunity Employer.

BIOTECHNOLOGY'S Leading Edge leads straight to Lilly.

Lilly is a premier biotechnology company and a world leader in the production of therapeutic proteins. Our Division of Research Technologies and Proteins is leading the way in the race to identify drug targets and develop therapeutic proteins. Innovation at Lilly is supported by the best scientific minds and a visionary company with a 100 year-plus reputation of constantly striving for excellence.

Senior Molecular Pharmacologist/Cell Biologist

We are seeking an enthusiastic and self motivated Ph.D. with post doctoral experience in biochemistry, molecular biology, pharmacology, cell biology or a related field to join an ongoing effort to develop and utilize fluorescence-based methods for the functional assay of receptors, channels, and transporters. Excellent communication skills are required as well as interests in developing fluorescence assays to monitor changes in cellular metabolism and/or signal transduction, genomic database mining for novel targets and/or agents, and initiating and championing novel drug discovery and/or assay development projects.

We are searching for candidates with demonstrated expertise in signal transduction, a thorough knowledge of integral membrane protein biochemistry (cytokine receptors, channels, G-protein coupled receptors and/or transporters) and proficiency in technologies related to molecular biology (PCR, DNA preparation and sub-cloning), mammalian cell expression, receptor biochemistry, and signal transduction (assays for Ca, inositol phosphate, intracellular pH, reporter genes). In addition, experience in either fluorescence photometry, confocal microscopy, configuration of high through-put functional assays, or laboratory robotics is desirable.

For confidential consideration, please send your resume and cover letter indicating the position of interest to: **Eli Lilly and Company, ADSCMPH03, DC1818, Lilly Corporate Center, Indianapolis, IN 46285.** We are an equal opportunity employer dedicated to diversity and the strength it brings to the workplace.

For other job opportunities, visit our Job Bank at <http://www.lilly.com>

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The current growth of our R&D Department will help Sigma continue to meet the dynamic needs of our industrial and research customers. Currently seeking R&D Scientists for the development of products and technology in the fields of Cell Culture and Molecular Biology.

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3 positions available. (1) Bioreactor Specialist with experience in mammalian cell culture bioreactor systems. (2) Formulations Specialist and (3) Custom Media Specialist. Qualifications include: Ph.D. with 1-5 yrs exp. (industry preferred), capable of technically directing other scientist and technicians in development, manufacturing and scale-up projects. Strong tissue culture background required, knowledge of ISO and cGMP's preferred.

PRINCIPAL INVESTIGATOR

Ph.D. in Molecular Biology or equivalent with 6-10 yrs of proven technology or product development experience, capable of technically directing other scientist and technicians in development projects. Emphasis will be on nucleic acid detection and isolation, DNA amplification, DNA sequencing and Microtiter/array.

If you are interested, please fax your resume to (314) 286-7863, or send your resume to:

Sigma Chemical Company
Human Resources (Pos. Ad-98-047-001)
3050 Spruce St.
St. Louis, MO 63103

Visit us on our homepage at: <http://www.sigma-sial.com>

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HELP SHAPE THE FUTURE OF BASIC AND CLINICAL NEUROSCIENCE

Join the NIH as a HEALTH SCIENTIST ADMINISTRATOR or MEDICAL OFFICER

The National Institute of Neurological Disorders and Stroke (NINDS), located in Bethesda, Maryland, is seeking a Health Scientist Administrator in the Division of Stroke, Trauma, and Neurodegenerative Disorders. The person holding this position will advise and assist NINDS grantees in areas related to basic, applied, and clinical neurobiologic research with emphasis on CNS trauma and regeneration, and will be responsible for evaluating and planning the extramural research program of the Institute in this scientific area. Applicants are expected to have broad knowledge of, and interest in, contemporary neurobiological research. Areas of special interest include CNS injury, molecular, genetic, or developmental biology. Successful applicants must possess a Ph.D. or M.D. (or equivalent degree) with postdoctoral training in research and a record of research accomplishment relevant to the responsibilities described above.

This is a GS-13/14 Civil Service position with a salary range of \$55,969 to \$85,978 per year for Ph.D.'s and \$64,349 to \$90,426 for M.D.'s. Physicians may be additionally eligible for a Physician's Comparability Allowance of up to \$19,000 per year.

Applicants should submit a letter of application with a brief description of career interests, along with a curriculum vitae and bibliography to: **Mr. Luis Arvelo, National Institutes of Health, NINDS Personnel Office, Building 31, Room 8A23, 31 Center Drive, MSC 2540, Bethesda, MD 20892-2540, or you may fax your application to (301) 402-2818.**

Applicants are strongly encouraged to obtain information concerning the position description and qualification requirements, by contacting **Mr. Arvelo at (301) 435-6033.**

U.S. citizenship is required.

Applications must be submitted by April 13, 1998. Refer to vacancy announcement # NS 98-12. For additional information on the NINDS, please visit our website. The Internet address is: <http://www.ninds.nih.gov>.

**National Institutes of Health
Department of Health and Human Services
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CELL AND MOLECULAR BIOLOGIST

Pharmacia & Upjohn is among the world's largest pharmaceutical companies. We are research-based and pharmaceutically oriented, working in areas such as Oncology, Infectious, Metabolic, and Central Nervous System Diseases. In each of these areas our objective is the same: to help people live longer and fuller lives.

We are seeking qualified candidates who will apply modern approaches to the solution of biological problems including establishment and validation of biochemical and cell-based assays in support of virology and neuroscience projects. The selected candidate will also characterize and validate novel molecular targets. Applicants must have a Master's degree (or equivalent) in Biochemistry, Molecular Biology, or a closely related science; or a Bachelor's degree (or equivalent) in Biochemistry, Molecular Biology, or a closely related science with 2-3 years experience. Experience with molecular and biochemical techniques such as SDS-PAGE and Western blotting, filter and in situ hybridization, and heterologous protein expression and purification using bacterial,

baculovirus, or adenovirus systems is desired. Experience with functional analysis of genes or with array-based technologies is also helpful. Independence, a desire to document work through internal and external publications, and the ability to thrive in a team-based setting are required.

We provide career opportunities for individuals who want to make a difference in their jobs and for the millions of people who rely on our products worldwide. If you're one of them, contact us. Competitive salary and benefits packages are available. For confidential consideration, please send your C.V. to: **Pharmacia & Upjohn, Ad #980161, 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

MEETING

LURIE COMPREHENSIVE CANCER CENTER OF NORTHWESTERN UNIVERSITY presents

THE BASIC SCIENCE UNDERLYING ANTIANGIOGENIC THERAPIES

Friday, May 15, 1998

8:30 a.m. – 5:00 p.m.

Chicago Campus

SPEAKERS

Judah Folkman (Boston, MA)

David Cheresch (La Jolla, CA)

George Yancopoulos (Tarrytown, NY)

Douglas Hanahan (San Francisco, CA)

Napoleone Ferrara (San Francisco, CA)

Kevin Peters (Durham, NC)

Gerald Soff (Chicago, IL)

Kenneth Thomas (West Point, PA)

COLLOQUIUM ORGANIZERS

Noel Bouck

Gerald Soff

Sharon Stack

INFORMATION

JuFen Hsu, Education Coordinator

T: 312.908.5258

F: 312.908.1372

E-mail: jufen@nwu.edu



Edge BioSystems is a privately held, growth-stage biotechnology company with an active program in expression cloning. The company is a leader in the development of high-throughput technologies for sample processing and occupies a unique position on the leading edge of mammalian protein expression systems.

Research Biochemist

A position is available for exceptional individuals with experience in the screening and analysis of expressed genes in mammalian cells. The applicant should have a Ph.D. in Biochemistry or Molecular Biology with two years of post-doctoral experience in the analysis of gene expression or an M.S. with 5 or more years of relevant experience. Excellent communication and organizational skills are essential.

Staff Molecular Biologist

Positions are available for highly motivated individuals with excellent laboratory skills and a strong record of accomplishment. The candidate should have a B.S. or M.S. degree in Molecular Biology and experience in the purification and cloning of DNA.

Located in the Washington, DC/Baltimore, MD area, we offer a competitive package of salary and benefits. Please respond to: **Edge BioSystems, Human Resources, 19212 Orbit Drive, Gaithersburg, MD 20879** or by e-mail: mrose@edgebio.com.

The Clarke Institute of Psychiatry,

A Division of the Addictions & Mental Health Services Corporation

The Clarke Institute of Psychiatry is offering a contract position (initial term 3 years with the possibility of renewal) for a Research Scientist (Assistant Professor level) with proven ability in transgenic research.

The Clarke Institute of Psychiatry is affiliated with the University of Toronto and dedicated to research and treatment of mental disorders and addiction. The Institute supports various research groups that employ genetic, molecular, biochemical, and behavioral approaches to research in mental disorders, in particular, but not exclusively, schizophrenia, depression, and addiction.

Suitable candidates are expected to contribute to collaborative research programs for transgenic models and should have a strong interest in neuroscience and mental illness.

In conjunction with this position the Institute has established a new transgenic research center fully equipped for transgenic research. In addition to being a member of the Transgenic Research Center, the scientist will be a member of the Laboratory for Molecular Neurobiology.

Candidates are expected to obtain extramural funding for their research. A competitive start-up package will be offered. In accordance with Canadian Immigration requirements, this advertisement is directed primarily, but not solely, to Canadian Citizens and permanent residents.

Interested candidates should submit their C.V., a statement of research interests, and three letters of reference to:

Franco J. Vaccarino, Ph.D.

Vice President of Research

The Addictions & Mental Health Services Corporation

The Clarke Institute of Psychiatry Division

250 College Street

Toronto, Ontario

M5T 1R8

Canada

**Clinical Research in Retrovirology
at the National Cancer Institute
Frederick Cancer Research and
Development Center
Frederick, Maryland**

**Announcement Number:
CA-97-1109-CT**

The National Cancer Institute is seeking scientists conducting clinical or translational research on *in vivo* models of human retrovirus pathogenesis and retroviral population dynamics. The successful candidate(s) will join a new program at the NCI-Frederick Cancer Research and Development Center (NCI-FCRDC) that will emphasize basic, clinical, and translational research in human retrovirus pathogenesis, retroviral genetic diversity and drug resistance, the biochemistry of viral enzymes, the mechanisms of genetic variation, small animal studies, and medicinal chemistry. In collaboration with **Dr. John Coffin**, this NCI-FCRDC program is the focal point of a major retrovirus research center in an excellent research environment with very strong support personnel and services, extensive opportunities for collaborations within and outside the NCI community, and access to clinical facilities and support.

Successful candidates must be self-directed scientists with a medical and/or Ph.D. degree who will conduct independent, investigator-initiated studies. A fully equipped laboratory and technical support will be provided. The positions may be filled at any level—from Tenure-Track Investigator (Assistant Professor) to Senior Investigator (Full Professor), including Medical Officer with potential physician special pay. The total annual compensation will be commensurate with experience, accomplishments, and education.

To apply, please forward a curriculum vitae, bibliography, the names and addresses of 5 referees, and a detailed description of research interests to:

**Dr. Marjorie C. Strobel (1109-CT)
Executive Secretary
NCI-FCRDC Retrovirology Search
Committee
Building 428, Room 39
Miller Drive
Frederick, MD 21702-1201**

Applications may also be faxed to (301) 846-6092. The Search Committee will begin reviewing complete applications by April 1, 1998. All applications must be postmarked by May 1, 1998, late applications can not be considered. For additional information, please call Susan Nelson, at (301) 846-5936 or (301) 846-1302.

Selection for these positions will be based on merit, without discrimination for nonmerit reasons such as race, color, religion, gender, national origin, politics, marital status, physical or mental disability, age, sexual orientation, or membership or nonmembership in an employee organization.

**THE NATIONAL CANCER INSTITUTE IS
AN EQUAL OPPORTUNITY
EMPLOYER.**

Chemists

As Pharmacia Biotech and

Amersham Life Science move forward with their merger, there are many exciting opportunities. As a leader in the research and production and marketing of molecular and cell biology products, we are seeking several chemists in our Nucleic Acid Chemistry departments. All positions require relocation to Piscataway, New Jersey within 1 year after the date of this posting.

Responsibilities: Synthesis of nucleoside and phosphoramidites. Some analytical work, along with maintenance of records and equipment related to the process.

Milwaukee has two openings: (1) Ph.D. Chemist with 2-4 years' experience in nucleic acid chemistry, preferably in nucleoside and phosphoramidite synthesis, and at least 2 years in a post-doctoral or industrial setting. (1) MS/BS Chemist with 2-4 years' experience in synthetic organic chemistry. Experience in nucleic acid chemistry preferred. **(Code MIL 198)**

Please send cover letter (indicating position code), resume and salary history to:

**Amersham Pharmacia Biotech Inc.-Milwaukee
Human Resources
2202 North Bartlett Avenue
Milwaukee, WI 53202
Fax: (414) 227-3620**

We are advocates of a diverse workforce. M/F/D/V

BIOPHARMACEUTICAL MANUFACTURING

SAIC Frederick, a division of Science Applications International Corporation, has challenging opportunities for individuals experienced in biologic drug manufacturing to join our GMP Biopharmaceutical Production Facility at the NCI's Frederick Cancer Research & Development Center in Frederick, MD. The GMP Biopharmaceutical Production Facility provides complete biological manufacturing capability from bulk biological products to purified proteins and, finally, filled container.

Biochemical Engineer: PhD in chemical/biochemical engineering with working knowledge of cGMP, aseptic processes, process development, scale-up fermentation and recovery processes for the production of biopharmaceuticals.

Sr. Biopharmaceutical Manufacturing Specialists: BS/MS in biological sciences with 4-6 years in biopharmaceutical process operations, including FDA/cGMP standards; cGMP certification preferred.

Biopharmaceutical Manufacturing Specialists: BS/MS in biological sciences

with 2-5 years' related experience; cGMP certification preferred.

Project Scientists: PhD in biological sciences with 3-7 years' related experience in performing process development and large-scale cGMP purifications; cGMP certification preferred.

Quality Assurance Sr. Scientist: PhD in biological sciences with 3-7 years' related experience in managing the functions of the Quality Control Laboratory to ensure compliance with federal regulations applicable to production of bulk pharmaceuticals, sterile injectables and licensed biological products.

SAIC Frederick offers a competitive salary and an attractive benefits program, including insurances, 401(k) savings program, stock purchase plan and more. Forward CV/resume, references and salary requirements to: **SAIC Frederick**, ATTN: Barbara J. Norton-Gill, Technical Recruiter, NCI-FCRDC, PO Box B, Frederick, MD 21702; e-mail: hr@mail.ncicrf.gov

EOE, M/F/D/V.

"We value cultural diversity in the workplace."

SAIC **SAIC Frederick**
An Employee-Owned Company A Division of Science Applications
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GROUP LEADERS



The Molecular Basis of Carcinogenesis Laboratory, ABL-Basic Research Program, NCI-FCRDC invites applications for two Group Leader positions (assistant professor equivalent) in the areas of signal transduction and cell growth regulation. At least one of the positions will be designated for an investigator using *Drosophila* as an experimental system.

***Drosophila* molecular genetics.** This position requires a strong background in *Drosophila* genetics. Candidates combining genetic and molecular approaches to the study of cell cycle control, signaling pathways, or developmental biology will be considered. The successful candidate will become part of an expanding *Drosophila* research community at the NCI-Frederick campus.

Signal transduction. Candidates whose research involves molecular, biochemical, and/or genetic approaches to the study of signal transduction pathways are encouraged to apply. Preference will be given to applicants whose interests are relevant to molecular mechanisms of cell growth control and oncogenesis.

The successful candidates for these fully funded groups will have at least two years of relevant postdoctoral experience and will develop an independent research program and supervise a staff of several associates. The ability to work in an interactive collaborative environment is expected.

The ABL-Basic Research Program, NCI-Frederick Cancer Research and Development Center is in Frederick, MD, a suburban community located at the foot of the scenic Catoctin Mountains, 45 miles north of Washington, D.C. and west of Baltimore, MD. The ABL-BRP offers a full complement of benefits, including medical, dental, and life insurance, a matched 401k, competitive salary, and an excellent work environment. For full consideration please send a CV, a one- to two-page statement of research interests, and three letters of recommendation to: **Human Resources, c/o MBCL Search Committee, ABL-Basic Research Program, NCI-FCRDC, P.O. Box B, Building 428, Frederick, MD 21702-1201.** Application deadline is April 24, 1998.



HOWARD HUGHES MEDICAL INSTITUTE

The Howard Hughes Medical Institute conducts biomedical research in the areas of cell biology, genetics, immunology, neuroscience and structural biology at over seventy locations around the United States. HHMI regularly has positions open for research and administrative personnel.

Laboratory Positions:

- Postdoctoral Fellowships
- Research Specialists/Technicians
- Research Secretaries

Administrative Positions:

- Managers
- Administrative Assistants
- Purchasing Coordinators
- Receiving Clerks

Institute employees enjoy competitive salaries and an excellent benefits package. HHMI is an equal opportunity employer. Please visit our website at www.hhmi.org/jobs for a listing of available positions.

POSTDOCTORAL FELLOWSHIPS

The Blood Center, an internationally recognized leader in molecular hematology, transplantation immunology, vascular biology, and transfusion medicine research, is seeking outstanding candidates to fill postdoctoral positions at its Blood Research Institute. These positions will be funded by an NIH Training Grant. Therefore, *qualified applicants must be U.S. citizens or permanent residents, and cannot have received more than two years of previous support from an NIH Training Grant.*

Located adjacent to the Medical College of Wisconsin, The Blood Research Institute provides state-of-the-art facilities, and offers an excellent environment for scientific interaction and interdisciplinary collaboration. Opportunities are periodically available with Blood Center scientists working in the following areas:

Richard H. Aster, M.D.—Pathogenesis of drug-induced blood dyscrasias.

David D. Eckels, Ph.D.—Immunobiology of hepatitis C virus.

Jack Gorski, Ph.D.—Structure/function analysis of HLA-DR; T cell repertoires.

Robert R. Montgomery, M.D.—Molecular and cellular biology of von Willebrand factor.

Peter J. Newman, Ph.D.—Cell adhesion and signaling in vascular cells.

Peter J. Sims, M.D., Ph.D.—Immune rejection and dysfunction of platelets and endothelium.

Therese Wiedmer, Ph.D.—Regulation of membrane phospholipid asymmetry.

Hartmut Weiler, Ph.D.—Vascular biology/thrombosis.

Applicants should send curriculum vitae, a brief description of current research, and the names and telephone numbers of three references to:

Director of Research, Blood Research Institute, 638 N. 18th Street, The Blood Center of South-eastern Wisconsin, Inc., Milwaukee, WI 53233.

Equal Opportunity/Affirmative Action Employer.

GENETIC THERAPY, INC.

Senior Scientist I

Genetic Therapy, Inc. is a leader in the research and development of human gene therapy products, for the treatment of genetic and acquired diseases. Using this novel approach, genes are inserted into cells to produce therapeutic proteins in the body. Founded in 1986, Genetic Therapy and its collaborators, represent one of the largest groups of scientists dedicated to research and development in this field.

The successful candidate will be a key member of a team responsible for developing gene therapy vectors to treat pulmonary diseases. This position entails the optimization of the vector for gene delivery and expression in the lung, as well as the cloning of therapeutic transgenes to treat specific diseases. Knowledge of viral (including adenoviral and lentiviral) and/or synthetic (including naked DNA) mammalian expression vectors is highly desired. Candidate must have a Ph.D. in a scientific discipline and two to four years of relevant experience; or equivalent. Experience with tissue culture and a willingness to work with animal models of pulmonary disease are also required. Individual should be self-motivated and able to work independently as well as in a team setting. Strong PC skills, written and presentation skills are required. (Job Code: 254-013-7)

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

Genetic Therapy, Inc.
938 Clopper Road
Gaithersburg, MD 20878
Fax: (301) 208-2481
E-mail: gti.jobs@pharma.novartis.com

NOVARTIS

EOE

Postdoctoral Fellow Biochemistry



Isis Pharmaceuticals has a strong program in combinatorial chemistry directed toward discovery of new antibacterial agents. A postdoctoral position for a biochemist is available immediately in the drug discovery group. Research will focus on identification of novel targets and development of automated, high throughput assays designed to select inhibitors of protein/RNA interactions. The scientist will characterize interactions between inhibitors and the RNA or protein and will participate in design of targeted combinatorial libraries. The successful candidate will have completed biochemical research on the structure or function of RNA. Strong interdisciplinary skills, including experience in either bio-organic chemistry, biophysical chemistry, or molecular biology are desired.

With strong funding and excellent academic ties, Isis offers a superb environment for professional training, as well as excellent salaries and benefits. We are located in North Coastal San Diego County. For consideration, send your CV, names of three references, and cover letter to: **Isis Pharmaceuticals, Human Resources, Code 245, 2292 Faraday Ave., Carlsbad, CA 92008.** Principals only. No phone calls please. EOE.

ISIS PHARMACEUTICALS



VICE PRESIDENT FOR RESEARCH

We are seeking an outstanding investigator with an M.D. and/or Ph.D. degree with a background in rehabilitation or related areas: neurosciences, behavioral sciences, or clinical applications of rehabilitation engineering. Strong management and interpersonal skills, and the ability to work with multidisciplinary clinical and research teams are essential.

KMRREC is a non-profit organization dedicated to medical research and a subsidiary of the public charity supporting organization known as the Henry H. Kessler Foundation, Inc. KMRREC's mission is to do research and provide education in the area of Physical Medicine and Rehabilitation. KMRREC currently has a staff of over 36 individuals, including 6 research fellows with annual grant funding exceeding 3 million dollars. There is active collaboration with the Kessler Institute for Rehabilitation, the University of Medicine and Dentistry of New Jersey, the New Jersey Institute of Technology, and the East Orange VA Medical Center. Research areas at KMRREC include: Neuropsychology, Outcome Studies, TBI, SCI, Stroke, Chronic Fatigue Syndrome, Gait Analysis and Motor Control, and Alternative Medicine.

Qualified candidates should send their curriculum vitae and the names of three references to: **Joel A DeLisa, MD, President, Kessler Medical Rehabilitation Research and Education Corporation (KMRREC), 1199 Pleasant Valley Way, West Orange, New Jersey 07052; 973-243-6805**

An Equal Opportunity/Affirmative Action Employer

Senior Professorship Plant Biotechnology/Genomics The University of Georgia



The University of Georgia and the Georgia Research Alliance are establishing new research facilities to foster growth in the area of applied plant biotechnology. A new 40,000-ft² building will include genome and plant-transformation core facilities, as well as laboratories for 7-8 plant scientists. A recent commitment to add six new faculty in the area of functional genomics and bioinformatics will further support development in this area. We seek a senior-level plant scientist to provide vision and intellectual leadership. Applicants with an interest in applying genomics to crop improvement are especially encouraged.

The successful candidate will be appointed in appropriate departments in the Colleges of Agricultural and Environmental Sciences and of Arts and Sciences, joining an already thriving community of plant scientists (www.plantcenter.uga.edu). He or she will sustain an internationally recognized and externally funded research program, contribute to the instructional activities of his or her home departments, maintain strong working relationships with state government and industry, and help develop an environment in which commercial applications of plant biotechnology can prosper. To aid the incumbent, salary for an administrative assistant or non-tenure-track research scientist will be provided.

Applications should include a curriculum vitae; names, telephone numbers and e-mail addresses of at least five references; and five reprints/preprints indicative of current research activities. Applications and nominations should be sent to: **Dr. Lee H. Pratt, Chair of the Search Committee, Department of Botany, University of Georgia, Athens, GA 30602 USA. [E-mail: pratt@bscr.uga.edu; telephone (1) 706-542-1841]** Applications will be reviewed postmarked by April 30, 1998. *The University of Georgia is an Equal Opportunity/Affirmative Action Employer.*



**St. Jude Children's
Research Hospital**
ALSAC - Danny Thomas, Founder

Postdoctoral position studying transcriptional coactivators

A postdoctoral position is available for NIH supported projects in the Department of Biochemistry. Our lab is focused on defining the molecular mechanisms that hematopoietic transcription factors use to stimulate gene expression by interacting with the transcriptional coactivators CBP and p300, and how perturbation of these interactions results in a disease state. Projects include studying the roles of acetyltransferase and kinase activities in CBP/p300 transcription complexes, and the regulation of transcription factor:CBP/p300 complex formation. Experimental approaches involve molecular biology/biochemical techniques in cell culture and mouse model systems.

Relevant publications include:

A Role for CREB Binding Protein and p300 Transcriptional Coactivators in Ets-1 Transactivation Functions. MCB. In press.

Multiple protein kinase A-regulated events are required for transcriptional induction by cAMP. PNAS 92:10521-10525.

Candidates should have experience in molecular biology or biochemistry. Please send a C.V. and three letters of recommendation to: **Paul Brindle, Department of Biochemistry, St. Jude Children's Research Hospital, 332 N. Lauderdale, Memphis, TN 38105. E-mail: paul.brindle@stjude.org EOE M/F/D/V**

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR POSITION Loyola University Chicago Stritch School of Medicine

The Department of Pharmacology and Experimental Therapeutics is seeking to fill a tenure-track Assistant Professor or Associate Professor position. The candidate should have a Ph.D. and/or M.D. degree, postdoctoral experience, and a strong commitment to excellence in research and teaching. We are seeking a candidate with a strong interest in signal transduction mechanisms. However, Pharmacologists with other research interests are also encouraged to apply. Evidence of originality and scientific accomplishment, plus an excellent record of publication in high-class peer-reviewed journals, are essential. A record of extramural grant support is preferable. Salary is competitive and based on experience and qualifications. Start-up support will be provided for early development. Candidates should send their curriculum vitae, three letters of recommendation, representative reprints, and a synopsis of their current and future research interests to: **Dr. Israel Hanin, Chairman, Department of Pharmacology and Experimental Therapeutics, Loyola University Chicago, Stritch School of Medicine, 2160 South First Avenue, Maywood, IL 60153. Telephone: 708-216-3261; FAX: 708-216-6596; website: <http://www.lumc.edu/pharmacology>. Affirmative Action/Equal Opportunity Employer.**

EVOLUTIONARY/SYSTEMATIC BIOLOGIST

The Department of Biology is extending the search and is inviting applications for a tenure-track faculty position at the **ASSISTANT PROFESSOR** level for as early as fall 1998. Preference will be given to candidates working with plants who integrate molecular systematics into broader issues of evolutionary or population biology, biogeography, or development. Interests in urban ecology or wetlands may be also be advantageous. The University has a strong faculty and very active research programs in environmental areas, and doctoral programs in environmental biology and environmental sciences. The candidate is expected to contribute to the graduate, undergraduate, and general education curricula and to have an active research laboratory supported by extramural grants. Applicants should have a Ph.D. and postdoctoral (or equivalent professional) experience. Please submit a curriculum vitae, statement of research and teaching goals, and three letters of reference to: **Dr. Kamaljit Bawa, Chair of Search Committee, Department of Biology, University of Massachusetts Boston, 100 Morrissey Boulevard, Boston, MA 02125. FAX: 617-287-6650; e-mail: heatley@umb.edu. Review of applications will begin April 1, 1998. University of Massachusetts Boston is an Affirmative Action/Equal Opportunity/Title IX Employer. Women and minorities are encouraged to apply.**

VISITING INSTRUCTORS IN BIOLOGY

The Department of Biology at Davidson College is seeking applications for two one-year **VISITING ASSISTANT PROFESSOR** positions. One position will teach cell biology and introductory biology. The second position will teach biostatistics and introductory biology. Interested persons should send their curriculum vitae, a teaching statement, and three letters of reference to: **Dr. Verna Miller Case, Department of Biology, Davidson College, P.O. Box 1719, Davidson, NC 28036 by April 3, 1998. Website: www.bio.davidson.edu/Biology/jobs.html. Equal Opportunity Employer; women and minorities encouraged to apply.**

FACULTY POSITION BIOLOGY

North Park University, Chicago. Tenure-track position, August 1998. Ph.D. or A.B.D. Teach human anatomy, physiology, and some of the following: genetics, health, introductory biology. North Park University is sponsored by the Evangelical Covenant Church. Send résumé, transcripts, and names of five references to: **Alice Iverson, North Park University, 3225 West Foster Avenue, Chicago, IL 60625-4895. FAX: 773-244-4952; e-mail: afi@northpark.edu. Women and minorities encouraged to apply.**

POSITIONS OPEN



THE UNIVERSITY OF MICHIGAN ANN ARBOR, MICHIGAN 48109-0650

The Department of Human Genetics and the Department of Internal Medicine (Division of Molecular Medicine and Genetics) at the University of Michigan seek to expand their research programs through individual and joint faculty recruitment. Research areas of potential interest encompass all aspects of genetics, including studies in human and other model organisms. There is also particular interest in candidates with research programs in population/quantitative genetics. Individuals at all stages of career development will be considered, although the emphasis is on applicants at the beginning **ASSISTANT PROFESSOR** level. The focus of this recruitment is on those individuals with the greatest potential for outstanding contributions to basic research. However, applicants who have interests in both basic and clinical genetics are also encouraged to apply. Applicants should send a curriculum vitae, a two- to three-page statement of interests, and three letters of recommendation by May 1, 1998, to: **David Ginsburg, M.D., Departments of Internal Medicine and Human Genetics, University of Michigan Medical Center, 4520 MSRB I, Ann Arbor, MI 48109-0650. The University of Michigan is an Affirmative Action/Equal Opportunity Employer.**

ASSISTANT UNIT LEADER/ ADJUNCT ASSISTANT PROFESSOR Human Dimensions of Natural Resources Conservation

The Department of Fisheries and Wildlife at the University of Minnesota anticipates the filling of the position of Assistant Unit Leader at the Minnesota Cooperative Fish and Wildlife Research Unit (U.S. Geological Survey-Biological Resources Division-Cooperative Research Units). This federal position will be officially announced by the Office of Personnel Management in Denver, Colorado. A background in natural resources conservation and demonstrated expertise in sociological aspects of conservation are mandatory. Applicants are expected to have expertise in one or more of the following, or related, areas: ecological economics; evaluation of stakeholder attitudes and values; incorporation of public opinion regarding natural resources into public policy; and involving stakeholders in development of natural resources management policy. Unit staff hold adjunct faculty appointments in the Department of Fisheries and Wildlife and are expected to teach one graduate-level course per year in their area of expertise. Potential applicants should contact the search committee so that they can be advised about federal application procedures for this position: **Assistant Unit Leader Search Committee, Department of Fisheries and Wildlife, 200 Hodson Hall, 1980 Folwell Avenue, St. Paul, MN 55108. Telephone: 612-624-3600; FAX: 612-625-5299.**

ASSISTANT/ASSOCIATE PROFESSOR DEPARTMENT OF CANCER CELL BIOLOGY Harvard School of Public Health

The Department of Cancer Cell Biology is seeking applications for a position as Assistant/Associate Professor in the Laboratory of Radiobiology. Candidates should have training in molecular biology and an interest in pursuing research in carcinogenesis and/or radiobiology.

The successful candidate will be expected to develop a strong research program and assume limited teaching responsibilities in basic courses in cancer biology and radiation biology, as well as in the supervision of doctoral students. A doctoral degree with two to three years of postdoctoral research experience is required, with demonstrated evidence of innovative research capability. Applicants should send a statement of current and future research interests, curriculum vitae, and the names of three references to:

**Dr. John B. Little, Chair
Department of Cancer Cell Biology
Harvard School of Public Health
665 Huntington Avenue
Boston, MA 02115**

Harvard University is committed to increase the number of women and minorities in its faculty and encourages applications from such candidates.

POSITIONS OPEN

EXPERIMENTAL PARASITOLOGIST

The Department of Pathology in the College of Veterinary Medicine and Biomedical Sciences at Colorado State University (CSU) is seeking applicants for a tenure-track faculty position in parasitology at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level. Candidates must possess a Ph.D. degree in parasitology or a closely related field. Candidates will develop an independent, extramurally funded research program concerned with investigation of the molecular biology/biochemistry of protozoan or helminth infections. Part of the commitment of that research program will be graduate student training. It is anticipated that teaching will be at the graduate level. The Department of Pathology plays a major role in the CSU Center of Excellence in Infectious Disease Research. The appointed faculty member will be expected to productively interact with Investigators in the infectious disease/vector biology group, and to integrate themselves within the university research environment. The salary and start-up package will be competitive and commensurate with the qualifications of the individual selected. The closing date for applications is April 15, 1998, or until suitable candidates are identified. Applicants should submit a curriculum vitae, a letter outlining professional interests and goals, and the names of three references capable of evaluating the candidate's potential. The letter should contain statements proposing a self-defined program of academic activity and/or proposed approaches to this position. Inquiries may be directed to: **Experimental Parasitologist Search Committee, Department of Pathology, Colorado State University, Fort Collins, CO 80523-1671. FAX: 970-491-0603. Colorado State University is an Affirmative Action/Equal Opportunity Employer.**

PLANT MOLECULAR DIVERSITY CORNELL UNIVERSITY

As part of a campuswide genomics initiative, Cornell University is recruiting a **SENIOR PLANT MOLECULAR BIOLOGIST (ASSOCIATE/FULL PROFESSOR)** to study genetic diversity in agricultural species of plants. This person will apply the tools of genomics and bioinformatics to the preservation and utilization of genetic resources in plants and will have major links to the Bailey Hortorium, Department of Plant Breeding, Sections of Ecology and Systematics, Genetics and Development, and Plant Biology as well as the Boyce Thompson Institute, Geneva Agricultural Experiment Station, USDA Germplasm Repository at Geneva, and the Biotechnology Program. The academic home of the position will be in one (or more) of the units mentioned above, depending on the individual. The candidate must be a proven leader in the study of plant molecular diversity. Other demonstrated characteristics should include administrative effectiveness, the ability to work successfully with other scientists (nationally and internationally), and to communicate effectively with faculty, staff, department heads, and scientists throughout the world. Teaching responsibilities will involve one or two courses in the area of plant molecular diversity (genomics) and/or bioinformatics and supervision of graduate students. Send application materials to: **Dr. Steve Tanksley, Chair, Search Committee, Department of Plant Breeding, 252 Emerson Hall, Cornell University, Ithaca, NY 14853. Telephone: 607-255-1673; e-mail: ljh4@cornell.edu. An Equal Opportunity/Affirmative Action Employer.**

BIOLOGIST. Grinnell College invites applications for a one-year appointment at the **ASSISTANT PROFESSOR** level, beginning August, 1998. We seek candidates who are broadly trained and able to teach in our two introductory biology courses, Structure and Function of Organisms and Evolution and Ecology. Candidates should also be able to teach an advanced course in their area of specialty. A Ph.D. is required and postdoctoral experience is preferred. Excellent facilities and financial support for student-faculty research are available. In their letters of application candidates should address their interest in undergraduate teaching in a liberal arts environment. Send curriculum vitae, three letters of recommendation, and copies of all transcripts to: **Dr. Jonathan Brown, Department of Biology, Grinnell College, Grinnell, IA 50112-0806. E-mail: brownj@ac.grin.edu; FAX: 515-269-4285. To be assured of full consideration, applications must be complete by March 27, 1998.**

Grinnell College, an Affirmative Action Employer, encourages applications from women and persons of color, and considers applications without regard to gender, race, color, creed, age, national or ethnic origin, disability, or sexual orientation.

BE A PART OF THE BIOTECHNOLOGY REVOLUTION!

With 1,900 employees around the world, \$670 million in revenues, and an exhilarating growth rate of 23%, PE Applied Biosystems is certainly living up to its mission—to accelerate life science research through automated biotechnology systems and information.

We are seeking several experienced scientists to join our team focused on the development of systems for automated genetic analysis.

Senior Scientist II/III

Work as part of a team focused on the development of systems for automated fluorescent genotyping and mutation detection. Responsibilities will include research and development of new reagents for use on our high density DNA microarray systems.

This position requires a PhD in Molecular Biology, Analytical Chemistry or related field. Candidates must possess 5+ years industrial experience, including developing protocols using nucleic acids, ideally with fluorescent assays, solid phase methods and oligonucleotide synthesis. Excellent organizational and written/verbal communication skills are a must; project management skills a plus. REF: ARRAY.

Pharmacogenetics Scientist II/III

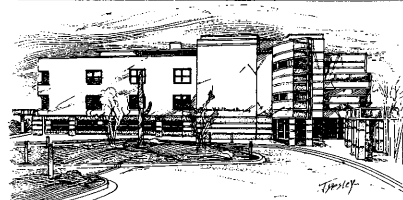
You will conduct research and development of new reagents for pharmacogenetics applications. Responsibilities include developing genotyping assays based on pharmacogenetic targets on a diverse set of PE-ABD technology platforms.

This position requires the knowledge and skills normally acquired through the successful completion of a Bachelor's or Master's (BS/MS). A PhD in Genetics, Molecular Biology or related field is preferred, with 2-5 years of industrial experience. Previous work with automated fluorescent genotyping, OLA, TaqMan, primer design and assay optimization procedures is desirable. Requires excellent organization and written/verbal communication skills. REF: 8453.

www.perkin-elmer.com

In exchange for your talents, we offer a competitive salary and benefits package with advancement potential for your career. For consideration, please send your resume to PE Applied Biosystems, Attn: Lori Mangual, Human Resources Department, REF: _____, 850 Lincoln Centre Drive, Foster City, CA 94404. You may also fax to 650/638-5874, email us at biocareer@perkin-elmer.com or see our home page on the WWW at <http://www.perkin-elmer.com> for more details. PE Applied Biosystems is an equal opportunity employer.

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Three Faculty Positions in Cellular and Molecular Biology in the areas of

- Intracellular Signaling
- Functional Genomics
- Immunology

Use of the mouse as an animal model of human disease is a major focus of the current basic investigators, whose areas of interest are listed below:

Sandra J. Gendler, Ph.D.

Mucin molecular biology and cancer

Claudia Kappen, Dr. rer. nat.

Homeobox genes and skeletal development

James J. Lee, Ph.D.

Pathobiology of the eosinophil, lung disease

Nancy A. Lee, Ph.D.

Inflammation, eosinophil biology and recruitment

Joseph C. Loftus, Ph.D.

Integrin structure and function; vascular biology

John A. McDonald, M.D., Ph.D.

ECM biology, integrins, fibronectin, and hyaluronan

John R. Riordan, Ph.D.

Cystic fibrosis

Address replies or inquiries to:

John A. McDonald, M.D., Ph.D.,

Director for Research,

Mayo Clinic Scottsdale,

13400 East Shea Blvd., Scottsdale, AZ 85259

Mayo Foundation is an affirmative action, equal opportunity employer and educator and supports a drug-free workplace.



www.mayo.edu

HERCULES

Corporate Research Director

Hercules Incorporated, a \$2 billion dollar chemical specialties company, is seeking an experienced professional to lead an international and multidisciplinary research team in the field of biotransformation. Specifically, the corporation is looking to develop expertise in applying biocatalysis to the production of chemical specialties. Over 60% of Hercules' revenues comes from chemically derivatized biomass such as cellulose, pectin, carrageenan, rosin and fatty acids, terpenoids and guar.

The Director will report to the Vice President of Technology and will work closely with the Vice Presidents of R&D within the businesses in applying this technology to current and future business needs. The position may locate either to the Hercules European Research Center in Barneveld, the Netherlands, or Hercules' U.S. Research Center in Wilmington, Delaware.

In this role, the Director will be responsible for:

- establishing biotransformation as a core technology and applying this skill across Hercules' businesses;
- establishing strategic and tactical direction and plans in alignment with the corporation's business goals;
- implementing internal and external research and development programs to achieve goals; managing a multimillion dollar budget;
- hiring and developing technical professionals; and
- performing these responsibilities in a safe and environmentally sensitive manner.

The successful candidate's proven track record should display, among other things, these key attributes:

- a demonstrated record of managing a professional team comprising organic chemists, chemical and bioengineers, enzymologists, fermentation specialists, molecular biologists, biologists, and analytical chemists;
- broad experience in directing multidisciplinary teams, starting from identification of needs to commercialization of new products and processes with proven sales;
- knowledgeable about modern technologies used to search for, evaluate, modify, and manufacture enzymes and microorganisms of commercial importance and be knowledgeable about their application and economic utility to the biotransformation of organic chemicals, polymers, wastestreams, and biomass;
- have established and managed an external R&D portfolio to make the best use of internal resources in meeting current and future technology and business needs.

An advanced degree in the Biological, Chemical, or Engineering disciplines is required. A demonstrated history of technical or business team leadership in the industrial or specialty chemicals industry is preferred, though experience in the biotechnology or pharmaceutical industries will be considered.

Qualified candidates are encouraged to send a detailed résumé to the following address: **Hercules Incorporated, Human Resources, 500 Hercules Road, Wilmington, DE 19808-1599.**

Hercules Incorporated is an Equal Opportunity Employer and does not discriminate on the basis of race, sex, national origin, age, color, religion, veteran status, disability, or any other protected class.

POSITIONS OPEN

ASSISTANT PROFESSOR DEPARTMENT OF PHARMACOLOGY MEDICAL COLLEGE OF OHIO

Tenure-track position in an established department with a long-standing record of extramural support and teaching excellence. Competitive salary, start-up funds, and laboratory space are available. The successful candidate will have demonstrated ability, or exceptional promise, to direct a state-of-the-art, extramurally funded research program related to receptor function and signal transduction at the cellular or molecular level. Applicants should have significant postdoctoral experience, and should have the appropriate background for teaching medical as well as graduate students. Applicants should send a letter, including a description of research and future plans, curriculum vitae, and names of three references to: **H. C. Rosenberg, M.D., Ph.D., Department of Pharmacology, Medical College of Ohio, 3035 Arlington Avenue, Toledo, OH 43614-5804. Website: <http://www.mco.edu>.** Applications will be considered until the position is filled, but should be received before April 15, 1998, to ensure full consideration. *The Medical College of Ohio is an Affirmative Action/Equal Opportunity Employer.*

The Department of Cell Biology at the University of Virginia has available a tenure-track position at the **ASSISTANT or ASSOCIATE PROFESSOR** level. Research is stressed, and candidates are expected to maintain independent programs of investigation and to participate in graduate education. The department seeks candidates whose research will complement existing strengths in cellular, reproductive, and developmental biology. Applications from mid-level Investigators with established research programs are welcome. Medical teaching is in a limited portion of the gross anatomy course, for which a training program and a reduced initial teaching obligation are available. Opportunities for productive collegial interactions include interdisciplinary programs in cell and molecular biology, reproduction, development, neuroscience, cancer, diabetes, cardiovascular biology, cell-matrix biology, biophysics, and structural biology. Candidates should send curriculum vitae, description of research, and names of three references to: **Dr. Charles J. Flickinger, Chair, Department of Cell Biology, Box 439 Health Sciences Center, University of Virginia, Charlottesville, VA 22908.** *An Equal Opportunity/Affirmative Action Employer.*

Population Leadership Program seeks **TECHNICAL ADVISOR** to work in the Research Division, Office of Population USAID/Washington. Advisor will provide technical assistance to Division projects. Specific duties include technical assistance in management of contracts and grants; develop workscopes; review subproject proposals; review technical quality of subproject activities; monitor and evaluate project activities and impact. In addition, as a core member of biomedical team, provide technical assistance to the Office of Population, including serving on research review committees; drafting technical papers, reports, and study protocols; working on program designs and evaluations; providing technical input to operations research portfolio; assisting in strategic planning and results monitoring. Minimum requirements: graduate degree in life sciences, biological sciences, or public health; five years of experience managing or conducting research related to family planning programs; knowledge of contraceptive technology, biomedical, and operations research; *eligible to work in United States.* Send résumé and cover letter to: **James Williams, Director, Population Leadership Program, 210 High Street, Santa Cruz, CA 95060.**

BIOGEOCHEMISTRY

The Ecology and Evolutionary Biology Department at Rice University seeks to fill a **HUXLEY RESEARCH INSTRUCTORSHIP**. This is a two-year appointment for a recent Ph.D. for research and teaching. Preference will be given to candidates with research interests in mechanisms of gas transport in wetland plants, carbon cycling, plant-soil microbial interactions, or global change. The annual teaching commitment is a one-semester upper-level course in the department's ecology offerings utilizing the specific area of the candidate's expertise. Applications, including curriculum vitae, a summary of research and teaching interests, and three letters of reference are to be sent to: **Dr. R. L. Sass, Ecology and Evolutionary Biology Department, Rice University, P.O. Box 1892, Houston, TX 77251-1892** by March 30, 1998. *Rice University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

GENBANK DATABASE ANALYST COMPUTERCRAFT CORPORATION

Scientific Data Analyst to help build and maintain GenBank, the National Institutes of Health (NIH) DNA Sequence Database, produced by the National Center for Biotechnology Information (NCBI) at NIH. This position is with ComputerCraft Corporation, working as a contractor on location at NCBI. Responsibilities include review and analysis of DNA sequence submissions to GenBank from individual laboratories as well as sequencing centers, use of bioinformatics software to ensure database quality control, editing database records to conform to international sequence database guidelines, and extensive communication with scientists around the world regarding their sequence submissions. Excellent opportunity to use state-of-the-art computer systems and gain experience using bioinformatics tools developed by a leading computational biology research group. This is not a laboratory position, but extensive molecular biology lab experience is needed to understand the information in the database records and communicate with scientists. Ph.D. in molecular biology or related field required. Excellent communication skills required. Experience with computers and DNA sequence analysis software also important. Mail/FAX résumé with cover letter and list of references to: **ComputerCraft Corporation, 6707 Democracy Boulevard, Suite 101, Bethesda, MD 20817. FAX: 301-530-0634, Attn: Molecular Biologist.**

GARST SEED CO.

Garst Seed Co., a leader in the industry, is seeking an enthusiastic, dynamic team player to join the Maize Molecular Marker Laboratory. Position plays an integral role in the development and application of molecular marker technologies. Requirements include a minimum of M.S. degree in molecular biology or related discipline; three to five years of experience; demonstrated abilities in designing experiments and interpreting data; strong interpersonal skills; experience in utilizing PCR-based molecular marker technologies is essential; experience with ABI sequencer, fragment, and genome analysis is highly desirable. Must function with limited supervision; experience with computers and databases.

Garst—delivering technology to your field.

Please send résumé to: **Human Resources, Job Openings #98-018, Garst Seed Company, 2369 330th Street, Slater, IA 50244. FAX: 515-685-5053; e-mail: agin@netins.net.**

Garst is an Equal Opportunity/Affirmative Action Employer. Minorities/Females/Disabled/Veterans.

PHYSICAL OCEANOGRAPHY NOVA SOUTHEASTERN UNIVERSITY

The Oceanographic Center of Nova Southeastern University invites applications for a permanent faculty position in either observational or theoretical physical oceanography. The successful applicant will have the Ph.D. degree in oceanography or a related science, and is expected to develop an externally funded research program after the first year. Supplemental support from the University, amounting to as much as four months' salary per year, may be provided for faculty carrying out research. Limited teaching opportunities are available at the graduate and undergraduate levels. Applicants should submit curriculum vitae, statement of research and teaching interests, and three references before April 30, 1998, to the attention of: **Dr. Julian McCreary, Chairman of the Search Committee, Department of Human Resources, Job Code: OCJ, 3301 College Avenue, Fort Lauderdale, FL 33314.** *Affirmative Action/Equal Opportunity Employer/Smoke-free campus.*

PART-TIME MICROSCOPE SALES/SCIENTISTS

Manufacturer of a new, high-resolution optical 3-D microscope seeks Microscopists with discretionary time interested in supplementing income through equipment sales and application development. Ideal candidate will continue to perform research in a discipline benefiting from 3-D analysis. Compensation based on ability to develop and publish new applications for technology and to assist in sales of microscopes to other scientists.

Send résumé to:

**InGen Corporation
235 Montgomery Street
Suite 300
San Francisco, CA 94104**

POSITIONS OPEN

MOLECULAR/CELL BIOLOGIST WITH NEUROSCIENCE RESEARCH FOCUS

Applications are invited for two tenure-track positions in the Department of Cell and Neurobiology at the University of Southern California School of Medicine. Both positions require that the successful candidate develop and/or maintain a vigorous, externally funded research program in cell biology with a focus on neuroscience. Candidates for these positions must be qualified to teach histology and cell biology or have experience that will enable them to teach human gross anatomy to medical and graduate students. Academic rank is open and dependent on qualifications and previous experience. Candidates at the level of Assistant Professor must have a Ph.D. or M.D. degree, at least three years of postdoctoral training, and prior training and/or teaching experience in either histology, cell biology, or gross anatomy.

Candidates should send an introductory letter addressing both their teaching experience and their research interests. Applications should include a curriculum vitae, copies of recent publications, and the names, addresses, and telephone and FAX numbers of three references. Preliminary review of applications will begin May 1, 1998. Send materials to the attention of: **The Search Committee, Dr. Cheryl M. Craft, Chair, Department of Cell and Neurobiology, School of Medicine, University of Southern California, 1333 San Pablo Street, BMT 401, Los Angeles, CA 90033.**

Junior faculty positions will be supported, in part, by the Howard Hughes Medical Institute Research Resources grant. *USC is an Equal Opportunity/Affirmative Action Employer.*

LECTURER IN BIOLOGY EMORY UNIVERSITY

The Department of Biology, Emory University, seeks Ph.D. applicants for a non-tenure-track position of Lecturer for the fall semester of 1998. The appointment will be made for a period of three years with the possibility of renewal for an additional three years. The primary responsibility of the position is teaching in undergraduate introductory and second-level courses as well as participating in advising students. Applicants should be particularly proficient in teaching all areas of general biology in an introductory biology sequence. It is expected that the Lecturer will contribute to the academic life of the department and the university through faculty committees and other forms of academic service. Please send a curriculum vitae, a detailed statement of your teaching philosophy and the subject areas you would be qualified to teach, and three letters of recommendation to: **Lecturer Search, Department of Biology, Emory University, Atlanta, GA 30322.** Evaluation of candidates will begin on March 15, 1998, and will proceed until the position is filled. *Emory is an Affirmative Action/Equal Opportunity Employer and applications from individuals belonging to the recognized minority groups are particularly welcome.*

RESEARCH POSITIONS

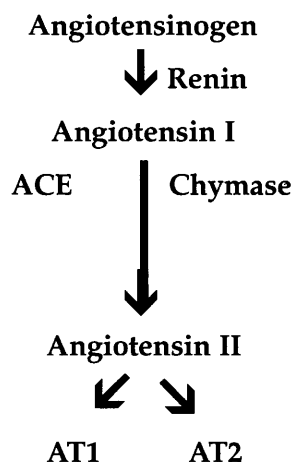
The University of Texas M. D. Anderson Cancer Center (UTMDACC), Science Park Research Division, is recruiting for a **RESEARCH ASSISTANT, GRADUATE RESEARCH ASSISTANT, and POSTDOCTORAL RESEARCHER** to participate in studies of DNA repair proteins, the role of gene activity and chromosome structure in DNA repair, and the roles of DNA damage and repair in human cancer. Experience in molecular biology, biochemistry, and genetics. The Center offers competitive benefits and salary commensurate with qualifications and experience. Résumés may be sent to: **Dr. Moon-shong Tang, University of Texas M. D. Anderson Cancer Center, P.O. Box 389, Smithville, TX 78957.** *UTMDACC is an Equal Opportunity/Affirmative Action Employer and a smoke-free workplace. Women and minority candidates are encouraged to apply.*

The Laboratory of Neurobehavior Genetics, Nathan Kline Institute for Psychiatric Research, accepts applications for a **RESEARCH ASSISTANT SCIENTIST** position. The successful candidate will become a member of a team working on gene mapping. Expertise in molecular genetics, analysis of genetic variability, PCR, genotyping with an ABI DNA sequencer, data processing, and handling of small animals are of particular interest. The earliest starting date is May 1, 1998. Forward a curriculum vitae, a detailed statement of research interest, and three letters of recommendation to: **Dr. Cs. Vadasz, Nathan Kline Institute, 140 Old Orangeburg Road, Orangeburg, NY 10962.**

Drugs, Enzymes and Receptors of the Renin Angiotensin System

13 – 15 July, 1998
Sydney, Australia

Celebrating a Century of Discovery – 1898-1998



Plenary Lecturers

W. Anderson (Aust)	E. Lumbers (Aust)
J. Cohn (USA)	G. Macdonald (Aust)
P. Corvol (France)	N. Maeda (USA)
V. Dzau (USA)	F. Mendelsohn (Aust)
R. Graham (Aust)	M. New (USA)
A. Husain (Aust)	O. Smithies (USA)
S. Izumo (USA)	W. Thomas (Aust)
C. Johnston (Aust)	J. Whitworth (Aust)
S. Karnik (USA)	Y. Yazaki (Japan)
B. Lorell (USA)	

Abstract/Submission Deadline: 7 June 1998

Information and Registration: Ms E. Martin, Victor Chang CRI
384 Victoria Street, Darlinghurst NSW 2010, Australia

Tel: +61-2-9295 8500 Fax: +61-2-9295 8501 e-mail: symposium@victorchang.unsw.edu.au

SYMPOSIUM

HIV RESEARCH AND TREATMENT

Cellular Factors

Targets for the Treatment of HIV Infection

Progetto RIGHT (Research Institute for Genetic and Human Therapy) presents this symposium for clinical researchers, physicians, and basic scientists focused on HIV research and treatment

April 19 - 20, 1998
Pavia, Italy

This two day meeting will include presentations and discussions led by renown international researchers from the U.S., Europe and Canada on topics that include HIV pathogenesis, mechanisms for interfering with cellular and molecular targets that contribute to HIV replication, agents capable of inhibiting deoxynucleoside triphosphate (dNTP) synthesis, HIV receptors, and immunomodulatory agents.

If you are interested in attending this symposium please contact MediSolutions in the U.S. at (212) 771-5300 or e-mail rsvp@medisolutions.com.

(Please note to refer to this program as the Pavia meeting.)



GLOBAL OPPORTUNITIES



THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

The Hong Kong University of Science and Technology, opened in October 1991, comprises four Schools: Science, Engineering, Business and Management, and Humanities and Social Science. The University's mission is to advance learning and scholarship; to contribute to the territory's economic and social well-being; and to promote research, development, and entrepreneurship. Current enrollment is 7,000, with students admitted at both undergraduate and postgraduate levels.

The University invites applications for the following post:

DEAN OF SCIENCE

The School of Science comprises five Departments: Biochemistry, Biology, Chemistry, Mathematics, and Physics. The School currently enrolls about a quarter of the University's undergraduate and postgraduate students. The Dean of the School is an executive and full-time appointment and will be a member of the senior administrative team of the University responsible for overseeing various aspects of the development of the University. The appointee will play a leading role in promoting the academic development of the School of Science and providing leadership to the School in its diverse activities including teaching, research, and resources management. Applicants should be renowned scholars with relevant experience in academic administration at a senior level.

Salary and Conditions of Service

Salary will be very competitive with generous fringe benefits; housing is also provided at a charge of 7.5% of salary. Initial appointment will be on a three-year contract with a gratuity payable upon successful completion of the contract.

Applications

Further particulars can be obtained from the **Personnel Office, The Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong** (by fax (852) 2358 0700, or by e-mail (careers@usthk.ust.hk), or from the University's World Wide Web homepage (<http://www.ust.hk>)). Applications/nominations together with a curriculum vitae and the name and address of three referees should be sent to **Professor Shain-Dow KUNG, Chairman of the Search Committee for Dean of Science**, before 15 April 1998, but the search will continue until a suitable appointment is made.

POSITIONS OPEN

DIRECTOR OF BIOMEDICAL SCIENCES VANDERBILT UNIVERSITY MEDICAL CENTER

Applications are invited for the position of Director of Biomedical Sciences in the office of the Associate Vice Chancellor for Research at Vanderbilt University Medical Center. The Director is responsible for research program development, administrative oversight of the office of biomedical sciences, the animal care facilities, and the institutional review board. The Director will also have oversight of the core facilities and the administration of intramural grants funds as well as the academic oversight and interface with technology transfer and will be liaison with the VA Medical Center and graduate education.

Qualifications: Doctorate degree in a biomedical science; familiarity with the operations of OPRR, FDA, NIH, etc.; institutional IACUC and IRB review boards; interdisciplinary graduate training; and knowledge of federally sponsored programs in the biomedical sciences.

Salary: Commensurate with qualifications and experience.

Starting date: Negotiable.

Application deadline: April 15, 1998.

Application process: Send letter of interest, résumé, and the names, addresses, and telephone numbers of three references to:

Director, Biomedical Sciences Search
c/o Ms. Jan Lotterer
Vanderbilt University Medical Center
CCC-3322 Medical Center North
Nashville, TN 37232-2103

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

DIRECTOR, LATIN AMERICA PROGRAM WILDLIFE CONSERVATION SOCIETY Founded in 1895 as the New York Zoological Society

Applications are invited for the position of Director of the Latin America Program, who promotes biological conservation in Latin America and the Caribbean through overseeing a large number of Wildlife Conservation Society (WCS) field projects in 17 countries in Latin America and the Caribbean. S/he establishes program priorities, develops strategic approaches, and coordinates financial and administrative support to the field. Additionally, s/he coordinates with the other WCS programs and with other national and international organizations.

Finally, s/he promotes biological conservation in Latin America among national governments, international agencies, and other nongovernmental organizations; directs international attention to important sites for conservation; and influences policies that promote conservation. Deadline for applications is 10 April 1998. The candidate must possess a Ph.D. in a field related to conservation of biological diversity, a minimum of five years of experience in the management of conservation programs in Latin America, and written and spoken fluency in Spanish and English with a preference for Portuguese as well. Please send curriculum vitae, letter of interest summarizing research and conservation experience, and list of references to: **Dr. Kent H. Redford, International Conservation, Wildlife Conservation Society, 2300 Southern Boulevard, Bronx, NY 10460 USA.**

SENIOR SCIENTIST ANALYTICAL CHEMISTRY

EnzyMed, Inc. is a rapidly growing organic synthesis company seeking an experienced scientist who will lead our analytical department. The successful candidate will be responsible for all analytical functions and databases, work closely with our scientists to establish methods (HPLC, MS, TLC, etc.), and manage automated equipment for the high-throughput processing and analysis of products from our parallel organic syntheses technology platform. We seek a talented and versatile scientist with a background of innovation interested in building a strong group that will aid in the growth of the company and maintain its technological leadership. Candidates should have a Ph.D. in analytical chemistry and have experience in laboratory automation for analyses and automated data handling. Programming ability (Visual Basic) and experience processing data and samples from combinatorial synthesis programs would be preferred. Send résumés to: **Human Resources, EnzyMed, Inc., 2501 Crosspark Road, Iowa City, IA 52242. E-mail: pmichels@enzymed.com.**

POSITIONS OPEN

DIRECTOR ILLINOIS WASTE MANAGEMENT AND RESEARCH CENTER

Applications are invited for the position of Director of the Illinois Waste Management and Research Center (WMRC), a Division of the Illinois Department of Natural Resources and an affiliated agency of the University of Illinois at Urbana-Champaign. WMRC is a nonregulatory government agency that provides technical assistance, sponsors research, and gathers and disseminates information on toxics and waste management issues. The staff consists of approximately 55 engineers, chemists, and support staff. The total annual budget is approximately \$6 million. The Director is the Center's top administrator with responsibility for staff, programs, and finances, and is the principal interface with state and federal agencies. Qualifications: the candidate must possess an earned advanced degree, Ph.D. preferred, in a pertinent discipline of engineering, or physical, chemical, biological, or environmental sciences. Experience in managing a large and/or complex organization operating in a technical environment is required. The candidate should also have extensive experience in industrial pollution prevention and/or waste management or a related area, experience with environmental regulations and regulatory agencies, and a demonstrated substantive and sustained record of accomplishment. Experience interacting with a governing board or advisory groups is preferred. Salary commensurate with qualifications and experience. *Proof of U.S. citizenship or eligibility for U.S. employment will be required prior to employment.* To ensure full consideration, send letter of application, résumé including publication record, and names and telephone numbers of three references by May 8, 1998, to: **Secretary of Search Committee for the Director, Waste Management and Research Center, One East Hazelwood Drive, Champaign, IL 61820. Telephone: 217-333-9059; TDD: 217-782-9175.** The search will continue until the position is filled. This appointment shall be effective on or about October 1, 1998.

The State of Illinois is an Equal Opportunity Employer and an American Disabilities Employer without regard to race, age, religion, color, national origin, sex, or disabled conditions.

MOLECULAR VIROLOGIST USDA/ARS U.S. MEAT ANIMAL RESEARCH CENTER

The Animal Health Research Unit at the U.S. Meat Animal Research Center, Clay Center, Nebraska, invites applications for a permanent full-time Virologist to join a multidisciplinary team working on the epidemiology and control of viral respiratory infections of domestic livestock. We seek individuals with broad backgrounds in infectious disease who have demonstrated research excellence in the areas of molecular virology and/or virus-host interaction. Specific areas of interest include identification of genes relevant to establishment and transmission of infection and characterization of host responses to infection. Highly qualified candidates will have a Ph.D. in virology, cell biology, or related disciplines, relevant postdoctoral experience, an outstanding academic record, and a record of significant research accomplishments including publications in major peer-reviewed journals. *Applicants must be U.S. citizens.* For a copy of Announcement Number ARS-D8W-104, see [website: http://www.ars.usda.gov](http://www.ars.usda.gov). The closing date of this announcement is April 20, 1998. Specific questions regarding the position may be directed to: **Dr. William Laegreid, U.S. Meat Animal Research Center, Telephone: 402-762-4177; e-mail: laegreid@aux.marc.usda.gov.** USDA, ARS is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

ASTRONOMY INSTRUCTOR

Spokane Falls Community College invites applicants for a full-time tenure-track position. Minimally have M.A. in astronomy or closely related field (earth science, planetary science, atmospheric and space physics, physics, chemistry). Primary responsibility will be teaching introductory astronomy for liberal arts students and to lesser extent students entering all scientific fields. \$35,000 per year. To be guaranteed consideration, application closing date: April 16, 1998. Must request official application and additional information by contacting: **Human Resources Office, Community Colleges of Spokane, 2000 North Greene Street, Spokane, WA 99217-5499. Telephone: 509-533-7429; TDD: 509-533-7466; website: <http://ccs.spokane.cc.wa.us>.** Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

CELL BIOLOGIST/IMMUNOLOGIST USDA/ARS U.S. MEAT ANIMAL RESEARCH CENTER

The Animal Health Research Unit at the U.S. Meat Animal Research Center, Clay Center, Nebraska, invites applications for a permanent full-time Cell Biologist, Immunologist, or a related discipline. The objective of this position is to investigate the host response of domestic livestock to infection with bacteria of importance to food safety. We seek individuals with broad backgrounds in cell biology, especially as related to immunity or inflammation, who have demonstrated research excellence in the areas of host response and/or bacteria-host interaction. Specific areas of interest include characterization of host gene expression in response to bacterial interaction with epithelial cells and analysis of effects of bacterial gene products on host immune responses. Highly qualified candidates will have a Ph.D. in immunology, cell biology, or related disciplines, relevant postdoctoral experience, an outstanding academic record, and a record of significant research accomplishments including publications in major peer-reviewed journals. *Applicants must be U.S. citizens.* For a copy of Announcement Number ARS-D8W-105, see [website: http://www.ars.usda.gov](http://www.ars.usda.gov). The closing date of this announcement is April 20, 1998. Specific questions regarding the position may be directed to: **Dr. William Laegreid, U.S. Meat Animal Research Center, Telephone: 402-762-4177; e-mail: laegreid@aux.marc.usda.gov.** USDA, ARS is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

UNIVERSITY OF FLORIDA

The Division of Hematology/Oncology in the College of Medicine, Department of Medicine seeks to fill the **PRICE EMINENT SCHOLAR CHAIR OF BASIC SCIENCE**. We are seeking to fill this tenure-track position with a scientist, M.D., Ph.D., or M.D.-Ph.D., with experience as a Cell Biologist to conduct basic research in one or more areas of hematopoiesis, cytokine regulation and hematopoietic progenitor cells, interaction of stem cells and bone marrow stroma, differentiation between normal and malignant hematopoietic stem cells, purification of hematopoietic stem cells, purification of hematopoietic progenitor cells of different lineages, and the characterization of primitive hematopoietic progenitors of fetal origin, adult bone marrow, and peripheral blood. Salary and fringes negotiable and commensurate with experience. Recruiting deadline: June 15, 1998. Anticipated starting date September 1, 1998. Applicants should send a letter of interest and a copy of their curriculum vitae to: **John R. Wingard, M.D., Chairman, Price Eminent Scholar, Chairman Search Committee, Professor of Medicine, Director Bone Marrow Transplant Program, University of Florida, Box 100277, JHMC, Gainesville, FL 32610-0277.** An Equal Employment/Affirmative Action Employer.

The Pennsylvania State University Department of Anthropology seeks two **BIOLOGICAL ANTHROPOLOGISTS** to join its distinguished program in human evolutionary and population biology: (1) a **GENETICIST** to advance understanding of human history, or the evolution or control of human phenotypes, development, or life history, and (2) a **POPULATION BIOLOGIST** having skills in mathematical modeling and statistical estimation. Ranks for these tenure-track faculty positions are open and dependent on qualifications. Applications received by April 1, 1998, will be assured consideration; however, all applications will be considered until the position is filled. Send letter of application, curriculum vitae, and the names of three references to: **Chair, Search Committee, Department of Anthropology, Box S1, 409 Carpenter Building, Penn State University, University Park, PA 16802-3404.** Affirmative Action/Equal Opportunity Employer.

Harvard Medical School. **POSTDOCTORAL POSITIONS** in biological/social psychiatry. Research training in both psychobiological and psychosocial areas with integrative seminar: for M.D.'s (including residents) and Ph.D.'s who are U.S. citizens or permanent residents. Fellowships begin summer 1998. Stipends: \$20,292 to \$33,012. Deadline April 15, 1998; rolling thereafter. Contact: **Clinical Research Training Program, Department S., Judge Baker Children's Center, 3 Blackfan Circle, Boston, MA 02115. Telephone: 617-232-8390, ext. 2559.** Minorities and M.D.'s encouraged to apply.

DIRECTOR, SCIENTIFIC AND EDUCATIONAL AFFAIRS

Group Public Affairs

Stevenage

Negotiable salary package

Blue chip company benefits

Glaxo Wellcome is a leading international research-based company whose people are committed to fighting disease by bringing innovative medicines and services to patients throughout the world and to the healthcare providers who serve them. Science and education are critical to our business success. Communicating the importance of science and technology to a wide variety of audiences and representing Glaxo Wellcome's interests in this field are important strategic activities.

As a result of a forthcoming retirement an opportunity has arisen for a Director of Scientific and Educational Affairs. This is a high profile position supporting our Chairman, Research and Development Director, Director of Genetics and Director of Group Public Affairs, with responsibility for advising the company on science and educational policy at the highest level. To that end you will play a leading, high profile role in representing Glaxo Wellcome's interests in science and education to external audiences. In particular, you will play a lead role in implementing the Glaxo Wellcome Public Policy and Communications initiative on Genetics, harnessing resources throughout our worldwide business. In addition, you will manage the Scientific and Educational Affairs function which is

responsible for supporting the effective teaching of science and technology in schools and universities; supporting high-level science and technology in universities and research institutions and promoting the Public understanding of Science, Engineering and Technology.

You will have a life science doctorate and recent experience at a senior level in the public policy field (preferably in the pharmaceutical industry). You should have an awareness of current issues in the education and science field and an extensive network of contacts. The ability to establish credibility at the most senior level and to represent the company's interests in an influential and authoritative manner is essential. Well developed management skills and an ability to provide strategic direction on issues are also key requirements.

For further information or an informal discussion please telephone: 0181 966 8389. Please apply in strictest confidence, to Ruth McGill, Senior Human Resources Adviser, Glaxo Wellcome plc, Glaxo Wellcome House, Berkeley Avenue, Greenford, Middlesex UB6 0NN, by 27th March 1998.

GlaxoWellcome

Disease has no greater enemy

Eugene Lang College, a division of the New School University, currently has the following two opportunities available:

MATHEMATICS

We are seeking candidates for a junior level position teaching Mathematics/Physical Science to a broad range of non-majors in the liberal arts. All teaching is conducted in small classes, both seminar and lecture format, in a multi-disciplinary setting. **Applications must be received by March 27, 1998** and should include a C.V., 3 letters of reference, sample outlines of 3 courses, and a statement of teaching philosophy to Verna deLaMothe at address below.

UNIVERSITY DISTINGUISHED SCIENTIST-IN-RESIDENCE

We are working to extend our teaching in the areas of Science and Mathematics. Seeking a senior scholar with the duties both of teaching a broad range of undergraduates in the liberal arts, and promoting the culture of science throughout the University. The term is 3 - 5 years and the appointment may be made full or part-time. **Applications must be received by April 15, 1998** to Professor Keith S. Thomson at address below.

Resumes should be sent to: **Eugene Lang College**, 65 West 11th Street, New York, NY 10011. Because we are committed to an educational environment reflective of the multicultural world in which we live, women and scholars of color are particularly encouraged to apply. Affirmative action/equal opportunity employer.



The New School

EUROPEAN OPPORTUNITIES

Biochemist or Biologist

The Hewlett-Packard Waldbronn Analytical Division, located near Karlsruhe, Germany, has worldwide responsibility for the development, manufacturing and marketing of liquid chromatographs and other products for pharmaceutical laboratories. For our activities in developing and marketing products and services to drug discovery departments we are looking for a **Biochemist or Biologist** in our international, team-based work environment, demanding a high degree of creativity, initiative and self direction.

Responsibilities include

- propose new product ideas and help with the development of user requirement specifications
- identify and develop applications for new and existing products, together with users of such equipment in pharmaceutical drug discovery
- publish the results in Hewlett-Packard customer journals and in scientific journals
- present results to the Hewlett-Packard development, marketing and sales teams and to current and future users of the products at scientific symposia.

The ideal candidate has

- an advanced degree in life-science or molecular biology
- laboratory experience in use of screening technologies for biomolecules, in Western Blot analysis, Radio Immuno-Assay, ELISA or Affinity Chromatography and/or experience in protein characterization
- oral and written communication skills, with fluency in English
- interest in working in an international marketing team.

If you are interested in this position, please send your full application to Hewlett-Packard GmbH, Veronika Junius, Personnel Department, Hewlett-Packard Strasse 8, 76337 Waldbronn, Germany.



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Hewlett-Packard is an international company which designs, manufactures and services electronic products and systems for measurement, computation and communications. Headquartered in Palo Alto, California the company employs 121,900 people in approximately 120 countries and has net revenues of 42.9 billion dollars worldwide.

POSITIONS OPEN

The University of California at Berkeley seeks to fill the position of **MANAGER** for the R. B. Gump South Pacific Biological Research Station on Moorea, French Polynesia.

Duties include management of the Station and its programs (75 percent) and performance of research in marine or terrestrial biology, biogeography, geology, or anthropology (25 percent). The Manager will reside at the Station and supervise a staff of three to four persons. Organizational, administrative, and mechanical skills are important prerequisites, and prior experience in managing field stations, especially in the tropics, is preferred. The applicant should hold a Ph.D. or Master's degree in the natural sciences, is expected to be conversant in French, preferably fluent, and should be certified as a scuba diver by the UCB diving board or an equivalent institution. The annual salary range is \$33,204 to \$54,072 and commensurate to experience. The position is renewable each year.

Applicants should send a curriculum vitae with the names of three references before April 30, 1998, to: Dr. Vincent H. Resh, R. B. Gump South Pacific Biological Research Station, Dean's Office, College of Natural Resources, 101 Giannini Hall #3100, University of California, Berkeley, CA 94720. E-mail: vresh@nature.berkeley.edu. Applications submitted after the deadline will not be considered.

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

SENIOR POSTDOCTORAL POSITIONS AVAILABLE AT SLOAN-KETTERING INSTITUTE

Seeking Research Scientists with several years of postdoctoral experience to define the role of AML1 and ETS transcription factors in normal and leukemic hematopoietic cell survival and differentiation. Applicants should have considerable expertise in the creation and analysis of knockout or transgenic mice, in differential molecular cloning techniques, or in the study of signal transduction pathways or cell cycle regulation. Those with expertise in hematopoietic cell development in *Xenopus* or zebrafish systems are also encouraged to apply. A description of your research interests, curriculum vitae, and the names and telephone numbers of three references should be sent to: Dr. Stephen D. Nimer, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, Box 575, New York, NY 10021.

A **POSTDOCTORAL POSITION** is available to investigate protein-carbohydrate interaction in aging and diabetic complications (JBC 271:19338, 1996; ABB 344:29, 1997; JBC 273:6928, 1998). Applicants must hold a Ph.D. in biochemistry with a strong background in protein biochemistry. Preference will be given to individuals with experience in free radical biology. Send curriculum vitae and three letters of recommendation to: R. H. Nagaraj, Ph.D., Department of Ophthalmology, Case Western Reserve University, Wearn 637, Cleveland, OH 44106. E-mail: nhr@po.cwru.edu.

SENIOR STAFF ASSOCIATE

Incumbent must possess a minimum of a Bachelor's degree with relevant professional experience in biochemical and molecular biological techniques. Projects include analyses of the molecular basis of cancer and neurodegeneration. Dr. P. B. Fisher, Department of Urology, College of Physicians and Surgeons, Columbia University, 630 West 168th Street, New York, NY 10032.

A **POSTDOCTORAL POSITION** is available immediately to study the role of oxidants in endotoxin-induced endothelial prostanoid synthesis and release. Position requires knowledge of cell culture techniques, Northern and Western analysis, RT-PCR, ESR, ELISA, and GC-MS. Please submit curriculum vitae and names of two references to: Barbara Meyrick, Vanderbilt University Medical Center, MCN T-1217, Nashville, TN 37232-2650. FAX: 615-343-7448; e-mail: barbara.meyrick@mcmail.vanderbilt.edu.

RESEARCH ASSOCIATE positions available to study central nervous system drugs and cytokine-inducible gene expression *in vitro* and *in vivo*. Applicants with a strong background in molecular biology, transcriptional regulation, or RT-PCR are requested to send a curriculum vitae with three letters of recommendation to: Peter Syapin, Ph.D., Department of Pharmacology, Texas Tech University Health Sciences Center, Lubbock, TX 79430. FAX: 806-743-2744; e-mail: phrjps@ttuhsc.edu.

POSITIONS OPEN



SUPERVISORY RESEARCH ANIMAL SCIENTIST/RESEARCH LEADER GS-14/15 (\$66,138 to \$101,142)

ARS is recruiting for a unique research leadership—Senior Scientist position in the Nutrient Conservation and Metabolism Laboratory, Livestock and Poultry Sciences Institute, located in Beltsville, Maryland. The individual sought should have leadership skills to integrate research disciplines bridging nutrient utilization by dairy cattle and creative solutions toward livestock waste management. Technology transfer experience and success in competitive grant applications are desirable. Applicants must call for a copy of the announcement for the qualification requirements and applications procedures (Announcement #ARS-D8B-131). Ph.D. desirable and U.S. citizenship is required. For further information contact: Judy Harrington, USDA-ARS-HRD, Telephone: 301-344-2949. USDA, ARS is an Equal Opportunity Employer.

ASSISTANT LABORATORY DIRECTOR

Fairfax Identity Laboratories, a division of the Genetics and IVF Institute, is seeking applicants for the position of Assistant Laboratory Director. Qualifications include a doctoral degree in genetics, molecular biology, or a related field, with interest or experience in paternity testing and forensic applications. The Institute provides a stimulating environment in which leadership, innovation, and research are encouraged. We offer a comprehensive benefits package and a fine location in the Washington, D.C. area. Salary is commensurate with experience. For confidential consideration, please forward your curriculum vitae to:

Dr. Amanda C. Sozer
Fairfax Identity Laboratories
3025 Hamaker Court, Suite 203
Fairfax, VA 22031
FAX: 703-204-9125
E-mail: asozer@givf.com

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

Molecular genetics **POSTDOCTORAL FELLOW-SHIP** available immediately for work on two projects: gene position candidate evaluations in mouse QTL studies; and molecular genetic studies in families with a gene mutation resulting in an abnormal phenotype. Possibility of long-term position. Salary, benefits competitive. Send cover letter, curriculum vitae, and the names of three references to: Ms. C. Farrell, Mineral Metabolism Laboratory, Loma Linda University, P.O. Box 7210, Loma Linda, CA 92354.

POSTDOCTORAL POSITION available to study gene expression pathways using high-density microarray technology. Studies will concentrate on comparing normal and malignant tissues as well as treated versus non-treated cancer cell lines. Candidate must have a strong cellular and molecular biology background. Please e-mail or send your curriculum vitae and at least two references to: James R. Hudson Jr., Research Genetics, 2130 South Memorial Parkway, Huntsville, AL 35801. E-mail: hudson@resgen.com.

RESEARCH ASSOCIATE BOSTON UNIVERSITY SCHOOL OF MEDICINE

Participate in studies involving matrix protein regulation by lung cells in culture. Molecular mechanisms controlling mRNA stability will be assessed, as well as cell-matrix interactions. Send curriculum vitae to: Linda M. Keys, The Pulmonary Center, 715 Albany—R304, Boston, MA 02118.

DIRECTOR OF CONSERVATION PROGRAMS

To oversee all science and conservation work, manage conservation teams, and supervise conservation planning. Seeking experienced conservation practitioner to lead development of multiple community-based conservation initiatives. The Nature Conservancy—Wisconsin. Telephone: 608-251-3994, ext. 106 for job description. Open until filled.

POSITIONS OPEN

THE UNIVERSITY OF TEXAS M. D. ANDERSON CANCER CENTER

The University of Texas M. D. Anderson Cancer Center has an outstanding opportunity at our research facility located in Smithville, Texas for:

POSTDOCTORAL TRAINEES

Postdoctoral training positions through an NCI-sponsored training program in molecular and cellular mechanisms of carcinogenesis are available starting July 1, 1998. Research programs focus on the following areas: DNA repair and mutagenesis role of oncogenes and/or tumor suppressor genes in multistage carcinogenesis, tumor promotion, normal and tumor cell differentiation, carcinogen metabolism and adduct formation, retrovirology, chemoprevention, and nutrition in cancer. Applicants must be U.S. citizens or permanent residents and must have a Ph.D., M.D., or D.V.M. degree.

For an application, contact: Dr. Ellen Richie, Professor, University of Texas Science Park, Box 389, Smithville, TX 78957. E-mail: erichie@odin.mdacc.tmc.edu; Telephone: 512-237-9425. We are an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL RESEARCH

Two positions are available in the laboratory of Melvin Berger, M.D., Ph.D., Departments of Pediatrics and Pathology, Case Western Reserve University (CWRU), Cleveland, Ohio.

(1) Studies of regulation of cytokine production by airway epithelial cells in the context of cystic fibrosis. Experience with epithelial cell culture and analysis of mRNA and/or *in situ* hybridization required.

(2) Studies of expression, subcellular localization, and function of complement receptor type 1 (CR1) emphasizing mutated and chimeric receptor constructs. Experience with recombinant DNA, transfection of mammalian cells, and confocal microscopy required.

U.S. citizenship or permanent resident status required. Contact: Dr. Melvin Berger, Immunology Division, Department of Pediatrics, Case Western Reserve University, 11100 Euclid Avenue, Cleveland, OH 44106. FAX: 216-844-7587; e-mail: mxbl2@po.cwru.edu. CWRU is an Equal Opportunity/Affirmative Action Employer.

The Nature Conservancy, an international conservation organization dedicated to protecting biological diversity, is seeking a **DIRECTOR OF SCIENCE** for its Great Lakes Program. A unique opportunity to translate state-of-the-art scientific theory, methods, and practice into applied action; to lead regional strategic action; and work binationally. Required: advanced degree in ecology, conservation biology, or related field; strong field ecology skills; familiar with biota and ecosystems of Great Lakes; experience in program development, strategic planning, and partnership; and knowledge of conservancy programs/methods. Competitive salary. Send résumé and letter to: Great Lakes Program, The Nature Conservancy, 8 South Michigan Avenue, Suite 2301, Chicago, IL 60603. Telephone: 312-759-8017. The Conservancy is an Equal Opportunity Employer.

MEDICAL DIRECTOR CARDIOVASCULAR Ph.D., Pharm.D. or M.D.

Medical education firm seeks a Medical Director due to growth and success in providing high quality medical education programs for its major pharmaceutical clients.

Experienced in analyzing and writing manuscripts about issues in cardiovascular medicine including arrhythmias, hypertension, heart failure, restenosis, or angina pectoris. Ability to communicate well and participate in goal-directed teams. Mail résumé to: Applied Clinical Communications, 1160 Parsippany Boulevard, Parsippany, NJ 07054. FAX: 201-316-5997; e-mail: jdagnese@appliedclinical.com.

TWO POSTDOCTORAL POSITIONS

Position One is to investigate the structural basis for heparin potentiation of antithrombin III anticoagulant activity. Position Two is to evaluate the use of neutrophil-resistant serpins in the treatment of inflammatory pathologies. Biochemistry, molecular biology, cell biology, and/or animal model experience required. Send curriculum vitae and names of three references to: Susan C. Bock, Ph.D., University of Utah, Departments of Medicine and Bioengineering, Pulmonary Division—Wintrobe 739, 50 North Medical Drive, Salt Lake City, UT 84132. E-mail: susan.bock@mcc.utah.edu.

POSTDOCTORAL POSITION

Post doctoral Position available to participate in studies directed toward the identification and characterization of genes involved in inherited immunodeficiencies, particularly genes controlling B-cell development. The applicant should have a Ph.D. or M.D./Ph.D. and experience in molecular biology and/or tissue culture. Please send curriculum vitae, statement of research interests and three letters of reference to:

Dr. M. E. Conley
Department of Immunology
St. Jude Children's
Research Hospital
332 N. Lauderdale
Memphis, TN 38105



ASSISTANT/ASSOCIATE PROFESSOR TENURE TRACK

Department of Otolaryngology
University of Pittsburgh
School of Medicine

The Division of Head and Neck Oncology and Immunology in the Department of Otolaryngology at the University of Pittsburgh School of Medicine, in conjunction with the University of Pittsburgh Cancer Institute, has an opening for a full-time Assistant/Associate Professor tenure track position to begin on September 1, 1998. The successful candidate will concentrate their research efforts in the field of head and neck oncology and complement the research of other established investigators at the institution. Qualified candidates will hold either a Ph.D. and/or M.D. degree with at least five years postdoctoral training and significant research accomplishments in cancer biology. A generous start-up package, with a minimum salary of \$45,000, based on experience, is available with the understanding that the candidate will establish an independent, externally funded research program. To ensure full consideration, please send by August 31, a letter of interest and a curriculum vitae to: **Jonas T. Johnson, M.D., Department of Otolaryngology, University of Pittsburgh School of Medicine, EEI Suite 500, 200 Lothrop Street, Pittsburgh, PA 15213. 412-647-2130. The University of Pittsburgh is an Affirmative Action, Equal Opportunity Employer.**

HEAD OF MILLENNIUM SEED BANK



Lead this Ambitious Conservation Project

Up to c. £37,000 Sussex

For the last 20 years, the world renowned Royal Botanic Gardens, Kew (RBG Kew) has been working to save some of the world's rich and varied plant life through seed bank storage at Wakehurst Place in Sussex. The Millennium Seed Bank, a new project part funded by the Millennium Commission, will mark a dramatic expansion in the scale of this work, constituting one of the most ambitious international conservation projects ever undertaken.

Your role will initially focus on the transition of the present section into a Department in its own right and its integration into RBG Kew's corporate planning process.

The project's aims are to collect 10% of the world's spermatophyte flora, principally from drylands, and to then conserve them under optimal storage conditions, most for over 200 years. You will be responsible for ensuring the project meets these objectives and, as the project's figurehead, post 2000, provide the leadership and credibility to manage a large, diverse professional team.

Alongside your experience in all aspects of wild species seed conservation, you will need a background of securing funding and science management as well as the international implementation of the Convention on Biological Diversity.

This is a unique role offering an exciting opportunity to make a mark on the world's environmental conservation coupled to the opportunity to continue personal research projects. Alongside the salary indicated, you will be offered a mainly non-contributory pension scheme, generous annual leave and probably one of the most stunning working environments in the country, set in 400 acres dating back to the 12th Century.

For more details and an application form (to be returned by 17th April 1998), write to Capita RAS, Innovation Court, New Street, Basingstoke, Hampshire RG21 7JB, or telephone 01256 468551 (24 hours) or fax 01256 383786/383787. Internet: rasnet.co.uk Please quote reference B3604. Interviews will be held in June 1998.

An equal opportunity employer



A MILLENNIUM PROJECT
 SUPPORTED BY FUNDS
 FROM THE NATIONAL LOTTERY

POSITIONS OPEN

The NIA's Laboratory of Cellular and Molecular Biology is searching for a tenure-track **INVESTIGATOR** to conduct studies on the anti-aging mechanisms of caloric restriction and its relevance to human aging, health, and disease. The successful candidate must possess a Ph.D., M.D., or D.V.M. in a relevant field and will be expected to establish an independent research program in one or more aspects of the molecular, biochemical, physiological, and/or behavioral effects of this nutritional intervention using state-of-the-art methodology. The research can involve various animal models, including invertebrates and vertebrates, but preference would be given to candidates with experience in nonhuman primate models. Knowledge of nutritional interventions and their relevance to gerontology is essential. In addition, candidates should possess good interpersonal skills and demonstrated ability to manage large-scale animal projects. Applicants should submit a curriculum vitae, bibliography, a detailed statement of research interests, select publications, and three letters of recommendation by April 13, and should be sent to: **Ms. Terry Neibuhr, Personnel Office, 5600 Nathan Shock Drive, Baltimore, MD 21224. Telephone: 410-558-8031.**

POSTDOCTORAL FELLOW IN VIRAL IMMUNOLOGY

The Beckman Research Institute/City of Hope National Medical Center is seeking a Postdoctoral Fellow to participate in cytomegalovirus nucleotide vaccine development. Skills in molecular biology, cellular immunology, and animal investigation preferred. Candidates with a Ph.D. should send a curriculum vitae and three letters of recommendation to: **City of Hope National Medical Center and Beckman Research Institute, Attn: Shelley Tam, 1500 East Duarte Road, Duarte, CA 91010-3000. FAX: 626-301-8448; e-mail: stam@smtpink.coh.org. Equal Opportunity Employer.**

We seek a full-time **POSTDOCTORAL ASSOCIATE** for up to 30 months to conduct analyses of soil and wetland trace gas (CO , CH_4) microbiology. Ph.D. in microbiology or related field required; experience with gas chromatography, radiotracers, cultures, and molecular techniques highly desirable. Annual salary range \$26,000 to \$28,000. Send statement of interest, curriculum vitae, and three letters of reference to: **Dr. G. M. King, Darling Marine Center, University of Maine, Walpole, ME 04573. Telephone: 207-563-3146, ext. 207. Review of applications begins 21 March 1998 and continues until a suitable candidate is found.**

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

POSTDOCTORAL POSITION available immediately to study the role of a novel phosphodiesterase gene in the regulation of PKA-mediated development in *Dicystostelium* (PNAS 93:15260, 1996; Development 125:691, 1998). Experience in molecular genetics, developmental biology, or protein biochemistry is required. Send curriculum vitae, statement of research interests, and names of three references to: **Dr. Gad Shaulsky, Department of Molecular and Human Genetics, Baylor College of Medicine, Houston, TX 77030. E-mail: gad@bcm.tmc.edu.**

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

A **POSTDOCTORAL POSITION** is available immediately in an active NIH-funded immunology laboratory to investigate mechanisms of tolerance and autoimmune disease in versatile animal models (see *Curr. Opin. Immunol.* December, 1997). Molecular and cellular immunology techniques are desirable and salary is competitive. Send a curriculum vitae, publication list, and the names, addresses, and telephone numbers of three scientists for letters of recommendation, to: **Dr. Kenneth Tung, Department of Pathology, University of Virginia, Box 214, Charlottesville, VA 22908. FAX: 804-924-8060; e-mail: kst7k@virginia.edu.**

POSTDOCTORAL POSITION

A Postdoctoral position is available immediately in the Department of Molecular Biosciences at University of California, Davis to study the mitochondrial control of neurodegeneration. Experience in mitochondrial molecular biology (PCR, RFLP, Southern, phylogenetic analysis) as well as biochemistry (RCR, Westerns) and tissue culture are very strongly preferred. Send curriculum vitae to: e-mail: **gaortopassi@ucdavis.edu; FAX: 530-754-9342.**

POSITIONS OPEN

Two **POSTDOCTORAL POSITIONS** to work on mechanisms of retinoids in cancer and/or metabolic diseases. Candidates should have good knowledge and experience with molecular biology technologies. Please contact: **M. Pfahl, Sidney Kimmel Cancer Center, 10835 Altman Row, San Diego, CA 92121. Telephone: 619-623-9632; FAX: 619-824-1967. Equal Opportunity Employer.**

PLANT BIOLOGY PENN STATE

POSTDOCTORAL FELLOWSHIPS to develop cross-disciplinary research on biochemical, molecular, or physiological mechanisms of plant responses to the environment, and/or in their ecological, population, or evolutionary consequences. Postdoctorates will be expected to develop collaborative projects involving two or more of 24 participating faculty and more than one level of organization (i.e., biochemical/molecular, physiological, ecological). Must be U.S. citizen or permanent resident, have a Ph.D., and no more than five years of postdoctoral experience. Send curriculum vitae, three letters of reference, and a letter describing research interests to: **Jack Schultz, Pesticide Research Lab, e-mail: uj@psu.edu; Telephone: 814-863-4438 or: Eva J. Pell, 321 Buckhout Laboratory, Penn State University, University Park, PA 16802. E-mail: ejp@psu.edu; Telephone: 814-865-0323.**

An Affirmative Action/Equal Opportunity Employer; women and minorities encouraged to apply.

POSTDOCTORAL MOLECULAR BIOLOGY

Corixa Corporation is a biotechnology company dedicated to the development of T cell vaccines and therapies for cancer and infectious diseases. Corixa is seeking a Ph.D. and/or M.D. Postdoctoral Scientist with a molecular biology background and experience in cDNA library construction to join the tumor antigen discovery effort. Skills in full-length cloning and bioinformatics are preferred. Competitive salary and benefits. Please send curriculum vitae, statement of research interests and experience, and names of three references by April 15, 1998, to: **Corixa Corporation, Attn: AD800, 1124 Columbia Street, Suite 200, Seattle, WA 98104. FAX: 206-667-5715. An Equal Opportunity Employer.**

POSTDOCTORAL POSITION UNIVERSITY OF PENNSYLVANIA

Two Postdoctoral positions are available for studies on phospholipid signaling in hematopoietic cells.

Immediate opportunities available for a highly motivated Ph.D. with an interest in cell signaling. One position will concentrate on the hematopoietic protein pleckstrin and the other on PI3K. Experience in molecular biology and interest in cell biology preferred.

Send curriculum vitae and the names of three references to: **Dr. Charles S. Abrams, Division of Hematology-Oncology, 422 Curie Boulevard, #1005, Philadelphia, PA 19104. FAX: 215-573-7400. Equal Opportunity Employer.**

POSTDOCTORAL POSITION

A Postdoctoral position is available to study human chromosome segregation and the structure and function of centromeres, towards making human artificial chromosomes. Experience in molecular and cell biology, cell culture, cytogenetics, or microscopy is desirable. Candidates should send curriculum vitae, research goals, and letters of references to: **Peter Warburton, Ph.D., Department of Human Genetics, Box 1498, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. We are an Equal Opportunity Employer fostering diversity in the workplace.**

UNIVERSITY OF MIAMI

POSTDOCTORAL POSITION available (at least two years) to study pathological mechanisms of neurodegenerative diseases. Studies will include biochemical, electrophysiological, and optical techniques using *in vitro* and *in vivo* preparations. Expertise with HPLC and microdialysis preferred. Send curriculum vitae and name and telephone of three references to: **Miguel A. Perez-Pinzon, Ph.D., Department of Neurology, D4-5, University of Miami School of Medicine, Miami, FL 33101. E-mail: mperez@neuron.med.miami.edu.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS are now available in the Sealy Center for Molecular Cardiology for the study of gene regulation in vascular cells. Positions require experience in molecular biology, DNA/RNA techniques, cell culture, and protein purification and expression. Starting salaries are generous and commensurate with experience. Positions are available with the following Principal Investigators:

Marshall S. Runge, M.D., Ph.D.: molecular mechanisms of atherosclerosis.

Cam Patterson, M.D.: gene regulation in vascular cells.

Send curriculum vitae and names of three references to: **Dr. Cam Patterson, Sealy Center for Molecular Cardiology, University of Texas Medical Branch, 301 University Boulevard, 9.138 Medical Research Building, Galveston, TX 77555-1064. E-mail: choraist@utmb.edu. UTMB is an Equal Opportunity/Affirmative Action/Minority/Female/Disabled/Veteran Employer.**

MOLECULAR GENETICS/VIRAL ONCOLOGY

A **POSTDOCTORAL POSITION** is available immediately to investigate the mechanism by which topoisomerase I participates in hepatitis B virus replication in the liver and integration into host chromosomes via illegitimate recombination. Applicants should have experience in molecular and cellular biology and preferably virology. Please send curriculum vitae and names of three references to: **Charles E. Rogier, Ph.D., Liver Research Center, Department of Medicine, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461. Equal Opportunity Employer.**

POSTDOCTORAL POSITION available immediately on a new NIH grant for a **NEUROBIOLOGIST** with a strong molecular biology background to study the role of cyclic nucleotide phosphodiesterases in the regulation of neuromodulation by adenosine in arousal centers in the brain. Send curriculum vitae, a letter describing research background and interests, and the names and telephone numbers of three references to: **Paul A. Rosenberg, M.D., Ph.D., Department of Neurology, Children's Hospital and Harvard Medical School, 300 Longwood Avenue, Boston, MA 02115. FAX: 617-730-0636; e-mail: rosenberg@al.tch.harvard.edu. An Equal Opportunity Employer.**

POSTDOCTORAL ASSOCIATE SIGNALING AND CELL POLARITY

Position available to study (1) function of RGS proteins in transgenic mice; or (2) actin polarization by PAK kinases. Requires first-author publications and experience in molecular biology, biochemistry, or cell biology. Send curriculum vitae and three letters of reference to: **Dr. Kendall J. Blumer, Department of Cell Biology and Physiology, Washington University School of Medicine, Box 8228, 660 South Euclid Avenue, St. Louis, MO 63110. E-mail: kblumer@cellbio.wustl.edu.**

POSTDOCTORAL POSITION MOLECULAR NEUROBIOLOGY THE ROCKEFELLER UNIVERSITY

Postdoctoral in molecular neurobiology with an emphasis on steroid hormone effects in mouse brain. To begin by June 1, 1998. Contact: **Professor Donald W. Pfaff, The Rockefeller University, 1230 York Avenue, Box 275 New York, NY 10021. Telephone: 212-327-8666; FAX: 212-327-8664; e-mail: pfaff@rockvax.rockefeller.edu.**

POSTDOCTORAL FELLOW available immediately to study development and effector function of CD8⁺ T cells in cutaneous immune responses (see *JEM* 183:1001, 1996; *EJI* 26:2606, 1996; *Jl* 158:4721, 1997; *Jl* 159:4217, 1997). Experience in immunology and molecular biology required. Send curriculum vitae and the names of three references to: **Dr. Rob Fairchild, Department of Immunology, Ffb-41, Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195. FAX: 216-444-3146; e-mail: fairchr@cesmtp.ccf.org.**

POSTDOCTORAL POSITION available immediately to study inverted repeat-mediated genomic instability in yeast. Experience in yeast genetics and molecular biology preferable. Send curriculum vitae and names of three references to: **Dr. Dillip Nag, Wadsworth Center, 120 New Scotland Avenue, Albany, NY 12201-2002. E-mail: dilip.nag@wadsworth.org. Competitive NIH-funded salary (through Health Research, Inc.). Health Research, Inc. is an Affirmative Action/Equal Opportunity Employer.**

The Cardiff Biosciences Initiative

Director of Biosciences

Cardiff University seeks an outstanding individual to head its new initiative - **the Cardiff School of Biosciences**. This new School will be created out of two large Schools - Pure & Applied Biology and Medical & Molecular Biosciences, building on the core of existing research strength and recognised teaching excellence, to position Cardiff as a major force in the international and UK biosciences community.

The new School will serve a population of some 1400 students, more than 110 of whom are research students. The School of Biosciences will occupy a total of c.17,000 sq metres of well resourced and equipped facilities, with a staff faculty of nearly 80 core academic posts, over 70 research posts, combining with technical and support staff into a unit of over 250 people.

Excellence in Research and Teaching

The 1996 Research Assessment Exercise firmly established Cardiff in the top 15 UK research Universities, with 12 departments rated 5 or 5* and a further 11 rated at 4. These departments include some 80% of all research active staff in the University.

The University wishes to invest further in the biosciences and create an internationally renowned research centre. Cardiff's actions in this area will enhance the existing 'Cardiff Partnership' with the University of Wales College of Medicine, where the combined research activities provide the opportunity for research to span from basic science to clinical application. Each institution has strengths in biomedical research and there are excellent prospects for the Director to develop further the research links between Cardiff University and the College of Medicine.

Cardiff has a first rate record in Teaching Quality Assessments and the achievements in the Biosciences are exceptionally good, with 'Excellent' gained in all areas, including in Anatomy and Physiology, Biology, Biochemistry, and also in Medicine and Dentistry taught jointly through the Cardiff Partnership with the College of Medicine.

Leadership

Cardiff University now seeks an individual of stature to head this exciting initiative. The appointee must be a leader drawn from the very top rank of the international Biosciences research community, and be capable of inspiring existing and new staff to achieve outstanding performance in research. The Director of Biosciences will be a leading force in the Cardiff Partnership and will promote Cardiff Biosciences research in the international research community. The salary for this Head of School position is negotiable but will be commensurate with the level of responsibility and stature of this very senior post.

Cardiff has appointed Saxton Bampfylde International to assist in the search for such a leader. Nominations, or informal contact for discussions, should be directed to Dr Gavin Mackenzie of Saxton Bampfylde International on 0171 799 1433 (fax 01483 303029), in the first instance and applications by CV with a covering letter of application should be sent to Dr Mackenzie, at Saxton Bampfylde International plc, PO Box 198, Guildford, Surrey GU1 4FH.

It is expected that the new Director, once identified, will play a significant role in making the additional appointments listed below, and hence contact with Saxton Bampfylde International should be made before 2 April 1998, although the University reserves the right to appoint from outwith the formal applications.

Ten New Posts Professors, Readers, Senior Lecturers, Lecturers

The new School of Biosciences will be central to the next phase of success at Cardiff, and will be the major focus of new research investment.

In the first instance, the University wishes to make at least **TEN** new appointments to permanent positions of individuals capable of contributing significantly to the future of the Biosciences at Cardiff - at any level from professorial group leader to lecturer.

Currently, Cardiff's research activities in the Biosciences are focused upon:

- **Molecular Entomology, Therapeutic Targets • Neuroscience • Connective Tissue Biology**
- **Environmental Biochemistry, Microbiology • Aquatic Biology**

However, the University will welcome outstanding applications from across the biosciences.

In addition to well-established figures or groups, the University expects to make some first permanent lectureship appointments, and the range of appointments may cover every stage between.

Any scientist wishing to take advantage of this exciting opportunity should make their application to the University by CV, including full details of publications and research grant income. An indication of research plans should also be included. A covering letter of application, setting out personal career aspirations, must be attached. The letter must also specify the post currently held by the applicant and the level of appointment sought at Cardiff. It would also be helpful if the addresses (including email addresses where possible) of three referees were included.

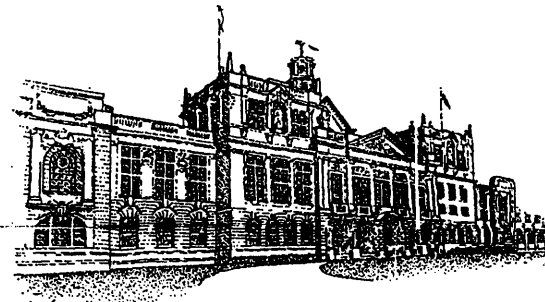
Applications should be submitted to the Director of Personnel, Cardiff University, 50 Park Place, CARDIFF CF1 3AT (e-mail persad@cardiff.ac.uk, telephone +44-1222-874895), through whom appropriate contacts for further informal discussions may be established.

Priority will be given to CV applications received by 28 April 1998, but outstanding candidates will continue to be considered thereafter.

Further details about the University and the Biosciences are available on Cardiff's website at <http://www.cardiff.ac.uk/>



ADVERTISED RECRUITMENT AND CONSULTANCY
A PRACTICE WITHIN SAXTON BAMPFYLDE INTERNATIONAL PLC



POSITIONS OPEN

ROSENSTIEL SCHOOL POSTDOCTORAL POSITION

The Division of Marine Biology and Fisheries, Rosenstiel School of Marine and Atmospheric Science, University of Miami, announces a competitive Rosenstiel Postdoctoral Award. This two-year award is an on-site research collaboration with a member of the Marine Biology and Fisheries faculty in one of the following areas: marine biomedical sciences, biological oceanography, fisheries, or coastal ecology. Applicants should include a curriculum vitae, a one-page research interest statement related to one of the thematic areas, up to three reprints or in press manuscripts, and the names and contacts for three references. Further details about our program and faculty can be found at website: www.rsmas.miami.edu/divs/mbf.html. Closing date is 15 April 1998 for a start date near September 1998. Applications to: RPD Search Committee, University of Miami Rosenstiel School of Marine and Atmospheric Science, Division of Marine Biology and Fisheries, 4600 Rickenbacker Causeway, Miami, FL 33149.

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

POSTDOCTORAL FELLOWSHIP POSITION

A Postdoctoral Fellowship position is currently available to do research focused on molecular mechanisms of influenza-induced changes in sleep and fever and other viral pathogenic mechanisms. Experience in molecular biology, virology, and neurobiology is desirable. Ph.D., D.V.M., or M.D. is required.

Interested candidates should send a letter of interest, curriculum vitae, and three letters of reference to:

Dr. James M. Krueger
Professor and Chair

Department of Veterinary and Comparative
Anatomy, Pharmacology, and Physiology (VCAPP)
College of Veterinary Medicine
Washington State University
Pullman, WA 99164-6520

Further information may be obtained via e-mail: krueger@vetmed.wsu.edu.

Washington State University is an Equal Opportunity/Affirmative Action Educator and Employer.

POSTDOCTORAL POSITION ADENOVIRUS GENE THERAPY VECTORS

Postdoctoral position available August 1, 1998, in the Department of Microbiology at the University of Colorado Health Sciences Center to work on development and testing of second generation adenovirus vectors for treatment of cystic fibrosis. A Ph.D. in molecular biology, biochemistry, or a related field is required. Salary is commensurate with training and experience. Submit curriculum vitae, bibliography, and names of three professional references to: Jerome Schaack, The Department of Microbiology, Campus Box B-175, University of Colorado Health Sciences Center, 4200 East Ninth Avenue, Denver, CO 80262. University of Colorado Health Sciences Center is committed to Equal Opportunity and Affirmative Action.

POSTDOCTORAL POSITION available immediately for RNA Virologist to study the molecular biology of birnaviruses. We have developed a reverse genetics system for birnavirus using synthetic transcripts derived from cloned cDNA (*Proc. Natl. Acad. Sci.* 93:11131-11136, 1996). Using this system, we will study the molecular basis of viral pathogenesis and virulence. Applicants should send curriculum vitae and list of three references (names, addresses, telephone numbers) to: Vikram N. Vakharia, Center for Agricultural Biotechnology, University of Maryland Biotechnology Institute, 5115 Plant Sciences Building, College Park, MD 20742-4450.

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

POSTDOCTORAL POSITION in molecular neurobiology at Cornell University to study expression of potassium channel genes in identified neurons using single-cell RT-PCR (*J. Neurosci.* 17:6597, 1997) and sense/antisense injections. Recent Ph.D. and strong skills in molecular biology are essential; knowledge of electrophysiology is desirable. Send curriculum vitae, names of three references, and statement of previous research to: Dr. R. Harris-Warrick, Section of Neurobiology and Behavior, S. G. Mudd Hall, Cornell University, Ithaca, NY 14853. E-mail: rmh4@cornell.edu. Equal Opportunity Employer.

POSITIONS OPEN



POSTDOCTORAL RESEARCH ASSOCIATE IN CELL SIGNALING

Two positions are available immediately to study G-protein control of differentiation and tyrosine kinase regulation of G-protein-linked receptors using microinjection, transgenic mouse, and mutagenesis techniques. View website: www.pharm.sunysb.edu. Ph.D. and experience in molecular biology/cell signaling required. Send curriculum vitae and letters of reference via FAX or e-mail to: Dr. Craig C. Malbon, Pharmacology, University Medical Center, SUNY at Stony Brook, NY 11794-8651. FAX: 516-444-7696; e-mail: craig@pharm.som.sunysb.edu. Equal Opportunity Employer.

MICROBIOLOGIST VIROLOGIST/PROTEIN CHEMIST

United States Department of Agriculture, Agriculture Research Service (ARS), Southeast Poultry Research Laboratory, Athens, Georgia has an opening for a **POSTDOCTORAL RESEARCH ASSOCIATE**. The Associate will conduct basic research on avian influenza virus hemagglutinin (HA) structure with a primary emphasis on the recent Hong Kong-origin H5N1 subtypes. Approaches will include *in vitro* recombinant DNA and crystallization and/or modeling studies in collaboration with the Biocrystallography Laboratory at the University of Georgia (Dr. B. C. Wang). Applicants should have a recent (three years) Ph.D. in microbiology, virology, or protein chemistry, and salary will be based upon experience (GS-11/12; \$38,593 to \$46,254). Preference will be given to candidates with closely related research experience. For more information on the research program and to apply, contact: Dr. Michael L. Perdue, 934 College Station Road, Athens, GA 30605. Telephone: 706-546-3435; e-mail: mperdue@asrr.arsusda.gov. ARS is an Equal Opportunity Employer.

THE REGULATION OF CELLULAR PROLIFERATION AND DIFFERENTIATION

POSTDOCTORAL and RESEARCH ASSOCIATE positions are available to investigate the regulation of cyclin-dependent kinase activities and how these activities alter cellular proliferation and differentiation. Highly motivated individuals are sought to investigate the molecular mechanisms that control the cell cycle and bring about growth arrest during differentiation. Outstanding research environment and competitive compensation. Initial appointments can be made for two years. Send curriculum vitae and the names of three references to:

W. J. Pledger, Ph.D.

H. Lee Moffitt Cancer Center and Research Institute
12902 Magnolia Drive
Tampa, FL 33612

POSTDOCTORAL POSITION MEMBRANE PROTEIN TRAFFICKING

Applications are invited for an immediate opening for a Postdoctoral Fellow to study the mechanisms regulating membrane protein traffic. This collaborative effort focuses on the molecular and cell biology of endocytic mutants isolated in a human liver cell-line. Experience in tissue culture and molecular biological techniques desirable. Please mail or FAX your curriculum vitae, names of three references to: Dr. Richard J. Stockert, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Ullmann, 123, Bronx, NY 10461. FAX: 718-430-8975. E-mail: stockert@aecom.yu.edu. Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE. Molecular Biologist needed to study adhesion and growth factor initiated receptor signaling in neuronal differentiation and pathfinding. Requires protein chemistry experience. Research involves genetic manipulation and computer-aided time-lapse video microscopy. Active collaborations ongoing in visual morphogenesis, sensory cell signaling, knockout mice, and pathway development within Doherty Vision Research Center where the lab is. Send letter, curriculum vitae, and three references to: Dr. Da-Yu Wu, University of Southern California Medical School, Department of Cell and Neurobiology, 1333 San Pablo Street, BMT 401, Los Angeles, CA 90033. Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION IN MOLECULAR OSMOTIC REGULATION

Available immediately to study transcriptional regulation of osmotically regulated genes in mammalian cells. Studies could include: (1) isolation and characterization of transcription factor(s) that interact with mammalian minimal essential osmotic response element(s) (Ferraris, J. D. et al., *J. Biol. Chem.* 271:18318-18321, 1996); (2) purification of low-abundance, osmotically regulated membrane-bound enzyme; (3) signal transduction events essential for the osmotic response.

Experience in molecular biology or protein purification is highly desired; applicants must have no more than four years of prior postdoctoral experience. Send curriculum vitae and three references to:

Dr. Arlyn García-Pérez
Chief, Osmotic Regulation Section
National Institutes of Health

Laboratory of Kidney and Electrolyte Metabolism
10 Center Drive MSC-1603
Building 10, Room 6N-260
Bethesda, MD 20892-1603
E-mail: agp@helix.nih.gov

NIH is an Equal Opportunity Employer.

THE W. M. KECK CENTER FOR COMPUTATIONAL BIOLOGY HOUSTON, TEXAS

Individuals are invited to apply for **POSTDOCTORAL FELLOWSHIP** positions supported by the National Library of Medicine or the National Science Foundation (*citizenship or permanent residency required*). The Center supports research at the interface between biology and computational science, providing trainees with cross-training, dual mentorship, and cutting-edge facilities. Areas of opportunity include advanced computational methods, algorithm development, biomedicine, crystallography, dynamics and design, genome studies, imaging, medical informatics, neuroscience, and structure/function of biomolecules.

For more information, access the Keck Center on-line at: <http://www.bioc.rice.edu/keck>.

Telephone: 713-527-4752
FAX: 713-527-4659

E-mail: keckcenter@bioc.rice.edu

Three **POSTDOCTORAL POSITIONS** (Visiting, one year) available in a phytoremediation lab for (1) a Wetland Ecologist to study the fate of trace elements in constructed wetlands, (2) a Microbiologist to study plant/microbe interactions in trace element uptake and volatilization by plants, and (3) a Molecular Biologist to identify and overexpress genes involved in trace element uptake and volatilization. Required: Ph.D. and experience in relevant subject area. Salary: \$27,000 to \$30,000. Application deadline: April 13. Send curriculum vitae and three letters of recommendation to: Prof. Norman Terry, Department of Plant and Microbial Biology, 111 Koshland Hall, University of California, Berkeley, CA 94720-3102. E-mail: nterry@nature.berkeley.edu. Equal Opportunity Employer/Affirmative Action.

NORTHWESTERN UNIVERSITY

POSTDOCTORAL POSITION available; NIH projects to examine the molecular basis for cytokine gene regulation in macrophages (*J.C.I.* 93:921, 1994) and developing genetic therapy for patients and animal models with inflammatory arthritis. Expertise in molecular and cellular biology and experimental animals required. Send résumé and names of three references to: Richard M. Pope, M.D., Chief, Arthritis Division, Northwestern University Medical School, 303 East Chicago Avenue, Ward 3-315, Chicago, IL 60611. E-mail: rmp158@nwu.edu. Northwestern University Medical School is an Affirmative Action/Equal Opportunity Employer. Hiring contingent upon eligibility to work in the United States of America.

Harvard Medical School, Dana-Farber Cancer Institute has **POSTDOCTORAL POSITIONS** available for studies of signal transduction in T-cell apoptosis [*Immunity* 2:363, 1995; 7:629, 1997]. Successful candidates will be highly qualified; background in molecular biology or biochemistry of cell activation preferred. A joint appointment will be held in an appropriate department of Harvard Medical School. Please forward curriculum vitae, bibliography, and names of three references to: Dr. Georg Weber, Dana-Farber Cancer Institute, 44 Binney Street, SM722C, Boston, MA 02115. FAX: 617-632-4630; e-mail: georg_weber@dfci.harvard.edu.



UNIVERSITY OF OXFORD

Dr Lee's Professorship of Chemistry

The electors intend to proceed to an election to Dr Lee's Professorship of Chemistry with effect from 1st October 1999, which falls vacant on the retirement of Professor J P Simons, FRS. The University is seeking candidates in the field of Physical Chemistry interpreted in its broadest sense.

A non-stipendiary fellowship at Exeter College is attached to the professorship.

Applications (ten copies, or one only from overseas candidates), naming three persons who have agreed to act as referees on this occasion, should be received not later than 27th April 1998 by the Registrar, University Offices, Wellington Square, Oxford OX1 2JD, from whom further particulars may be obtained.

The University is an Equal Opportunities Employer.

A major
European
pharmaceutical
company wishes
to recruit for its
Research Centre
located
west of Paris

SCIENTIST cardiovascular pharmacology

Involved in research projects aiming at the discovery of novel drugs, you will manage a small team and be more particularly responsible for research program on hemodynamic techniques and will perform in vivo models, specially myocardial ischemia.

Qualifications include a PhD with postdoctoral experience in cardiovascular research. Applicants should have a practical experience of operative techniques.

Our material and technical facilities are excellent. You will join a high-level multidisciplinary team and evolve in a stimulating scientific environment.

Please send your application file (CV, handwritten letter and photo) to **PUBLIVAL/3014**
27 route des Gardes - 92190 MEUDON (FRANCE)



BASF-LYNX Bioscience AG

BASF-LYNX Bioscience AG is a joint venture of a highly innovative US genomics company and a giant of the European chemical industry. Based in the stimulating environment of the Heidelberg university campus, BASF-LYNX Bioscience AG is rapidly growing to a sophisticated company of highly motivated and enthusiastic scientists whose primary goal will be to translate first rate science and technology into commercially valuable applications.

We offer career opportunities at the challenging interface between basic academic and applied research. Novel technologies for gene expression profiling and outstanding academic research partners provide a solid basis for our scientific and commercial success. We have high expectations of our employees, and reward them with a competitive compensation and benefits package.

Our three main missions are:

- identification of new targets for epilepsy
- discovery and characterization of marker transcripts for toxicity
- optimization of microorganisms for the production of fine chemicals

Qualifications of candidates should include a proven strong background in molecular biology plus substantial experience in one of the following fields:

- molecular neurobiology
(experience with animal models of neurological diseases would be advantageous) (Job Code MN)
- molecular toxicology and/or molecular pharmacology (Job Code MT)
- high-throughput analysis of gene expression/functional genomics (Job Code GE)
- microbiology/metabolic engineering (Job Code Me)

BASF-LYNX Bioscience AG aims to provide a stimulating, interactive, multinational atmosphere for young scientists with different cultural backgrounds, therefore applications from abroad are especially welcome.

Please submit your resume indicating the relevant Job Code to:

**BASF-LYNX Bioscience AG,
Im Neuenheimer Feld 519,
D-69120 Heidelberg, Germany**

POSITIONS OPEN

Mayo Clinic **POSTDOCTORAL RESEARCH FELLOWSHIPS** in endocrinology. The Endocrine Research Unit, Mayo Clinic, has openings in an NIH-funded postgraduate training program for qualified M.D. and Ph.D. candidates. Fourteen NIH-supported faculty are involved in clinical and basic studies of: (i) diabetes/metabolism (M. Jensen, R. Rizza, F. Schwenk, T. O'Brien, and S. Nair); (ii) bone/calcium metabolism (L. Fitzpatrick, R. Turner, S. Khosla, and L. Riggs); (iii) growth factors (C. Conover); (iv) thyroid stimulating hormone and thyroid iodide symporter (J. Morris); (v) Grave's ophthalmopathy (R. Bahn), and (vi) control of gene expression (N. Eberhardt and D. Tindall). The programs provide excellent training experiences in well-equipped laboratories investigating molecular, cellular, and organ-level endocrinology. NIH stipends are supplemented according to standard Mayo policy. Appointments are made for a minimum two-year period with maximum support up to three years. *Candidates must be U.S. citizens or have resident alien status.* Additional information available at website: <http://w.mayo.edu/endo/endocrine.html>. Interested individuals contact: Norman L. Eberhardt, Ph.D., Alfred 4-407, Mayo Clinic, Rochester, MN 55905. Telephone: 507-255-6554; FAX: 507-255-4828; e-mail: eberhardt@mayo.edu. Mayo Foundation is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION ANTIMICROBIAL THERAPEUTICS

Postdoctoral position available to study novel antimicrobial therapies. Candidates should have an interest in studying microbial pathogenesis in *in vivo* small animal model systems. Experience in cellular immunology including flow cytometry, mucosal immunology, bacteriology, and/or virology is highly desirable. This project is a component of a multi-investigator, multicenter research program. Position available immediately. Salary commensurate with experience. Please send curriculum vitae/bibliography and names of three references to: Dr. Steven D. London, Department of Microbiology and Immunology, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425. E-mail: londonsd@musc.edu. Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP position available to study the functions of homeobox genes in mammalian development. Projects include investigation of the roles of Hoxa 11 in limb and kidney development focusing on upstream regulation and downstream gene targets; study of the Hoxa 11 antisense transcripts (*Genes and Dev.* 7:2318; *Development* 121:1373; *Nature* 375:791); study of homeobox genes and brain development (*Dev. Biol.* 191: 230); and study of the formation of the left-right axis of development (*Nature* 389:963). Must have a solid background in DNA work. Must be hard working and self-motivated. Good publication record an obvious advantage. Send curriculum vitae and names and telephone numbers of two references to: Dr. Steven Potter, Division of Developmental Biology, Children's Hospital Research Foundation, 3333 Burnet Avenue, Cincinnati, OH 45229-3039 USA. E-mail: steve.potter@chmcc.org.

POSTDOCTORAL POSITION AT UNIVERSITY OF NORTH CAROLINA

A Postdoctoral position on protein crystallography is available in the Department of Biochemistry and Biophysics at the University of North Carolina at Chapel Hill. The structures under determination are cyclophilin, calcineurin, HIV-1 gag p24, and DNA endonuclease NaeI. Interested and qualified candidate with Ph.D. or equivalent degree should send curriculum vitae, research interest, and three letters of recommendation to: Hengming Ke, Department of Biochemistry and Biophysics, University of North Carolina, Chapel Hill, NC 27599-7260. E-mail: hke@med.unc.edu; FAX: 919-966-2852.

POSTDOCTORAL POSITION

A Postdoctoral position is available immediately to study mRNA decay and rRNA processing in prokaryotes. Strong background in molecular biology is desirable. Send a letter (no e-mails, please) with curriculum vitae and have two or three reference letters sent to: Dr. David Bechhofer, Department of Biochemistry, Box 1020, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. FAX: 212-996-7214. We are an Equal Opportunity Employer fostering diversity in the workplace.

POSITIONS OPEN

POSTDOCTORAL POSITION THE UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM Department of Dermatology

Postdoctoral positions are available on an NIH-funded Training Program in Investigative Dermatology to study the molecular, cellular, and tissue aspects of a wide variety of problems in cutaneous biology. Research will be conducted under the mentorship of established investigators in any of the following areas: cell adhesion; cell proliferation; cutaneous oncology/immunology; epidermiology; extracellular matrix and wound healing; inflammation; and intrinsic and photoaging; and pharmacology. Candidates must have a M.D., Ph.D., or M.D.-Ph.D. and be a U.S. citizen or permanent resident. Applicants should send curriculum vitae and summary of current research and goals, together with the names of three references to: Robert M. Lavker, Ph.D., Director of Research, Department of Dermatology, University of Pennsylvania Health System, 415 Curie Boulevard, Philadelphia, PA 19104. Telephone: 215-898-3232; FAX: 215-573-2143; e-mail: lavker@mail.med.upenn.edu.

Two **POSTDOCTORAL POSITIONS** are available immediately to study membrane biogenesis and intracellular protein transport. The induction of membrane biogenesis is being studied in animal cells and yeast. Projects comprise biochemical, molecular, and genetic analyses of the biogenesis of the secretory pathway, with an emphasis on how cells increase their secretory capacity. Intracellular protein transport is being studied in yeast using molecular genetics combined with cell biological and biochemical approaches. Projects address the molecular basis of endocytosis and protein sorting in the Golgi apparatus, with a focus on sorting signals and their interactions with vesicle coat proteins. Send curriculum vitae, a description of research experience, and three letters of reference to: David Meyer or Greg Payne, Department of Biological Chemistry, UCLA School of Medicine, Los Angeles, CA 90024-1737. E-mail: dimeyer@ucla.edu or gpayne@biochem.medsch.ucla.edu.

A **POSTDOCTORAL POSITION** in human genetics is available to identify and characterize genes required for spermatogenesis and/or oogenesis in humans. A background in genetics or molecular biology is desired. Send curriculum vitae, letter of interest, and three letters of reference to:

Renee A. Reijo, Ph.D.
Reproductive Genetics Division
Department of Obstetrics, Gynecology, and
Reproductive Sciences
University of California at San Francisco
533 Parnassus Avenue, UC Hall 253
San Francisco, CA 94143-0720
Telephone: 415-476-3178
FAX: 415-476-6145
E-mail: renee_reijo@quickmail.ucsf.edu

POSTDOCTORAL POSITION in neurophysiology available to study how oxidation affects ion channel and other neuronal properties. Electrophysiology experience using single-channel and macroscopic patch-clamp recordings as demonstrated by publication is required. Knowledge of molecular biology, optical methods, and organ-level physiology is desirable. Send curriculum vitae, names of references, and description of previous research experience to: T. Hoshi, Ph.D., Department of Physiology and Biophysics, The University of Iowa, Iowa City, IA 52242. FAX: 319-335-7330. E-mail: toshinori-hoshi@uiowa.edu. The University of Iowa is an Equal Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply.

POSTDOCTORAL POSITION

An immediate opening exists for a Postdoctoral Fellow to study oncogenic signal transduction focusing on the role of the JAK/STAT pathway in growth factor/cytokine signaling and related malignancies.

Send cover letter, résumé including the names of three references, and statement of research interests to: Dr. William LaRochelle, Ph.D., Principal Investigator, National Cancer Institute, Building 37, Room 1E24, Bethesda, MD 20892.

NCI is an Equal Opportunity Employer.

POSITIONS OPEN

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

POSTDOCTORAL POSITIONS available in summer/fall 1998 to study mechanisms controlling tolerance and autoimmunity to immunologically privileged antigens and to develop approaches to immunotherapy. The studies are conducted in animal models of antiretinal autoimmunity. Approaches and conclusions are largely generalizable to other autoimmune diseases. Applicants should have a strong background in cellular and molecular immunology. Experience in rodent handling and surgery is an asset. For more information visit our website: <http://www.nei.nih.gov/intramural/imm-reg.htm>. Applicants must be U.S. citizens or permanent residents and have less than five years of postdoctoral experience. Stipend range: \$25,000 to \$35,000 per year. Submit a curriculum vitae/bibliography, one-page summary of research interests, and names of three references to: Rachel R. Caspi, Chief, Section on Immunoregulation, Laboratory of Immunology, NEI, Building 10, Room 10N222, 10 Center Drive MSC 1857, Bethesda, MD 20892-1857. Telephone: 301-435-4555; FAX: 301-480-6668; e-mail: rcaspi@helix.nih.gov.

POSTDOCTORAL POSITION IN MOLECULAR EPIDEMIOLOGY

A Postdoctoral position is immediately available in our Cancer Susceptibility Program within our NCI-funded Cancer Center. This individual will be part of an ongoing interdisciplinary study aimed at identifying mechanistic factors responsible for observed racial/ethnic differences in cancer risk. Applicants should have a Ph.D. and a strong background in molecular biology or biochemistry and an interest in applying these techniques in large-scale human studies on cancer risk. Submit curriculum vitae, statement of career goals, and the names of three references to: American Health Foundation, Department JR, 1 Dana Road, Valhalla, NY 10595. FAX: 914-592-6317.

Equal Employment Opportunity/Minorities/Females/Disabled/Veterans/ADA.

POSTDOCTORAL RESEARCH SCIENTIST. Schneider Children's Hospital of the North Shore-Long Island Jewish Health System, has a position available for a **CELL BIOLOGIST** to study the biochemical and molecular mechanisms by which neutrophil recruitment and native lung cells contribute to inflammation and chronic lung disease of the newborn. Ph.D. in biological sciences with experience in molecular biology requested. Competitive salary and benefits program. Please send résumé to: Dr. Dennis Davidson, Division of Neonatal-Perinatal Medicine, Department of Pediatrics, Schneider Children's Hospital, 270-05 76th Avenue, New Hyde Park, NY 11040. Telephone: 718-470-3440. North Shore-Long Island Jewish Health System is an Equal Opportunity Employer.

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POSTDOCTORAL POSITIONS available immediately to study antisense inhibition of viral replication in stem cells and signaling mechanisms in endothelial cell apoptosis. Molecular biology experience necessary. Competitive salary and benefits available. Send résumé to: Jeffrey Laurence, M.D., Cornell University Medical College, 411 East 69th Street, New York, NY 10021. Equal Employment Opportunity/Affirmative Action/Minorities/Females/Disabled/Veterans.

POSTDOCTORAL POSITION available to study herpes simplex virus DNA replication. Research will involve a study of the virally encoded enzymes as well as their interaction during DNA replication. Background in enzymology and molecular biology is desirable. Please send curriculum vitae, and the names of three references, to: I. R. Lehman, Department of Biochemistry, Beckman Center, Stanford University, Stanford, CA 94305-5307. FAX: 650-723-6783.

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POSTDOCTORAL POSITION in molecular microbiology to study expression, function, and structure of bacterial multidrug resistance pumps. Knowledge of protein chemistry a plus. Competitive salary commensurate with experience. The project is funded by the NIH and a biotechnology company, and participation in a drug discovery project is an option. The laboratory is located in a new science and technology building, 15 minutes from downtown Boston. Send curriculum vitae and names of three references by e-mail to: Dr. Kim Lewis, Biotechnology Center, Tufts University, Medford, MA 02155. E-mail: klewis@tufts.edu.

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SYMPOSIUM

Call for **ABSTRACTS** for "Multiple Chemical Sensitivity: Problems for Science and Society" at the American Chemical Society meeting in Boston, August 25-26, 1998. The symposium will consist of two sessions on mechanisms of multiple chemical sensitivity and related disorders: one on epidemiological investigations, and one on societal implications. A limited amount of discretionary financial support is available. Call for information: Telephone: 301-405-3928 and send abstract by April 15, 1998, to: Dr. Amy Brown, Entomology Department, University of Maryland, College Park, MD 20742. FAX: 301-314-9290.

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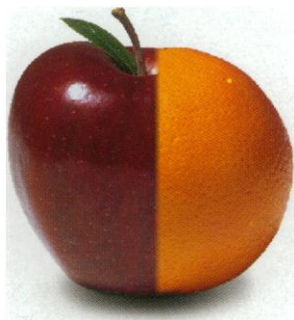
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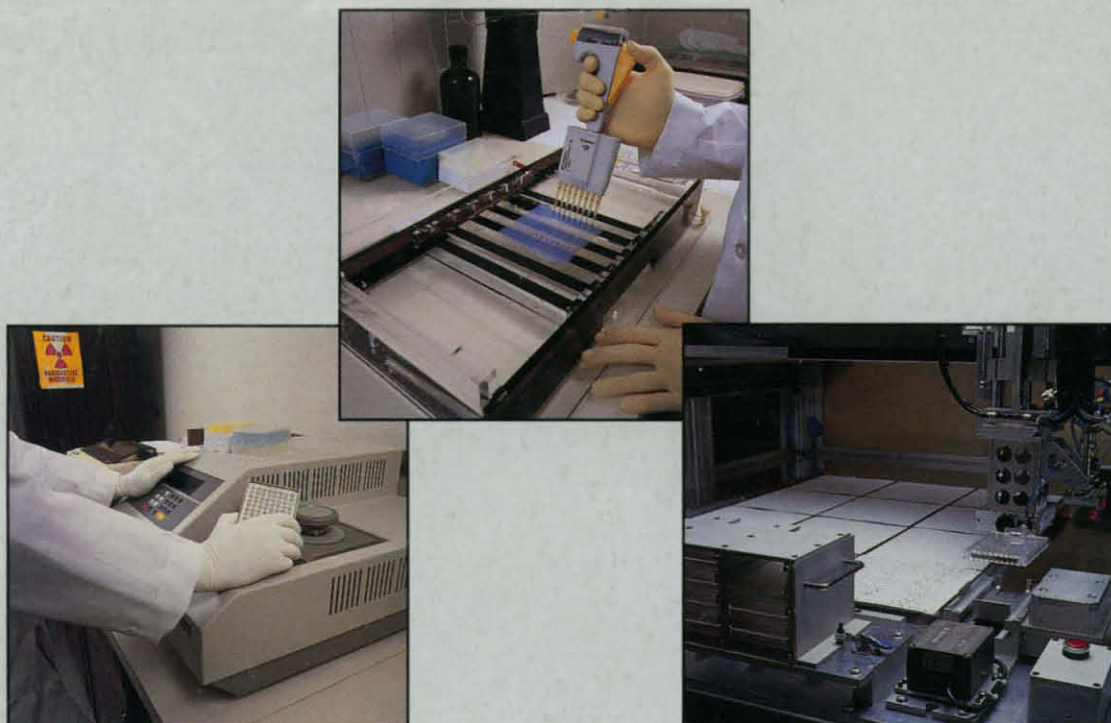
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