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As a competitive candidate, you will have earned a Ph.D. in synthetic organic or medicinal chemistry and have at least four to ten years of experience in drug discovery. You will have broad familiarity with modern synthetic methodologies and analytical techniques. In collaboration with computational chemists, X-ray crystallographers and biochemists, you will design and synthesize novel compounds to inhibit enzymes, kill pathogens and fight infections.

Biophysical Chemistry

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FOCUS ON CAREERS CHERNISTRY Opportunities in the Central Science

Chemists of all types can now find challenging jobs in life science. To do so, they need excellent scientific credentials, strong communications ability, and intellectual flexibility. by Peter Gwynne

To many of its practitioners, chemistry is the central science. As chemists see it, their discipline creates applications of physics and provides the bedrock on which biology is built.

Nowadays, researchers in life science have started to take a similar view of chemistry. Both industrial companies and academic departments that specialize in life science seek chemists to play major roles in the efforts to understand diseases and to develop remedies for them. In recognition of chemistry's growing influence in life science, the Chemistry Department at Harvard oniversity is changing its name

Department of the second stry and Biological Chemistry.

Pharmaceutical companies have particular interest in hiring chemists. Organic chemists have long played a significant part in drug discovery by designing and synthesizing small-molecule drugs. In recent years, colleagues from the field's three other main subdisciplines — physical, inorganic, and analytical chemistry — have joined them. Not only do they help to characterize molecules with pharmaceutical promise; they also work on the broader issue of materials with the appropriate physical and chemical properties for delivering drugs to specific points in the body in the desired way.

The need for chemists has become particularly apparent in three life science pursuits. One growth area occurs at the boundaries between chemistry and other fields, most notably molecular biology. Studies of the structure of complex biological systems have become natural targets for chemists. The second source of growth is computational chemistry. Industry and academe need specialists who can make sense of the extraordinary amounts of data relevant to life science that are pouring out of chemistry labs. Information science has become a key factor in chemistry. More surprisingly, nanotechnology has emerged as a third focus for chemists. The study of materials on the ultrasmall scale where conventional physics does not apply promises to lead to new materials on the frontier between chemistry and biology.

Academic chemistry departments traditionally train more graduates for industry than for academic life. About 80 percent of chemistry graduates go into industry. However, the nature of industrial employers is changing. Three decades ago, most chemistry graduates found jobs in major chemistry-based corporations. Now, increasing numbers are finding jobs in smaller companies that concentrate more on research.

One factor hasn't changed. Employers still expect candidates for jobs to possess more than strong credentials in the chemistry laboratory. Industrial companies and academic departments expect recruits to show the ability to communicate effectively, both on paper and orally. The industrial world, in particular, wants chemists and other employees who feel comfortable working in multidisciplinary teams. Equally important are flexibility and creativity.

Life science plainly offers chemists new opportunities to develop productive careers. Here, we discuss hiring opportunities with representatives of a major pharmaceutical company and an elite research university.

CONTINUED >>



A former science editor of Newsweek, Peter Gwynne writes about science and technology from his base on Cape Cod, Massachusetts, U.S.A.

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WEST POINT, Pennsylvania: "Merck is in a strong hiring mode," says Örn Almarsson, a Research Fellow at Merck Research Laboratories."We like broad-minded people who have gained an excellent chemistry background from strong academic programs. We employ many different kinds of chemists, including physical, organic, inorganic, pharmaicta in both programs and manufacture."

ceutical, and analytical chemists, in both research and manufacture." $% \left({{{\left({{{{\bf{n}}}} \right)}_{i}}}_{i}} \right)$

Almarsson points out that pharmaceutical companies such as Merck pioneer a great deal of research in understanding the structures of both extremely complex biological systems and materials at the nanometer scale. "Pharmaceuticals are not just organic molecules," he explains. "They are also materials with physical and chemical properties that can be exploited to deliver drugs. There are real opportunities for chemists of all types to study materials. So it's very important that synthetic organic chemists and process chemists aren't the only chemists in pharmaceutical companies. For example, we have a very big impetus to hire physical organic chemists to do formulation chemistry." Merck chemists are also involved in vaccine research.

Almarsson, himself a physical organic chemist, heads a group testing new compounds that have shown evidence of pharmaceutical activity. "We have experts in kinetics, photochemistry, oxidation, and other topics," he says. "Our charge is to evaluate the physical and chemical properties of drug candidates. This activity leads to formulation, development and scale-up activities, and processes for developing dosage forms. We're responsible for the development of dosage forms that will end up on the market after clinical trials." The work puts the team in touch with the entire process of drug development, from creation of a molecule to its commercial manufacture. "It's a wonderful place to stand," enthuses Almarsson. "You see the whole breadth of activity in creating a drug. At every point, you have to stop and think: 'Is what I'm doing consistent with the properties of the molecule?'"

That work represents just one facet of chemists' role in Merck in particular and the pharmaceutical industry in general. "Chemists have always been important to pharmas, but the breadth of chemistry skills needed by the industry has become more evident," says Almarsson. "If you're a physical organic chemist or a physical chemist, it's worth talking to pharmas."

Merck expects its recruits to possess more than excellent scientific credentials. "You need strong problem-solving skills and the ability to work in a team," Almarsson points out. "You also need good



communication skills and the ability to write effectively." Perhaps the most important intangible characteristic is flexibility. "This business is in a lot of flux," he adds. "We have to deal with new compounds and new challenges every day. It's important to keep an open mind. No academic training really prepares you completely for the pharmaceutical industry. You should have a strong interest in diving in and learning on the job."

ATLANTA, Georgia: "All the traditional areas of chemistry have a role to play in the interaction of complex systems with the life sciences," says Gary Schuster, dean of the College of Sciences and professor of chemistry and biochemistry at Georgia Tech University. "Combinatorial chemistry, which is part of organic chemistry, is very hot. Physical chemistry offers new spectroscopic methods for detecting compounds for drug design. Analytical chemists are working on signaling in complex biological systems that operate through chemical messages."

Similarly, chemists have significant parts to play in understanding new inorganic materials of nanoscale dimensions. "Analytical techniques like atomic force microscopy give us the chance to develop insights into new materials that were previously unobtainable," Schuster says.

To meet such challenges, in industry and academe, chemists must work comfortably in multidisciplinary teams. Thus, Georgia Tech has started a unique initiative. "We're investing \$125 million in science buildings on campus," says Schuster. "The first building, housing the Institute for Bioengineering and Biosciences, includes 'research neighborhoods.' The labs have a lot of open space assigned to accommodate graduate students working on similar projects. A chemist might be next to a chemical engi-



neer, a physicist, or a mechanical engineer working on similarly themed projects. The Institute also has a mixture of faculty members, in chemistry, biomedical engineering, and biology, with offices next door to each other. I think that the students are the greatest beneficiaries, because they are no longer isolated in their fields. They talk to others."



Comfort in scientific situations that involve teamwork is just one significant factor that influ-

ences the employability of chemists. "Academic and industrial institutions are looking for exactly the same people," says Schuster. "Whether they're doing applied R&D or basic research, those people have creativity, the rarest of all commodities. They can learn about a problem, find a solution to it, execute that solution, and interpret the results of that execution in a meaningful way."

Like Almarsson, Schuster emphasizes another quality prized by recruiters of chemists for life science. "It's always a mistake to underestimate the importance of communications," he warns. "Almost every employer, in industry and academe, is looking for someone who can communicate complex thoughts and ideas in a way that those not as expert can understand and appreciate."

Schuster always gives the same advice to graduate students preparing for their careers. "Don't make any small plans," he says. "Think boldly. You've chosen to be a scientist because you want to know the answers to important questions. So ask important questions, not trivial ones."

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SCIENTISTS—FORMULATION DEVELOPMENT

In this position, you will be responsible for the development of formulations and formulation processes for protein therapeutics. You should be knowledgeable in the field of biophysical chemistry and in techniques to achieve protein formulations with long-term stability. Candidates should also have experience in developing formulations for lyophilization as well as lyophilization cycle development. Analytical experi-ence should include methods for quantitation of protein degradation and characterization of degradation products. A Ph.D. (or equivalent experience) in Biochemistr or Protein Chemistry and 5+ years of relevant experience required. Relevant cGMP experience a significant plus.

■ SENIOR SCIENTISTS/SCIENTISTS—PROTEIN CHEMISTRY The Analytical Process Development group is seeking a protein chemist with 5+ years of experience in characterizing recombinant proteins. This position requires significant experience in developing assays to assess identity, purity and strength of drug substance as well as identifying and quantifying process-derived impurities. Effective communication skills and familiarity with cGMP policies and regulatory testing requirements a must. A Ph.D. (or equivalent) and experience in protein formulations or vaccine development is required. Effective communication skills and familiarity with cGMP policies and regulatory testing requirements is a must.

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In this position, you will be responsible for supervising, scheduling, coordinating, and performing cGMP manufacturing operations. A BS or BA degree or equivalent (science degree preferred) and 3+ years of experience in cGMP manufacturing of biologicals; or AA degree or equivalent (science training preferred) with 5+ years of experience in cGMP (pharmaceutical) manufacturing of biologicals is required. Experience with fermentation/recovery manufacturing, writing/revising SOPs and production batch records is preferred.

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■ RESEARCH ASSOCIATES, PURIFICATION DEVELOPMENT

In this position, you will be responsible for monitoring the progress of purification processes developed for the manufacture of biopharmaceuticals. Candidates should have at least 2 years of experience in protein purification and/or protein chemistry in a GLP environment and enjoy working in a fast-paced environment with highly motivated coworkers. A BS/BA (or equivalent) in a scientific area and 1+ years of related experience is required.

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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 novel drug targets and develop therapeutic protein solutions. Currently, our group has several openings for associate research scientists

BS/MS Molecular Biologists (5 positions):

We are seeking several highly motivated individuals with expertise in molecular biology. A BS/MS degree in the biological sciences and a minimum of 3 years experience in recombinant DNA techniques (including vector construction), mammalian tissue culture stud ies and heterologous gene expression. Expertise in protein expression in purification using baculovirus and/or mammalian systems is preferred. Position code ADSCMRT01

BS/MS Biochemists (6 positions):

We are seeking several highly qualified individuals with BS/MS degrees in biochemistry or related fields. Qualified individuals will have a minimum of 3 years experience utilizing the following: protein purification and characterization techniques, HPLC, column chromotography, Western blotting, protein sequencing, and enzyme assays. Experience with various spectroscopic and fluorescence techniques also a plus. Position code ADSCMRT02



Tarrytown, NY Location 30 miles North of NYC

A Proven

At Progenics (NASDAQ - PGNX), successes in our research and clinical programs have created the following new opportunities for talented and motivated scientists:

SENIOR SCIENTIST - Clinical Process Development

Ph.D. with 3 years industry experience in clinical process development, scale-up and adaptation to cGMPs. Experience in upstream & downstream processing and analysis of vaccines, antibodies and other biologicals. Demonstrated ability to manage internal staff and external collaborative and contract projects.

SENIOR SCIENTIST - Immunology

Ph.D. with 5 years industry experience in viral and/or tumor immunology, with expertise in vaccine development. Proficient in animal models of cancer and/or viral infections and all current analyses of humoral and cellular immunity, including MHC tetramer assays, intracellular cytokine staining and ELISPOT.

For the above positions, experience working within a U.S. pharmaceutical compa-ny is preferred. We offer excellent benefits & generous stock programs. For immediate consideration, qualified candidates may send CV with salary requirements, indicating position desired to:

Progenics, HR Dept, P.O. Box 549, Tarrytown, NY 10591 Fax: 914-789-2863 E-mail: hr@progenics.com EQUAL OPPORTUNITY EMPLOYER Visit us at www.progenics.com



CHAIR OF CHEMISTRY

The University of Northern British Columbia opened in 1994 and is in its sixth year of operation with approximately 3,500 full and part-time students in over 40 academic programs. The University has a regional mandate to serve the northern two-thirds of the province, with regional offices located in Prince Rupert, Fort St. John and Quesnel, The main campus is located in Prince George, B.C. and offers an unbeatable combination: a strong mandate for growth, a modern and attractive campus, and a wonderful setting in the heart of British Columbia

UNBC is a small research-intensive university committed to teaching at the undergraduate and graduate (M.Sc.) levels. The University is equipped with significant instrumentation, including a 300 MHz Bruker Wide-bore NMR, GC/MS, Stable Isotope Ratio MS, Leeman ICP, HPLC, SEM and an automated DNA sequencing facility. The University has recently also received approval for a \$12 million expansion to the existing laboratory building and for a high performance computing facility.

Applications are now invited for the position, Chair of Chemistry. The successful candidate will have earned a doctoral degree in any specialization in Chemistry (including Biochemistry), with a strong record of scholarly activity and experience commensurate with an appointment at a rank of tenured Associate or Full Professor. You will be responsible for administration of the Chemistry Program and will provide academic leadership with a strong commitment to teaching. The Chair is also expected to maintain an independent research program and facilitate the research of the program's faculty.

Please forward your application and curriculum vitae, along with the names and addresses of three references (including telephone and fax numbers) to: Dr. Deborah Poff, Vice President Academic, University of Northern British Columbia, 3333 University Way, Prince George, BC, V2N 4Z9. Fax: 250-960-7300. Inquiries may be made to Dr. Keith Egger, Acting Dean, College of Science & Management, phone: (250) 960-5860; fax: (250) 960-5537; e-mail: egger@unbc.ca. The starting date for this position is negotiable. Review of applications will begin April 30, 2000 and will continue until the position is filled.

For more information, visit our Web site: WWW.UNbc.ca

HNIVERSITY

of Northern BRITISH COLUMBIA IN ACCORDANCE WITH CANADIAN IMMIGRATION REQUIREMENTS, PRIORITY WILL BE GIVEN TO CANADIAN CITIZENS AND PERMANENT RESIDENTS OF CANADA. THE UNIVERSITY OF NORTHERN BRITISH COLUMBIA IS COMMITTED TO EMPLOYMENT EQUITY AND ENCOURAGES APPLICATIONS FROM WOMEN. VISIBLE MINOBITIES, PERSONS WITH DISABILITIES AND ABORIGINAL PERSONS.

THE NATIONAL ACADEMIES

The National Research Council announces opportunities for Postdoctoral Research in the NASA Astrobiology Institute

Postdoctoral research awards will be offered in the field of astrobiology at the NASA Astrobiology Institute. NASA has formed this new Institute to study the origin, distribution, evolution, and future of life on Earth and in the universe. Awards will be offered for multidisciplinary research in biology, genetics, chemistry, geology, planetary and space science, astronomy, paleontology, and other astrobiology-related areas. The awards will be for one year, possibly renewable, through the following lead institutions or their collaborators:

NASA Ames Research Center NASA Johnson Space Center NASA Jet Propulsion Laboratory Arizona State University University of California, Los Angeles University of Colorado, Boulder Harvard University Pennsylvania State University Carnegie Institution of Washington Marine Biological Laboratory Scripps Research Institute

Stipend begins at \$42,000 per year; Application deadline is April 15 • For additional information and application materials, contact:

Dr. Robert Manka, Associate Director, or Ms. Jacinta Kelly, Program Coordinator Associateship Programs (TJ 2114/NAI) NATIONAL RESEARCH COUNCIL 2101 Constitution Ave NW Washington, DC 20418 E-mail: astrobio@nas.edu http://national-academies.org/rap Internet: Tel: (202) 334-2760 (202) 334-2759 Fax: E-mail: rap@nas.edu

Dr. Baruch S. Blumberg, Director, or Ms. Catherine Tsairides, Education Coord. NASA Astrobiology Institute MS 240-1 NASA Ames Research Center Moffett Field, CA 94035-1000 ctsairides@mail.arc.nasa.gov E-mail: Internet: http://nai.arc.nasa.gov (650) 604-0809 Tel: (650) 604-4251 Fax:

Qualified applicants will be reviewed without regard to race creed, color, age, sex or national origin.

BioChem Pharma is an International Biopharmaceutical Company dedicated to the research, development and commercialisation of innovative products for the prevention and treatment of human diseases, with a focus in the anti-infective and anticancer areas. We are currently seeking candidates to fill the following positions.

Research Scientists, Organic Chemistry (R99-Chimie-RS)

You will design, plan and execute the synthesis of

biologically active compounds. Minimum requirements include a Ph.D. in Synthetic Organic Chemistry and 2 years of postdoctoral experience. You should also demonstrate a strong interest in medicinal chemistry and have the potential to make substantial contributions in breakthrough areas of drug research.

Research Associates, Organic Chemistry (R99-Chimie-RA)

You will actively participate in drug research for the control of infectious diseases and cancer. Responsibilities will include conducting multi-step synthesis of novel organic compounds as part of our medicinal chemistry research efforts. While we are looking for people with an M.Sc. in Organic Chemistry, we will consider applicants with a B.Sc. and pharmaceutical industry research experience.

Research Computer Systems and Database Specialist (R99-84)

The incumbent will be responsible for all researchspecific computing requirements. Main duties will involve the support of our Corporate database; maintain the DEC ALPHA (OPENVMS) and the SGI (IRIX) servers and support ISIS software and commercial databases. The ideal candidate must be proficient in the use of ISIS and have good general database knowledge (preferably Oracle). A scientific background, including some knowledge of Organic Chemistry, would be an advantage.

Research Scientist, Cancer Biology (R98-57)

The incumbent would be characterising metabolism and cellular interactions of novel anti-tumor and anti-viral nucleosides analogues. We are looking for a candidate with a Ph.D. in Biochemistry and with post-doctoral training in Nucleoside Biochemistry. The candidate therefore needs to have a general background in Nucleoside Biochemistry.

Post-Doctoral Scientist positions

To apply to the following post-doctoral positions, you must qualify for an NSERC Industrial Research Fellowship and be a Canadian citizen or permanent resident of Canada.

Post-Doctoral Scientist - Pharmacology (R99-93T)

The incumbent will be involved in the development of drug metabolism capabilities in the Department of Pharmacology and Toxicology. Your mandate will be to carry out in vitro and in vivo drug metabolism studies on drugs (Phases 1 and 2) using traditional enzyme kinetics (induction and inhibitor). Molecular Biology tools and knowledge in analytical methods including LC/MS/MS, GC-MS, NMR, etc. would be an advantage.

Post-Doctoral Scientist - Virology (R2000-09T)

The incumbent will be responsible for expression and purification of viral enzymes; help establish drug screening methods; characterise the recombinant enzyme and study its structure and function with respect to viral replication. Qualifications include a Ph.D. in Molecular Biology and/or Biochemistry with hands-on experience in the field of expression and purification of recombinant proteins, enzyme kinetics, and molecular biology.

Post-Doctoral Scientist - Virology (R2000-10T)

The incumbent will be responsible for setting up a high throughput screening method for selecting inhibitors of viral enzymes, and study the mechanism of action of these proteins. Qualifications include a Ph.D. in Virology and/or Molecular Biology with hands-on experience in the fields of virology (preparation and characterisation of recombinant viruses), and molecular biology (cloning, site-directed mutagenesis, expression of protein) and cell culture.

Post-Doctoral Scientist - Organic Chemistry (R99-52T)

The candidate should have a comprehensive command of synthetic organic chemistry with demonstrable strengths in problem solving. The candidate will work independently and ideally demonstrate a strong interest in developing chemistries that are immediately or broadly applicable to medicinal chemistry or drug design. A Ph.D. in Synthetic Organic Chemistry is a minimum requirement.

If you share our commitment to excellence and demonstrate a capacity for teamwork, kindly send your résumé plus **three (3) letters of reference**, before March 31, 2000, to the Human Resources Department, BioChem Pharma Inc., 275 Armand-Frappier Blvd., Laval (Quebec) H7V 4A7 or by fax to 450-978-7992 **indicating the reference number of the position**. To apply by E-Mail, use the reference number of the position of interest followed by @biochempharma.com (ex: <u>r99-chimie-rs@biochempharma.com</u>).

We offer a competitive salary, a full range of benefits and equal employment opportunities to all.

We thank everyone who applies but only those selected will be contacted. Please note that no information on the status of candidacies will be given in the recruitment process.

BIOCHEM PHARMA



FACULTY POSITION COLUMBIA UNIVERSITY

The Columbia Genome Center (CGC) and the Department of Medical Informatics (MI) are jointly recruiting an expert in computational genomics/ bioinformatics to apply for a tenured or tenuretrack faculty position (depending upon qualifications). Applicants should have a PhD, or MD/ PhD, in medical informatics, computer science, or a closely related field, and minimum of 5 years further experience in the area of computational molecular biology, with significant achievements in computational biology, medical informatics, or computer science. Candidate should have outstanding academic credentials and demonstrated ability to teach effectively at the graduate level. The successful candidate will serve as Head of both the informatics section of the CGC and the bioinformatics section in MI. The candidate will be expected to build and lead a research program and faculty in computational biology that spans molecular biology, medical informatics, and computer science. The appointee will also be responsible for academic duties associated with graduate level programs.

Interested applicants should send CV, a short statement of research plans, and the names of three references to:

Dr. Conrad Gilliam Columbia Genome Center 1150 St. Nicholas Ave College of Physicians and Surgeons at Columbia University New York, NY 10032 Email: TCG1@columbia.edu. Fax: (212) 304-5515. Columbia University is an Equal Opportunity Employer/Affirmative Action Employer.



DEPARTMENT OF BIOMEDICAL ENGINEERING

The Department of Biomedical Engineering at Duke University in Durham, North Carolina, USA is seeking an individual with an established national and international reputation for Chairperson of the department. The Edmund T. Pratt, Jr. School of Engineering has committed resources that could substantially increase the faculty and research enterprise of this department in the next five years. Candidates should have experience in administration, research planning, and be motivated in leading this world class department to the next level of excellence.

Interested candidates should submit a curriculum vitae and a list of three references by May 15, 2000 to: Search Committee Chairman, PO Box 90295, Duke University, Durham, NC 27708-0295.

www.hr.duke.edu



Duke University Is An Equal Opportunity/Affirmative Action Employer



RESEARC

IGEN International, Inc., a leading manufacturer of medical device and diagnostic instrumentation located in Gaithersburg, MD, currently has openings for:

ASSAY DEVELOPMENT SCIENTISTS with expertise in cellular and molecular biology. The successful applicants will be involved in the development and implementation of novel assays using our proprietary technology. Knowledge and experience in DNA/RNA amplification/hybridization techniques; mRNA quantitation assays; enzyme assays; and transcription factor characterization and receptor pharmacology, as well as previous involvement in assay development is highly desirable. Individuals work in a team environment while maintaining a high degree of self reliance. Exceptional oral and written communication skills are essential, as is a Ph.D. and 2 or more years of postdoctoral experience.

PRODUCT DEVELOPMENT SCIENTIST/MANAGER The successful applicant will be involved in the development of novel molecular biology kits and reagents from product concept to transfer to production for the life science marketplace. Knowledge and experience with DNA/RNA nucleic acid amplification and hybridization techniques, DNA-protein assays as well as previous management of assay development and troubleshooting are required. Individual will demonstrate strong leadership and project management skills in hiring and directing a team of people in support of multiple ongoing product development efforts. Exceptional oral and written communication skills are essential. A Ph.D. or equivalent experience and 5 or more years of product development experience (or equivalent) is required. Previous industrial experience in product development is critical.

IGEN, an equal opportunity employer, offers an excellent salary and benefits package. Send resume and salary history to: IGEN International, Inc., 16020 Industrial Dr., Gaithersburg, MD 20877, Attn: HR/JH, or fax to 301/947-6998.

"IT'S AS EASY AS TAKING A BREATH."

Inhale—Leading the *inhaleables* revolution.

World-leading pharmaceutical companies have made real investments in inhaleables. Inhale's partnership with Pfizer addresses pulmonary delivery of insulin. With Biogen, we are working on a non-invasive formulation of its leading multiple sclerosis drug, AVONEX[®]. Inhale's novel system integrates customized formulation and proprietary fine-powder processing, packaging and inhalation device technologies. Our valuable corporate alliances and our broad product portfolio in various stages of development and commercialization make this an exciting time to join the Inhale team.

Inhale has openings in the following areas:

Project		RESEARCH	510SCI
MANAGEMENT	180SCI	MANUFACTURING	610SCI
Drug Development	3305CI	PROCESS DEVELOPMENT	620SCI
REGULATORY AFFAIRS	340SCI	Quality Control	670SCI
QUALITY Assurance	410SCI	Manufacturing Engineering	700SCI
VALIDATION	440SCI	FACILITIES	900SCI
Environmental Monitoring	470SCI		

Inhale offers excellent benefits and an informal, collaborative work environment. Salary commensurate with experience. EOE.

Please reference department code in all correspondence. Send resume and cover letter to: Inhale Therapeutic Systems, Attn.: Human Resources, 150 Industrial Road, San Carlos, CA 94070; email: jobs@inhale.com.

Please visit us at the ACS Spring Meeting's National Employment Clearing House at the Westin St. Francis Hotel in San Francisco, March 26-29, 2000.

Or, visit us on the web at www.inhale.com.

INHALE THERAPEUTIC SYSTEMS, located on the San Francisco Bay Area Peninsula in San Carlos, is developing the world's leading delivery creating platform for inhaleables. Innovations in biotechnology have led to the development of more than 30 macromolecules, with over 120 in clinical trials. These complex molecules,' the next generation of inhaleables, are best absorbed in the deep lung. While our biotechnology and pharmaceutical partners make breakthroughs in new drug development, Inhale's platform is rapidly becoming the industry standard for inhaleable drug delivery. Inhaleables reduce the complexity and aversion to taking your medicine.



make up one of the largest healthcare systems in the United States. The Carolinas Heart Institute, located at Carolinas Medical Center (the system's flagship facility), is one of the only specialty heart centers in the country providing care for all ages. The medical professionals who represent Carolinas Heart Institute are peerless in their fields.

Administrative Director of Clinical Research

Here's an opportunity to facilitate and coordinate research activities for practicing cardiologents and cardiovascular surgery. You will also design, organize, and implement clinical research efforts; support ongoing research; perform statistical analysis and write/edit material for peer-reviewed publication; and secure external funding by writing grant applications. Qualified candidate will possess experience in clinical research with IRB-related processes.

Carolinas HealthCare System is located throughout Charlotte, NC. All facilities are within easy driving distance of majestic mountains and the beautiful Atlantic coastline. It all adds up to an outstanding quality of life that is rated among the nation's best.

We offer competitive salaries and exceptional benefits, including a matching 401(k). Please send, fax or email resume to: Carolinas HealthCare System, Attn: Management Recruiter, PO Box 32861, Charlotte, NC 28232; fax: (704) 444-3100 or call (704) 444-3200; email: npalmer@carolinas.org (please indicate position in subject line).



We are an Equal Opportunity/Affirmative Action Employer





Developmental Biology Assistant/Associate/Full Professor

The Developmental Biology Division of the Cincinnati Children's Hospital Research Foundation is undertaking a major expansion under the future direction of Dr. Christopher Wylie. It is anticipated that at least eight tenured or tenure track faculty positions will be filled over the next five years. Applicants at all levels will be considered. Organogenesis, stem cell differentiation, and pattern formation are major interests, but innovative, high quality research in all aspects of developmental biology will be the prime consideration. Attractions include outstanding start up packages, new research facilities, an excellent graduate program and modest teaching responsibilities. This search will continue until all positions have been filled.

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

Dr. Steven Potter, Chair, Search Committee Division of Developmental Biology **Children's Hospital Research Foundation** TCHRF 2013 • 3333 Burnet Avenue Cincinnati, OH 45229

Children's Hospital Medical Center is an Affirmative Action/Equal Opportunity Institution Women and minorities are encouraged to apply

www.calipertech.com caliper Caliper Technologies is an exciting company with the goal of revolutionizing laboratory experimentation.

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Caliper offers an aggresive benefits package including stock. Send responses to: Caliper Technologies Corp.

Attn: Human Resources **605 Fairchild Drive** Mountain View, CA 94043 Fax: 650-623-0500 or E-mail: Jobs@calipertech.com

Cortical Function

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The Department of Neurosurgery at Upstate Medical University is seeking a scientist with interests in human and animal cortical mechanisms relating to sensory, motor, or higher cognitive functions. Facilities include a new human performance center and an MR machine dedicated to research endeavors. There is excellent departmental support for this position. This is a tenure track position at the Assistant or Associate Professor level. The successful candidate will have a significant publication history and a demonstrated ability to generate outside funding. Upstate Medical University is an equal opportunity employer. Women and minorities are encouraged to apply.

Experimental Neuro-oncology

The Department of Neurosurgery at the Upstate Medical University is offering a position for a scientist interested in the cellular mechanisms related to central nervous system neoplasia. This is a named (The Robert and Molly King Neuroscientist) position with excellent departmental support and will be an integral part of the academic efforts of the department. The successful candidate will have a proven publication and funding record and will qualify at least for an Associate Professor rank. Upstate Medical University is an equal opportunity employer. Women and minorities are encouraged to apply.

Oualified applicants interested in either position should contact:

Charles J. Hodge, M.D. **Department of Neurosurgery Upstate Medical University** 750 East Adams Street Syracuse, New York 13210 (315) 464-5510 e-mail: hodgec@upstate.edu



Postdoctoral Appointments

Postdoctoral positions are available for those with less than 5 years postdoctoral training in the following areas:

NIH-NIA-Gerontology Research Center-Baltimore, Maryland www.grc.nia.nih.gov

Laboratory of Biological Chemistry

An immediate opening is available for a postdoctoral fellow in the Laboratory of Biological Chemistry to study molecular and cellular responses to stress: signaling pathways activated, influences on cell survival, and importance to aging. Candidate with an interest in utilizing cDNA microarray analysis to investigate stress response genes also desired.

Correspondent: Dr. Nikki Holbrook E-mail: holbrooN@grc.nia.nih.gov

A postdoctoral position is available immediately to study gene expression in ovarian cancer and normal ovarian tissues using Serial Analysis of Gene Expression (SAGE). A large number of differentially expressed genes have been identified by the research group and initial emphasis will be placed on characterization of these genes, many of which are novel

Correspondent: Dr. Pat Morin E-mail: morinp@grc.nia.nih.gov

Laboratory of Clinical Investigation

The Nuclear Magnetic Resonance (NMR) Unit of the LCI has two postdoctoral fellowship openings. NMR instrumentation in the Unit consists of a double-resonance Bruker ABX 1.9T/31 cm Biospec with shielded gradients, and a tripleresonance wide-bore Bruker DMX 400 Avance system with microimaging and solids capability. 1.) A postdoctoral position is available for work in the NMR Unit for spectroscopic and imaging studies of cartilage tissue derived from tissue engineering protocols and from animal models. We are pursuing correlative studies utilizing MRI, histology, biochemistry, tissue biomechanics, and gene expression measures to assess the response of engineered cartilage tissue to mechanical and biologic interventions. A background in biological magnetic resonance, or a background in cartilage biology and a desire to learn MRI, is required. 2.) A unique intergrative biology position is available in the Laboratory of Cardiovascular Sciences (Edward Lakatta, Chief) and the NMR Unit. Initial projects will center on spectroscopic studies of myocardial metabolism related to congestive heart failure and ß adrenergic stimulation of the heart. Applicants with expertise in cardiac or muscle physiology, biochemistry, or pharmacology, or in biological NMR spectroscopy or imaging, will be considered.

Correspondent: Dr. Richard Spencer E-mail address: spencer@helix.nih.gov

★ Laboratory of Immunology

A postdoctoral position is available immediately for a postdoctoral fellow to study HIV aged lymphocytes. The immune defects in aged leukocytes, the biology of chemokines and their receptors on leukocyte subpopulations, T-cell apoptosis, and HIV-mediated immune modulation are

National Institutes of Health National Institute on Aging

being studied in the laboratory. A friendly, enthusiastic scientist with a basic understanding of tissue culture techniques as well as basic molecular and biochemical skills including Western and Northern blot analyses and RT-PCR.

Correspondent: Dennis Taub, Ph.D. FAX: (410) 558-8284 E-mail:Taubd@grc.nia.nih.gov.

A postdoctoral training position is available to study the molecular and cellular mechanisms of aging influence on learning and memory formation. Current studies include characterization of genes that are associated with maze learning in rat hippocampus, elucidation of the functions of aging associated genes in the process of learning and memory. Applicants are required to have experience in molecular biology and neurobiology. Prior experience in transgenic and knockout mouse techniques is desirable.

Correspondent: Dr. Nan-ping Weng E-mail address: weng@grc.nia.nih.gov.

Laboratory of Molecular Genetics

Applications are being accepted for postdoctoral positions which will be available in early Fall 2000. The investigators will conduct research on DNA repair and molecular changes with aging. The laboratory is studying the molecular biochemistry of premature aging disorders and the processing of oxidative DNA damage in nuclear and mitochondrial DNA

Correspondent: Dr. Vihelm A. Bohr E-mail address: vbohr@nih.gov

★ Laboratory of Neurosciences

Applications are being accepted for postdoctoral positions in the Laboratory of Neurosciences in the following areas: 1.) Mechanisms of Ischemic Brain Injury - Research will concentrate on understanding cellular signaling mechanisms that either promote or prevent neuronal death in stroke. Projects will involve histological, biochemical and molecular analyses of brain tissues from transgenic and knockout mice subjected to focal cerebral ischemia. Experience with middle cerebral artery occlusion - reperfusion focal ischemia model in mice required; molecular biology background preferred. 2.) Synaptic Plasticity in Neurodegenerative Disorders - Elucidating mechanisms that either promote or prevent synaptic dysfunction in Alzheimer's disease and other agerelated disorders is the focus of research in this lab. Projects will involve electrophysiological analyses of synaptic plasticity in hippocampal slices from transgenic and knockout mice. Experience with both extracellular and intracellular recording in mouse hippocampal slice preparations preferred, 3.) Neural Stem Cell Biology -Studies will be directed at identifying mechanisms that regulate brain stem cell proliferation and differentiation, determining whether such mechanisms are altered in aging and age-related neurodegenerative disorders, and developing stem cell therapy approaches for neurodegenerative disorders. Projects will involve histological, biochemical and molecular analyses of brain tissues in mouse models of neurodegenerative disorders. Preference will be given to those with experience in the field of stem cell biology.

Correspondent: Dr. Mark Mattson E-mail: mattsonm@grc.nia.nih.gov

To apply for a postdoctoral position at the



Gerontology Research Center please send curriculum vitae with publication list and three letters of recommendation to the correspondent. If you are unable to contact the correspondent using email, you may send the information to:

> National Institute on Aging Gerontology Research Center Attn: (Name of Correspondent) 5600 Nathan Shock Drive Baltimore, MD 21224-6825

Laboratory of Genetics

Two postdoctoral positions are available immediately in the Developmental Genomics and Aging Section, Laboratory of Genetics, to study early mouse development utilizing cDNA microarray technology with a collection of 15,257 unique gene set from the pre and peri-implantation mouse embryos. One position is to study the global changes of gene expression patterns and to analyze genes that are expressed in a stagespecific manner during perimplantation mouse development. The other position is to study the germ line development by analyzing gene expression regulations in primordial germ cells. Experience with mouse developmental biology is desired and extensive experience in molecular biology is required.

A postdoctoral position is available to study newly-identified human ATP-dependent Chromatin-remodeling (G&D 10:2117; Cell 95:625; Mol. Cell 2:851), and helicase complexes involved in Werner's syndrome, a premature aging disorder. More information is available at http://www.grc.nia.nih.gov/branches/lg/trru/trru/ htm. The successful candidate will obtain training in rapid protein complex purification from mammalian cells, microsequencing and cloning of new subunits, analysis of the roles of these complexes in normal cellular processes and in human diseases

To apply for a position within the Laboratory of Genetics please send a curriculum vitae, bibliography, an introductory letter containing a brief description of research interest, and three letters of reference to A. Michaelis, Laboratory of Genetics, 333 Cassell Drive, Suite 4000, Baltimore, MD 21224-6825 or E-mail to MichaelisA@grc.nia.nih.gov.

NIH-NIA Bethesda, Maryland

Section on Brain Physiology and Metabolism

The Section of Brain Physiology and Metabolism is accepting applications for an IRTA fellow to study transcriptional regulation of brain phospholipases involved in arachidonic acid and lipid metabolism. Experience is desired in molecular genetic techniques, including RT-PCR, Northern and Western blotting, cDNA library construction, and cloning.

Please send a letter of application, C.V. and names of three referees to Stanley I. Rapoport, M.D.. Section on Brain Physiology and Metabolism, National Institutes of Health, National Institute on Aging, Building 10, Room 6C103, Bethesda, MD., 20892 or E-mail (text or attached MS Word File) to E-mail: sir@helix.nih.gov.



Postdoctoral Research Fellowship Position Feline Immunodeficiency Virus Vectors for HIV Gene Therapy Laboratory of Dr. David Looney

University of California San Diego

Description: A position is open for a postdoctoral researcher wishing to pursue the molecular virology of feline immunodeficiency virus (FIV), involving design, construction, and optimization of FIV vectors expressing transgenes directed against HIV and SIV, as well as vector packaging and mobilization. Vectors effective in vitro will proceed to testing in animal models in collaboration with other investigators in a program-project effort. This research will require skills in molecular virology (including the ability to design and implement cloning projects), conventional virology and tissue culture techniques (vector preparation and titration, transfection and transduction), protein expression analysis, the ability to supervise research associate(s) and student(s), and the capability to analyze, interpret, and present data and prepare publications. Experience in lentiviral vector research would be helpful. Accelerated reclassification to an Assistant Research Virologist position is a possibility for the senior postdoctoral applicant with an appropriate publication record.

Availability: Position is available immediately.

Postdoctoral Research Fellowship Position KSHV Virology

Laboratory of Dr. David Looney Veterans Medical Research Foundation San Diego (Affiliated with University of California San Diego)

Description: A position is open for a postdoctoral researcher interested in pursuing aspects of the molecular virology of KSHV/HHV-8, including replication levels and kinetics of replication in tissue/blood, the role and molecular basis of action of specific viral genes (including vMIP-II), and regulation of viral gene expression early in infection. This research will require skills in molecular biology, tissue culture, protein expression and purification, supervision of research associate(s) and/or students, the ability to plan cloning projects (including design and implementation of strategies for mutagenesis), and the capability to organize, analyze, and present data, as well as prepare manuscripts for publication.

Availability: Position is available immediately.

For both positions contact:

David J. Looney, M.D. Dept. of Medicine 0678 SCRB Room 302 University of California San Diego 9500 Gillman Drive La Jolla, CA 92093-0678 FAX: 858-552-7416 TEL: 858-552-8585 x2626 EMAIL: dlooney@ucsd.edu

UNIVERSITY OF MINNESOTA

HEAD, DEPARTMENT OF GENETICS, CELL BIOLOGY AND DEVELOPMENT

The University of Minnesota, College of Biological Sciences and the Medical School, announces a search for the position of Head for the Department of Genetics, Cell Biology and Development. The Department serves as a focal point for the University's molecular and cellular biology initiative and will be housed largely in the new MCB building to be occupied January 2002. Research strengths in the department range from structure/function of the cytoskeleton to gene therapy and include expertise in developmental genetics of model organisms (including worms, flies, zebrafish and mice). The successful candidate is expected to maintain an active research program and participate in training of graduate students and postdoctoral fellows. This is a twelve-month academic and administrative appointment with a tenured faculty rank of Full Professor. For additional information on the Department, and the University, see http://www.gcd.med.umn.edu.

Essential qualifications and experience include a Ph.D. or M.D. (or foreign equivalent), an internationally recognized record of ongoing scholarly activities, experience in faculty-level undergraduate, professional and/or graduate level instruction, as well as administrative and/or program leadership experience.

Applications will be reviewed beginning April 1, 2000 and will continue to be accepted until the position is filled. A letter of application or nomination of up to three pages that discusses the vision, experiences, and special abilities that the candidate will bring to this position, vitae, and the names of four references should be submitted to: Ms. Alaine Siniff, GCD Head Search, Box 293 Mayo, 420 Delaware St. SE, Minneapolis, MN 55455

The University of Minnesota is an Equal Opportunity Educator and Employer



MAYO CLINIC POSTDOCTORAL POSITIONS

Positions available at the computer-aided molecular design (CAMD) lab for postodoctoral fellows to develop novel angiogenesis inhibitors and to study chromophores of green fluorescent proteins using ab initio/molecular mechanics calculations, spectroscopic analyses, and organic syntheses. Applicants must have strong total-synthesis experience and/or quantum mechanics and molecular mechanics background. Preference will be given to applicants with their own fellowships or with experience of Beowulf-class computer systems. The CAMD lab has records of developing biologically active molecules and novel methods for zinc protein molecular dynamics simulations and for virtual screen of chemical databases. It has state-ofthe-art synthetic equipment, a cluster of dedicated Origin 2000 and 200 servers (16xR10K, 8xR12K, 200Gb disk, and 3Gb memory), and four Octane graphics. Recent patents and publications by the CAMD lab are available from ftp.mayo.edu (name: anonymous, cd pub/camd). Applications including curriculum vitae, two relevant papers, and two recommendation letters should be sent to:

> Yuan-Ping Pang, Ph.D. Computer-Aided Molecular Design Mayo Clinic Guggenheim 711A 200 First Street SW Rochester, MN 55905 e-mail: pang@mayo.edu

Mayo Foundation is an affirmative action and equal opportunity employer and educator.

Boehringer Ingelheim Pharmaceuticals, Inc. Bringing A World Of Science

To The World At Large.

At Boehringer Ingelheim, we believe that the future is not an event to be anticipated...but an opportunity to be shaped. We're ready to transform your innovation and drive into the power to define an industry — to develop and market breakthrough pharmaceuticals that enhance the quality of human life. Bring your ambition into focus and your goals within reach by contacting Boehringer Ingelheim today. Exciting research and development openings are available now in our Drug Metabolism department. We are seeking experienced scientists to become part of our team and take advantage of the following opportunities:

Senior Scientist

While functioning in an interactive, interdisciplinary team environment, you will establish in vivo and in vitro absorption models for profiling potential drug candidates, establish PK/PD relationships in support of pharmacology models, represent the department on multidisciplinary discovery projects and prepare technical reports and external publications. You will also be responsible for PK studies for discovery projects from the drug discovery to the early clinical stage.

The successful candidate will have a Ph.D. in Chemistry, Biopharmaceutics or related field and established working knowledge in the ADME area. Experience in HPLC-UV and LC/MS methodology an asset. Excellent verbal and written communications skills a must. IOD Code: AD-SCI/RD100

Associate Director Pre-Clinical - PK-DMPK Department

In this position, you will assume the responsibility and accountability of the Pre-clinical section. You will participate in defining department goals and establish in vivo and in vitro absorption models for profiling potential drug candidates. You will be responsible for PK studies for Discovery projects from the drug discovery to the early clinical stage. You will also lead a staff of to scientists, handle conflicting priorities simultaneously, represent the department on multidisciplinary discovery projects and prepare technical reports and external publications.

To qualify for this position, you must have a Ph.D. in Chemistry, Biopharmaceutics, or related field or equivalent, established working knowledge in the ADME area, a minimum 8 years of relevant pharmaceutical experience, a solid background in regulatory requirements, proven leadership capabilities and excellent verbal and written communication skills. Prior experience managing senior level staff is required. Job Code: AD-SCI/RDI899A

Senior Scientist Bioanalytical

You will develop HPLC chromatographic and extraction methods, conduct mass spectrometric experiments to support PK studies in biological matrices using HPLC and/or LC/MS/MS, identify drug metabolites and quantitate target analytes in biological matrices, conduct data analysis and prepare technical reports and external publications, analyze and report data in a timely fashion and maintain laboratory equipment and documents. Management experience a plus.

The successful candidate will have a Ph.D. or equivalent in Organic Chemistry, Analytical Chemistry, or a related field and a minimum of 2 years of industrial experience. Experience in qualitative and quantitative analysis of drugs in biological matrices and the operation and maintenance of HPLC and LC/MS chromatographic systems, excellent verbal and written communication skills, proficiency with LC/MS/MS, automation and various extraction techniques. A solid background in GLP and regulatory requirements is essential. Must be able to function in a team setting. Job Code: AD-SCI/RD₄, ao

Bioanalytical Scientist

In this position, you will develop HPLC chromatographic and extraction methods, conduct mass spectroscopic experiments to support drug metabolism and PK studies for discovery projects and early development, quantitate compounds in biological matrices using HPLC and/or LC/MS/MS, identify drug metabolites, analyze and report data in a timely fashion and maintain the laboratory equipment.

Requirements include BS/MS in Organic Chemistry, Analytical Chemistry, or a related field, minimum 5 years of industrial experience, experience in qualitative and quantitative analysis of drugs in biological matrices, experience in the operation and maintenance of HPLC and LC/MS and excellent verbal and written communication skills. Must be able to function in a team setting and have experience with LC/MS/MS and automation. Familiarity and understanding of GLP is desirable. Job Code: AD-SCI/RDoGoo

At our Ridgefield, CT campus, we offer a dynamic, collaborative environment where insight, inspiration and commitment create opportunity on an entirely new scale. For immediate consideration, please e-mail your resume and salary history to: bipiobi-careers.com; or send to: Bochringer Ingelheim Staffing Center, PO Box 534. Waltham, MA 02454-0534; or fax (781) 663-2431. Including the appropriate job code in your cover letter or subject line will help us to expedite your request and avoid delays in routing your resume. Please, principals only. Unsolicited agency referrals will not be accepted. We are a proud Equal Opportunity Employer and are committed to offering a healthy, non-smoking work environment, M/F/D/V.

Post-Doctoral Fellow

The candidate will be expected to assist in developing a project to assess human glucuronosyl transferase activity in vitro with a view to predicting in vivo metabolism by these enzymes. Candidate will be encouraged to publish and develop contacts with academic labs.

The successful candidate should have a Ph.D. in Biochemistry, Pharmacy or a related subject with experience in drug metabolism and an interest in drug-metabolizing enzymes, in particular glucuronosyl transferases. Experience and knowledge of enzyme kinetics, hepatocyte culturing, expressing recombinant enzymes would be an advantage. Job Code: AD-SCI/PD0100

Scientist

This Scientist will have a solid background in Chemistry or Biochemistry, demonstrated by a BS or MS degree in one of those fields and an interest in in vitro metabolism. Experience in conducting in vitro incubations, sample preparation, analysis and data presentation and interpretation is imperative. A knowledge of drug-metabolizing enzymes, enzyme induction and inhibition or enzyme kinetics would be an advantage. Training in-house can be accomplished for an otherwise desirable candidate. Excellent interpersonal, verbal and written communication skills are required. Good organizational skills, an ability to work in teams and computer literacy are also important. Job Code: AD-SCI/RD4000

Senior/Principal Scientist

The successful candidate will be responsible for supervising a laboratory consisting of 3-5 scientists conducting in vitro metabolism studies in both Drug Discovery and Development.

Candidates should have a Ph.D. in Biochemistry, Pharmacology, Chemistry or a related discipline with 2 or more years of relevant experience. Current knowledge of drugmetabolizing enzymes is essential and an interest in PK predictions, high throughput metabolism, in vitro drug-drug interactions or induction would be an advantage. Excellent oral and written communication, problem solving and interpersonal skills are necessary. Previous supervisory experience, the ability to work in multidisciplinary team situations, and the flexibility to succeed in a dynamic environment are desirable. **Job Code:** AD-SCI/RD3900

Clinical Pharmacokinetics

The individual in this position will guide new chemical entities from candidate selection in Drug Discovery through market launch. Duties include protocol design, data analysis, report and regulatory submission writing, product presentation before authorities world-wide, and collaborations with other scientists on project teams and external publications.

Requirements for the position are a Pharm.D. or Ph.D. (Biological or Pharmaceutical Science) with a minimum of 2 years of experience in clinical pharmacokinetic research. Demonstrated knowledge in protocol design and data interpretation using trial simulation and clinical pharmacokinetic computer programs a must. As Boehringer Ingelheim is a true global pharmaceutical company, the ability to travel worldwide (or\$) and use excellent communication skills to bring new chemical entities to market are desirable. Job Code: AD-SCI/RD5000

http://www.boehringer-ingelheim.com



SCIENTIFIC PROGRAM MANAGERS

Major international health foundation is seeking Scientific Program Managers to work in our Research Department. The successful candidates will assist in the planning of the research grants program, training grants program, projects and collaborations. Will help determine program priorities and funding levels as well as track and prepare analyses of research requirements. Coordinate programs and committees. Assist in the supervision of the grant administration process.

Post doctoral scientific research experience or equivalent is a must. PhD, MD or equivalent professional degree is preferred. Excellent written, verbal and interpersonal skills are essential.

Please forward your resume and salary requirement to: Carmel Simone, HR Director

The Juvenile Diabetes Foundation International

120 Wall St, 19th Fir, New York, NY 10005-4001 or Fax to: (212) 785-9595

EOE M/F/D/V



LABORATORY MANAGER HEPATITIS CENTER

The Rockefeller University, a leading biomedical research institute, seeks a Laboratory Manager to handle laboratory administration and contribute to research focussed on Hepatitis C.

Responsibilities include setting up and organizing a new research laboratory that is moving to Rockefeller's campus, developing and standardizing lab protocols, assisting with experiments as determined by the PI, training and supervising designated lab personnel, and interacting with all levels of university personnel.

Requires a BS in Life Science and a minimum of 2-5 years practical laboratory experience in basic molecular and cell biology and with lab instrumentation; MS or Ph.D desirable. Emphasis on organization, communication, implementation, and problem solving. Ideal candidate must be detail and multi-task oriented and a self-starter.



For immediate consideration, please send cover letter, resume, and salary requirements to: The Rockefeller University, 1230 York Ave, Box 125, New York, NY 10021; FAX: (212)327-7079; Email: hr@rockvax.rockefeller.edu An Affirmative Action/EOE.



Vice President for Research

Virginia Commonwealth University invites nominations and applications for the position of Vice President for Research. VCU is a comprehensive research university that enrolls more than 23,000 undergraduate, graduate, and professional students in the College of Humanities and Sciences and the Schools of Allied Health Professions, the Arts, Business, Dentistry, Education, Engineering, Medicine, Nursing, Pharmacy, and Social Work. The full-time faculty of 1,600 attract more than \$112 million a year in research funding.

The Vice President reports directly to the VCU president and oversees University-wide research and scholarship emphasizing biomedical and social sciences, biotechnology, and health-care. Units reporting to the Vice President include the Office of Technology Transfer, the Intellectual Property Foundation, Sponsored Programs Administration, the Office of Environmental Health and Safety, the Institutional Review Board, the Institutional Animal Care and Use Committee, the Division of Animal Care, and several multidisciplinary research institutes.

Successful applicants must demonstrate visionary scientific and administrative leadership and be recognized scholars with strong backgrounds in a researchintensive science discipline. Applicants must qualify for appointment at the rank of professor in an academic department.

Review of applications begins early March 2000 and the position will remain open until filled. Nominations and/or applications, including a letter of interest, curriculum vitae and names, addresses, and phone numbers of five references, should be sent, in confidence, to: Search Committee for the Vice President for Research, ATTN: Trudi Flynn, Office of the Provost, Virginia Commonwealth University, P.O. Box 842527, Richmond, VA 23284-2527. For additional information about Virginia Commonwealth University, visit our web site at www.vcu.edu.

VCU is an affirmative action, equal opportunity employer. Women, minorities, and persons with disabilities are encouraged to apply.

RESEARCH NUTRITIONIST GS-0630-12

Shape the future! The U.S. Department of Agriculture, Agriculture Research Service, Grand Forks Human Nutrition Research Center located in Grand Forks, North Dakota invites applications from individuals with broad background in nutrition metabolism and epidemiology for a Research Nutritionist position, GS-12 (\$50,139 to \$65,179 salary based upon experience) to lead research to determine the effects of trace minerals on key metabolites, hormone or receptor function, gene interaction, etc., utilizing human subjects and facilities of a metabolic ward, outpatient clinic or mobile laboratory. Research involving human volunteers will be based on experiments with animals, epidemiology and appropriate biochemistry. Collaborative arrangements with scientists at the University of North Dakota and/or other institutions are possible. Candidates must have a Ph.D., M.D., or Ph.D./M.D. degree in a closely related discipline. Applicants should submit a curriculum vitae, a list of publications and a succinct outline of research plans and goals. This is a competitive, permanent appointment. U.S. Citizenship is required at the time of application. The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital and family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice or TDD) To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue SW, Washington, DC 20250-9410, or call (202) 720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.

For additional information on job requirements and application procedures, please contact Linda Fayram at (701) 795-8370 between 8:00am and 3:30pm, Monday through Friday, or fax (701) 795-8395, or write to: USDA-ARS-HRD-WSB, 5601 Sunnyside Avenue, Beltsville, MD 20705-5106.

Please reference announcement number ARS-XOW-0130. Applications must be postmarked by 24 April 2000.

Explore new worlds of pharmaceutical innovation in a work environment that encourages innovation. As a \$32+ billion international organization with a focus on research, Bayer is making great strides in curing and preventing diseases. This translates into career pathing at unprecedented rates. Currently, we have the following exceptional opportunities at our corporate headquarters, located in West Haven, CT.

LEAD DISCOVERY RESEARCH

SCHATISTS

Biological Assay Development MS/BS

The candidate will have numerous responsibilities in the area of early drug discovery including validation and implementation of novel radioligand binding, enzyme and cell-based high throughput screens. The candidate will be required to interact with medicinal chemists, cell and molecular biologists and pharmacologists, and should have a broad interest in drug discovery and development. Duties will include computer assisted data analysis, use of laboratory automation, development of plate-based enzyme, receptor and functional assays, use of radioisotopes and various in-vitro techniques and cell culture.

In addition, the candidate must possess a B5 or an M5 with experience in developing and performing biological assays in different formats. A working knowledge of spreadsheet and/or database applications is essential, as are good oral and written skills. JOB CODE: ASMW0666

SCIENTISTS Pharmacologist - Ph.D.

The incumbent will represent the Lead Discovery Research group to the Bayer Therapeutic areas, Responsibilities will include supervision of a lab unit engaged in the development and execution of high throughput screening assays for various target types, with an emphasis on membrane receptor targets, and management of those targets through the Lead Discovery group, including data analysis and reporting of results. The candidate will interact with project teams from therapeutic areas in discussions of target selection, assay design, reagent generation and hit-to-lead activities. The candidate will evaluate new technologies that may be applicable to compound testing and drug discovery.

Candidate must have a Ph.D. in Chemistry, Biochemistry or Receptor Pharmacology with a minimum of 6 years relevant experience, preferably in the pharmaceutical industry. Experience in design and trouble shooting of bioassays is essential, with emphasis on receptor binding formats. This position requires good computer, interpersonal, supervisory and presentation skills. A broad, background in different disease areas and some knowledge of chemistry will be extremely helpful. JOB CODE: ASMW0818

OBESITY DRUG DISCOVERY SCIENTISTS Cell Biology/Protein Biochemistry – Ph.D.

The incumbent is required to provide cell biology/protein biochemistry support for programs in obesity research. The successful candidate will join a multi-disciplinary team focused on the discovery of central and peripheral targets involved in obesity and appetite control, and in the discovery of small molecular weight compounds that can be used to modulate these conditions in humans. The incumbent will identify/discover novel targets useful for the treatment of human obesity, establish high-throughput screening assays with these targets, and assist in identification of drug candidates. The candidate will prepare explicit, analytical reports and present results to others. In addition, the incumbent will effectively manage direct reports for maximum productivity and efficiently interact in a team environment with other group members and personnel in other departments to ensure that responsibilities are completed in a timely manner.

Candidate must possess a Ph.D. with 3-5 years of proven expertise in cell biology, intermediary metabolism, and/or protein biochemistry including in vitro and in vivo protein assay techniques. Experience in peripheral mechanisms of obesity, e.g. adipogenesis and fatty acid/lipid metabolism, would be especially valuable. Experience in molecular biology would be helpful. JOB CODE: ASMW0834

GENOMICS SCIENTISTS Molecular Biology – MS/BS

The successful candidate will be a key person in a new enterprise within the Drug Research Technologies Genomics Group involving expression of profiling of genes. The incumbent will assist in setting up an RNA repository of human and rodent tissue and determining the expression profile of genes of interest to the TRAs. Techniques will include but not be limited to Northern blot analysis. Tagman gene expression arrays. The original experiments will be done manually but it is anticipated that the incumbent would help to automate techniques when higher throughput is required.

The candidate is required to possess a BS or MS with 5-7 years related experience and must have the ability to design, direct and conduct research and evaluate the progress of the project with minimal supervision. The successful applicant must be fully conversant with routine molecular biological techniques with special expertise in RNA purification. Northern blot analysis and PCR JOB CODE: ASMW0798

Bayer offers a competitive salary, an excellent benefits package and an on-site child care facility. Please forward your resume, along with corresponding job code to: Bayer Corporation, Pharmaceutical Division, PO. Box 3238, Scranton, PA 18505-0238. Fax: 1-888-805-7474. E-mail: bayerpharma@alexus.com. No agencies or phone calls please. Please visit our website at: www.bayerpharma.na.com and go to the career section for additional opportunities and information. An Equal Opportunity Employer M/F/D/V. Bayer Corporation is committed to enhancing and maintaining cultural diversity within our work environment.



Pharmaceutical Division

Changing the world with great care.



At Boehringer Ingelheim, we believe that the future is not an event to be anticipated...but an opportunity to be shaped. We're ready to transform your innovation and drive into the power to define an industry — to develop and market breakthrough pharmaceuticals that enhance the quality of human life.

Senior Scientist/ Transcription Regulation

Qualifications will include a Ph.D. in Biochemistry, Molecular Biology or a closely related field. At least 3 years of postdoctoral experience in the biochemical analysis of eukaryotic transcription, DNA replication, or DNA recombination is essential. Experience with gene expression technologies and the quantitative characterization of protein-protein and protein-nucleic acid interactions would prove useful. Job Code: AD-SCI/RDBIOI

Postdoctoral Fellow

This postdoctoral research associate will develop confocal fluorescence correlation microscopy methodologies to study receptorligand binding phenomena involving GFP-labeled recombinant proteins inside living cells. The candidate should have significant expertise in analytical and quantitative confocal microscopy. Job Code: AD-SCI/RDBIO2

<u>Scientist II/III</u>

As a member of our Physical Biochemistry Group, you will delineate the mechanism of action for drug candidates using a variety of methodologies. The position requires a BS/MS in Biochemistry or related field with 1-3 years of experience, preferably in the application of fluorescence spectroscopy and/or surface plasmon resonance. Job Code: AD-SCI/RDBIO3

At our **Ridgefield**, **CT campus**, we offer a dynamic, collaborative environment where insight, inspiration and commitment create opportunity on an entirely new scale. For immediate consideration, please email your resume and salary history to bipiabi-careers.com OR send to Boehringer Ingelheim Staffing Center, PO Box 534, Waltham, MA 02454-0534. Including the Job Code in your cover letter or subject line will help us to expedite your request and avoid delays in routing your resume. Please, principals only. Unsolicited agency referrals will not be accepted. We are a proud Equal Opportunity Employer and are committed to offering a healthy, non-smoking work environment, M/F/D/V.



THE UNIVERSITY OF TEXAS MDANDERSON CANCER CENTER

FACULTY POSITIONS IN STRUCTURE BIOLOGY

The Department of Biochemistry & Molecular Biology at the University of Texas M.D. Anderson Cancer Center in Houston has identified structural biology, with an initial emphasis on Xray crystallography, as a top priority for research development. This heavily research-oriented department is seeking outstanding structural biologists to develop essential technology platforms and research applications to investigate the structure of biological macromolecules using X-ray crystallography. As part of the unmatched scientific community at the Texas Medical Center, we provide a unique and interactive community of researchers with strengths in structural, molecular, and cellular biology, in molecular genetics and in molecular medicine. Areas of current research strength related to the macromolecular investigation include signal transduction, transcription factors and molecular genetics. Applicants should hold a Ph.D. and/or M.D. degree, evidence of scientific productivity and scholarly achievement in X-ray crystallography, and be able to demonstrate their potential as independent scientists. Please send a C.V., a two page research summary and the names and addresses of three references to:

Warren Liao, Ph.D., Chair, Search Committee Department of Biochemistry & Molecular Biology, Box 117 The University of Texas M.D. Anderson Cancer Center 1515 Holcombe Blvd., Houston, TX 77030

Application Deadline: May 15, 2000

MDACC is an Equal Opportunity Employer, smoke free environment. Women and minority candidates are encouraged to apply. Visit our website at: www.mdanderson.org/DEPARTMENTS/biochem/

Protein Crystallographer

Located in the San Francisco Bay Area, Tutarik Inc. is a progressive biopharmaceutical company dedicated to the discovery and development of novel therapeutic agents that regulate gene expression. The continued growth of our Structural Biology department has created a great opportunity for a talented Protein Crystallographer to join a multi-disciplinary team that also includes protein biochemistry, NMR, and computational chemistry.

You will elucidate crystal structures of protein/ligand complexes that will form the basis for a structure-assisted drug design effort in cutting-edge research projects at Tularik. Qualified candidates will possess a Ph.D., at least 3 years of postdoctoral experience in all aspects of the field, and a proven record of accomplishments.

Tularik offers productive and experienced leadership, employee stock options, a competitive salary and benefits package, and a collaborative and stimulating research environment that recognizes achievement. For immediate consideration, please submit your resume to:

Tularik Inc. **HR** Department Attn: Job# S0317-PC Two Corporate Drive South San Francisco, CA 94080 FAX: (650) 825-7303

Visit www.bi-pharm.com

www.tularik.com





Chiroscience R&D, Inc., a leading biotech company located near Seattle which uses its diverse, state-of-the-art genomics and target validation technologies to discover, develop and bring to market novel medicines for improved healthcare, has a variety of immediate opportunities.

ASSOCIATE DIRECTOR - COMPUTATIONAL BIOLOGY

This position will manage staff involved in the development and application of systems for gene discovery based on sequence analysis. Current projects include finding genes and regulatory elements in a positional cloning project, finding additional members of a novel gene family, and finding novel genes based on expression and function. Qualified individuals will have a Ph.D. or equivalent experience and strong credentials in both molecular biology and computer science with specific expertise in the development of novel sequence analysis algorithms to test biological hypotheses. In addition, the ideal candidate will have at least 4 years of experience as a manager providing leadership and direction with demonstrable success in guiding projects and personnel.

SCIENTIST - DISCOVERY BIOLOGY

This position will establish a core histological capability focused on immunological and bone diseases. Duties include characterizing gene and protein expression in normal and disease settings, as well as within specific cells and helping to identify potential functional characteristics. The successful candidate will participate in both novel gene discovery efforts and in analysis of gene function in an interdisciplinary team environment. Good written and verbal communication skills and the ability to work well within a team are essential. The minimum requirements for this position are an M.S. or Ph.D. and previous experience with histology and immunohistochemistry, 2-5 years of experience using a variety of histological techniques including specimen processing (murine and human), embedding and sectioning with mircotome and cryostat, and immunohistochemical staining and in situ hybridization.

SCIENTIST – GENE FUNCTION

This position will assist in characterization of products from our gene discovery program. Assay design, validation, and implementation for discovery projects are some of the duties. Skills in signal transduction characterization are desirable and knowledge of bone cell biology is a plus. Familiarity in high-throughput screening techniques would be helpful. The successful candidate will have solid communication and computer skills and will be interested in working closely with other scientists in a team-oriented environment. This position requires a Ph.D. and 2 - 4 years' post-doctoral training and 3 - 8 years in the pharmaceutical or biotech industry in *in vitro* cell-based assay techniques. Experience with cell biology is also desired.

We also have an ongoing need for those at the Associate Scientist and Senior Associate Scientist level. For position descriptions, please see our job postings at celltechgroup.com/celltech_chiroscience/ index.html and click on Recruitment.

Chiroscience offers competitive compensation & benefits & the chance to join one of science's most exciting fields – gene discovery! For consideration, please fax, mail, or email your resume to:

Human Resources Chiroscience R&D, Inc. 220th St. SE, Suite 200 Bothell, WA 98021 Fax: 425-489-8018 Email: careers@chiroscience.com

GenStar Therapeutics Corporation provides challenging career opportunities for highly-motivated scientists

GenStar Therapeutics is a rapidly growing biotech company specializing in the gene therapy of hemophilia and cancer. The company has a technology platform of minimal (gutless) adenovirus vectors and is expanding its capacity in R&D and clinical studies. This provides an excellent environment for career development in the biomedical sciences. Highly-motivated and innovative scientists are encouraged to apply for the following positions:

Medical Director (Position: 200010)

Successful candidates should have an M.D. degree with 5-8 years of experience in clinical affairs and in monitoring clinical studies of biotech products. Candidates with expertise in hematology/oncology and gene therapy are preferred. The primary responsibilities will be to direct and coordinate clinical trials of gene therapy products, to interact with clinical investigators and regulatory agencies (FDA, RAC, IRB, etc.), to manage clinical data and study reports, and to serve as a resource in clinical and regulatory affairs for senior management of the company.

Scientists for Vector Technology (Positions: 200011-200012)

Two positions are open for candidates who have a Ph.D. degree with 4-8 years of R&D experience with virology and adenovectors, *in vivo* gene therapy, animal models and assay development. Capabilities in conducting innovative and creative vector design are highly desirable. The primary responsibilities will be to design and optimize vectors for pre-clinical studies on adenovector based products for hemophilia and cancer.

Scientists for Cancer Biology and Animal Models (Position: 200013)

Candidates should have a Ph.D. degree and 4-8 years of postdoctoral research experience in cancer biology, animal models (particularly prostate cancer models), adenovectors, and gene therapy of cancer. The primary responsibilities will be to characterize oncolytic adenoviral vectors and to develop and standardize related assays.

Scientist for Immunology and Animal Models (Position: 200014)

Candidates should have a Ph.D. degree and 4-8 years of post- doctoral research experience and expertise in immunology in the context of adenovector technology. The primary responsibilities will be to join an R&D team and to improve delivery technology and host compatibility for adenovector administration.

Research Assistants for Pre-clinical Studies (Positions: 200015-200018)

Candidates should have a B.S. or M.S. degree in Biology or related subjects with 2-4 years of research experience in recombinant DNA, biochemistry, cell culture, viral vector development, different types of assays on DNA, RNA, protein, cellular, and animal samples. Experience in handling adenoviral vectors and producer cells is preferred. The primary responsibilities will be to carry out experiments required for pre-clinical studies of products, including *in vitro* and *in-vivo* characterization of vectors, functional and structural analyses, animal modeling and tox/pk studies.

Please send your CV with a cover letter indicating the desired position number to:

Wei-Wei Zhang, M.D., Ph.D., Sr. V.P.



GenStar

Therapeutics

and CSO GenStar Therapeutics, 10835 Altman Row Suite 150, San Diego, CA 92121 Tel: (858) 450-5949 ext.107 Fax: (858) 642-9173 THE UNIVERSITY OF TEXAS HOUSTON HEALTH SCIENCE CENTER

THE INSTITUTE OF MOLECULAR MEDICINE FOR THE PREVENTION OF HUMAN DISEASES

RESEARCH DIRECTOR MICROBIAL PATHOGENESIS

The Institute of Molecular Medicine for the Prevention of Human Diseases, a newly founded disease-oriented basic research institute of the University of Texas-Houston Health Science Center, seeks a qualified scientist for the position of Research Director in the areas of bacterial, viral or parasitic pathogenesis.

The applicant must have a proven track record in obtaining research support. The applicant will hold a faculty position (Associate Professor) with the potential for a cross-appointment in a department of the Medical School of the University of Texas-Houston.

Applications for the Research Director position should be addressed to Dr. Irma Gigli, Professor and Associate Director, Institute of Molecular Medicine, The University of Texas-Houston Health Science Center, 2121 W. Holcombe Blvd., Houston, Texas 77030.

The University of Texas is an equal opportunity employer. Women and minorities are encouraged to apply.

ANNOUNCEMENTS

NATIONAL SPACE BIOMEDICAL RESEARCH INSTITUTE Research Announcement

The National Space Biomedical Research Institute (NSBRI) announces an opportunity to participate in the core research program of the NSBRI. The release date for this announcement is February 22, 2000.

NSBRI Research Announcement 00-01 An Opportunity to Participate in the Core Research Program of the National Space Biomedical Research Institute: Expansion of Current Research Teams

This announcement is available electronically via the Internet at http://www.nsbri.org

Letter of Intent Due:	April 14, 2000
Proposals Due:	June 16, 2000

Paper copies of this Announcement are available to those who do not have access to the Internet by calling 713-798-7412 or by writing to:

R. J. White NSBRI One Baylor Plaza, NA-425 Houston, TX 77030.



Angiogenesis Research Center BIDMC Harvard Medical School

Is recruiting postdoctoral fellows for NIH SCOR grant "Angiogenesis in Myocardial Ischemia"-funded positions starting Spring or Summer 2000. The following projects on the SCOR grant have postdoctoral openings:

- Myocyte-endothelial signaling (PI: RD Rosenberg)
- Syndecan signaling, inflammation and angiogenesis (PI: M. Simons)
- Vascular bed-specific endothelial transcription (PI: W. Aird)
 Local delivery of angiogenic growth factor (PI: D. Baim & R Laham)
- MR imaging in angiogenesis mice and men (PI: D. Burstein & JD Pearlman)

All SCOR postdoctoral fellows will carry out research in a collaborative manner in the laboratories in the Angiogenesis Research Center (ARC) at BIDMC or Department of Biology at MIT. The ARC combines basic, applied and clinical research in vascular biology and molecular medicine. In addition, considerable emphasis is placed on the development of novel clinical and functional end-points needed to assess the efficacy of angiogenic therapy.

Candidates with MD or Ph.D. degrees from US or major international universities and experience in molecular cell biology techniques, MR imaging or large animal research are invited to submit their cv with three letters of reference to:

> M. Simons, MD Director, Angiogenesis Research Center BIDMC, RW-453 330 Brookline Ave Boston, MA 02215 http://angiogenesis.bidmc.harvard.edu

Agricultural Research Service

Director, Plant Sciences Institute

Beltsville Agricultural Research Center

This is a Senior Executive Service position with the U.S. Department of Agriculture.

The Director of the Plant Sciences Institute (PSI) is responsible for leadership and management of fourteen research laboratories covering all areas of plant science and comprised of about 130 Ph.D research scientists, 400 total employees, and a budget of \$29 million. PSI is the largest of the Institutes and Centers making up the Beltsville Agricultural Research Center, which is the largest and most comprehensive agricultural research center worldwide. Scientists in PSI represent a variety of disciplines, including microbiology, entomology, botany, plant pathology, plant physiology, genetics, genomics, soil science, agronomy, horticulture, chemistry, systematics, and nematology. The outstanding quality of research in PSI is exemplified by the recent designation of the top ten accomplishments in plant pathology of the 20th century by the American Phytopathological Society: of the ten, three were the work of PSI scientists, two by a scientist who is currently on staff.

This position requires considerable flexibility and skill in providing effective leadership to a wide diversity of research programs, many of which are cooperative, multidisciplinary programs with the other Institutes and Centers at Beltsville-the Livestock and Poultry Sciences Institute, the Natural Resources Institute, the Beltsville Human Nutrition Research Center, and the U.S. National Arboretum as well as cooperators in other institutions. It requires systematic, coordinated planning to achieve broad, goal-oriented research results and to ensure transfer of technology to farmers, consumers, and industry. The incumbent must also establish and maintain effective work relationships with Federal and State agencies, cooperators, and representatives of consumers and industry groups. Salary \$115K-\$130K.

For program information, please contact Dr. Phyllis E. Johnson, Beltsville Area Director, (301) 504-6078 or email to johnsonp@ba.ars.usda.gov.

The complete vacancy announcement and information about how to apply is found at http://www.ars.usda.gov/ afm/hrd/vacancy/00-4 or contact Human Resources Division Telephone: (301) 504-1448. Applications must be received by April 14, 2000.

USDA/ARS IS AN EQUAL OPPORTUNITY EMPLOYER.

Robert W. Franz Cancer Research Center **Providence Health System**

The Robert W. Franz Cancer Research Center needs to fill several positions to support recent growth and new federal grant funding. The Center's focus is on the immunology of melanoma, renal cell, prostate, and breast cancer. The goal of our research is to translate promising laboratory findings into new therapies for patients with cancer, with an emphasis on vaccine development.

Senior Research Associate

Outstanding opportunity for a Senior Research Associate to participate in a state-of-the-art cancer immunotherapy program. Extensive ongoing human anti-cancer immunotherapy clinical studies at the Earle A. Chiles Research Institute require the organization and establishment of a new Immunomonitoring Laboratory to measure the immune response of cancer patients receiving gene-modified therapeutic cancer vaccines, anti-cancer vaccines formulated with defined tumor associated antigens and/or cytokine therapy.

Requires a Bachelor's or Master's degree, plus at least five years of laboratory research experience. Extensive, broad-based experience in tissue culture, flow cytometry, tetramer and ELISPOT assay procedures, in-vitro T-cell activation and effector function (CTL) assays, and some knowledge of basic molecular biology techniques such as PCR and RPA procedures essential. Will also be required to manage a sophisticated, multi-instrument flow cytometry facility, and train junior technicians in basic flow cytometry procedures. Must have excellent communication skills since the position requires significant management responsibilities for the other laboratory personnel.

Research Associate

The successful candidate for this position will participate in the preparation of cancer vaccines for cancer immunotherapy patients on clinical trials. Additional responsibilities include performing a variety of immunomonitoring studies to measure the antigen-specific immune response of patients receiving cancer immunotherapy vaccines. Assays will include flow cytometry analysis of cytokine and chemokine expression by T-cell and dendritic cell subsets, ELISPOT and tetramer analysis of CD-4 positive and CD-8 positive T lymphocyte subpopulations, cell-mediated cytotoxicity assays, and PCR and RPA analysis of cytokine and chemokine mRNA in discrete lymphocyte and dendritic cell subpopulations.

Requires a Bachelor's degree and at least two years of experience working in a cell biology, immunology, or molecular biology research laboratory. Must have well developed tissue culture skills, knowledge of basic in-vitro techniques for culturing and activation of T-cells, and competence in basic molecular procedures.

Visit our website at: www.franzcancer.org

Our compensation package and health care plan are highly competitive. Please send a cover letter briefly describing research experience, a curriculum vitae and the names of three references to: Edwin Walker, Ph.D., Chief, Immunomonitoring Laboratory, Robert W. Franz Cancer Research Center, Providence Portland Medical Center, 4805 N.E. Glisan Street, Suite 5F40, Portland, OR 97213; or FAX (503) 215-6841. We are an Affirmative Action Employer in a Culturally Diverse Workplace.



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Lyophilization Scientist

A BS/MS or Ph.D. degree in Chemical Engineering/Pharmaceutical Sciences is required. In addition, 5+ years in development of lyophilized parenteral products; experience in cycle development and troubleshooting scale-up issues; knowledge in the operation and characteristics of production-scale lyophilizers as compared to labscale lyophilizers; and knowledge of FDA and GLC/GMP guidelines are required. Experience in parenteral dosage forms development is a plus.

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Developmental Therapeutics Program, National Cancer Institute

Postdoctoral Research Positions

Postdoctoral fellowships for candidates with less than three years of experience are available to work within a multidisciplinary program to develop and study new targeted therapeutics for cancer. Potential areas of research include studies focused on mechanisms mediating drug-drug interactions and cell death, identifying novel targets of drug action as well as designing and developing novel antibody targeting agents. Applicants should have backgrounds in molecular and cellular biology or proteomics. Experience with antibody engineering and phage display would be a strong asset. Stipend ranges from \$31,500 - \$36,390, commensurate with experience. Please send curriculum vitae and three references to:

Ms. Lisa Gray Screening Technologies Branch, DTP, NCI Building 431A Frederick Cancer Research and Development Center National Cancer Institute Frederick, MD 21702 E-mail: Igray@mail.ncifcrf.gov

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Applicants should have a Ph.D., a strong research background in either industrial or academic research, a broad understanding of and interest in the field, excellent literary skills, an enthusiasm for and commitment to the communication of science and an appreciation of the history and evolution of molecular biology into biotechnology.

To apply, please submit a CV (including current salary), a short (700–900 words) News & Views-style article on an exciting and newsworthy recent development in any area of biotechnology, and a short cover letter explaining your interest in the post, to Dr. A. Marshall, Nature Biotechnology, 345 Park Avenue South, New York NY 10010 (fax 212.696.6935; email biotech@natureny.com) to arrive as soon as possible and **not later than March 20th**.



NATIONAL INSTITUTES OF HEALTH OFFICE OF RESEARCH SERVICES BETHESDA, MD

DIRECTOR, VETERINARY RESOURCES PROGRAM

The National Institutes of Health (NIH) is seeking a highly qualified individual to direct and manage the Veterinary Resources Program (VRP). VRP provides professional, technical, and scientific support services encompassing the care and use of animals, research consultation, and disease control services to the NIH Intramural Research Program (IRP).

The Director, VRP, oversees a service program in support of intramural scientists of all NIH Institutes and Centers working on a wide spectrum of biomedical research projects using a variety of animal models including rodents, lagomorphs, carnivores, non-human primates, and ungulates. VRP professional, technical, and scientific staffs contribute to this research by providing full-service, Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC) accredited, research animal facilities and services. These services include animal pathology and diagnostics, cryopreservation and re-derivation, genetic testing, animal husbandry, animal imaging, and comprehensive clinical veterinary medicine. VRP employs 23 doctoral-level staff, including 17 veterinarians, 32 mid-level staff, and 70 technical support staff. The full VRP staff comprises 125 government employees and 150 contractors. VRP facilities house approximately 75,000 animals in 450,000 square feet located in multiple facilities at NIH Bethesda, MD and the NIH Animal Center, Poolesville, MD. VRP is structured as a cost recovery operation and charges for its services.

The Director, as a vital member of the NIH senior scientific staff, plans, develops, and directs the biomedical animal research activities of VRP. The VRP Director is responsible for aligning these activities with the strategic goals and mission of the NIH IRP. The VRP Director oversees the development and implementation of policies, guidelines and procedures for animal care and use to maintain program compliance with applicable laws, regulations, and policies. The Director provides leadership in the development and implementation of a comprehensive program of laboratory animal science and medicine. The Director will have the vision and follow-through to strengthen the VRP, bring together diverse constituencies, and promote inter- and multi-disciplinary programs through responsive and effective leadership. This requires outstanding communication, business, and leadership skills and an ability to work knowledgeably and effectively with veterinary professionals, technical staff, research scientists, and administrators.

Salary is negotiable up to Executive Level I (currently \$157,000) consonant with the individual's qualifications and dependent upon the nature of the appointment. Federal employment benefits are included.

Candidates for this position should have either a Doctor of Veterinary Medicine or equivalent degree from an accredited school, or a Doctorate in Allied Biological Sciences. The ideal candidate will be a Diplomate, American College of Laboratory Animal Medicine. In addition, significant experience in planning, directing, and supervising a research support program providing laboratory animal resources for a large, complex, multidisciplinary medical research institution is required. Candidates from academia, industry, and Federal laboratories are encouraged to apply.

All applications should consist of a statement of qualifications for this position, a career synopsis, a current curriculum vitae and bibliography, and the names and addresses of five references. Applications must be postmarked by close of business June 1, 2000, and sent to:

Ms. Barbara Hansen NIH, ORS Human Resources Branch, 31 Center Drive, MSC 2157, Building 31, Room 4B41 Bethesda, MD 20892-2157

For questions, contact Ms. Hansen by phone (301-402-1528) or by email hansenba@ors.od.nih.gov

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BRENKEK The following postdoctoral positions at	re anticipated to be available in the Spring/Summer 2000.
Psychiatric Epidemiology: Prospective study of psychotic illness; Evelyn Bromet. Psychiatry Nuclear reactions at RHIC energies; John Alexander and Roy Lacey, Chemistry Plant Biology: Intercellular communication and nuclear import; Vitaly Citovsky, Biochemistry and Cell Biology Marine Fish Ecology: Evolutionary physiology, life history, and fisheries science; David O. Conover. Marine Sciences Research Center	 Geosciences: Crystal chemistry, geochemistry, mineral and rock physics, petrology, sedimentary geology, seismology, and tectonics Robert Liebermann, Geosciences Retinal Neurobiology: Molecular biology and electrophysiology of synaptic processing; Gary G. Matthews, Neurobiology Phylogenetic systematics of cetaceans, emphasis on soft anatomy/histology; Maureen O'Leary, Anatomical Sciences
Three-dimensional structure of damaged DNA using NMR spectroscopy and MD simulations; Carlos de los Santos, Pharmacological Sciences Evolutionary genetics: Pathoadaptation of fimbriae in Escherichia	Neurobiology of thalamus and vision; S. Murray Sherman, Neurobiology and Behavior The use and development of aerosol technology in human disease; Gerald C. Smaldone, Pulmonary/Critical Care Medicine
coli; Daniel Dykhuizen, Ecology and Evolution Acute Lung Injury: Role of Matrix Metalloproteinases; H. Foda, Pulmonary and Critical Care Medicine Developmental Genetics: Regulation of gene expression in Drosophilia; J. Peter Gergen, Biochemistry and Cell Biology Evacemental Particle Physics: Droso experiment at the Formilab	 Yeast genes and mutants affecting nuclear structure and function Rolf Sternglanz, Biochemistry and Cell Biology TGF-beta signaling pathways, ubiquitin ligases, and T box transcription factors in amphibian and mouse development; Gerald H. Thomsen, Biochemistry and Cell Biology Mineral Physics and Chemistry: High-pressure and temperature behavior of minerals;
Experimental Particle Physics: Dzero experiment at the Fermilab Tevatron Collider; Paul Grannis, Physics G protein-coupled receptor signaling; pathogenic yeast; James Konopka, Molecular Genetics and Microbiology Medical Imaging: SPECT/PET reconstruction and MR/CT	Donald J. Weidner, Mineral Physics Institute Role of glycosylation in regulation of Notch signaling pathway; Robert S. Haltiwanger, Biochemistry Clinical Psychology: Emphasis on family violence and/or marital parenting research; K. Daniel O'Leary, Psychology
segmentation; Z. Liang, Radiology The University at Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer.	Submit resumes, indicating the name of the researcher, by March 29, 2000 to: Georg Meyer, Office of the President, State University at Stony Brook, Stony Brook, NY 11794-0701; e-mail: postdocads5@notes.cc.sunysb.edu

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Director, Ocean Drilling Programs Joint Oceanographic Institutions (JOI)

Joint Oceanographic Institutions (JOI) is seeking a highly qualified scientist, with established scientific leadership and management skills, to fill the vacancy of Director, Ocean Drilling Programs. By agreement with the US National Science Foundation (NSF), the Director is responsible for leading and administering the Ocean Drilling Programs (ODP) on behalf of its 14 international partners. The Director is also responsible for the management of the US science support programs affiliated with ODP. Candidates should note that the current final phase of ODP will extend through 2003.

Necessary minimum qualifications for the position include a Ph.D. in oceanography or geoscience; 15 years experience in research, with extensive project and/or program management experience; and a willingness to relocate to Washington, DC. Desirable additional qualifications include familiarity with the ODP and NSF program planning procedures; a desire to enhance cooperation between ODP and other international scientific initiatives; and a vision of how to involve a wider, international scientific community in the Program, both through the development of new partners and the integration of new scientific disciplines. The position is open to citizens of any ODP member country and it requires extensive domestic and international travel.

An application letter, including a complete CV and names of 6 references, should be addressed to Human Resources Manager-DODP, Joint Oceanographic Institutions, 1755 Massachusetts Avenue, NW, Suite 800, Washington, DC 20036-2102.

Review of applications is expected to begin immediately and continue until the position is filled. JOI is an equal opportunity employer. D/V/F/M

Postdoctoral Positions in Functional Genomics/Proteomics of Low Dose **Ionizing Radiation**

Ν The Bioscience Division is seeking 2 postdoctoral candidates to perform basic research in the functional genomics/proteomics of cellular responses to low- and high-LET, low dose ionizing radiations, includ-G ing genomic and proteomic responses that occur in nontargeted cells as collateral or "bystander" effects. In addition to having a strong C background in molecular biology and/or biochemistry, applicants 0 should have demonstrable experience in one and preferably more of the following areas: radiation biology, free radical biology, cell-cell S signaling/cytokine networks, DNA damage and repair, cell cycle regulation, and genomic instability. For further information about the 50 positions and ongoing projects, contact Dr. Bruce E. Lehnert at: lehnert@telomere.lanl.gov. Ū A Ph.D. completed within the last three years, or soon to be com- $\mathbf{\wedge}$ pleted, is required. Further details about the Postdoctoral Program 5 may be found at: http://www.hr.lanl.gov/postdoc/. G For consideration, submit a resume and publications S list along with a cover letter outlining current research interests to: postdoc-jobs@lanl.gov (no attachments) Ð referencing job #SCIENCE-PD005669, OR SUBMIT C TWO COPIES to: Postdoc Program Office, #SCIENCE-U PD005669, MS-P290, Los Alamos National Laboratory, Ð Los Alamos, NM 87545.

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National Program Leader for Grain Crops

The USDA, Agricultural Research Service, Beltsville, Maryland, has a GS-14/15 opening for a National Program Leader for Grain Crops. Salary commensurate with experience (\$71,954-\$110,028 per year). Appointment is permanent full-time and requires U.S. citizenship. Responsibilities include planning and implementation of research on grain crops (corn, sorghum, wheat, barley, rice and other cereal grains) production, improvement, and utilization research. Participates as a leader or member of interdisciplinary planning teams responsible for establishing research priorities and goals in the national program. Works with managers nationwide to assure that the national operating plans reflect national priorities and policies. Serves as agency technical expert working with non-governmental customers in developing research plans. Works to implement national programs, evaluates on-going research activities and participates in agency budget development and presentation.

Applicants must have a degree (Ph.D. is desirable) in the biological sciences (horticulture, plant genetics, plant pathology or plant physiology) and 1 year of specialized experience directly related to the position. For application instructions/package call (301) 504-1484 or download from the internet at **www.ars.usda.gov/afm/hrd/hrdhomepage/ empopp.htm**. Applications must be marked ARS-X0E-0175 and postmarked by April 28, 2000. For program information, contact Judy St. John at (301) 504-6252.

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a Ph.D. in molecular or cellular biology or related field. Candidate should have general experience in carcinogenesis/chemoprevention and a strong interest in the molecular mechanisms of colon carcinogenesis.

Applicants should send curriculum vitae, brief description of present work and future research plans along with 3 letters of recommendation to:

Dr. C.V. Rao Chemoprevention Program American Health Foundation One Dana Road Valhalla, NY 10595 • Fax: 914-592-6317 Email: anshacvr@ix.netcom.com

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Investigator/Senior Investigator

Working in our Pulmonary Biology department you will participate in the drug discovery process in the area of pulmonary disease. You will also be responsible for utilizing established techniques and developing new technologies to identify and progress unique molecular targets, especially related to 7-transmembrane domain G-protein-coupled receptors, for pulmonary disease. We require a PhD or equivalent in Molecular Biology, Biochemistry or Molecular Pharmacology, and 2 or more years of post-doctoral experience in Molecular Pharmacology, Immunopharmacology or a related field. Expertise in biology of G-protein coupled receptors, and with current "state-of-the-art" methodologies in molecular and cellular biology is required.

For confidential consideration for the above position only, please forward your scannable resume to: SmithKline Beecham, Ad Code: 2K0266, PO Box 40047, Philadelphia, PA 19106.

Lead Chemical Software Programmer

You will participate in the development of new software and systems for the registration, searching, manipulation and use of chemical structures in pharmaceuticals development. You will maintain existing applications for handling chemical information as well as investigate and utilize new technologies emerging for chemical applications. Working with scientists and chemical registration professionals to understand their requirements, you will participate in the integration of chemical data with other types of information (e.g., biological). We require a BS in Computer Science or related discipline, (MS preferred), and 6 or more years of working in relevant information technologies. Experience developing software in UNIX and/or Windows NT environments, with chemical structure data handling software and/or databases, and with SQL and relational database technology is also required. Understanding web programming, protocols and techniques is essential.

For confidential consideration for the above position only, please forward your scannable resume to: SmithKline Beecham, c/o National Resume Processing, Ad Code: 991987, P.O. Box 1070, Burlington, MA 01803.

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DIRECTOR NRC Research Associateship Programs

The Office of Scientific and Engineering Personnel is seeking candidates for the position of Director of the NRC Research Associateship Programs. These programs

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The Director is responsible for an annual budget of \$32M and a staff of 30. With the assistance of 5 senior administrators, he/she leads the program staff in recruiting Associateship candidates, selecting panelists for peer review of applications, issuing stipends and other payments, maintaining fiscal and program records, and evaluating sponsors' facilities and the research performance of awardees. The Director also conducts site visits to new and existing laboratories and serves as the primary liaison to sponsoring agencies and participating laboratories.

Candidates will possess a doctoral degree in Science or Engineering and at least 10 years of experience in the direction or administration of research and the supervision of graduate students and/or post-doctoral researchers. Must have a proven record of publications based on personal research and successful experience managing a large organization. Experience with federal laboratories is preferred.

An extensive description of the Associateship Programs may be found at www.national-academies.org/rap

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Positions require BS or MS in Chemistry with 3 to 5 years' experience (0-3 years' with MS) in synthetic organic chemistry. Experience in solid phase organic chemistry and/or combinatorial methods is highly desirable. Strong knowledge of modern spectroscopic and chromatographic techniques is essential. You must be able to work independently with minimal supervision, and have excellent communication and organizational skills. **Job Code: XHXDD9993**

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Two Postdoctoral Positions

Massachusetts General Hospital Cancer Center Harvard Medical School BOSTON, MASSACHUSETTS

Cyclin D1 in Breast Cancer

Using MMTV-cyclin D1, MMTV-p16 and p16^{-/-} transgenic mice, we are studying terminal differentiation during mammary involution. Ongoing studies include expression analyses of altered gene regulation in normal, preneoplastic and neoplastic tissues to evaluate the functions of G1 control elements in breast cancer. Future studies will include: 1) Breedings with MMTV-oncogene mice to test p16's role in growth signaling in mammary epithelium; 2) Determination of stem cell activity in these transgenics; and 3) Pharmacologic tests of cdk inhibitors.

Wang TC, Cardiff RD, Zukerberg L., Lees E., Arnold A. and Schmidt EV. Mammary hyperplasia and carcinoma in MMTV-cyclin D1 transgenic mice. Nature 1994, 369: 669-671

c-myc in Growth Regulation

We are evaluating mechanisms and significance of transcriptional regulation of the translation initiation factor 4E by c-myc. Ongoing studies include analysis of genetic interactions between c-myc, elF4E, and a dominant blocker of elF4E (activated 4E binding protein - PHAS). Additional studies include characterization of an interacting cis-element in the elF4E promoter at -25, which can substitute for TATA. Identification and cloning of novel proteins interacting with this element will provide a major focus for this position.

Schmidt EV. The role of c-myc in growth control. Oncogene 1999, 18: 2987-2994.

Please contact: Dr. Emmett V. Schmidt, MD, PhD; Laboratory of Tumor Biology; MGH Cancer Center; Building 149 13th Street; CHARLESTOWN, MA 02129. Fax: 617-726-5637. Email: Schmidt@helix.mgh.harvard.edu



The Biology Department of Bowdoin College seeks to fill a one year position in Developmental Biology beginning Fall 2001. Teaching responsibilities include one semester of Developmental biology, a nonmajors course in science and an advanced seminar course on a topic of your choosing. The successful applicant is expected to maintain a research program which includes undergraduates. Please send a CV, a letter of intent which includes a description of your research interests and teaching philosophy and have three references sent to:

Carey Phillips, Chair Biology Department 6500 College Station Bowdoin College Brunswick, ME 04011-8465

Review of applications will begin April 14, 2000. Bowdoin College is committed to Equal Opportunity through Affirmative Action. Women and minorities are encouraged to apply. For further information about the department and the college, see our web site at www.bowdoin.edu

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We offer a competitive salary, excellent benefits, and career advancement within a dynamic startup environment. Please send your resume to: PPGx, Inc., HR Dept., Attn: (Job Code P00-01), 11099 N. Torrey Pines Rd. #100, La Jolla, CA 92037; fax: (858) 452-6069. EOE

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Postdoctoral Position Neuronal Apoptosis National Cancer Institute, NIH

Starting salary range \$33,130, commensurate with experience. Candidates must have a Ph.D. and/or M.D. degree and a year of experience.

A postdoctoral position is available to study the molecular mechanism of apoptosis in photoreceptor neurons. Our particular interest is how misfolding transmembrane proteins trigger neuronal degeneration. Approaches to the problem range from biochemistry to molecular genetics and cell biology. Experience in Drosophila genetics, electrophysiology, or molecular biology is desirable, but not essential.

Please send curriculum vitae and the names of three references to:

> **Dr. Florence Davidson** Laboratory of Biochemistry **National Cancer Institute** Building 37, Room 4D-11 **37 Convent Drive** Bethesda, MD 20892 Fax: (301) 402-3095 Email: Davidson@helix.nih.gov

NIH is an Equal Opportunity Employer.

Postdoctoral Positions in Functional Genomics/Proteomics Using Phage Display

The Bioscience Division is seeking several highly motivated, imaginative, independent-minded postdoctoral candidates in the fields of functional genomics/proteomics. The focus of the laboratory is the use of molecular diversity libraries, predominantly phage display based, in the study of functional genomics and proteomics. Novel recombinatorial methods to make large antibody libraries have been developed by the PI (Nature Biotech (2000) 18, 75-80), 0 and further development of this technology is envisaged. In addi-S tion, work in a number of interrelated fields, including antibody arrays, is presently underway or planned. Experience in molecular 20 biology is essential and applicants with experience in phage display, array technologies, mass spectroscopy, bioinformatic or robotics are especially welcome. For further technical information, contact Dr. Andrew Bradbury at: amb@lanl.gov.

A Ph.D. completed within the last three years, or soon to be completed, is required. Further details about the Postdoctoral Program may be found at: http://www.hr.lanl.gov/postdoc/. Starting salaries range from \$51,800 - \$55,800.

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For consideration, submit a resume and publications list Ð along with a cover letter outlining current research interests C to: postdoc-jobs@lanl.gov (no attachments) referencing job **#SCIENCE-PD005670, OR SUBMIT TWO COPIES to:** Scien Postdoc Program Office, SCIENCE-PD005670, MS-P290, Los Alamos National Laboratory, Los Alamos, NM 87545.

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ENDOWED PROFESSORSHIP IN MICROBIAL PATHOGENESIS

The University of Missouri seeks applications for the Charles & Charlene McKee Professorship in Microbial Pathogenesis. This professorship offers a unique opportunity for a highly motivated investigator to contribute to a campus-wide, interdisciplinary microbial pathogenesis program. Specific opportunities are available for participation in joint programs between Veterinary Pathobiology (College of Veterinary Medicine) and Molecular Microbiology and Immunology (School of Medicine); Program in Microbial Pathogenesis and Immunity and/or Advanced Vaccine Research for the Control and Prevention of Disease in Food Animals.

This position would be a full time faculty position in the Department of Veterinary Pathobiology. The primary responsibilities of the McKee Professorship will be to conduct internationally recognized research on microbial pathogenesis related to food animals and/or human disease. The successful candidate will help lead a diverse group of faculty who have interest in infectious diseases of laboratory and/or food animals, molecular biology, molecular genetics, and food safety. Other faculty positions will be added in the department over the next three years through a legislative initiative termed Mission Enhancement. The philosophy of the Department is to encourage the development of intra- and interdisciplinary research and teaching teams. The candidate is expected to contribute to professional or graduate student instruction in their specialty.

The successful candidate will be located in recently renovated state-of-the-art laboratories and would have the opportunity for an adjunct appointment in Molecular Microbiology and Immunology in the School of Medicine

Candidate should have an earned doctorate (DVM, MD, PhD, etc.), qualify at the academic rank of Professor and be committed to interdisciplinary research. Salary for this position is competitive and commensurate with experience. Applicants should send a letter of intent, curriculum vitae, summary of research accomplishments and future research directions, and the names of three references to: Dr. Gerald M. Buening, Chair, Search Committee, Department of Veterinary Pathobiology, College of Veterinary Medicine, University of Missouri, Columbia, Missouri, 65211. Phone 573-882-6628, fax 573-884-5414, or email: BueningG@missouri.edu

Review of applicants will begin approximately May 1, 2000 and will continue until the position is filled.

The University of Missouri is an equal opportunity institution and complies with the guidelines of the Americans with Disabilities Act of 1990. If you have special needs as addressed by the ADA and need assistance with this or any portion of the application process, notify us at the above address or telephone number as soon as possible. Reasonable efforts will be made to accommodate your special needs.



Postdoctoral Fellow Developmental Biology

A postdoctoral position is available immediately to join a start-up group studying the roles of Proteoglycans and other genetic components in Wnt/Wingless signaling in Drosophila (See Nature 400:281-284, 1999; Development 126:3715-3724, 1999; Development 124:3565-3573, 1977). Strong background in Drosophila genetics, developmental biology and molecular biology preferred.

Please send letter, curriculum vitae and three references to:

Xinhua Lin, Ph.D. c/o Maureen Huschart Division of Developmental Biology Children's Hospital Medical Center 3333 Burnet Avenue Cincinnati, OH 45229-3039

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



Scientists and Research Assistants

Sangamo BioSciences, a Bay Area biotechnology company, is growing. We are engineering transcription factors for the control of gene expression. We are seeking molecular and cellular biologists for several open positions. Experience in DNA binding proteins, transcription, chromatin structure, cell line construction, phage display or high throughput screening is particularly desirable.

We offer a high-energy entrepreneurial environment, great science, career growth opportunities and competitive compensation. For more detailed information please visit our web site at www.sangamo.com.

For consideration please submit your resume to:

Sangamo BioSciences Attn: Department 0301SCI 501 Canal Blvd., Suite A100 Richmond, CA 94804 Or by email: mkaur@sangamo.com

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RAMAPO COLLEGE OF NEW JERSEY

Ramapo College, a public, barrier-free institution offering Baccalaureate and selected Master's degrees, approximately 25 miles from New York City, is committed to global education. On-site child care is available.

ASST PROFESSOR OF PHYSIOLOGY/NEUROSCIENCE Position #756: <u>Job Description</u>: A one year, full time Assistant Professora position beginning September 2000 which may be extended for two additional years. The successful candidate will teach Fundamentals of Biology, Anatomy and Physiology, and will develop elective courses in physiology and neuroscience. **Qualifications:** The candidate should conduct a research program, develop

precially courses, supervise undergraduate research projects, advise students and participate in faculty governance. A Ph.D. and previous college teaching experience are required. Qualified persons should send letter of interest, vita/resume, and a list of three references to: Dr. Susan Petro, Search Committee Chair, School of Theoretical and Applied Science or e-mail spetro@orion.ramapo.edu.

ASST PROFESSOR OF ENVIRONMENTAL SCIENCE Position #752: Job Description: A one year appointment at Assistant Professor level to teach undergraduate courses in environmental physics and environmental science, including computer modeling using systems modeling software and spreadsheets, energy and society, and introductory environmental studies/science courses. Participation in student advisement is required.

Qualifications: Ph.D. or ABD in physics or environmental science. Some college teaching experience in similar or related areas required. Qualified persons should send letter of interest, vita/resume and a list of three references to: Dr. William J. Makofske, Search Committee Chair, School of Theoretical and Applied Science of e-mail bmakofsk@orion.ramapo.edu.

Since its beginning, Ramapo College has had an intercultural/ international mission. Please tell us how your background, interest and experience can contribute to this mission, as well as to the specific position for which you are applying. Website: http://www.ramapo.edu. Positions offer excellent state benefits.

To request accommodations, call (201) 684-7734. We will begin to review resumes on March 31, 2000 and continue until position is filled.



JERSEY Attention: Dept 25 505 Ramapo Valley Road, Mahwah, NJ 07430

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Scientists

Insulin Secretion/Resistance

Metabolex, Inc.

Francisco Bay Area

> is a privately-held biotech company using genomic approaches to identify novel drug targets for the treatment of Type II diabetes. We currently have an excellent opportunity for several experienced, hands-on Scientists to contribute to the success of our insulin secretion & insulin resistance programs.

Candidates must possess a Ph.D./MD; 3+ years of postdoctoral experience; hands-on experience with signal transduction, cell biology, transcriptional regulation, developmental biology and molecular biology; and excellent written/verbal communication skills. Applicants with experience in diabetes research, vesicular trafficking, and electro-physiology are encouraged to apply.

We offer an excellent compensation and benefits package. Please forward cover letter and resume to: Metabolex, Inc., HR Dept., Attn: Job# S0317-S, 3876 Bay Center Place, Hayward, CA 94545; fax: (510) 293-6853; email: dpetty@metabolex.com. EOE m/f/d/w



COLUMBIA UNIVERSITY Lecturer/Director Master's Program in Biotechnology

- Duties: Teaching, administration, and program development
- Appointment: 12 months, renewable annually; starting May–July 2000
- Qualifications: Ph.D. in biological sciences; research and teaching experience

The ideal candidate will be a talented teacher with a strong background in molecular biology and some experience with the biotechnology industry. Excellent organizational and social skills will be required to develop the new Master's Program in collaboration with the Department of Biological Sciences, to recruit and select students, to solicit guest lecturers, and to forge links with industry.

Send curriculum vitae and three letters of reference by April 17 to Justin Cassity, MAO Director Search, Department of Biological Sciences, Columbia University, Mail Code 2402, 1212 Amsterdam Avenue, New York, NY 10027.

Further information: e-mail jc837@columbia.edu or visit www.columbia.edu/cu/biology/grad/biotech/

Columbia University takes affirmative action toward equal employment opportunity.

SUGEN is a dynamic and respected biopharmaceutical company whose aim is to develop small molecule drugs using focused and proven drug discovery techniques. We maintain a strong pipeline of new targets through the successful application of innovative gene discovery and target validation strategies. Y2K promises to be particularly exciting, with the completion of the human genome sequence and the challenge of applying new genetic approaches - systematic gene analysis, application of reverse genetics and polymorphism analysis - to the study of human disease.

In our South San Francisco, CA facility, we foster an innovative, energetic and team-oriented atmosphere. Our continued success in the application of genomics based oncology research has created excellent opportunities for the following key positions:

Research Scientist/Group Leader Functional Genomics

Candidate should have a Ph.D. or MD with minimum 4 years postdoctoral experience. The appropriate candidate will be an integral part of ongoing efforts in functional genomics focused on identification/validation of novel therapeutic targets in oncology. Applicants should have a strong background in molecular biology and/or biochemistry. Demonstrated expertise in techniques such as expression cloning, phage display, protein interaction screening are advantageous. Preference will be given to candidates with prior experience in molecular and genetic mapping of signal transduction pathways. (Job Code: MG-SCI)

Senior Group Leader/Group Leader and Research Associates Proteomics

We seek a highly qualified and motivated person to establish and lead a proteomics research group. This person will be responsible for hiring two-three additional team members and supervising all aspects of proteomic analysis including operation of the PE Biosystems Voyager DE-STR MALDI-MS. A PhD and 5+ years expenence in a relevant field are required, as are knowledge of 2D electrophoresis of proteins and protein analysis by mass spectrometry. Experience in supervision of technical personnel is essential. (Job Code: JS-SCI)

Bioinformatics Statistician

Working with scientists and database programmers, you will develop and maintain gene expression databases. You will also be involved in designing experiments to get statistically meaningful results. In addition, you will work with scientists and visualization experts to analyze gene expression profiles using neural net or other clustering algorithms. A Master's degree in statistics with some database experience required. Expenence in a statistical software system such as SAS preferred. A working knowledge of biology is very helpful. (Job Code: SS-SCI)

Bioinformatics Scientist

Candidate will participate in identifying novel members of gene families from genomic sequences. Candidate should be familiar with protein profile search methods such as hidden Markov models. Should be able to build profiles for families of interest using sequence and structural information. Experience in protein threading methodologies and secondary structure prediction methods a big plus. Candidate should have a Ph. D. in physical or biological sciences. Proficiency in a programming language such as "C" and/or in a scripting language such as Perl is required. 1-2 years of industry or academic (postdoc) experience preferred; exceptional graduate students will also be considered. (Job Code: SS-SCI)

Bioinformatics Programmer

Working with software developers, scientists and system administrators, you will maintain intranet and internet web sites, manage databases, write automation scripts and participate in software development projects. You will build on your background in Perl, Java, Oracle, HTML, JavaScript and CSS in a multi-platform environment including NT and Unix servers. You should have B.S. (or equivalent experience), plus 1 to 2 years of software development or web programming. Recent college grads with internship experience are welcome to apply. (Job Code: GM-SCI)

We will reward you with an attractive compensation and benefits package that includes a 1st class pension plan, a generous profit sharing/bonus program, weekly happy hours (TGIF), and a fun, collaborative work environment that encourages creativity and achievement. Please forward resume and cover letter to: SUGEN, Inc, HR Department, Attn: (Job Code:___), 230 East Grand Avenue, South San Francisco, CA 94080; fax: (650) 553-8301; email: jobs@sugen.com (MS Word docs only, please). EOE

SUGEN

XenoPort

XenoPort, Inc. is a start-up stage drug delivery company that will become the leader in development and application of new technologies to enhance the absorption of drug compounds, by exploiting the function of specific proteins involved in active transport of molecules into and through cells. Molecular recognition by these natural transport systems promises to provide an enabling mechanism for drug delivery across tissue barriers such as the intestinal epithelium and blood-brain barrier.

At XenoPort the powerful tools of combinatorial chemistry and high-throughput screening will be applied for the first time with a drug delivery focus, enabling drug absorption to be understood as predictable phenomena based upon the principles of molecular recognition.

Having recently completed a substantial initial financing, XenoPort is actively recruiting talented individuals in the areas of synthetic and analytical chemistry, cellular and molecular biology, high throughput screening, and pharmacokinetic analysis.

Scientists - Medicinal / Combinatorial Chemistry

Participate in research team designing and synthesizing orally bioavailable drug candidates. **Staff Scientists (Job Code 102)** require Ph.D. in Organic, Medicinal or Bioorganic Chemistry with one or more years of postdoctoral research experience and an emphasis in synthetic methodology development and/or whitten total curtability for the synthetic methodology development and/or contention of the second secon MS, HPLC). Prior hands-on experience with solid-phase combinatorial synthesis and/or solution phase library synthesis is preferred. Excellent oral and written communication skills are essential.

Scientists- Analytical & Bioanalytical Chemistry

Positions are available for analytical chemists in a group providing LC-MS and NMR services in support of high throughput synthetic chemistry programs (Job NMR services in support of high throughput synthetic chemistry programs (Job Code 104), and bioanalytical support for *in vitro* and *in vivo* drug absorption and metabolism studies using LC-MS and other detection methods (Job Code 105). Requires M.S. or Ph.D. in Organic or Analytical Chemistry, Biochemistry or Pharmaceutical Sciences with a strong background in mass spectrometric analysis of organic compounds and practical experience in quantitative analysis of drugs and drug metabolites from biological matrices using HPLC, mass spectrometric and other detection methods. Significant experience with laboratory automation, compute recomprised and background in a scenarial Price experience in computer programming and database management is essential. Prior experience in working with combinatorial chemistry and biopharmaceutics groups in a pharmaceutical company environment preferred.

Senior or Staff Scientist- Transporter Biology

Lead a group responsible for the analysis of integral membrane transporter proteins and characterization of novel compounds interacting with these transporters. Requires a Ph.D. in biological sciences, extensive experience in the study of biological transporters, and substantial knowledge of the biology of epithelial cells. epithelial cells. A demonstrated record of scientific accomplishment in these fields is essential. Candidates will be expected to be creative, effective problem solvers with superior communications skills; and to maintain active, hands-on research programs. (Job Code 211)

Staff Scientist or Research Associate-

Cell & Molecular Biology

Experienced Research Associate or a recent Ph.D. graduate to take responsibility for the cloning, expression, and analysis of a variety of protein targets. Will also be responsible for building and supervising a core molecular biology group to provide services, including cloning, vector construction, and DNA sequencing, to other research groups. Requires an M.S. or Ph.D. in biological sciences and a broad background in molecular biology, with extensive knowledge of state-of-theart strategies in the expression of proteins in mammalian cells. A demonstrated record of scientific accomplishment is essential, and experience in the biology of integral membrane transporters is preferred. Candidates will be expected to be effective problem solvers with excellent communication skills. (Job Code 210)

Senior or Staff Scientist - Biopharmaceutics

Perform in vitro and in vivo ADME/PK studies to evaluate novel drug delivery technology. Develop and implement HPLC methods, analyze biological samples, perform pharmacokinetic analysis, isolate and identify metabolites, and prepare data for internal/external presentation. Requires a Ph.D. in Pharmaceutical or Biological Sciences and at least 6 years of relevant experience in industry. Extensive knowledge of methods development, PK, and in vitro / in vivo metabolism studies required. Strong collaborative and communication skills and a demonstrated record of scientific accomplishment are essential. (Job Code 220)

We offer outstanding candidates an excellent compensation and benefits package. For consideration, please send your CV and cover letter indicating relevant job code to XenoPort, Inc., 2631 Hanover St., Palo Alto, CA 94304. Email: jobs@xenoport.com EOE

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ANNOUNCEMENTS

The Ellison Medical Foundation 2000 Senior Scholar Award **Request for Letters of Intent DEADLINE: JUNE 23, 2000**

The Ellison Medical Foundation is announcing an opportunity to submit letters of intent for the Senior Scholar Awards for 2000. The Senior Scholar Award program is designed to support established investigators, working at institutions in the U.S., to conduct research in the basic biological and clinical sciences relevant to understanding aging processes and age-related diseases and disabilities. The award is intended to provide significant support to established investigators in order to allow the development of new, creative research programs by investigators who may not currently be conducting aging research or who may wish to develop new research programs in aging. The Foundation particularly wishes to stimulate new research, which has rigorous scientific foundations, but which may not be currently funded adequately, because of its perceived novelty, its high risk, or because it is from an area where traditional research interests absorb most funding.

Up to ten Senior Scholars will be selected in 2000. Each award will be made for up to \$150,000 per year direct cost, with full indirect cost at the institution's NIH negotiated rate added to that, for up to four years. Letters of Intent to submit an application must be received before close of business June 23, 2000 at The Ellison Medical Foundation address below. The Ellison Medical Foundation has been established by a gift from Mr. Lawrence J. Ellison to support biomedical research on aging.

For further information on the Senior Scholar Program and guidelines on submitting your letter of intent, contact:

> Richard L. Sprott, Ph.D. Executive Director The Ellison Medical Foundation 4710 Bethesda Avenue, Suite 204 Bethesda, MD 20814 301/657-1830 or 2511 (phone) 301/657-1828 (FAX) email: rsprott@emf.ipmail.att.net www.ellison-med-fn.org

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ANNOUNCEMENTS

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- Scholars receive up to 4 years of support at the NCI, followed by up to 2 years of support in an extramural institution.
- Scientists with 0-5 years of post-doctoral training in the areas of basic, clinical, or population-based biomedical research are invited to apply.
- Applications are due June 12, 2000.
- Must be a U.S. citizen or permanent resident.

For more details, contact:

Lester S. Gorelic, Ph.D., Cancer Training Branch, National Cancer Institute 301-496-8580 • 301-402-4472 (Fax) • lg2h@nih.gov http://rex.nci.nih.gov and click on "What's New."

Chief, Life Sciences Division

technology

and

NASA's Ames Research Center is

soliciting letters of interest from qualified

individuals who are interested in pursuing an Intergovernmental Personnel Act (IPA)

position assigned to lead its Life Sciences

Division in the planning, advocacy, and

conduct of ground and spaceflight research

http://lifesci.arc.nasa.gov). As Division Chief, leads a team of scientists, engineers,

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advancing our knowledge of the role and

influence of gravity on living systems.

Both basic and applied biological and biomedical research is supported covering a wide spectrum of science disciplines

including, physiology, neuroscience, cell

and molecular biology and the emerging

interdisciplinary field of astrobiology. The

successful candidate will have a Ph.D. or

MD degree with at least 10 years of

research and leadership experience. Salary

negotiable commensurate with experience.

Submit a letter of interest and resume by

NASA Ames Research Center

Moffett Field, California 94035 Attn: Camilla Perez, MS241-6

April 17, 2000 to:



development (See

NATIONAL INSTITUTES OF HEALTH UNDERGRADUATE SCHOLARSHIP PROGRAM

Undergraduates can train – and be mentored – at the cutting edge of biomedical research while receiving scholarship support.

ANNOUNCEMENTS

The Undergraduate Scholarship Program (UGSP) is sponsored by the National Institutes of Health (NIH), the Federal Government's premier biomedical research and research training agency. NIH offers scholarships to qualified undergraduates who are committed to a career in biomedical research.

Scholarships of up to \$20,000 per year support tuition, educational, and qualified living expenses (room, board, transportation) while students pursue an undergraduate degree.

For each award year, scholars work 10 weeks (with salary/benefits) in our research laboratories in Bethesda, MD. They are assigned mentors, participate in developmental and science enrichment seminars, and are provided with housing and transportation. After graduation, they work 1 year of full-time employment at NIH for each year of scholarship award.

WE SEEK YOUR ASSISTANCE IDENTIFYING STUDENTS WHO:

- Are committed to a career in biomedical research;
- Are from a disadvantaged background;
- Have a GPA of at least 3.5 or are in the top 5 percent of their class;
- Are a U.S. citizen, national, or
- permanent resident; and • Are enrolled or accepted for enrollment
- Are enrolled or accepted for enrollment as full-time students at a qualified accredited institution.

FOR MORE INFORMATION, CONTACT THE UGSP AT:

- Internet: http://ugsp.info.nih.gov
- E-mail: ugsp@nih.gov
- Phone: 1-800-528-7689
- TTY: 1-888-352-3001

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TENURE-TRACK FACULTY POSITIONS

Applications are invited for a 12-month tenure-track faculty position at the **ASSISTANT/ASSOCI**-ATE PROFESSOR rank in the Department of Microbiology at Colorado State University. The position includes appointment as Section Head of the Diagnostic Virology Service at the Colorado State Veterinary Diagnostic Laboratory (50%), teaching through the Department of Microbiology (30%), and collaborative research (20%). Candidates are required to have a Ph.D., D.V.M./Ph.D., or equivalent degree with an emphasis in virology, demonstrated competence or potential for innovative diagnostic service, and research employing molecular techniques for investigation of infectious disease problems. Preference will be given to candidates with experience in food animal virology, teaching and postdoctoral experience, ACVM board or equivalent certification, and excellence in interpersonal skills. The candidate will be expected to communicate on a daily basis with specialists in the diagnostic laboratory, clinicians, and clients served by the diagnostic laboratory. Teaching assignments will include graduate and undergraduate courses in the Department of Microbiology and in the professional veterinary medical curriculum. The person in this position will be expected to participate in collaborative research with epidemiologists, basic virologists, clinical faculty, and bacteriologists. Salary will be commensurate with experience. Candidates should submit a curriculum vitae, a statement of career interests and philosophy, and request that three letters of recommendation be sent to: Dr. Ralph Smith, Head, Department of Microbiology, Colorado State University, Fort Collins, CO 80523.

Applications or nominations will be considered until the position is filled; however, applications received by May 1, 2000, will be given full consideration. Additional information by **Telephone: 970-491-6179;** e-mail: lpearson@cvmbs.colostate.edu.

Colorado State University is an Equal Employment Opportunity/Affirmative Action Employer. Employment Opportunity Office: 101 Student Services.

BASIC MUSCULOSKELETAL SCIENTIST

The Department of Orthopaedics at the New Jersey Medical School invites applications for a **TENURE**-**TRACK FACULTY POSITION**. Applicants with research interests in all areas of orthopaedic science will be encouraged. We are especially interested in applicants with research programs in tissue engineering and the study of cell-material interactions. Applicants must have a Ph.D. or its equivalent and at least two years of postdoctoral experience. Currently, basic research efforts in the Department focus on the study of biomaterials for skeletal repair, the molecular biology and biomechanics of bone healing, and the molecular analysis of skeletal development. Applicants should send their curriculum vitae, the names of three references, and a statement of research interests to: Fred F. Behrens, M.D., Chairman, Department of Orthopaedics, UMDNJ-New Jersey Medical School, Doctors Office Center, Suite 5200, Newark, NJ 07103.

UMDNJ is an Affirmative Action/Equal Opportunity Employer, Minorities/Females/Handicapped/Veterans, and is a member of the University Health System of New Jersey.

DIABETES RESEARCH

The Center for Diabetes Research at Case Western Reserve University and the VA Medical Center invite applications for a FULL-TIME FACULTY PO-SITION (Ph.D. or M.D.) to study complications of diabetes. All research areas pertaining to diabetic complications are relevant. The successful candidate will maintain a funded and independent research program. Applicants should send curriculum vitae, statement of research interests, and three letters of reference to: T. Kern, Ph.D., Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106-4951. E-mail: epc2@po.cwru.edu. Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITION BIOCHEMISTRY AND MOLECULAR BIOLOGY

Purdue University, Department of Biochemistry Applications are invited for a tenure-track faculty position in the Department of Biochemistry at the rank of ASSISTANT PROFESSOR. We are interested in individuals who employ genomic information to approach important biochemical problems. Examples include novel strategies for assigning function to proteins identified through genomic analyses, largescale characterization of protein expression and modification (proteomics), combinatorial chemistry to elucidate protein function, or the directed modification of metabolism through in vivo genome manipulations. The research program may focus upon any nodel organisms for which adequate genomic re-sources are available. A strong record of research accomplishments at the postdoctoral level is essential. It is expected that the candidate will be prepared to lead a vigorous extramurally funded research program.

Purdue is building a strong faculty in genomic and postgenomic biology through the Purdue Genomics Initiative, which has committed more than 12 positions to this research area in the past two years. Collegial support for this position is excellent.

legial support for this position is excellent. The successful candidate will be an active participant in the teaching programs of the department, which include undergraduate, graduate, and medical curricula. A significant part of the evaluation of faculty candidates will be the perceived effectiveness of the candidate as a teacher.

Competitive start- up funds and excellent laboratory space will be provided. Universitywide support facilities include state-of-the-art genomic analysis instrumentation, protein and peptide sequencing and synthesis, modern mass spectrometers, high-field NMR equipment, X-ray crystallography, and computational facilities.

Curriculum vitae, the names and addresses of three individuals who can supply letters of reference, a twopage summary of research interests, and a statement of the candidate's teaching approach and philosophy are required for an application. The screening of applications will commence immediately and will continue until the position is filled.

> Biochemistry Search Committee Department of Biochemistry Purdue University

West Lafayette, IN 47907-1153 U.S.A.

Purdue University is an Affirmative Action/Equal Opportunity Employer.

PALEOCLIMATE SCIENCE FACULTY POSITION Massachusetts Institute of Technology

The Department of Earth, Atmospheric, and Planetary Sciences at MIT invites applications for FAC-ULTY POSITIONS in the area of atmospheric, oceanic, and geological paleoclimate science. Rank and salary are open, but we particulary encourage potential junior faculty to apply. We seek creative applicants with broad research interests who have a strong understanding of fundamental biological, geological, chemical, and physical processes affecting the evolution of the Earth's climate. The position is open to outstanding candidates in all areas of paleoclimatology. Observational and experimental approaches are favored; applicants capable of initiating and/or taking full advantage of the interdisciplinary nature of the Department are encouraged to apply. Enthusiasm for teaching at the graduate and undergraduate level is essential at MIT

Interested individuals should send curriculum vitae and names of three references to: Professor Ron Prinn, Department Head, Attention PC Search, Department of Earth, Atmospheric, and Planetary Sciences, Massachusetts Institute of Technology, Cambridge, MA 02139. More information on our Department can be found at website: http:// eaps.mit.edu. MIT is an Equal Opportunity/Affimative Action Employer. MIT is a nonsmoking environment.

17 MARCH 2000 VOL 287 SCIENCE www.sciencemag.org

POSITIONS OPEN

FACULTY POSITIONS PURDUE UNIVERSITY NORTH CENTRAL Beginning August 14, 2000

Full-time; 10-month; tenure-track. Salary and rank commensurate with experience and credentials. Modest research/scholarly activity expected and supported. Teaching load between 11 and 14 contact hours per semester. Some courses may be on weekends, in the evenings, or at off-campus locations, including a correctional facility. Academic advising, participating in campus governance, commencement attendance, and pursuing own research interests are considered to be a part of faculty duties. Applications accepted until positions are filled.

DISCIPLINE: BIOLOGICAL SCIENCES. Ph.D. in biology and a strong commitment to excellence in teaching are required. A strong preparation in organism developmental biology preferred. A background suitable for working with a core group of ecologists in teaching and research would be advantageous. Duties may include the teaching of cell biology, developmental biology (plant and animal), non-majors courses, and advanced specialty courses in areas of the candidate's choosing. Deadline: Application review will begin March 10, 2000, and continue until position is filled. Submit letters of application; résumés; and the names, addresses, and telephone numbers of three references to:

> Christine Kowert, M.S. Academic Services Purdue University North Central Westville, IN 46391 FAX: 219-785-5553 E-mail: ckowert@purduenc.edu Website: http://www.purduenc.edu

Will provide application acknowledgement letter. An Affirmative Action/Equal Opportunity Employer. Women, minorities, and individuals with disabilities encouraged to apply.

FACULTY POSITION MICROBIOLOGY

The University of Maine seeks applicants for a ten-ure-track **ASSISTANT PROFESSOR** position in microbial physiology available September 1, 2000. The applicant will develop and maintain an externally funded research program, be able to teach undergraduate microbial physiology and general microbiology and a graduate-level specialty course, and direct undergraduate and graduate student research. The specific research emphasis of this position is open. A Ph.D. and postdoctoral research experience are required. For more information, see website: http:// www.ume.maine.edu/~bmmb/. Send cover letter, curriculum vitae, research plans, and names and ad-dresses of three references to: Dr. R. Gundersen, Department of Biochemistry, Microbiology, and Molecular Biology, 5735 Hitchner Hall, University of Maine, Orono, ME 04469-5735. Review of applications will begin May 1, 2000, and continue until the position is filled. The University of Maine is an Equal Opportunity / Affirmative Action Employer. Women and minorities are encouraged to apply.

STAFF ASSOCIATES COLUMBIA UNIVERSITY

Three positions available to join the Immunogenetics Division, with experience in cellular and molecular immunology. Duties and requirements for each position are as follows: (1) flow cytofluorometry analysis of lymphocyte differentiation antigens, (2) molecular immunology of HLA and lymphokines, and (3) propagation and cloning of antigen-specific T cell lines. M.D., Ph.D., M.S., or B.S. with four years of experience. Send curriculum vitae and names of three references to: Dr. Nicole Suciu-Foca, College of Physicians and Surgeons of Columbia University, Pathology/Immunogenetics Division, P and S 14-401, 630 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity/ Affirmative Action Employer.



CURAGEN'S rapid growth has created exceptional career opportunities. We have openings for individuals with strong backgrounds in molecular biology, biochemistry, engineering, bioinformatics and medicine. Successful CuraGen employees are exceptionally well organized, have an entrepreneurial spirit, a passion for their work, and thrive in a challenging, team environment. We are currently seeking highly driven individuals for the following positions:

General Manager / Technology Development

We are looking for an exceptional engineer and manager with proven track record building and leading a team of engineers, software developers and molecular biologists. Must have mastery of the DNA analysis field, and manage both internal and external resources. Successful product development experience required. Job Code: 046-00

Instrument Development

You must have a strong track record developing instrumentation for DNA analysis. Expertise in liquid handling, optics and computer control, as well as familiarity with microfabrication methods is required. M.S./Ph.D. Engineering required. Job Code: 047-00

Molecular Biology Methods

We are looking for a Ph.D. Biochemistry/Biology with a 4+ year track record of DNA methods development. Encyclopedic knowledge of molecular biology protocols and methods, as well as multiple related publications. You must have extensive knowledge of the gene expression analysis field and strong quantitative skills. Job Code: 048-00

> Please send cover letter, resume / CV and 3 letters of recommendation. EOE

PathoGenesis Corporation is a biopharmaceutical company that is exploring new frontiers in the discovery, development and commercialization of drugs to treat infectious disease. Share in the mission and commitment that is PathoGenesis Corporation and make a difference in the lives of countless people:

Scientist, Biochemistry

Our effort to identify new antibiotics includes the development of high-throughput assays for small molecules with novel mechanisms of antibacterial activity. We are looking for an individual who will identify antibacterial targets, develop assays, and study mechanisms of action, using chemical and biochemical expertise and knowledge of bacterial physiology to complement our current strength in molecular biology and bacterial pathogenesis. Qualified candidates will possess a PhD or equivalent experience in biochemistry or in a related field, with research experience in enzymology and other aspects of biochemistry.

The Department of Research Biology is also currently seeking a biochemist and several molecular biologists at the Research Associate level to join our antibiotic discovery team.

Scientist, Toxicology

We are seeking a scientist to join our Toxicology Group to assist with a growing number of internal and external toxicology studies. Activities will be split between toxicity evaluation of research compounds and regulatory toxicology studies for compounds in development. Qualified candidates will possess a PhD (in Toxicology or a related field), a DVM, or a BS/MS with equivalent experience, as well as a minimum of 1 year of toxicology research experience. Familiarity with GLP, FDA and ICH guidelines for drug development and knowledge of aerosol delivery or pulmonary toxicology useful.

To learn more about these and other opportunities with Pathogenesis Corporation, visit our web site at:

www.pathogenesis.com

Located on the Seattle waterfront, PathoGenesis offers a competitive salary and benefits program that includes stock options. For consideration, please send your resume, indicating position of interest, to: PathoGenesis Corporation, HR, 201 Elliott Avenue West, Suite 150, Seattle, WA 98119; FAX: 206-270-3343; E-mail: resumes@pathogenesis.com PathoGenesis is an Equal Opportunity Employer.





The Department of Ophthalmology and Visual Sciences, University of Iowa College of Medicine, has an opening for a full-time **TENURE-TRACK FAC-ULTY MEMBER** with interest and experience in both clinical ophthalmology and molecular biology. Clinical experience should be in the field of inherited diseases of the eye, with special emphasis on diseases of the retina and anterior segment.

Applicants must have graduated from a fully accredited ophthalmology residency and be eligible for licensure in the state of Iowa. Subspecialty training in retinal or anterior segment disease is also required. The ability to independently direct a research program that will be competitive for NIH and other external funding is desirable.

Rank and salary commensurate with experience and credentials. Individuals with a commitment to clinical care, research, and teaching in an academic setting are required.

Interested persons are invited to direct inquiries and submit curriculum vitae to:

Thomas A. Weingeist, Ph.D., M.D. Professor and Head Department of Ophthalmology University of Iowa Health Care 200 Hawkins Drive Iowa City, IA 52242-1091 Telephone: 319-356-2867 FAX: 319-353-6030 E-mail: thomas-weingeist@uiowa.edu

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

ASSISTANT/ASSOCIATE PROFESSOR PROFESSOR

The School of Veterinary Medicine at Tufts University invites applications for faculty positions in the Department of Biomedical Sciences. Primary responsibilities include teaching and research. The incumbent will be joining a well-established multidisciplinary research program concerned with many and diverse aspects of enteric infections of the normal and the immunodeficient host. Candidates must have D.V.M. (or equivalent) and/or Ph.D. degree with a strong background in pathophysiology, immunopathology, and/or pathogenesis of infections of the gastrointestinal tract. Candidates for Associate Professor and above should have a demonstrated ability to compete for extramural research funding. Review of applications will begin immediately, and the search will continue until the positions are filled. Interested applicants should submit a letter of application with a statement of career goals, curriculum vitae, and the names of three or more references to: Dr. Sawkat Anwer, Professor and Chair, Department of Biomedical Sciences, Tufts University School of Veterinary Medicine, 200 Westboro Road, North Grafton, MA 01536.

Tufts University is an Affirmative Action/Equal Opportunity Employer.

PACE UNIVERSITY

Biological Sciences seeks applications for two tenure-track faculty positions to begin August 2000. (1) Specialist in the area of ecology. Teaching responsibilities include courses in a Master's program in environmental science. (2) Specialist in the area of vertebrate anatomy and vertebrate physiology for majors.

Faculty are expected to develop an active research program that includes undergraduates. Ph.D. required and postdoctoral experience preferred. Pace University is a diverse institution with nearly 14,000 students and campuses in New York City and suburban Westchester County. Send letter of application, curriculum vitae, teaching philosophy and research interest statements, and three letters of reference to: Pace University, Dyson College of Arts and Sciences, Attention: Dr. John Sharkey, 1 Pace Plaza, New York, NY 10038. Closing date is April 14, 2000.

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

POSITIONS OPEN

FACULTY POSITIONS ASSOCIATE/FULL PROFESSOR AND ASSISTANT PROFESSOR Molecular Biology/Physiology

The University of Missouri is accepting applications for tenured or tenure-track investigators (Associate/ Full Professor and Assistant Professor) with demonstrated research achievements in molecular biology and interest in its application to understanding mechanisms involved in neurohumoral control of physiological systems. Desirable research interests include synaptic transmission, sensory processing, or receptor systems in central autonomic pathways. Outstanding candidates in related areas also are encouraged to apply. The primary research focus may vary, but the individual should have an active interest in applying information gained in molecular studies to functional aspects of neurohumoral control of the cardiovascular system. The successful candidate will exhibit an active, well-established, nationally recognized research program. A desire to lead research and training initiatives to integrate molecular biological with functional approaches related to neurohumoral control of the circulation is essential. This position is a Mission Enhancement Initiative of the University in support of the existing excellence in neurohumoral control of the circulation on campus. The successful senior candidate will have the opportunity to participate in the Mission Enhancement Initiative for recruitment of a junior-level investigator with complementary research interests. Teaching requirements will be commensurate with the expertise of the individual. The appointment is in Biomedical Sciences, College of Veterinary Medicine, with joint appointments in the College of Medicine (e.g., physiology) and the Dalton Cardiovascular Research Center as appropriate. Applications should include a curriculum vitae, names of three references, and a letter stating professional goals. Review of applications will begin on February 1, 2000, and continue until the position is filled.

Interested individuals should send a curriculum vitae, statement of research interests, and three references to:

Eileen M. Hasser, Ph.D. Dalton Cardiovascular Research Center 134 Research Park University of Missouri Columbia, MO 65211-3300 Telephone: 573-882-6125 E-mail: HasserE@missouri.edu

PROJECT ASSOCIATE VISITING ASSISTANT PROFESSOR

Project Associate/Visiting Assistant Professor with the BioQUEST Curriculum Consortium and the Beloit College Department of Biology. We seek candidates to collaborate on a national bioinformatics education project. Responsibilities include the development of bioinformatics educational materials, planning and running faculty workshops, conference presentations, and preparing publications. The position also provides the opportunity to teach one undergraduate biology course at Beloit College. Experience in bioinformatics and classroom teaching is required. A Ph.D. in biological sciences is preferred. The successful candidate must be able to demonstrate their commitment to the reform of undergraduate life science education and have excellent communication, collaboration, and organizational skills. Position begins in June 2000 with an initial appointment of one calendar year with the possibility of extension. Application materials should include a letter of interest, curriculum vitae, description of bioinformatics experience, two letters of reference, statement of teaching philosophy, examples of writing, and official transcripts. Send all application materials by April 17. 2000, to: Professor John R. Jungck, Department of Biology, Beloit College, 700 College Street, Beloit, WI 53511. E-mail: jungck@beloit, edu. Beloit College is committed to cultural and ethnic diversity and urges all interested individuals to apply. Affirmative Action/ Equal Employment Opportunity Employer.

POSITIONS OPEN

TENURE-TRACK FACULTY POSITIONS DEPARTMENT OF BIOENGINEERING THE UNIVERSITY OF UTAH

Applications are invited for two **ASSISTANT**- or **ASSOCIATE-LEVEL**, **TENURE-TRACK FAC-ULTY** positions in the areas of biointeractive materials. Candidates must have an earned Doctorate and a strong physical science and engineering background, with a special biological direction to their research. We are seeking candidates with demonstrated expertise in one of the following three areas: engineering of tissue scaffolding, engineering of structural biomaterials, or engineering of functional structures and devices.

Appointees will be expected to develop significant research programs and teach appropriate undergraduate and graduate courses. See **website:** www. bioen.utah.edu for further information.

A complete curriculum vitae, names of three references, and a brief career goals/objectives statement should be sent to: Dr. V. Hlady, Search Committee Chair, Department of Bioengineering, 50 South Central Campus Drive, Room 2480, Salt Lake City, UT 84112-9202. Applications will be reviewed and continue until qualified candidates are selected.

The University of Utah, an Affirmative Action/Equal Opportunity Employer, encourages applications from women and minorities and provides reasonable accommodation to the known disabilities of applicants and employees.

ASSISTANT/ASSOCIATE PROFESSOR (THREE POSITIONS) MARINE FISHERIES Ecology and Genetics

Oregon State University announces an expanded research and educational initiative in marine fisheries, including three new tenure-track faculty positions in marine fisheries ecology and genetics. One position (marine fisheries ecology) will be based in the Department of Fisheries and Wildlife on the main campus in Corvallis. Two (marine fisheries ecologist, marine fisheries population geneticist) will be based at the Coastal Oregon Marine Experiment Station, which is located at the Hatfield Marine Science Center in Newport. For additional information, please see the website: http://hmsc.orst.edu/groups/ comes. Candidates must have a Ph.D. in marine ecology, biology, genetics, fisheries, or related field or be expected to complete such a degree by July 2000. Please submit a letter of interest; a current résumé including a list of current interests, publications and funding history; and names and addresses of at least three references to: Carol Cole, Coordinator, Coastal Oregon Marine Experiment Station, 2030 S.E. Marine Science Drive, Newport, OR 97365. Telephone: 541-867-0230; e-mail: comes@hmsc.orst.edu.

Oregon State University is an Equal Opportunity Employer and has a policy of being responsive to dual-career needs.

FACULTY POSITION UNIVERSITY OF WASHINGTON SCHOOL OF DENTISTRY Department of Oral Biology

Tenure-track ASSISTANT PROFESSOR to assume primary responsibility for a two-quarter embryology and histology course for first-year dental students (including lectures and laboratory) and 50 percent responsibility for a three-quarter embryology and histology course for graduate dental specialty students. Candidate is also expected to develop a dentally relevant, hard-tissue research program. Candidates must have Ph.D., relevant embryology and histology teaching experience, and have published in the area of mineralized tissue research. Send curriculum vitae and names of four references by May 1, 2000, to: Assistant Professor Search, Department of Oral Biology, Box 357132, Seattle, WA 98195-7132. The University of Washington is building a culturally diverse faculty and strongly encourages applications from female and minority candidates. The University is an Equal Opportunity/Affirmative Action employer.

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Reproductive Endocrinologist

The Women's Health Research Institute, a division of Wyeth-Ayerst Laboratories, was formed 6 years ago with the goal of developing novel therapeutics in the areas of menopausal conditions, reproductive disorders and contraception. Over 100 scientists are involved in the research and regularly present their work at national meetings and in peer reviewed scientific journals.

We are looking for a talented, energetic PhD scientist to join the Endocrinology Division of the Women's Health Research Institute. Your focus will be on novel targets that affect fertility. You will also need to propose, plan and implement projects in the area of reproductive endocrinology as well as help define and direct our future research efforts in this area.

A PhD with a minimum of 2 years relevant experience in reproductive endocrinology is required. Previous experience with in vitro and/or in vivo models for one or more of the following areas is desirable: contraception, hypothalamic-pituitary axis, ovarian biology or sperm-egg interaction. You must have strong written, communication and data analysis skills.

Wyeth-Ayerst offers competitive compensation and benefits programs including stock options, child-care subsidies, flex time, business casual Fridays, educational assistance and professional development programs. Please forward your resume with salary requirements to: Wyeth-Ayerst, Reference OPSCI, P.O. Box 7886, Philadelphia, PA 19101-7886. Fax in fine mode to: (610) 989-4854. Email: jobs@RAMAIL1.wyeth.com (ASCII format, no attachments, subject: resume).

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Gilead Sciences, headquartered in Foster City, CA, is an independent biopharmaceutical company that seeks to provide accelerated solutions for patients and the people who care for them. The Company discovers, develops, manufactures and commercializes proprietary therapeutics for challenging infectious diseases (viral, fungal and bacterial infections) and cancer. Gilead maintains research, development or manufacturing facilities in Foster City, CA, Boulder, CO, San Dimas, CA, Cambridge, UK and Dublin, Ireland and sales and marketing organizations in the United States, Europe and Australia.

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Areas we typically recruit for include

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ASSOCIATE VICE PRESIDENT FOR RESEARCH

Applications and nominations are invited for consideration for appointment as Associate Vice President for Research at the University at Albany, State University of New York.

The Associate Vice President will assist the Vice President with stimulating the development of new research programs and forging new research alliances. These duties focus on building new linkages and initiatives with federal, state, and industry sources. The individual will play a key role in coordinating the outreach, data, and communications for the Division for Research and work with University Advancement to promote the Division's message to external constituencies and to the public. The Associate Vice President will work with the Vice President in developing and implementing the Division's strategic objectives. The individual will serve as Acting Vice President for Research in the Vice President's absence.

The candidate must have a Ph.D. with demonstrated research experience and possess superior interpersonal, organizational, written, and analytical skills. Experience with and knowledge of government agencies and industrial partnerships is essential. Candidates are sought who can adapt to changing circumstances, strategies, and opportunities; who have the ability to develop a communication strategy reflecting the Division's expanding program; and who will work flexibly and as a team player.

Interested applicants should submit a letter of application; curriculum vitae; and the names, addresses, and telephone numbers of three references to the contact person listed below. The closing date for receipt of applications is May 1, 2000.

Dr. Timothy Lance, Ph.D. Chair of the Search Committee Office of the Vice President for Research University at Albany AD 227, 1400 Washington Avenue Albany, New York 12222

The Research Foundation of SUNY is an Equal Opportunity/Affirmative Action Employer. Applications from women, minority persons, persons with disabilities, and special disabled or Vietnam-era veterans are especially welcome.

ASSISTANT PROFESSOR POSITIONS VASCULAR BIOLOGY PROGRAM

The vascular biology program is a new initiative at The University of Tennessee, Memphis, and is seeking qualified tenure-track faculty at the **ASSISTANT PROFESSOR** level in the area of vascular biology, with focus on endothelial cell function, mechanisms of angiogenesis, cell growth and apoptosis, tumor cell progression, and metastasis.

Located in the medical center of the University of Tennessee in Memphis, the vascular biology program provides a productive research environment for scientific endeavors and interdisciplinary collaborations. Basic, translational, and clinical research are integral parts of the program's activities.

Successful candidates will have a Ph.D. or M.D. degree or both, two to five years of postdoctoral experience, and a strong publication record. Laboratory and office space as well as start-up funds will be provided. Faculty are expected to develop collaborations with existing faculty on campus.

Please send your curriculum vitae, a letter detailing your specific training and research interests, date of availability, and the names and addresses of three references to:

Lisa K. Jennings, Ph.D. Director, Vascular Biology Program The University of Tennessee, Memphis Coleman Building H300 956 Court Avenue Memphis, TN 38163

The University of Tennessee is an Equal Employment Opportunity/Affirmative Action/Title VI/Title IX/Section 504/Americans with Disabilities Act/ADE Employer and encourages applications from qualified women and minorities.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR MOLECULAR PHARMACOLOGIST/ TOXICOLOGIST University of Connecticut

The Department of Pharmaceutical Sciences of the School of Pharmacy at the University of Connecticut (website: http://pharmacy.uconn.edu) invites applications for a tenure-track position at the Assistant or Associate Professor level in its pharmacology/toxicology discipline to begin January 1, 2001. Appointment will be commensurate with level of experience. Candidates must have a Ph.D. in pharmacology or toxicology or related fields; postdoctoral experience; and will be expected to develop and maintain innovative, independent, and externally funded research programs, which emphasize molecular pharmacology and/or toxicology. The successful candidate will also be expected to teach at both the undergraduate and graduate levels. Preferred research interests include but are not limited to developmental/reproductive toxicology, inflammation biology, cell survival, or xenobiotic regulation of gene expression. The successful candidate will have the opportunity to interact with and complement our existing programs in cell signaling and receptor-mediated xenobiotic interactions and to interact with faculty in our NIH pre- and postdoctoral training program in toxicology. Applicants should send a curriculum vitae, a statement of research interests, and arrange for three letters of recommendation to be sent directly to:

Dr. Andrea K. Hubbard Chair, PharmacologyToxicology Search Committee Department of Pharmaceutical Sciences School of Pharmacy, U–2092 University of Connecticut Storrs, CT 06269 E-mail: Hubbard@uconnvm.uconn.edu

Applications will be received until the position is filled. Initial review of applications will begin April 15, 2000. We encourage applications from women, minorities, and people with disabilities.

FACULTY POSITION TOXICOLOGY

The University of Louisiana at Monroe College of Pharmacy, Department of Toxicology, has a tenure-track faculty position at the ASSISTANT or ASSO-CIATE PROFESSOR level available August 2000. Minimum requirements: Ph.D. or equivalent in toxicology or closely related discipline; two years of postdoctoral experience; a record of research productivity: ability to develop/maintain an extramurally funded toxicology research program; ability to teach at the undergraduate, graduate, and professional levels. The University of Louisiana at Monroe is one of only six universities with an undergraduate toxicology program. All areas are welcome, but a special area of interest is industrial toxicology/risk assessment. Applications accepted until April 15, 2000, or until position is filled. Applicants should send a letter of application, curriculum vitae, and the names and contact information of three professional references to: Dr. Benny L. Blaylock, Head, Department of Toxicology, College of Pharmacy, The University of Lou-isiana at Monroe, 700 University Avenue, Monroe, LA 71209.

ASSISTANT PROFESSOR COLUMBIA UNIVERSITY

The Division of Immunogenetics of the Department of Pathology at Columbia University invites applications for two positions at the Assistant Professor level in the area of molecular/cellular immunology. Responsibilities include supervision of flow cytometry laboratory, development of protocols, and research in the area of immune regulation. Ph.D. or M.D. with postdoctoral experience required. Send curriculum vitae and names of three references to: Dr. Nicole Suciu-Foca, Columbia University, Pathology/Immunogenetics Division, 630 West 168th Street, P and S 14-401, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

HEAD OF THE DEPARTMENT OF HUMAN NUTRITION AND DIETETICS

College of Health and Human Development Sciences at the University of Illinois at Chicago

Lead a progressive academic department in the 21st century. The Department of Human Nutrition and Dietetics in the College of Health and Human Development Sciences at the University of Illinois at Chicago (UIC) invites applications and nominations for the position of Department Head at the rank of PRO-FESSOR with tenure. The Department Head is the principal administrator of the Department and is expected to have a commitment to developing and maintaining a unit that is nationally recognized for its excellence in research, teaching, and service. The applicant must be capable of developing the Department, which includes building on the foundation of existing faculty and resources, recruiting faculty, and forming partnerships with other academic programs within the University. The candidate must have a strong record of scholarship with a history of consistent external funding, excellent leadership qualitics; management and organizational skills, fiscal responsibility, and a dedication to research. Areas of research focus could include but are not limited to nutritional biochemistry, epidemiology, nutraceuticals, community nutrition, and the role of nutrition in the prevention and treatment of cancer.

With 25,000 students, the University of Illinois at Chicago is the largest and most diverse university in the Chicago area. UIC offers a full array of undergraduate, graduate, and professional degree programs in its 15 colleges and schools. The UIC Health Sciences Center is one of the most comprehensive centers for educating health care professionals in the United States. It encompasses a 400-bed hospital, the nation's largest college of medicine, and five additional health science colleges. UIC is one of the nation's 88 leading Research I universities.

Nominations, applications, and inquiries should be addressed to: Warren Palmer, Ph.D., Executive Associate Dean, College of Health and Human Development Sciences, Office of the Dean (MC 518), 808 South Wood Street, Chicago, IL 60612-7305. Telephone: 312-996-4359; e-mail: kinase@ uic.edu. Review of applicants will begin immediately and will continue until the position is filled.

DEPARTMENT OF PHARMACEUTICAL SCIENCES ST. JOHN'S UNIVERSITY

St. John's University, one of the largest Catholic universities in the United States, seeks applications for a tenure-track position at the ASSISTANT PRO-FESSOR level. Applicants must possess an earned Ph.D. in basic biomedical sciences. Responsibilities include teaching undergraduate courses in infectious diseases and immunology, graduate courses in area of specialty, establishment of an active research program, and mentoring graduate students. Send résumé to: Dr. Louis Trombetta, Professor and Chair, Department of Pharmaceutical Sciences, St. John's University, 8000 Utopia Parkway, Jamaica, NY 11439. St. John's is an Equal Opportunity Employer and encourages applications from women and minorities.

The Medical University of South Carolina seeks to fill the Jeffrey Gilliam Memorial Chair for the study of neurodevelopmental disorders. Rank will be at a level of **PROFESSOR**, and the candidate must have an M.D. with evidence of the ability to sustain an extramurally funded research program. Candidate must have research experience in the biological underpinnings of neurodevelopmental and will have a joint appointment in the Department of Physiology/Neuroscience. Candidate should send curriculum vitae, a list of three individuals to contact as references, and a letter containing a research summary to: Peter Kalvias, Ph.D., Gilliam Chair Search Committee, Department of Physiology and Neuroscience, Medical University of South Carolina, 650 Medical University of South Carolina Complex Suite 607, Charleston, SC 29425. Telephone: 843-792-4424.

Postdoctoral Fellows Columbia University Institute of Human Nutrition Applications are available for postdoctoral fellowships in the Institute of Human Nutrition of

Columbia University. Specific areas of research are:

Harry R. Kissilett, Ph.D. Psychology of eating disorders

Rudolph L. Lolbel, M.D. Biology of weight regula-tion and the genetic bases of obesity and diabetes

Cathy L. Mendelsohn, Ph.D. Molecular pathways involved in embryonic development

Frederica P. Perera, Br.P.H. Molecular epidemiol

David Schachter, M.D. Calcium metabolism

David M. Stern, M.D. Vascular cell biology; pathogenesis of blood vessel diseases; pathogenesis of thrombosis

Ira A. Tabas, M.D. Ph.D. Regulation of intracellular cholesterol esterilication, lipoprotein endocytic pathways

Alan R. Tall, M.D. Plasma lipoprotein metabolism

David A. Taimage, Ph.D. Signal transduction and cancer; interactions between retinoids and protein

1. Bernard Weinstein, M.D. Molecular mechanisms

Debra J. Wolgemuth, Ph.D. Processes underlying

meiosis and differentiation of mammalian germ cells;

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atherosclerosis; regulation of gene expression;

Stephen L. Sturley, Ph.D. Extracellular and

Cy A. Stein, M.D., Ph.D. Development of

antisense technology

intracellular steroi transpo

in macrophages

molecular nutrition

of carcinogenesis

embryonic development

kinases

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ogy; risk assessment; carcinogenesis

David B. Allison, Ph.D. Human obesity, <u>clinical</u> trial design and analysis, quantitative genetics, and statistical and research methodology

Lars F. Berglund, M.D., Ph.D. Lipid and liooorotein metabolism

William S. Blaner, Ph. D. Retinoids and itamin A met

Streamson C. Chua, M.D., Ph.D. Genetic basis of obesity

F. Xavler PI-Sunyer, M.D. Carbohydrate and lipid metabolism; obesity; diabetes mellitus; food intake Carol N. Boozer, D.Sc. Molecular penetics of lipoprotein metabolism in humans and induced mutant lipoprotein metabolis mouse models regulation Regina M. Santella, Ph.D. Monitoring of dietary and environmental exposure to chemical carcinogens

Richard J. Deckelbaum, M.D. Lipoprotein-rece tor-cell interaction; lipid emulsion metabolism; free fatty acids and cell lipid-lipoprotein metabolism -recep-

Bernard F. Erlanger, Ph.D. Biologically significant receptors, the relationship of their structures to their metabolic and regulatory activities

Michael D. Field, M.D. intestinal ion transport mechanisms; intestinal transport of nutrients and diarrheal diseases; aberrations of these processes in diabetes and cystic fibrosis

Anne A. Gershon, M.D. Virus intectivity; intant immunity relevant to viral infections; varicella-zoster virus (VZV)

Michael D. Gershon, M.D. Enteric nervous system Henry N. Ginsberg, M.D. Regulation of plasma lipoprotein metabolism; regulation of apoprotein B secretion from hepatocytes

Ira J. Goldberg, M.D. Lipoprotein metabolism; lipolytic enzymes; endothelial cell biology, atherosclerosis

Maxwell E. Gettesman, M.D. Gene transcription and regulation; cancer; thyroid physiology

Steven B. Heymsfield, M.D. Studies of body composition and energy expenditures

Geoffrey R. Howe, Ph.D. Nutrition and cancer; radiation and cancer

U.S. citizens or permanent residents who wish to receive advanced training in any of these areas of nutrilion are encouraged to apply. Applicants should send curriculum vitae to Dr. David A. Talmage, Institute of Human Nutrition, Columbia University, 630 West 168th Street, PH 1512, New York, NY 10032; phone (212) 305-4808; tax (212) 305-3079; nutriti@cpmc3.cis.columbia.edu Columbia University is an affirmative action/equal opportunity employer. Minority and women applicants are especially encouraged to apply.

Symposium



Director for Physics Division

The Director for Physics Division will be responsible for the scientific leadership and administration of the Division's activities, facilities and staff and, as a member of senior Laboratory management, will help formulate the strategic directions for the Laboratory. The Director will work closely with the Associate Laboratory Director for Strategic and Supporting Research. The Director will manage a budget of \$65M in a broad program of basic and applied experimental physics that is balanced between national security-driven and exploratory fundamental research. The research supports national programs in nuclear weapons; nuclear and particle physics; nonproliferation; biophysics; atomic, laser and plasma physics; hydrodynamics; quantum information; and fusion energy. The mission of the Division for the Laboratory is to further the understanding of the physical world, to create new technology in experimental physics, to extend the physics foundation for existing programs, and to build a foundation for new ones. The Director will lead a staff of some 250 people, comprising 150 scientists and engineers, of whom nine are Laboratory Fellows. The Division's staff has an excellent and valued publication record (publishing in 48 refereed journals last year) and a distinguished record of recognition through numerous major fellowships, awards and prizes.

The Director will lead the Division in increasing the value and visibility of our physics research to the national programs as measured by science reputation and innovation, and delivery of successful programs. There will be the opportunity, flexibility and expectation to collaborate with other program and line managers outside the Division in the formulation and delivery of broadly based science programs. The Director will create an intellectual environment that promotes scientific excellence and that attracts and retains the highest caliber scientific staff. The Director will also be expected to actively support significant collaborations with other laboratories and universities, and industrial partners. The Director will manage Division facilities to ensure the implementation of all-applicable safety, security, and administrative policies and procedures.

The successful candidate will be the individual judged most able to fulfill these roles and responsibilities.

Required Skills: Record of scientific accomplishment in an area of physics research relevant to the Division, as evidenced by an outstanding publication record and/or demonstrable national or international reputation. Record of scientific leadership as evidenced by successful direction of a physics program or programs of significant impact, complexity or size. Record of excellence in communication as exemplified in successfully explaining, advocating, and gaining support and funding for programs of high scientific impact. Record of success in human leadership as demonstrated

in formally directing, monitoring and mentoring the performance of others. Ability to obtain a DOE Q clearance, which usually requires U.S. citizenship.

Desired Skills: Familiarity with the national security arena. Experience in results-driven research and development with welldefined objectives and customers. Experience in broadly based programs of multidisciplinary research or those containing a spectrum of basic and applied science. Experience in strategic planning and in development of new scientific programs. Experience in workforce planning that has included elements such as recruitment, retention and mentoring of an outstanding research staff. Broad familiarity with the state of science in the areas within the Division's mission including activities across the Laboratory, DOE, other government agencies, academia, and the private sector. Experience interacting with science funding agencies. Experience in management and administration of high output scientific facilities requiring stringent environmental, safety and health standards.

Education: Ph.D. in Physics or a related discipline, or an equivalent combination of education and experience in related areas, that are relevant to the mission of the Division.

To apply, submit a comprehensive resume and cover letter that addresses the specific required and desired criteria, referencing "SCIENCE005607", to the Resume Service Center, P.O. Box 1663, MS P286, Los Alamos, NM 87545.



www.lanl.gov/jobs

FACULTY POSITIONS IN MICROBIAL PATHOGENESIS/IMMUNOLOGY

The University seeks highly qualified candidates with research expertise in the pathogenesis of viral, bacterial, or parasitic infections, using state-of-the-art molecular, immunologic, or biochemical methods. Two tenure-track positions at the **ASSISTANT** or **ASSOCIATE PROFESSOR** levels are available at the University of Utah in the Departments of Pathology and Pediatrics. Laboratory space will be in the School of Medicine building in space contiguous with members of the Department of Pathology, Division of Cell Biology and Immunology, and members of the Department of Oncological Sciences. Qualified candidates will have a demonstrated record of scholarly, laboratory-based achievements and the scientific background to conduct independent, extramurally funded research. The position in the Department of Pathology is open to individuals with Ph.D., M.D., or M.D./Ph.D. degrees. The candidates for the position in the Department of Pediatrics must possess M.D. or M.D./Ph.D. degrees and have appropriate clinical training to allow staff appointments at the University of Utah or Primary Children's Medical Center. A curriculum vitae, along with a brief statement of current and future research, should be submitted by May 1, 2000. The application should also include the names of three individuals who have agreed to send recommendation letters upon request. Applicants should indicate which of the two departments they are applying to. Applications should be sent to: Program in Microbial Pathogenesis, c/o Kim Cash, Program Coordinator, Department of Pathology, University of Utah School of Medicine, 50 North Medical Drive, Salt Lake City, UT 84132. Web site: http://molbio.med.utah.edu. The University of Utah is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities and provides reasonable accommodations to the known disabilities of applicants and employees.

ASSISTANT PROFESSOR OF MEDICINE RENAL DIVISION Washington University School of Medicine

The Renal Division at Washington University School of Medicine seeks to recruit a Scientist to a tenure-track position. Candidate (M.D., Ph.D., or M.D./Ph.D.) should be well trained in and committed to a career in biomedical research and able to function independently, as demonstrated by prior publications and funding. We can provide an outstanding start-up package and protected time. For M.D. candidates, clinical training in nephrology is not essential. Candidates's science must be of high quality and relate to transplant immunology. Send a curriculum vitae and a brief summary of research plans to: **Marc R. Hammerman, M.D., Director, Renal Di**vision, Washington University School of Medicine, Box 8126, 660 South Euclid Avenue, St. Louis, MO 63110. Washington University is an Equal Opportunity Employer/Affirmative Action Employer; Minortites/Females/Disabled/Veterans.

Full-time faculy position: A position is open at the ASSISTANT PROFESSOR level in the Department of Biochemistry of the College of Medical Sciences at Nova Southeastern University. The candidate's responsibilities will include participation in team-taught medical biochemistry courses to health profession students, scholarship, and service. Individuals with teaching experience will be given special consideration. The College of Medical Sciences is located in the Health Professions Division facility on the Fort Lauderdale, Florida, campus. Position is available immediately. We offer a competitive salary dependent upon qualifications, tuition waiver, and outstanding benefits. Please send or e-mail a letter of interest, curriculum vitae, and copies of three professional references to: (HLF) Nova Southeastern University, Office of Human Resources, 3301 College Avenue, Ft. Lauderdale, FL 33314. E-mail (in MS Word or Word/Note Pad format): nsujobs@nova.nsu.edu. Visit our website: www. nova.edu. Affirmative Action/Equal Opportunity Employer.

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

ASSISTANT PROFESSOR/ MOLECULAR NUTRITION UNIVERSITY OF NEBRASKA

Nine-month, tenure-track position available beginning August 2000. Summer salary paid for two years. Develop molecular nutrition research program. Teach and develop courses emphasizing molecular nutrition as applied to nutritional health of humans. Requires Ph.D. in molecular nutrition, biochemistry, or related area; university teaching experience desirable. Proven grantsmanship and publication history desirable. Review of applications begins May 15, 2000, and will continue until a suitable candidate is found. Submit letter of application, résumé, and the names of three references to:

Dr. Timothy Carr, Search Committee Chair Department of Nutritional Science and Dietetics University of Nebraska

316 Ruth Leverton Hall Lincoln, NE 68583-0806 Telephone: 402-472-7940 E-mail: tcarr2@unl.edu

University of Nebraska–Lincoln is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity, is responsive to the needs of dual-career couples, and assures reasonable accommodation under the Americans with Disabilities Act.

ASSISTANT/ASSOCIATE PROFESSOR, Institute of Marine and Coastal Sciences/Rutgers, The State University of New Jersey. Tenured/tenuretrack position with interests in the areas of physical oceanography, data assimilation, and/or interdisciplinary modeling. Level of appointment will be commensurate with qualifications and experience. Ph.D. in physical oceanography or related discipline and at least two years of postdoctoral experience required. Candidates are sought who will complement a team of interdisciplinary scientists presently engaged in a coastal ocean modeling and observation program in the New York Bight and adjacent estuaries. Targets of specific research interest include regional-scale ocean observing systems, advanced methodologies for model/data assimilation, coupled physical/biological modeling, and air-sea interaction. The successful applicant will have access to the substantial combined resources (observational systems, real-time models) at the LEO-15 National Littoral Laboratory. Send résumé, a statement of research interests, and the names of three references by May 1, 2000, to: Dr. J. Fred-erick Grassle, Rutgers, The State University of New Jersey, Institute of Marine and Coastal Sci-ences, 71 Dudley Road, New Brunswick, NJ 08901-8521. Rutgers is an Equal Opportunity / Affirmative Action Employer

POSITIONS OPEN

ASSISTANT PROFESSOR NUTRITION-GENE INTERACTIONS

The graduate program in nutrition at The University of North Carolina at Greensboro (website: http://www.uncg.edu/nfs) invites applications for a tenure-track position to begin August 1, 2000. Ph.D. and appropriate postdoctoral experience are required. Preference will be given to candidates studying the mechanisms by which nutrients regulate gene expression and developmental processes or the impact of genetic factors on nutrient metabolism. Successful candidates will be expected to establish an externally funded research program, to participate in the teaching of the graduate curriculum, and to develop a graduate course in the area of expertise. Modern wellequipped laboratories, competitive salary, and start-up packages are available. A letter of interest and a statement of research plans; curriculum vitae; and the names, telephone numbers, and e-mail addresses of at least three qualified references should be forwarded to: Dr. Mark Failla, Department of Nutrition and Foodservice Systems, P.O. Box 26170, 318 Stone Building, The University of North Carolina at Greensboro, Greensboro, NC 27402-6170. Review of the applications will begin in early May and continues until the position is filled. *The University of* North Carolina at Greensboro is an Affirmative Action/Equal Opportunity Employer. Women, minorities, veterans, and disabled persons are encouraged to apply.

HERPETOLOGIST FROSTBURG STATE UNIVERSITY

Frostburg State University seeks a full-time, tenuretrack Herpetologist at the ASSISTANT PROFES-SOR level, available August 2000. Responsibilities: Teach courses in herpetology, population/conservation genetics, vertebrate zoology, and general biology; establish an active research program with field component; direct undergraduate and graduate re-search. Minimum qualifications: Ph.D. in biology/ zoology or related field by fall 2000; research experience in herpetology and conservation biology; demonstrated potential for excellence in teaching and research. Preferred qualifications: Training/research/ field experience in population/conservation genetics and/or molecular systematics. Release time for research negotiable. Send a letter of interest, copy of curriculum vitae, statements of research plans and teaching interests, and the names and contact information of three professional references by April 14, 2000, to: Frostburg State University, Office of Human Resources, Attention: Herpetologist (Position #2000-1054), Frostburg, MD 21532. E-mail: humanresources@frostburg.edu; website: www.frostburg.edu. Frostburg State University is an Affirmative Action/Equal Opportunity Employer. Appropriate auxiliary aids and services for qualified individuals with disability will be provided upon request. Please notify in advance

ASSISTANT PROFESSOR BIOCHEMISTRY

The Arizona College of Osteopathic Medicine, a College of Midwestern University, is recruiting a fulltime tenure-track position at the Assistant Professor level for July 1, 2000. The person selected will participate in several team-taught courses including biochemistry, molecular biology, and biotechnology for medical, allied health, and/or undergraduate students. Faculty is expected to develop an independent research program. Special consideration will be given to applicants with research interests in developmental biology and protein-DNA biochemistry. It is expected that the individual will have a Ph.D. or equivalent and postdoctoral experience. Screening for the position will begin on April 1, 2000, and will continue until the position is filled. Candidates should submit their curriculum vitae, a description of their teaching philosophy, research interests, and the names of three references to: Dr. David Mann, Midwestern University, 19555 North 59th Avenue, Glendale, AZ 85308. Visit our website: www.midwestern.edu. Midwestern University is an Equal Opportunity Employer.

ANNOUNCEMENTS

Two Tenure Track or Tenured Investigators

Mood and Anxiety Disorders Program National Institute of Mental Health

The Mood and Anxiety Disorders Program of the National Institute of Mental Health Intramural Research Program invites applications for two tenure track or tenured investigators. The candidates are expected to develop independent research programs to plan and conduct postmortem investigations relevant to the morphology, neuroanatomy, neuropathology, neurochemistry, and genetics of mood and anxiety disorders.

The candidate must have an M.D. and/or Ph.d and broad research experience, including a record of high scientific achievement as an independent investigator, experience in direct administration of a research program, and national and international recognition. Applicants should send a curriculum vitae, statement of research interests, and have three letters of recommendations sent by March 31, 2000 to:

Dr. Dennis Charney, Chair, Search Committee for Senior Investigators in the Mood and Anxiety Disorders Program,

National Institute of Mental Health, Bldg. 10, Room 4N-222, 9000 Rockville Pike, Bethesda, MD 20892.

NIH is an equal opportunity employer

The Dow Chemical Company BIOINFORMATICS: San Diego, California

SENIOR RESEARCH SPECIALIST: The Dow Chemical Company is building a biotechnology program at its site in San Diego, California. We seek a team member to fill the role of Senior Research Specialist in Bioinformatics. The successful candidate will work directly with lab scientists and lead other scientific computing staff both on- and off-site to design, build and maintain computing solutions to meet requirements of the Bioinformatics program. Candidates should have experience in biological structure, physiology, biochemistry or molecular biology, as well as strong computer science skills. Experience with relational databases for management and manipulation of biological data is required. Strong communication skills are required to bridge an understanding between computational and experimental groups. Educational requirements: Ph.D. in Biology, Biochemistry or Bioinformatics, and 2-5 years post-doctoral industrial or academic experience. Additional formal training in computer science is a plus. Job code #00-44/MLK.

RESEARCH COMPUTING TECHNICAL SPECIALIST: We also seek an individual to design, develop, and support innovative computing solutions for biological problems. Incumbent should have experience in the integration of laboratory equipment and computers, knowledge of laboratory information management systems, and software application development and database design principles. Individual will be an on-site computing resource accountable for a variety of lab-related projects, but would remain a member of a global research computing organization. Strong communication skills and project management skills are also required. The operating environment is primarily Microsoft NT based. Experience with Oracle or other database management systems along with Visual Basic and C++ programming languages is helpful. Educational requirements: B.S. in physical sciences or computer science, with combination of competence and interests in both (7-8 years of experience preferred). Job code #00-100/MLK.

Respond to: **The Dow Chemical Company**, P. O. Box 1655, Workforce Planning Department Job Code #, Midland, Michigan, United States, 48641-1655 or e-mail: R&D@dow.com. Email respondents <u>must</u> list Job code # and their last name as the first and second items on the Subject line. Only those selected for an interview will be contacted. Equal oppor-

tunity employer offering a competitive compensation and benefits package including 401k, stock purchase, [¬] performance incentives, and educational assistance.



DOES THIS SOUND LIKE YOU OR SOMEONE YOU KNOW?

"I have long been interested in science, and in helping people. During my training, I had a number of clinical experiences which convinced me that I wanted to specialize in immunology at the bench, but still have patient contact." "I was always tinkering with my toys, taking them apart, trying to fit the square peg in the round hole. NIH is the only place to be for cutting-edge training, creativity, and pure excitement."

Has your interest always been to pursue medical research? Do the realities of staggering educational debt appear to prevent you from realizing your dreams? NIH offers a variety of clinical and basic science postdoctoral training fellowships that can be combined with

educational loan repayment incentives. You owe it to yourself to know about these programs (or share the information with someone in need!) as you make your career decisions. You owe it to yourself to learn more about what NIH can do for you.

NIH Loan Repayment Benefits of \$35,000 per Year

NIH, the world's leading biomedical research facility, has trained thousands of qualified students in neuroscience, pathology, immunology, molecular genetics, developmental biology, cell biology, molecular biology, virology, and structural biology, to name only a few areas in our intramural research program.

For more information on the Loan Repayment Program and postdoctoral training, visit our websites at:

http://www.training.nih.gov and http://lrp.info.nih.gov



Toll Free: 1-800-528-7689

TTY: 1-888-352-3001

NIH is dedicated to building a diverse community in its training and employment programs.

Because of you



It's our solid dedication, vision and constant search for answers that allow us to touch millions of people around the world every day. As a major division of Fortune 500 American Home Products Corporation, we help people lead healthier lives through the development of innovative pharmaceutical, vaccine and nutritional products. We achieve this through our

We're making a world of difference.

superior research, manufacturing, sales and marketing capabilities. Enjoy the freedom to develop your own career while having the support of a valuable team.

Chemical Sciences has opportunities available in Princeton, NJ, Pearl River, NY, Radnor, PA and Cambridge, MA for BS, MS and Ph.D. Chemists with a background in synthetic organic chemistry and/or experience in parallel synthesis.

Chemists

The successful candidate will be involved in the design, synthesis and characterization of novel compounds as part of our multi-disciplinary drug discovery efforts. Requirements include a BS with 2 to 8 years of experience or an MS with up to 6 years of experience or a Ph.D. with up to 6 years of pharmaceutical experience in synthetic organic chemistry. Experience in modern synthetic methods and an aptitude for practical organic chemistry are essential.

Wyeth-Ayerst is involved in innovative research in Women's Health, Neuro-Science, Infectious Diseases, Oncology, Muscular Skeletal and Immunoinflammatory diseases.

Wyeth-Ayerst offers competitive compensation and benefits programs including stock options, child-care subsidies, flex-time, educational assistance and professional development programs. Please forward your resume with salary requirements to: Wyeth-Ayerst, Reference OPSCI, P.O. Box 7886, Philadelphia, PA 19101-7886. Fax in fine mode to: (610) 989-4854.

E-mail: jobs@RAMAIL1.wyeth.com (ASCII format, no attachments, subject: resume).

No phone calls please. Principals only. Equal Opportunity Employer. M/F/D/V.

For more information, please visit us at: http://company.monster.com/wyay/



FACULTY POSITION: MOLECULAR PATHOGENESIS

The Virginia-Maryland Regional College of Veterinary Medicine at the University of Maryland, College Park, Maryland, invites applications from qualified individuals for a nine-and-one-half-month, TEN-URE-TRACK FACULTY POSITION in molecular pathogenesis. Minimum qualifications include a Ph.D. degree in microbiology, molecular biology, or related field. The position responsibilities are divided into 70% research, 15% teaching, and 15% service. Candidates should demonstrate evidence of experience in molecular biology/microbiology and possess a willingness to work with microbial agents involved in foodborne illness. Areas of interest might include but are not limited to host-pathogen interactions, virulence factors, pathogen detection, or microbial ecology. The successful candidate will be expected to develop an active, extramurally funded research program and work in a multidisciplinary environment. Excellent opportunities exist for collaboration with federal agencies (USDA, FDA, NIH) and other University departments. Salary will be commensurate with experience.

Submit a letter of application; curriculum vitae; statement of career goals; and names, addresses, and telephone numbers of three references to: Dr. Robert M. Dyer, Chair, Search Committee, Virginia-Maryland Regional College of Veterinary Medicine, University of Maryland, 8075 Greenmeade Drive, College Park, MD 20742-3711. Telephone: 301-935-6083, extension 110; FAX: 301-935-6079; e-mail: rd70@umail.umd.edu. Applications will be accepted until April 28, 2000, or until a suitable candidate is selected.

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

MOLECULAR NEUROBIOLOGIST

The Neurobiology group within the laboratories of the Robert Stone Dow Neurology Chair in Portland, Oregon, is seeking a well-qualified molecular neurobiologist for the position of **ASSISTANT** or **ASSO-CIATE SCIENTIST**. We are particularly interested in individuals with at least two years of experience in a range of molecular biology applications. The candidate should have a Ph.D. or M.D. degree and preferably a strong background in techniques including cDNA cloning, gene transfection, and expression *in vitro* and immunoprecipitation. The candidate will be joining an established group working on intracellular pathways mediating neuronal death in a range of *in vitro* and *in vivo* models of ischemia.

The neurobiology laboratories are contained within a newly remodeled 6,000 square foot facility and offer an ideal scientific environment. (Search for "research" at website: www.legacyhealth.org.)

Please send curriculum vitae and the names of three references to:

Roger P. Simon, M.D. Robert S. Dow Chair of Neurology Director, Neurobiology Research Legacy Research and Technology Center 1225 N.E. Second Avenue Portland, OR 97232 E-mail: rsimon@lhs.org

An Equal Opportunity Employer.

We are recruiting a **POSTDOCTORAL SCHOL-AR** trained in mammalian cell electrophysiology. The successful candidate will study synaptic transmission and other properties, using both viral vector-mediated gene transfer and transgenic mice. You can learn more about our program at **website:** http://www. cco.caltech.edu/~lester. Please send a curriculum vitae and arrange to have three confidential letters of recommendation sent to: Henry A. Lester and Norman Davidson, Division of Biology 156–29, California Institute of Technology, Pasadena, CA 91125. E-mail: Shannan Boss, smboss@its.caltech.edu.

POSITIONS OPEN



RNA BIOLOGISTS

Message Pharmaceuticals, Inc., is exploiting a novel and proprietary approach for identifying drugs that increase or decrease the in vivo production of proteins by regulation of mRNAs. Message currently has three openings at the SCIENTIST level. Each position requires a Ph.D. and experience with any aspect of RNA metabolism, including mRNA transcription, splicing, nuclear export, polyadenylation, stability or translation, or RNA structural analysis. The first position requires extensive experience in studying mechanisms of mRNA decay. The second position requires experience with RNA-protein interactions and mammalian cell culture systems. The final opening requires experience with RNA footprinting and/or familiarity with biophysical techniques, such as ÚV-Vis and fluorescence spectroscopy or biosensors. Message has immediate openings in these areas. Successful candidates will be innovative team players willing to learn and prosper in a fast-paced research environment. To apply for one of these positions, send a cover letter and curriculum vitae to: Message Pharmaceuticals, Inc., 30 Spring Mill Drive, Malvern, PA 19355. FAX: 610-695-0957; e-mail: message@ messagepharm.com.

Saint Louis University, a Catholic Jesuit institution dedicated to education, research, and health care, is seeking applicants for two NIH-funded POSTDOC-TORAL POSITIONS available immediately in the Department of Biochemistry and Molecular Biology at Saint Louis University School of Medicine to study the structure and function of coagulation proteases and their inhibitors. A Ph.D. degree in biology, biochemistry, or in a related field, with some background in routine molecular biology methods and/or enzyme kinetics, is desired. A competitive salary and fringe benefits are offered. Send curriculum vitae and the names of three references to: Dr. Ray Rezaie, Department of Biochemistry and Molecular Biology, Saint Louis University School of Medicine, 1402 South Grand Boulevard, St. Louis, MO 63104 U.S.A. E-mail: rezaicar@slu.edu; Tele-phone: 314-577-8130; FAX: 314-577-8156. Saint Louis University is an Affirmative Action/Eaual Opportunity Employer and encourages nominations of and applications of women and minorities.

POSTDOCTORAL/SENIOR RESEARCH ASSOCIATES

Positions are open to participate in genetic and genomic studies on *Cryptosporidium*. Areas of interest include functional genomics, mechanisms of gene expression, and identification of drug targets. Candidates will work with biomedical scientists in data mining and curation. Competitive salary and opportunities for active independent research are offered to individuals skilled in bioinformatics and computational biology with strong background in molecular biology. Send curriculum vitae and three letters of recommendation to: Saul Tzipori, Division of Infectious Diseases, Tufts University School of Veterinary Medicine, North Grafton, MA 01536. E-mail: stzipori@infonet.tufts.edu.

NIH POSTDOCTORAL POSITION available starting in June 2000 to study serine proteases from mast cells. Work focuses on human chymase: its structure, substrate specificity, and mechanism of interaction with protein inhibitors of the serpin family. An X-ray crystal structure, along with methods to produce recombinant chymase and the serpins, make detailed physical studies and mutational analyses possible. Candidate must have a Ph.D. or M.D. degree and *must be a U.S. citizen or permanent resident.* Please send curriculum vitae to: Norman Schechter, Ph.D., Department of Dermatology, University of Pennsylvania, 415 Curie Boulevard, 242A Clinical Research Building, Philadelphia, PA 19104. FAX: 215-573-2143; e-mail: schechte@mail.med. upenn.edu. Equal Opportunity Employer.

POSITIONS OPEN

RESEARCH ASSOCIATE POSITION available immediately for up to three years to work on signal transduction protein-protein interactions. Our current interest is in GPCR signaling and activation of protein kinase C. Candidates must be able to demonstrate proficiency in one or more of: (1) basic molecular biological techniques, including PCR and construction of expression vectors, etc.; (2) purification and characterization of proteins, using FLPC affinity chromatography; (3) fluorescence imaging approaches to the study of signaling in intact cell systems; and (4) in vitro studies of signaling proteinprotein interactions. The position is funded from an NIH training grant, which is available to U.S. dtizens and permanent residents. However, other exceptional candidates may be considered. The position would suit newly qualified Ph.D.s or Postdoctorals with zero to three years of experience. Laboratory website: http://jeffline.tju.edu/CWIS/DEPT/Pathology/ ARC/cdslab.htm. Applications with the names of two references to (e-mail applicants; no attachments, please): C. D. Stubbs, Ph.D., Division of Cell Biology, Department of Pathology, Anatomy, and Cell Biology, Thomas Jefferson University, Room 271 JAH, 1020 Locust Street, Philadelphia, PA 19107. Thomas Jefferson University is an Equal Opportunity Employer

BIOINFORMATICS FACULTY POSITION

The Department of Animal Science at Iowa State University seeks an ASSISTANT/ASSOCIATE PROFESSOR in bioinformatics to be part of the L. H. Baker Center for Bioinformatics and Biological Statistics (website: www.bioinformatics.iastate. edu). The candidate will establish a vigorous extramurally funded research program with collaborative efforts in animal and veterinary sciences and contribute to graduate education. Candidates must have a Ph.D. related to bioinformatics or genetics and demonstrate excellent research capabilities and effective communication skills. To apply, submit résumé and have three reference letters sent to: Dr. D. Marple, Department of Animal Science, 1221 Kildee Hall, Iowa State University, Ames, IA 50011. Telephone: 515-294-2160; e-mail: dmarple@iastate. edu. Review of applications will begin June 1, 2000. Iowa State University is an Equal Opportunity/Affirmative Action Employer.

THREE POSTDOCTORAL POSITIONS available to study sea lamprey sex pheromones. (1) Production and release of pheromone. Candidates with background in chemistry and physiology and skills in ELISA, RIA, HPLC, and microchemical analyses desired. (2) Effects of pheromone release on mating competitiveness. Background in animal behavior and fisheries and experience in fieldwork and application of microsatellite markers preferred. (3) Signal transduction for pheromone in olfactory receptor neurons. Background in chemoreception and molecular biology techniques desired. Starting as soon as possible for duration of up to three years. Salary: \$25,000 to \$35,000 with full benefits. Pending final approval of funding. Send cover letter, curriculum vitae, three references to: Weiming Li, Department of Fisheries and Wildlife, Michigan State University, East Lansing, MI 48823 U.S.A. E-mail: Liweim@pilot. msu.edu.

POSTDOCTORAL POSITION YALE UNIVERSITY SCHOOL OF MEDICINE

NIH-funded position available immediately for recent Ph.D. to study T cell responses during antigeninduced inflammation and tolerance using animal models of disease (asthma) (see J. Exp. Med. **188**: 1739, 1998; Immunity **11**:473, 1999; J. Clin. Invest. **104**:985, 1999). Strong background in molecular biology and/or immunology required. Please send a brief cover letter, curriculum vitae, and the names and telephone numbers of two to three references to: Dr. Anuradha Ray, Department of Medicine/Pulmonary Section, Yale University School of Medicine, 333 Cedar Street, LCI **105**, New Haven, CT 06520.

UNCF•Parke-Davis Scientific Initiatives Program Postdoctoral Fellowships





The United Negro College Fund and Parke-Davis Pharmaceutical Research, the research and development division of Warner-Lambert Company, have established a partnership to support the career development of underrepresented minority post-graduates in the biomedical research fields.

- Four (4) Fellowships Awarded in 2000
- Fellowships up to \$51,000
- Support for 12-24 Months
- Mentoring by Parke-Davis Staff Scientists

Applicants must be:

- A Ph.D. or equivalent degree recipient in a life or physical science by the end of the 1999-2000 academic year
- Appointed as a postdoctoral fellow during the 2000 calendar year at an academic or non-academic research institution in the USA, including Parke-Davis (other private industrial labs are excluded)
- A member of a minority group that is under-represented in the biomedical research fields

Submitted applications must be postmarked by May 1, 2000 For application forms and more information, please contact: Jerry L. Bryant, Ph.D., Director, Science Education Initiatives The College Fund/UNCF, 8260 Willow Oaks Corporate Drive, P.O. Box 10444, Fairfax, VA 22031-4511 Phone: (703) 205-3503 Fax: (703) 205-3574 E-Mail: uncfpd@uncf.org Internet: www.uncf.org

A mind is a terrible thing to waste.



VISITING FACULTY POSITION

The Department of Biological Sciences at the University of Alabama in Huntsville invites applications for a **VISITING ASSISTANT PROFESSOR**. This is a one-year position set to begin in August 2000 with the possibility of a second-year renewal. Ph.D. is required, and teaching experience is desirable. The applicant will provide undergraduate instruction in the areas of cell and molecular biology, biochemistry, and/or genetics. Graduate-level instruction is also a possibility. The Department has 12 faculty and awards over 30 Bachelors' degrees and four to six Masters' degrees each year. We are currently developing a proposal for an interdisciplinary Ph.D. program in biotechnology with an anticipated start date of 2001 or 2002. The Ph.D. program will emphasize the following areas (with particular reference to drug design and commercial product development): structural biology, bioprocess engineering, and biomolecular sciences (genetics, natural products, molecular biology). The successful candidate for the Visiting Assistant Professor position also might be an appropriate faculty for new positions that become available in the biotechnology Ph.D. program, depending upon his/her research interests and expertise. Collaborative research opportunities are available in the instructional areas of responsibility. Collaboration with adjunct faculty at local biotechnology companies is also possible. Please send a letter of application, curriculum vitae, transcripts, brief statements of research interests and teaching philosophy, and a list of persons who may be contacted for references to: Chair, Cell and Molecular Biology Search Committee, Department of Biological Sciences, 142 Wilson Hall, University of Alabama in Huntsville, Huntsville, AL 35899. E-mail: campbep@email.uah.edu. Deadline for receipt of completed applications is April 7, 2000. The University of Alabama in Huntsville is an Equal Opportunity Employer.

ASSOCIATE/ASSISTANT PROFESSOR MEDICINAL CHEMISTRY School of Pharmacy University of Connecticut

The Department of Pharmaceutical Sciences of the School of Pharmacy at the University of Connecticut invites applications for a tenure-track position at the ASSOCIATE or ASSISTANT PROFESSOR levels in its medicinal chemistry discipline to begin 1 January 2001. The School of Pharmacy is involved in the design and construction of a new \$42,000,000 building in the center of the campus research quadrangle. A training grant for the design and discovery of medications for drugs of abuse has recently been funded and provides an opportunity for new faculty interaction. The successful candidate will be expected to have a background in organic, bio-organic chemistry, or related fields and maintain an innovative, independent, and externally funded research program in medicinal chemistry. The applicant's research interests should complement existing research programs (see website: http://pharmacy.uconn.edu). A commitment to teaching at both the undergraduate and graduate levels is also expected. Applicants should send a curriculum vitae and a statement of research interests and arrange for three letters of recommendation to be sent directly to: Dr. Sandra C. Vigil-Cruz, Chair, Medicinal Chemistry Search Committee, Department of Pharmaceutical Sciences, University of Connecticut, School of Pharmacy, U-2092, Storrs, CT 06269. E-mail: sandra.vigil-cruz@uconn.edu; FAX: 860-486-1553. Applications will be received until the position is filled. Initial review of applications will begin April 15, 2000. We encourage applications from underrepresented groups, including minorities, women, and people with disabilities. (Search Number 00A292)

POSITIONS OPEN

CORNELL COLLEGE MT. VERNON, IOWA

Cornell College, a private undergraduate liberal arts college, invites applications for a **ONE-YEAR SAB**-BATICAL REPLACEMENT appointment in its Department of Biology for the 2000–2001 academic year. Responsibilities include teaching introductorylevel biology courses (for majors and non-majors) and an upper-level course in organismal biology (animals). Shared appointment will be considered. Ph.D. re quired; college teaching experience preferred. Cornell College has attracted national attention for its unique academic calendar under which faculty teach and student enroll in one course at a time in month-long terms. Send letter, curriculum vitae, teaching philosophy statement, and three letters of reference to: Ms. Ann Opatz, Assistant to the Vice President for Academic Affairs, Cornell College, 600 First Street West, Mount Vernon, IA 52314-1098. Formal consideration begins April 7, 2000. Cornell College is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minority candidates.

The Division of Infectious Diseases, Department of Medicine, University of Pittsburgh, is now recruiting several faculty at the ASSISTANT, ASSOCIATE, or PROFESSOR level to expand its clinical and basic research programs in HIV/AIDS and other viral diseases as part of a new Center for Viral diseases. Candidates should have an M.D., Ph.D., or equivalent and have sufficient experience to establish an independent, funded research program that intregrates basic virology or clinical science with clinical medicine. Competitive salary and start-up packages are available, including newly renovated laboratory and office space. Send curriculum vitae, summary of research interests, and names of three references to: John W. Mellors, M.D., Chief, Infectious Diseases Divi-sion, Director, HIV/AIDS Program, University of Pittsburgh, Graduate School of Public Health, 603 Parran Hall, 130 DeSoto Street, Pittsburgh, PA 15261. Telephone: 412-624-8512; FAX: 412-383-7982; e-mail: fern+@pitt.edu. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT CURATOR

Assistant Curator to serve as coordinator of a special botanical research publication project. Coordinate the acquisition of information on vascular plants of Bolivia, work with Bolivian scientists, and supervise date input and data entry personnel. Collate data necessary to compile a catalogue, which will be a computerized synopsis of the species of vascular plants found in Bolivia. Establish guidelines for contributors, communicate with co-authors, establish a database to trace manuscript progress, produce treatments for the catalogue, and oversee the production of the computer-generated catalogue. Reading and writing fluency in English and Spanish. Ph.D. in botany or natural Sciences and five years of experience in tropical botanical systematics. Forty hours per week; \$38,000 per year. Send résumé to: Mrs. J. Gaston, Division of Workforce Development, 4040 Seven Hills Drive, Suite 166, Florissant, MO 63033-6700. Refer to Iob. No. 206355.

ASSISTANT PROFESSOR OF MEDICINE RENAL DIVISION

Washington University School of Medicine The Renal Division at Washington University School of Medicine seeks to recruit a Scientist to a research nontenure-track position. Candidate (Ph.D.) should be well trained in and committed to a career in biomedical research and able to function as an integral part of a laboratory with a longstanding interest in the regulation of kidney development, growth, and regeneration. Send a curriculum vitae to: Marc R. Hammerman, M.D.; Director, Renal Division, Washington University School of Medicine, Box 8126, 660 South Euclid Avenue, St. Louis, MO 63110. Washington University is an Equal Opportunity Employer/Affirmative Action Employer, Minorities/Females/ Disabled/Veterans.

POSITIONS OPEN

POSTGENOMICS PROGRAMS IN MALARIA SEATTLE BIOMEDICAL RESEARCH INSTITUTE (SBRI) Department of Pathology University of Washington

Applications are invited for two independent faculty positions (ASSISTANT, ASSOCIATE, or FULL **MEMBER**) at Seattle Biomedical Research Institute to develop postgenomics programs in malaria. Corresponding academic appointments (Assistant, Associate, or Full PROFESSOR) in the Department of Pathobiology, School of Public Health and Community Medicine, University of Washington, are anticipated, with details depending on interests and qualifications. These programs are to have an emphasis on vaccine antigen discovery and gene function and will be supported with funds from the Gates Foundation. Additional complementary research areas can be supported with funds that the investigators bring and/or develop. SBRI is a highly interactive, investigatordriven research institute with a focus on human pathogens of global importance (website: http:// www.sbri.org). It is expanding its programs in hostpathogen interactions, particularly from a functional genomics and/or immunological perspective. The research programs will be conducted in a highly collaborative environment that is rich in all aspects of genomics ranging from genome sequencing and bioinformatics to functional genomics including microarrays, mass spectrometry, proteomics, and related approaches. Close interactions are expected with the Gates Foundation-funded Malaria Vaccine Initiative that is administered by the Program for Appropriate Technologies in Health (PATH), located adjacent to Seattle Biomedical Research Institute. Applicants must have an M.D. and/or Ph.D. in a laboratorybased discipline and demonstrated ability to direct a successful independent research program. Participation in graduate student training will be expected. The positions are available immediately and will remain open until filled.

Please send curriculum vitae, statement of proposed research program, and names of four references to:

Ken Stuart, Gates Malaria Antigen Program Seattle Biomedical Research Institute

4 Nickerson Street, Seattle, WA 98109-1651 E-mail: kstuart@u.washington.edu

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

POSTDOCTORAL POSITION

Available immediately to study signal transduction and regulation of apoptosis in primary hematopoietic/erythroid cells (see JBC 274:24469, 1999). Experience in molecular and cell biology including sitedirected mutagenesis and cDNA library construction/screening required. Send curriculum vitae and names of references to: A. Wickrema, Ph.D., Hematology/Oncology Section (M/C 734), The University of Illinois at Chicago, 900 South Ashland Avenue, Chicago, IL 60607. E-mail: awickrem@ uic.edu. University of Chicago is an Affirmative Action/ Equal Opportunity Employer.

POSTDOCTORAL SCIENTIST POSITION available immediately to study spiral ganglion (SG) neuron ion channels/receptors. The Postdoctoral Scientist will participate in projects studying ion channels/receptors of SG neurons during development and mammalian cochlear transduction mechanisms using patch clamp technique on cultured SG neurons or cochlear slices. Applicants should have a Ph.D. or equivalent. Candidates with experience in patch clamp on brain slices are preferred. Salary starts from \$35,699. Please send curriculum vitae, recent publications, and three references to: Dr. Xi Lin, House Ear Institute, 2100 West Third Street, Los Angeles, CA 90057. E-mail: xlin@hei.org; FAX: 213-273-8088.

Join the leader in LIFE SCIENCE research equipment

Packard Instrument Company is a progressive leader in the manufacture of analytical instruments for use in the life sciences industry. We have several opportunities available for scientists to help bring high performance microarray technology to market. You'll work in a multi-disciplinary group in MERIDEN, CT to further develop and implement piezoelectric microarray manufacturing technology and to develop microarray applications using proprietary technologies including unique HydroGel substrates. Packard's R&D efforts will involve collaboration with both academic and industrial partners.

Scientists/Sr. Scientists

Biochemistry and Molecular Biology

We are seeking several highly motivated Ph.D. level scientists with demonstrated ability to perform independent research in biochemistry and molecular biology. Some positions require previous experience in microarray technology and/or genomics. Other positions require experience in assay development, HTS or SNP analysis. To qualify, you must be self-motivated and able to work in a multidisciplinary team.

Chemistry

We are seeking scientists with knowledge of polymer chemistry, surface chemistry and biomolecule coupling chemistries for development of both nucleic acid and protein microarrays. A Ph.D. in chemistry is desirable, but those with Masters or Bachelors degrees and relevant laboratory experience will be considered.

Research Associates

Biochemistry and Molecular Biology

We are seeking B.S./M.S. scientists with biochemistry and molecular biology experience to assist in the development of microarray technology. Other positions will assist in the development of lab-on-a-chip technology. Experience with laboratory experimentation and instrumentation is essential.

All positions require excellent organizational and communications skills. Travel to conferences and to the sites of partners worldwide will be required for many of these positions.

We offer competitive salaries, comprehensive benefits, and the challenge and excitement of working with other scientists in developing, marketing and supporting life science research instrumentation and technologies. Please send your resume (indicating position desired) with salary history to: Director of Human Resources, Packard Instrument Company, 800 Research Pkwy, Meriden, CT 06450, USA. Or email your resume to: pi-jobposting@pbc



Career Opportunities With DuPont Pharmaceuticals...

Applied Biotechnology Department

The pharmaceuticals market is rapidly changing; evolving and maturing everyday as new ways and tools are being developed to improve the quality of human life. Ideas, outstanding performance and the growth and caring of our people are at the core of our value system. Our future is in the hands of the exciting individuals who make up our company. Our Applied Biotechnology Department is in need of the following:

QC/ANALYTICAL LAB HEAD

A Ph.D. with 3-5 years of experience is sought to oversee technology transfer/assay development and implementation of various analytical assays in a GLP setting. Excellent management and organizational skills are required. Familiarity with cGMP/GLP preferred. **Code: QCLH**

CONTRACT MANUFACTURING

This broadly trained biochemist/molecular biologist will use their 3-5 years experience to assist in development phase company projects through in-house and outside contract efforts. Ph.D. or equivalent and strong management skills are required; familiarity with GMP/GLP highly preferred. Some travel necessary. **Code: CM**

PRODUCTION STAFF SCIENTIST

We're in need of a scientist skilled in protein purification and process development with a BS/MS degree and 3-5 years of experience. Experience with cGMP/GLP, fermentation, cell culture, enzyme or analytical assays is a plus. **Code: PSS**

GLP/GMP PROJECT COORDINATOR

Your 3-5 years of experience in GLP/cGMP research or production at the bench and strong communication and organizational skills has prepared you to develop, organize and manage projects related to regulated research and production. A Ph.D. is required while experience in scaled protein production and/or protein purification and analysis is strongly preferred. **Code: GLMPC**

DOCUMENT ADMINISTRATOR

We are seeking a BA/MA or BS/MS level person with 3-5 years of experience in cGMP/GLP regulatory documentation and demonstrated computer software and organizational skills. The position requires handling all documents for regulated research and production including indexing, storage of hard and electronic copies, tracking distribution, maintaining up to date status of all outstanding documents and historical files including document revisions. Knowledge of Microsoft Word and Excel required. Knowledge of Documentum desired. **Code: DA**

QUPOND:

BIOCHEMIST -PROTEIN CHEMISTRY

Using you broad based experience in protein chemistry and biochemistry, you will work with a team of scientists to purify and characterize proteins from natural and recombinant sources. A Ph.D. in Biochemistry or related field along with 3+ years experience required. Familiarity with analytical biochemistry, fermentation and/or molecular biology a plus. **Code: BCPC**

ANALYTICAL BIOCHEMIST

A BS/MS level scientist with experience in biological mass spectroscopy, HPLC, peptide mapping and/or enzyme assays is sought. Experience with protein purification is strongly desired. 3-5 years of experience are required. **Code: AB**

Along with a competitive compensation and benefits, we offer excellent facilities with state-of-the-art technology and the opportunity to gain pharmaceutical discovery research experience. Interested candidates should forward their resume to: **The DuPont Pharmaceuticals Company, Human Resources, E400-2413, P.O. Box 80400, Wilmington, DE 19880-0400; e-mail: AMSResume@dupontpharma.com.** An equal opportunity employer, M/F/D/V.

SCIENTIST

We're also looking for a Scientist to become part of our new autoradiography team and assist with qualitative and quantitative whole-body and micro-autoradiography studies to support drug discovery and development efforts.

This BS/MS level Scientist will perform autoradiographic and histologic investigations and be responsible for test article preparation and assay, animal dosing (rodents) by various routes, sample collection, preparation and analysis for wholebody and micro-autoradiography, data reduction, assisting in report preparation and lab safety and maintenance. Experience in autoradiography (whole-body and/or micro) histology, digital imaging and image analysis, data processing and management and GLP regulations are strongly preferred along with excellent documentation skills.

Qualified candidates for this position, please send resume to: Eric Solon, Ph.D., DuPont Pharmaceutical Company, Stine-Haskell Research Center, S110, PO Box 30, 1090 Elkton Rd, Newark, DE 19714; fax: 302-366-6254, e-mail: eric.g.solon@dupontpharma.com. Candidates may also call at 302-451-0027. An equal opportunity employer, M/F/D/V.

DuPont Pharmaceuticals Company



PLANT PHYSIOLOGIST FOR RESEARCH IN PHYTONUTRIENTS BELTSVILLE HUMAN NUTRITION RESEARCH CENTER Phytonutrients Laboratory Agricultural Research Service U.S. Department of Agriculture

The Phytonutrients Laboratory of the Beltsville Human Nutrition Research Center has an opening for a Plant Physiologist. Incumbent will conduct research concerning processes that affect the content and distribution of organic phytochemicals and will collaborate with nutritionists in assessing health effects of phytochemicals that are available from foods.

À Ph.D. or equivalent in plant physiology or a related field is desirable. Preference given to candidates who have research experience in organic micronutrients. Incumbent must have a record of independent research and must have demonstrated scholarly achievement, including publications on phytochemicals or related topics in peer-reviewed journals. *Applicants must be U.S. citizens.*

Salary range: \$51,200 to \$93,500. Must request application materials from: Beverley Jacobs; Telephone: 301-504-1350; website: www.ars.usda. gov. Refer to Announcement Number ARS-X0E-0178. Specific questions regarding the positions may be directed to: Dr. Beverly Clevidence; Telephone: 301-504-8396 or e-mail: Clevidence@ bhnrc.arsusda.gov. Closing date: May 1, 2000.

ARS is an Equal Opportunity/Affirmative Action Employer/Provider.

HEALTH SCIENTIST ADMINISTRATOR NATIONAL INSTITUTES OF HEALTH NATIONAL CENTER FOR RESEARCH RESOURCES

The National Center for Research Resources invites applications for three positions of Health Scientist Administrator, NCRR, NIH. The incumbents of these positions will be responsible for providing technical leadership and scientific guidance in the planning, development, evaluation, and administration of resource grants and contracts. Some of the major professional duties the incumbent performs include: (1) negotiations with officials of the nation's universities and research institutions; (2) interpretation of policies and procedure; (3) identification of research resource needs; (4) advisor to grant officials concerning the development of plans for research resources; and (5) performs various other related scientific and administrative functions, including participation with senior scientists, department officials, and academic deans in the development research of resource programs involving interuniversity and institutional programs.

To view the full-text vacancy announcement and requirements, applicants are strongly encouraged to access the NIH automated vacancy retrieval system at website: http://careerhere.nih.gov and view vacancies within the National Center for Research Resources. This is a permanent, full-time position with a salary range of \$60,890 to \$110,028 per annum commensurate with qualifications. A recruitment bonus of up to 25% of base pay may be available to a nonfederal selectee for this position. A relocation bonus of up to 25% of base pay (subject to approval) may be available to a permanent federal employee who must relocate to accept this position.

Send applications to: National Institutes of Health, National Center for Research Resources (NCRR), 31 Center Drive, MSC 2131, Bethesda, MD 20892. For additional information, contact the NCRR Personnel Office at Telephone: 301-496-1524. Deadline for applications is April 17, 2000.

Public Health Service commissioned officers interested in performing the duties of the position with the Commissioned Corps may submit a résumé to the above address. *NIH is an Equal Opportunity Employer.*

POSITIONS OPEN

South Orange County Community College District, Department of Math, Science, and Engineering, has an opening for a full-time, nontenure **MARINE** SCIENCE/OCEANOGRAPH INSTRUCTOR at Saddleback College for the 2000-2001 academic year. Position is a one-year, temporary sabbatical leave replacement. Duties and responsibilities will be to instruct a variety of lecture/laboratory-division marine science/oceanography science courses, including introduction to oceanography, physical and chemical oceanography, and marine science; to assist in the development and implementation of a comprehensive oceanography/marine science curriculum; and to participate in general faculty functions related to the education program, in-service, and professional development. Minimum qualifications: (1) Master's degree or higher in physical or chemical oceanography; OR (2) Bachelor's degree in any physical or marine science AND a Master's degree in physics, chemistry, or oceanography; OR (3) a combination of education and experience that is at least the equivalent of Items (1) or (2) above (candidates who apply on the basis of equivalency must submit the Supplemental Application for Equivalency Determination form in addition to all other required materials); OR (4) a valid California credential that authorizes service as a full-time community college instructor of marine sciences and oceanography. Preference will be given to those candidates who demonstrate a high level of professional expertise on the basis of college teaching experience in oceanography and related areas. Current contract calls for 178 duty days per academic year. Salary: \$33,814 to \$52,412 commensurate with education and prior experience. Closing date: April 5, 2000. For an application, please contact: South Orange County Community College District, 28000 Marguerite Parkway, Mission Viejo, CA 92692. Job Line Telephone: 949-582-4850; FAX: 949-365-1748; website: www.socccd.cc.ca.us. Opening: #1711-2191.

ICHTHYOLOGIST

The Department of Biological Sciences at Eastern Kentucky University seeks an Ichthyologist (TEN-URE-TRACK ASSISTANT/ASSOCIATE PRO-FESSOR) to assume duties beginning August 15, 2000. Initial teaching responsibilities will include general biology for non-majors and/or majors and advanced courses in ichthyology and fish ecology. This position includes curation of a significant museum fish collection. The successful candidate will be expected to maintain an active research program, which includes undergraduate and graduate students. Essential qualifications include a Ph.D., evidence of excellent teaching and communication skills, and an active research program. Submit application letter, curriculum vitae, unofficial transcripts, statements of teaching philosophy and research interests, and three letters of reference to:

Guenter A. Schuster Ichthyology Committee Chair Department of Biological Sciences Eastern Kentucky University 521 Lancaster Avenue Richmond, KY 40475-3102

Review of applications will begin April 1, 2000, and continue until the position is filled. For further information about the Department and Eastern Kentucky University, see our **website: www.biology. eku.edu** or contact the committee chair at **website: bioschus@acs.eku.edu**.

Eastern Kentucky University is an Equal Opportunity/ Affirmative Action Employer.

The University of Maryland Eastern Shore is seeking applicants for three faculty positions in the areas of environmental chemistry, microbiology, and marine sciences. The successful candidate will be expected to teach discipline-related courses and establish externally funded research programs that include both undergraduate and graduate participation. All three positions are full-time, **TENURE-TRACK POSI-TIONS**, and the Ph.D. is required. Please visit our website: www.umes.edu for full job descriptions.

POSITIONS OPEN



STATISTICAL GENETICIST: RESEARCH

We seek an outstanding candidate in population genetics to join a highly motivated research team studying the genetic causes and epidemiology of diabetes and related metabolic disorders in collaboration with a major international pharmaceutical company. The group has access to valuable repositories from numerous ethnic populations in Asia and the Pacific highly suited to the study of genes in human complex diseases. The successful candidate will employ modern techniques of genetic epidemiology and statistical analysis to investigate evolutionary and hereditary questions about diseases in human populations. He/ She will have access to advanced molecular biology techniques, using state-of-the-art equipment for genotype analysis. In addition to a broad multidisciplinary background, he/she will have a solid training in computational bioinformatics, covering all aspects of statistical applications to investigate genetic inheritance and model disease patterns. A thorough knowledge of parametric and nonparametric linkage analysis is expected.

The Institute is located in Melbourne, Australia, offering an exciting and progressive research environment in a beautiful, modern, and cosmopolitan city. An attractive salary and relocation package will be negotiated with the successful candidate.

Full curriculum vitae plus names of three references should be sent to: **REF/StatGenetics**, **Internation**al Diabetes Institute, 260 Kooyong Road, Caulfield, Victoria 3162. Australia. E-mail: jjowett@ idi.org.au.

Closing date: 14 April 2000.

TENURE-TRACK POSITION DEVELOPMENTAL BIOLOGY

The Forsyth Institute invites applicants for a tenurctrack position at the level of **ASSISTANT MEM-BER** with a joint appointment in the Faculty of Medicine at Harvard University. Candidates must have a Ph.D., M.D., or equivalent degree and at least two years of postdoctoral experience with a strong background in developmental biology. Applicants are expected to develop a funded rescarch program in areas related to mechanisms of bone morphogenetic protein signal transduction, regulation of gene expression, and cell and tissue differentiation in developmental systems. Expertise with vertebrate models is highly desired. A strong record of novel and signficant research accomplishment supported by publications in peer-reviewed journals is necessary. Send letter of application, curriculum vitae, and the names of three references to:

Dr. Philip Stashenko Chair, Developmental Biology Search Committee The Forsyth Institute 140 The Fenway Boston, MA 02115

The Forsyth Institute is an Equal Opportunity/Affirmative Action Employer; women, minorities, and persons with disabilities are encouraged to apply.

RESEARCH ASSOCIATE POSITIONS THE UNIVERSITY OF VIRGINIA

Exciting discoveries have led to the cloning of three novel genes for T-type channels. Two positions are available to study the molecular pharmacology and neurophysiology of these channels. Require Ph.D. with experience in either molecular cloning techniques or electrophysiological recording. Send curriculum vitae and a list of references to: Dr. Edward Perez-Reyes, Department of Pharmacology, P.O. Box 800735, University of Virginia Health System, Charlottesville, VA 22908-0735. E-mail: eperez@virginia.edu. Application deadline: open until filled. The University of Virginia is an Equal Opportunity/Affirmative Action Employer.

Purdue Pharma L.P.

Purdue Pharma L.P. is a rapidly expanding international ethical pharmaceutical company with U.S. headquarters in Norwalk, CT. Currently, we are seeking a qualified professional medical editor/writer to make a serious impact in our publication program supporting a number of analgesic products.

MEDICAL WRITER/ SENIOR MEDICAL WRITER

Responsibilities include: substantive writing/editing and rewriting of scientific manuscripts, posters, abstracts, product monographs, slide kits, and clinical study reports; interpreting clinical data and checking accuracy of reported information; and identifying supporting documentation.

To qualify, you should have a minimum of 2 years' prior experience writing manuscripts for clinical or biological sciences, and graduate level training in a bioscientific discipline. Proven interpersonal (team), organizational, and written/verbal communication skills are critical. Candidate must be able to manage multiple projects and meet aggressive deadlines. Working knowledge of MS Word and AMA style are recommended. Familiarity with regulatory writing a plus.

We offer a contemporary work environment, competitive salary and excellent benefits. Qualified candidates, please mail or fax resume with salary history/requirement, to: **Purdue, Dept-CKK/SM, 100 Connecticut Avenue, Norwalk, CT 06850; FAX: (203) 851-5300. Corporate standards require drug testing and background investigation.** We are an equal opportunity employer committed to a diverse workplace.





Administrative Director

Talented biologist with administrative experience and broad interests in biology to assist the Director in leading a year-round scientific institution with pre-eminent summer research and educational programs. MDIBL is a nonprofit institution near Bar Harbor Maine which emphasizes the use of marine models in basic and biomedical research. Duties include: assist Director in management of daily operations and personnel, writing grants, management of budget, educational programs, and recruitment of scientific staff. Assist in administering NIH sponsored Marine Toxicology Center, Marine DNA Sequencing Center, and Center for Marine Functional Genomic Studies. Ph.D. and experience in research administration required, background in molecular biology and marine or cellular biology preferred. Position available September 1, 2000; applications will be accepted until the position is filled. Send letter, curriculum vitae and three references to John N. Forrest, Jr., M.D., Director, MDIBL, P.O. Box 35, Salisbury Cove, ME 04672 or e-mail john.forrest@yale.edu.



COLLEGE OF ARTS & SCIENCES

Nominations and applications are invited for the position of Dean of the College of Arts and Sciences. The University of Massachusetts Dartmouth is located in the Town of Dartmouth, approximately 60 miles south of Boston and 30 miles east of Providence, Rhode Island. It is a comprehensive university, located on a modern campus of 700 acres and serves 5,500 full-time commuter and resident students and 2,000 part-time students. The 300+ fulltime, unionized faculty offer baccalaureate and master degrees in five colleges: Arts and Sciences, Business and Industry, Engineering, Nursing and the Visual and Performing Arts. The University of Massachusetts includes campuses in Amherst, Boston, Dartmouth, Lowell and Worcester. Further information is available at the UMass Dartmouth web site at WWW.UMASSD.EDU.

The Dean is the chief academic and administrative officer of the College and reports to the Vice Chancellor for Academic Affairs. The college is composed of thirteen departments: Biology, Chemistry & Biochemistry, Economics, Education, English, Foreign Literature and Languages, History, Mathematics, Medical Laboratory Science, Philosophy, Political Science, Psychology and Sociology/ Anthropology. In addition, there are specialized centers. Masters degrees are offered in the departments of Biology, Chemistry, English and Psychology and the Master of Arts in Teaching. Additional graduate programs at the masters and doctoral level are being planned. The Dean is expected to promote quality and diversity in the faculty, staff and students of the college. The Dean, in consultation with the department chairpersons, provides leadership and direction in the selection and retention of faculty and staff; the development and implementation of curriculum, research, and scholarly activities of the faculty; and intellectual leadership; and plans, directs and coordinates the administrative, budgetary, and academic activities of the College. The Dean is a member of the Council of Academic Deans and responsibilities include the development of cooperative interactions with other units on campus and surrounding communities.

Candidates must have a Ph.D. or equivalent degree in one of the disciplines of the College from an accredited institution and a distinguished record of scholarly research and teaching appropriate for a faculty appointment within one of the departments of the College; successful experience in progressively responsible levels of university administration; a record of shared governance; and demonstrated commitment and success in furthering the principles of equal opportunity, affirmative action and cultural diversity. The preferred candidate will also have experience with graduate level education, knowledge of external funding opportunities for scholarly and/or creative activities, an understanding of higher education insteads, fiscal management procedures, service as a department chairperson and exceptional interpersonal and communication skills.

Applicants should submit a letter of interest, not to exceed two pages, summarizing their accomplishments and philosophy relative to the above stated objectives and suitability for the position; a current vita; and the names, addresses and telephone numbers of four references. Applications, nominations, or requests for additional information should be sent to: Dean, College of Arts & Sciences Search Committee, Office of Human Resources, University of Massachusetts Dartmouth, 285 Old Westport Road, North Dartmouth, MA 02747-2300. The review of applications will begin April 10, 2000 and will continue until the position is filled.

The University of Massachusetts Dartmouth is an Affirmative Action, Equal Opportunity Employer; applications are encouraged from women, minorities and disabled individuals.

SUPERVISORY RESEARCH SCIENTIST

(GS-15) CHEMISTRY, PHYSICAL SCIENCE, BIOLOGY, PHYSICS U.S. Army Soldier and Biological Chemical Command

U.S. Edgewood Chemical Biological Center (ECBC)

Aberdeen Proving Grounds, Maryland

Responsibilities: Serves as Senior Team Leader for protection and decontamination, sharing fully in program planning and technical direction of basic and applied research and exploratory development in a wide array of technologies supporting the Chemical Biological Defense (CBD) protection and decontamination programs.

Required: Degree in chemistry, physical science, life science, engineering, physics, mathematics, and biological sciences, or an equivalent combination of education and research experience.

Applicants selected for the above positions will be subject to a security investigation and must meet eligibility requirements for access to classified information. Salary: \$84,638.

Applications: Ms. Danyra Quinones-Taylor, 1309-R Continental Drive, Abingdon, MD 21009. E-mail: supervisorjobs@yahoo.com; Telephone: 410-612-8243. Applications must be postmarked by 28 April 2000.

Equal Opportunity Employer. U.S. citizenship required.

SUPERVISORY RESEARCH SCIENTIST (GS-15) CHEMISTRY, PHYSICAL SCIENCE U.S. Army Soldier and Biological Chemical Command

U.S. Edgewood Chemical Biological Center (ECBC)

Aberdeen Proving Grounds, Maryland

Responsibilities: Serves as Senior Team Leader for chemistry, sharing fully in program planning and technical direction of basic and applied research and exploratory development in a wide array of technologies supporting the Chemical Biological Defense program through the application of chemistry, especially modern analytical methods.

Required: Degree in physical science, life science, engineering, mathematics or an equivalent combination of education and research experience.

Applicants selected for the above positions will be subject to a security investigation and must meet eligibility requirements for access to classified information. Salary: \$84,638.

Applications: Ms. Danyra Quinones-Taylor, 1309-R Continental Drive, Abingdon, MD 21009. E-mail: supervisorjobs@yahoo.com; Telephone: 410-612-8243. Applications must be postmarked by 28 April 2000.

Equal Opportunity Employer. U.S. citizenship required.

ASSISTANT CHIEF ILLINOIS NATURAL HISTORY SURVEY (INHS)

ASSISTANT CHIEF at the level of Professional or Senior Professional Scientist (full-time, state funded) to serve as scientific and administrative leader and provide backup and assistance to the Chief. Assist in development of research initiatives and scientific agenda, provide input on Survey policies and operating procedures, coordinate activities between scientific centers, and promote cooperation and multidisciplinary team activities. Provide liaison with state and federal agencies, institutions, and the public in matters related to the Survey's activities. Ph.D. in biological sciences with minimum of eight years of relevant experience required. Located on the University of Illinois/Urbana/Champaign campus. Telephone: 217-244-7790; e-mail: suekey@mail.inhs.uiuc. edu to request a copy of the position announcement and application requirements. Visit our website: www.inhs.uiuc.edu. The Illinois Natural History Survey is an Equal Employment Opportunity/Affirmative Action/ Americans with Disabilities Act Employer

POSITIONS OPEN

HIV/AIDS VIRO-IMMUNOLOGY RESEARCH GROUP

The University of Miami School of Medicine, together with the VA Medical and Research Service, seeks to fill the positions for a GROUP LEADER and TWO JUNIOR FACULTY members active in research related to the pathogenesis of HIV/AIDS. The appointments will be made in the Departments of Microbiology and Immunology and Medicine, with the expectation of major commitment to research. The Group Leader is expected to have an M.D. or M.D./Ph.D. degree with an established record of productivity and funding in HIV-related research. One of the Junior recruits will have an M.D. degree and fill a joint, clinical/research-oriented position with the University and the VA Hospital. The second Junior Faculty member will hold a Ph.D. or M.D. degree. The group will maintain a strong basic science focus while actively collaborating in translational research with large, well-funded clinical research programs. The group will augment and complement the AIDS-related malignancies group supported by the Sylvester Comprehensive Cancer Center and the Department of Microbiology and Immunology

The University and VA offer a generous start-up package and excellent benefits in an active, researchoriented environment, with considerable strength in immunology and apoptosis, as well as clinical and population-based research.

Please send curriculum vitae and names of references to: Eckhard R. Podack, M.D., Chair, HIV Search Committee, Department of Microbiology and Immunology, University of Miami School of Medicine, P.O. Box 016960 (R-138), Miami, FL 33136. E-mail: epodack@miami.edu.

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

SUPERVISORY RESEARCH SCIENTIST (GS-15) MICROBIOLOGY, PHYSICAL SCIENCE,

BIOLOGY U.S. Army Soldier and Biological Chemical Command U.S. Edgewood Chemical Biological Center

(ECBC)

Aberdeen Proving Grounds, Maryland

Responsibilities: Serves as Senior Team Leader for biosciences, sharing fully in program planning and technical direction of basic and applied research and exploratory development in a wide array of technologies supporting the Chemical Biological Defense program through the application of biological sciences, especially biotechnology products and precepts for their application to CB Defense needs.

Required: Degree in biological sciences, microbiology, physical science, engineering, mathematics, or an equivalent combination of education and research experience.

Applicants selected for the above positions will be subject to a security investigation and must meet eligibility requirements for access to classified information. Salary: \$84,638.

Applications: Ms. Danyra Quinones-Taylor, 1309–R Continental Drive, Abingdon, MD 21009. E-mail: supervisorjobs@yahoo.com; Telephone: 410-612-8243. Applications must be postmarked by 28 April 2000.

Equal Opportunity Employer. U.S. citizenship required.

University of Michigan, Department of Anesthesiology, is recruiting faculty at the **TENURED ASSO CIATE PROFESSOR** level. The Department is especially interested in faculty with Ph.D. or M.D./ Ph.D. with an ongoing funded research program. Applicants should be knowledgeable in the areas of host defense, immunological challenge, and modulators of arousal state control. Interested candidates should apply to: **Ralph Lydic**, Ph.D., **Department of Anesthesiology**, **7433 Medical Sciences Building I, Box 0615, Ann Arbor, MI 48109-0615.** The University of Michigan is a nondiscriminatory Affirmative Action/Equal Opportunity Employer. Minorities and women are encouraged to apply.

POSITIONS OPEN

SUPERVISORY RESEARCH SCIENTIST (GS-15) CHEMISTRY, PHYSICAL SCIENCE, TOXICOLOGY, BIOLOGY, PHYSICS U.S. Army Soldier and Biological Chemical Command U.S. Edgewood Chemical Biological Center (ECBC)

Aberdeen Proving Grounds, Maryland

Responsibilities: Serves as Senior Team Leader for toxicology and aerosol science, sharing fully in program planning and technical direction of basic and applied research and exploratory development in a wide array of technologies supporting the Chemical Biological Defense (CBD) program. The teams conduct a wide variety of scientific investigations fundamental to understanding the nature of the CB threat and necessary for the development of doctrine and equipment to combat that threat.

Required: Degree in toxicology; physical science; life science; engineering; physics; mathematics; and biological, medical, or veterinary sciences, or an equivalent combination of education and research experience.

Applicants selected for the above positions will be subject to a security investigation and must meet eligibility requirements for access to classified information. Salary: \$84,638.

Applications: Ms. Danyra Quinones-Taylor, 1309-R Continental Drive, Abingdon, MD 21009. E-mail: supervisorjobs@yahoo.com; Telephone: 410-612-8243. Applications must be postmarked by 28 April 2000.

Equal Opportunity Employer. U.S. citizenship required.

RESEARCH SCIENTIST FISH REPRODUCTIVE ENDOCRINOLOGIST

The National Center for Mariculture of the Israel Oceanographic and Limnological Research Institute in Eilat, Israel, invites applications for the position of SCIENTIST/SENIOR SCIENTIST and Head of the Department of Fish Reproduction. The successful candidate is expected to develop a strong, indepen-dent, externally funded basic and applied program in fish reproductive endocrinology. This includes the study of environmental, hormonal, cellular, and molecular regulation of reproduction in commercially important finfish and the development of technologies to manipulate reproduction and spawning in farmed fish. Special emphasis is given to the applica-tion of molecular biology and biotechnology approaches. The successful candidate will lead a group of research associates and students. The applicants must have a Ph.D. in animal biology or related fields and several years of postdoctoral experience. Fluency in Hebrew is preferred. Applicants should submit a complete curriculum vitae, a short description of research interests, a statement of past and ongoing research, and arrange for three letters of reference to be sent to: Dr. Amos Tandler, Director, National Center for Mariculture, IOLR, P.O.B. 1212 Eilat 88112, Israel. Deadline for applications: April 30, 2000.

ASSISTANT CURATOR

Assistant Curator to administer special botanical publication projects regarding Latin American floras. Prepare the scientific and vernacular plant name indices, develop a database regarding the novelties and endemics, and prepare taxonomic treatments in Spanish for each respective project. Coordinate the activities of the botanists collaborating on the projects and coordinate manuscript reviews. Edit the Spanish-language manuals for each respective Latin American floras project. Reading and writing fluency in English and Spanish. Ph.D. in botany or natural sciences and three years of experience in tropical botanical systematics. Forty hours per week, \$29,300 per year. Send résumé to: Mrs. J. Gaston, Division of Workforce Development, 4040 Seven Hills Drive, Suite 166, Florissant, Missouri 63033-6700. Refer to Job No. 206321.

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With its innovative culture, The Novartis Horsham Research Centre undertakes basic and applied research to combat respiratory disease.

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Two outstanding opportunities exist for recent PhD's, or those with 1-2 years' post-doctoral experience. These roles offer the chance to broaden your research experience and develop your career in a multi-disciplinary research centre.

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This position, based in Horsham, will form the basis of a collaborative effort between the Respiratory Disease and Dermatology therapeutic areas of Novartis in Horsham and Vienna, respectively.

You will be a molecular biologist, with experience of immunology and a keen interest in the regulation of inflammatory cell chemotaxis. Knowledge of G-protein coupled receptors, retroviral technology and novel receptor cloning would be advantageous.

Receptor Biology

You will have a background in Biochemistry, Molecular Biology or Pharmacology, and be familiar with molecular and biochemical techniques used to analyse signalling pathways, including site-directed mutagenesis and mammalian cell transfection. An understanding of G-protein coupled receptor structure and function would be beneficial.

To apply, please send a CV and covering letter to Lisa Pullinger at the address below. E-mailed applications can be sent as a Word document to lisa.pullinger@pharma.novartis.com

Closing date: 7th April 2000.

The Novartis Horsham Research Centre, Wimblehurst Road, Horsham, West Sussex, RH12 5AB, UK.



LABORATORY TECHNICIAN

The Metabolism Branch, Division of Clinical Sciences, National Cancer Institute, National Institutes of Health in Bethesda, Maryland, seeks an experienced laboratory technician wishing to work in a challenging research environment. Interested candidates would work directly with mice in a murine model of adult T cell leukemia, evaluating and testing for efficacy novel therapeutic agents (including those labeled with radioisotopes) developed in the Metabolism Branch program. Additional responsibilities would in-clude specialized studies on blood samples derived from patients with human T cell lymphotropic Virus 1 (HTLV-1, associated with adult T cell leukemia) who are currently enrolled in experimental cancer protocols to determine whether the leukemic cells of these patients produce messenger RNA for IL-2, IL-15, and their receptors. Desirable technical skills include experience handling and injecting mice, purification of cells, and cell culture techniques including proliferative studies. Additionally, the candidate should have good organizational skills, effective written and verbal communication skills, and familiarity with computers. Position is open at the GS 7–9–11 level depending on qualifications and experience. Interested candidates must be U.S. citizens. Please call Telephone: 301-402-2789 for vacancy information or request a FAX: 301-594-2953. Information may also be obtained at website: http://careerhere.nih.gov. Pos-tion number is NCI-00-0720; FAX ID# is 1825. Applications must be postmarked by April 10, 2000.

The National Cancer Institute is an Equal Employment Opportunity/Affirmative Action Employer that values and fosters diversity throughout the entire organization.

RESEARCH PROGRAM DEVELOPER

Our client, located in Littleton, Colorado, who specializes in innovative measurements and control solutions, seeks a visionary with a passion to generate new ideas. This leader is well known and has an established record of success in developing new program opportunities.

This energetic and enthusiastic professional will be responsible for developing and creating new program opportunities; preparing/reviewing/supporting proposals, reports, and publications; participating in technical meetings/conferences/committees; and helping to hire the right people.

This strong communicator must have a Bachelor's degree, five years of postdegree work experience, a record of writing winning proposals and successful program development, and an established support network and national reputation. Experience as a **SCIENTIST/CHEMIST**, 15 years of post-Bachelor's work experience, knowledge of SBIR programs, and an innovator in measurement and control solutions is preferred. A Ph.D. and extensive publications and presentations are desired.

If you are a team player with a strong desire and talent to build/create new programs, send a narrative letter about yourself with your current résumé to:

Creative-Leadership, Inc. Position Code E105 11777 Bernardo Plaza Court Suite 101 San Diego, CA 92128 E-mail: résumés@clci.com FAX: 858-592-0413

ASSISTANT PROFESSOR (tenure track) in the Departments of Anesthesiology and Pharmacology at the University of Illinois at Chicago College of Medicine. Ph.D. in pharmacology with at least two years of postdoctoral experience in molecular biology, cell biology, and cardiovascular systems physiology. Trained in protein biochemistry, receptor pharmacology, digital and confocal fluorescence imaging, immunohistochemistry, isolated organ perfusion, Ca³⁺ imaging, cell culture, plasmid construction and transfection, and quantitative data analysis. Competitive salary and benefits. Send curriculum vitae and a list of three references to: Dr. Ronald F. Albrecht, Head. Department of Anesthesiology, University of Illinois at Chicago, Department of Anesthesiology, m/c 515, 1740 West Taylor, Chicago, IL 60612-7239. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

SUPERVISORY RESEARCH SCIENTIST (GS-15) CHEMISTRY, PHYSICAL SCIENCE,

OPERATIONS RESEARCH, PHYSICS U.S. Army Soldier and Biological Chemical Command

U.S. Edgewood Chemical Biological Center (ECBC)

Aberdeen Proving Grounds, Maryland

Responsibilities: Serves as Senior Team Leader for operations research analysis/simulation, sharing fully in program planning and technical direction of basic and applied research and exploratory development in a wide array of technologies supporting the Chemical Biological Defense (CBD) detection program.

Required: Degree in physical science, life science, engineering, mathematics, operations research, physics. Applicants selected for the above positions will be subject to a security investigation and must meet eligi-

bility requirements for access to classified information. Salary Range: \$84,638 to \$110,028.

Applications: Ms. Danyra Quinones-Taylor, 1309-R Continental Drive, Abingdon, MD 21009. E-mail: supervisorjobs@yahoo.com; Telephone: 410-612-8243. Applications must be postmarked by 28 April 2000.

Equal Opportunity Employer. U.S. citizenship required.

ASSOCIATE SCIENTIST: 1999-64

Corixa Corporation is a leading-edge biotechnology company based in Seattle, Washington, dedicated to the discovery of vaccines for the treatment of cancer and infectious diseases. We currently have an opening available at our Hamilton, Montana, location for a person to direct toxicology/immunology-related experimentation in support of product development. This will include but is not limited to developing biological methods, developing and validating immunological/biological assays, coordinating contracted toxicology studies, conducting non-GLP toxicology studies, and dose response and mechanism of action studies. This position includes supervising technicians and writing regulatory reports. Successful candidates will have a minimum of two to five years of experience and a Ph.D. in immunology/immunopharmacology or a related field. Technical skills required include immunology-related manipulations, animal skills. sterile technique, computer skills (Word, Excel), and statistical analysis. Corixa offers an attractive compensation and benefits package and a progressive work environment. Please apply by April 14 2000, to: Corixa Corporation, Attention: 1999-64, 553 Old Corvallis Road, Hamilton, MT 59840. FAX: 406-363-6129. Website: www.corixa.com. Equal Opportunity Employer

ANATOMY ASSOCIATE

The Department of Anatomy and Cell Biology at The University of Iowa seeks an experienced teacher for its human gross anatomy program. The successful candidate will have a Ph.D., M.D., or equivalent and will participate in team-taught courses for medical, dental, and graduate students. Experience in teaching gross anatomy and experience in innovative computer-aided instruction and the use of electronic media in teaching professional students is desired. Appointment is on an annual basis for up to three years. Opportunity exists for continuation of scholarly activity, either in the candidate's area of research or in development of teaching methodology or curriculum design.

Send curriculum vitae, bibliography, a brief statement of teaching and research interests/experience, and the names of three references to:

Chair, Faculty Recruitment Committee Department of Anatomy and Cell Biology 1–100 BSB The University of Iowa Iowa City, IA 52242

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

POSITIONS OPEN

North American Vaccine, Inc., a biotechnology company dedicated to the research, development, manufacturing, and sale of vaccines for the prevention of infectious diseases in children and adults currently has the following positions available in our Process Development group:

SCIENTIST (PROTEIN CHEMIST)

Qualified candidates must have a Ph.D. in biochemistry/chemistry and at least two years of industrial biotechnology experience. Position #645–Y.

BIOCHEMICAL ENGINEER (DOWNSTREAM PROCESSING)

Qualified candidates must have a B.S./M.S. in biochemical chemical engineering with at least two years of industrial biotechnology experience. Position #645–Z.

Both of these positions require specific experience in protein/polysaccharide purification/scale-up and column chromatography/ultrafiltration. Qualified candidates must send résumé indicating position number to: Human Resources Manager, North American Vaccine, Inc., 10150 Old Columbia Road, Columbia, MD 21046. FAX: 410-381-3453; e-mail: HR@nava.com; website: http:// www.nava.com. Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE PLASTICITY OF NEUROENDOCRINE CELLS

A POSTDOCTORAL POSITION is available for the study of state-dependent synaptic and dendritic plasticity of oxytocin and vasopressin neurons. The research will utilize electrophysiological, calcium-imaging, and neuroanatomical techniques. Applicants should have an advanced degree with experience in neuroscience. Stipend will be commensurate with experience. Review of applications will continue until the position is filled. Please send curriculum vitae and names of three references to: William E. Armstrong, Ph.D., Department of Anatomy and Neurobiology, College of Medicine, The University of Tennessee, 855 Monroe Avenue, Memphis, TN 38163. E-mail: warmstr@nb.utmem.edu. The University of Tennessee is an Equal Employment Opportunity/ Affirmative Action/Title VI/Title IX/Section 504/Americans With Disabilities Act/Age Discrimination in Employment Act Employer.

PROGRAM DIRECTOR: SANREM CRSP, University of Georgia, Athens, Georgia, U.S.A. The Sustainable Agriculture and Natural Resource Management Collaborative Research Support Program at the University of Georgia seeks a full-time Program Director for this USAID-funded research program. For details, check out **website: www.sanrem.uga.** edu for the complete position announcement. Application deadline: May 1, 2000. To apply: submit a résumé that lists publications, details of work experience, and names of three references to: Dr. E. T. Kanemasu, Director, Office of International Agriculture, c/o SANREM CRSP, 1422 Experiment Station Road, Watkinsville, GA 30677. Telephone: 706-769-3792; FAX: 706-769-1471; email: sanrem@arches.uga.edu.

LECTURER POSITION, one-year, full-time temporary in the biological sciences. Ph.D. to teach general education courses for nonscience majors, lowerdivision animal or cell biology for majors, and assist with upper-division integrated science (physical and life sciences) for K-8 preteachers. See website: www. csub.edu/biology for full description. Send curriculum vitae, transcripts, and three letters of recommendation immediately to: E. A. Halpern, Department of Biology, California State University, Bakersfield, 9001 Stockdale Highway, Bakersfield, CA 93311-1099. California State University, Bakersfield, is an Affimative Action/Equal Opportunity Employer. Laboratory of Molecular Biology, Cambridge

CAREER-TRACK POSITION IN NEUROBIOLOGY

Scientists interested in developing an independent programme of basic research in any aspect of molecular neurobiology/neurophysiology are invited to apply for a career-track position in the Division of Neurobiology. Current research interests of the Division focus on the molecular basis underlying synaptic transmission, gene regulation and neurodegeneration.

A stimulating research environment is provided within the Laboratory of Molecular Biology with a centrally funded research budget and core facilities, and there are no teaching responsibilities. The appointment, initially for five years, will be to MRC Salary Band 2. The starting salary is likely to be in the range £29,362 - £35,000, depending on qualifications and experience.

Further information can be obtained from Dr. Harvey McMahon (e-mail: hmm@mrc-lmb.cam.ac.uk) or Dr. Nigel Unwin (Fax: +44 1223 402492; e-mail: mas@mrc-Imb.cam.ac.uk).

Applications, including 2 copies of a full CV, a brief description of research interests and the names and addresses of two professional referees who can be contacted prior to interview, should be sent by May 1st 2000, quoting reference NB/NU/200/9, to:

Johanna Webb, Personnel Officer, MRC Centre, Hills Road, Cambridge, CB2 20H

Some financial assistance with relocation may be available.



The Medical Research Council is an Equal Opportunity Employer and operates a strict no smoking policy.

CONFERENCES

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First International Quality Research in Dementia Conference

advances in cause, cure and care for dementia The Queen Elizabeth II Conference Centre Westminster, London, UK

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www.alzheimers.org.uk

The Alzheimer's Society is the leading care and research charity for people with all forms of dementia, their families and carers. Founded in 1979 as the Alzheimer's Disease Society. Registered Charity No. 296645

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Further information from Messe München GmbH, Messegelände, D-81823 München, info@messe-muenchen.de

POSTDOCTORAL FELLOWSHIP IN THE STUDY OF CHROMATIN IN MITOSIS

A Postdoctoral position is available immediately in the unit of Chromosome Structure and Function to study biochemistry of chromatin in mitosis and the molecular mechanisms of mitotic chromosome segregation. The goal of the project is to understand the cell-cycle regulation of sister chromatid cohesion and its place in the establishment of higher-order chromatin structure. The applicant must have an M.D. and/ or Ph.D., less than five years of postdoctoral experience, and be skilled in biochemistry or molecular biology. Experience in yeast genetics or mammalian cell biology is desirable. Send curriculum vitae and names and e-mail addresses of three references to:

Dr. Alex V. Strunnikov Laboratory of Molecular Embryology National Institute of Child Health and Human Development National Institutes of Health Building 18T Library Drive, Room 106 Bethesda, MD 20892-5430, U.S.A. E-mail: strunnik@box-s.nih.gov Telephone: 301-402-8384 FAX: 301-402-1323

MEDICAL WRITERS. Cleveland-based medical communications company is seeking experienced medical writers. Science Writer responsibilities include preparing clinical and preclinical manuscripts, abstracts, and posters; clinical trial reports; and marketing and educational materials. Regulatory Writer responsibilities include preparing regulatory documents, protocols, investigator's brochures, case report forms, clinical trial reports, and presentation materials for FDA and CPMP advisory meetings. Candidates must have an advanced degree (i.e., M.D., Ph.D.); be able to interpret data and be familiar with biostatistics and FDA and CME guidelines; have excellent scientific writing, communication, and organization skills; be able to exercise a large degree of autonomy in a team structure; and have the ability to thrive in a fast-paced agency environment. Position requires a creative person who is willing to "wear many hats" in return for growth opportunities, competitive salary, and benefits. Pharmaceutical industry experience is desirable. Send curriculum vitae, nonreturnable writing samples, and salary history to: Medical Writers; FAX résumé to: 216-595-0757; or e-mail to: jobs@proedcom.com; website: http:// www.proedcom.com. Equal Opportunity Employer

POSTDOCTORAL POSITION in Alzheimer's Disease Research: A position is immediately available at the Sun Health Research Institute to investigate the role of Ab peptides in Alzheimer's disease. Candidates are expected to conduct high-quality research leading to publications. Experience in neurobiology, protein chemistry, HPLC, FPLC, ELISA, Western blotting, PCR-based genotyping, and computer proficiency is required. Sun Health Research Institute is located in the metropolitan Phoenix area. Salary is competitive and commensurate with experience. Candidates should submit a curriculum vitae and a list of three references to: Alex E. Roher, M.D., Ph.D., Sun Health Research Institute, 10515 West Santa Fe Drive, Sun City, AZ 85351. Telephone: 623-876-5465; FAX: 623-876-5698; e-mail: aroher@mail. sunhealth.org.

POSTDOCTORAL FELLOW POSITION: oxidative damage of biomolecules. Position available immediately to use animals with genetically engineered deficiencies in phagocyte oxidant generation to understand the pathogenesis of atherosclerosis and cancer. Preference given to candidates with experience in biochemistry, HPLC, and mass spectrometry. Send curriculum vitae, a brief overview of prior experience and interests, and names of three references to: Dr. Jay Heinecke, Box 8046, 660 South Euclid, St. Louis, MO 63110. E-mail: heinecke@im. wustl.edu. For further information about the laboratory, see website: http://internalmed.wustl.edu/ divisions/lipid/main.htm. Washington University is an Equal Employment Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL POSITIONS WAYNE STATE UNIVERSITY SCHOOL OF MEDICINE

These positions are available immediately in the Department of Pathology for two successful, hardworking candidates with strong motivation and willingness to work in a productive and energetic research environment. We also offer excellent salary and benefits packages for the successful candidates.

Position One: to study apoptosis regulation and growth factor signaling (*Cancer Res.* **59**:3429, 1999; *Cancer Res.* **59**:4148, 1999; *Cancer Res.* **59**:6267, 1999; *PNAS* **92**:9500, 1995). Strong background in molecular and cellular biology required. The research project involves site-directed mutagenesis, transfection, kinase assay, protein purification, and apoptosis assay. Send requests to: **Dr. Hyeong-Reh Choi Kim.**

Position Two: to study the regulation of activation of matrix metalloproteinases in cancer cells (*Cancer Res.* 57:3159, 1997; *JBC* 272:29975, 1997; *JBC* 273:10672, 1998; *JBC* 275:2661, 2000). Applicants must have a Ph.D. in chemistry or biochemistry and a strong background and proven expertise in protein chemistry, enzymology, and molecular biology. The research project involves structure-function studies of enzyme domains; biophysical studies of enzyme-inhibitor interactions; enzyme kinetic analysis; site-directed mutagenesis; and recombinant protein expression, purification, and characterization. Send requests to: **Dr. Rafael Fridman**.

Qualified applicants should send a curriculum vitae, a brief description of research experience, and three names of references to: Dr. Kim (Position One); e-mail: hrckim@med.wayne.edu or Dr. Fridman (Position Two); e-mail: rfridman@med.wayne. edu. Mail to: Department of Pathology, Wayne State University, 540 East Canfield, Detroit, MI 48201.

POSTDOCTORAL RESEARCH ASSOCIATE in molecular biology: A two-year Postdoctoral position in bacterial molecular biology is being sought to work on a well-funded project studying immunity to Pasteurella haemolytica in cattle using recombinant outer membrane proteins and DNA vaccines. The successful individual should have an earned Doctorate degree, research experience in recombinant DNA technology and bacterial molecular genetics, and a working knowledge of immunology. Interested individuals should send a curriculum vitae; letter stating research and postdoctoral education goals; and names, addresses, e-mail addresses, and telephone numbers of three references to: Dr. A. W. Confer, Associate Dean for Research and Graduate Education, College of Veterinary Medicine, Oklahoma State University, Stillwater, OK 74078-2007. For full consideration, applications should be received by April 15, 2000. Inquiries can be addressed to Dr. Confer at e-mail: aconfer@okstate.edu or Telephone: 405-744-4542

Oklahoma State University is an Affirmative Action/Equal Employment Opportunity Employer committed to multicultural diversity.

POSTDOCTORAL POSITION NORTHWESTERN UNIVERSITY MEDICAL SCHOOL

A Postdoctoral position is available immediately to study the functional interactions of the retinoid X receptor in premalignant breast lesions. Candidates should have a Ph.D. degree with expertise in molecular biology and, in particular, experience with cell culture, PCR and primer design, cloning, gel shift assay, and immunoprecipitation. Send a curriculum vitae, names of three references, and a summary of research experience and interests to: Susan E. Clare, M.D., Ph.D., Department of Surgery, Northwestern University Medical School, Tarry 11–703, 300 East Superior Street, Chicago, IL 60611. Email: sclare@nmff.org. Northwestem University is an Equal Opportunity/Affirmative Action Educator and Employer. Women and minorities are encouraged to apply. Hiring is continent upon eligibility to work in the United States.

POSITIONS OPEN

POSTDOCTORAL POSITIONS AVAILABLE

The Center for Molecular Orthopaedics at Harvard Medical School is seeking two Postdoctoral Scientists to join a growing team of investigators in this newly established facility. Applicants should be capable of working independently yet able to collaborate effectively with other members of this interdisciplinary group. Areas of interest include gene therapy and the biology of inflammatory joint disorders (see *PNAS* **95:**4613, 1998; *A&R* **42:**1, 1999; *JI* **162:**3625, 1999; *JI* **163:**2202, 1999).

One Postdoctoral position requires expertise in molecular and cellular immunology in relation to murine models of rheumatoid arthritis. The other position requires expertise in molecular biology. For one of these Postdoctoral positions, candidates must be U.S. citizens or permanent residents and available to start by 1 May 2000. Both positions require high standards of written and spoken English. For further information, contact: **Chris Evans, Ph.D.**, at the following address:

Center for Molecular Orthopaedics Harvard Medical School 221 Longwood Avenue, BL-152 Boston, MA 02115

The Brigham and Women's Hospital and Massachusetts General Hospital and Partners Health Care System are Equal Opportunity Employers. Women and minorities are encouraged to apply.

A POSTDOCTORAL POSITION is available to study outer membrane proteins of Borrelia Burgdorferi, the Lyme disease spirochete. The focus of the project shall be to use diverse genetic and protein-based approaches to identify and characterize lipid-modified and nonlipid-modified borrelial outer membrane proteins, which are differentially expressed in arthropod and mammalian hosts. Proficiency with recombinant DNA techniques is required, as is a solid understanding of membrane biology and membrane protein structure-function relationships. Knowledge of plasmid genetics and genomics is also desirable. Position includes salary (negotiable), fringe benefits, and the opportunity to work in a rapidly expanding microbial pathogenesis center located in the heart of Lyme disease country. Send curriculum vitae and the names/ telephone numbers/e-mail addresses of three references to: Dr. Justin Radolf, Center Director, Center for Microbial Pathogenesis, University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030-3710. FAX: 860-679-8130; e-mail: JRadolf@up.uchc.edu. An Affirmative Action/Equal Opportunity Employer; Minorities/Females/ Persons With Disabilities / Veterans.

University of Pennsylvania School of Medicine. **POSTDOCTORAL POSITIONS** available: (1) neurophysiology in behaving monkeys to study roles of brain monoaminergic systems in cognitive processes; (2) neurophysiology in rats to study roles of monoamine systems in circadian processes and sleep; (3) behavioral pharmacology in behaving rats to study roles in monoamine systems in drug abuse. Positions are within the Laboratory of Neuromodulation and Behavior (G. Aston-Jones, director), an interdisciplinary group of neuroscience researchers. Applicants must have a strong academic background with appropriate experience. Competitive salary and benefits. Send curriculum vitae and names of three references to: Dr. Gary Aston-Jones, Professor, Department of Psychiatry, University of Pennsylvania, VAMC (151), University and Woodland Avenues, Philadelphia, PA 19104.

POSTDOCTORAL POSITION to study the role of telomere loss in chromosome instability in human cancer and to determine the factors and genes that influence this process. Send curriculum vitae, statement of research interests, and the names of three references to: Dr. John P. Murnane, Radiation Oncology Research Laboratory, University of California, 1855 Folsom Street, MCB 200, San Francisco, CA 94103. E-mail: murnane@rorl.ucsf.edu. University of California San Francisco is an Equal Opportunity Employer. Become a pivotal part of Eli Lilly's global research effort. Join a culture where you will be encouraged to go beyond conventional thinking.

search Leaders - Neuroscience

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Target Enablement

A biochemical pharmacologist with molecular and cell biology experience, you will lead a department involved in the development of novel molecular targets into drug discovery projects. Ref: 00019SC.

In vivo Pharmacology

A behavioural pharmacologist and/or *in vivo* biochemist, your department will develop and utilise both established and innovative models of CNS disorders, including those using transgenic animals. Ref: 00031SC.

For both positions, you will have a PhD in an appropriate discipline, backed by at least 10 years' relevant experience in the pharmaceutical industry. A proven manager, your exemplary track record of research achievements will be complemented by the vision necessary to become a global opinion leader. In return, you will receive an attractive salary and benefits package and the opportunity to deliver scientific results which will make a real contribution to healthcare.

To apply, send your CV, ideally by e-mail, with a covering letter quoting current salary and the appropriate reference number, to Dr Kay Wardle or Dr Patrick Mileham who are advising. Alternatively call first for a brief, confidential discussion.

Roger Stephens & Associates, Chequers House, 1 Park Street, Old Hatfield, Herts AL9 5AT, UK. Tel: +44 (0) 1707 259333/275361 Fax: +44 (0) 1707 271366 www.pharmarecruit.com e-mail: rsvp@pharmarecruit.com



POSTDOCTORAL RESEARCH POSITIONS in the Division of Cardiovascular Medicine at Vanderbilt University Medical Center. Postdoctoral positions are available in NIH-funded, state-of-the-art laboratories. Training opportunities emphasize an interdisciplinary approach and collaborative efforts, both within and outside of the Division. Areas of investigation include the biology of ion channels (K. Murray, D. Roden, M. Anderson); vascular biology (D. Vaughan, R. Myers); atherosclerosis (S. Fazio, M. Linton); and cardiovascular development (D. Bader, J. Barnett). Detailed research descriptions and application materials can be obtained at website: http://medicine.mc.vanderbilt.edu or by contacting:

Jacqueline J. Haynes Division of Cardiovascular Medicine Vanderbilt University Medical Center 2220 Pierce Avenue, Room 315 MRBII Nashville, TN 37232-6300 Telephone: 615-936-1714 FAX: 615-936-1714 E-mail: jacqueline.haynes@mcmail.vanderbilt.edu

An Equal Opportunity Employer.

A POSTDOCTORAL POSITION is available to study human and mouse immune responses to Borrelia Burgdorferi and Treponema pallidum, the agents of Lyme disease and syphilis. The focus of the project shall be to use molecular and cellular approaches to study the interactions between innate immunity and spirochetal lipoproteins. Proficiency with tissue culture, flow cytometry, and both prokaryotic- and eukaryotic-recombinant DNA techniques is extremely desirable. Position includes salary (negotiable), fringe benefits, and the opportunity to work in a rapidly expanding microbial pathogenesis center located in the heart of Lyme disease country. Send two copies of curriculum vitae and the names/telephone numbers/e-mail addresses of three references to: Dr. Justin Radolf, Center Director, Center for Microbial Pathogenesis, University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030 3710. FAX: 860-679-8130; e-mail: JRadolf@ up.uchc.edu. An Affirmative Action/Equal Opportunity Employer; Minorities/Females/Persons With Disabilities/Veterans

MECHANISM OF MOLECULAR MOTORS JOHNS HOPKINS UNIVERSITY

A **POSTDOCTORAL** position is available to study the motor functions of mitochondrial ATP synthase. This enzyme is now known to contain two motors, one driven by a proton gradient and the other by ATP. When mitochondria make ATP, the proton gradient-driven motor is believed to drive the ATPdriven motor in reverse. The successful applicant should be highly motivated with experience in both yeast molecular biology and in protein purification. Send complete curriculum vitae and three letters of recommendation to: Dr. Peter L. Pedersen, Department of Biological Chemistry, Johns Hopkins University, School of Medicine, 725 North Wolfe Street, Baltimore, MD 21205-2185. FAX: 410-614-1944. Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study the molecular mechanisms involved in the posttranscriptional regulation of gene expression by nutritional factors. This project involves examining nuclear steps involved in RNA processing of the glucose-6phosphate dehydrogenase mRNA. Ph.D. in biochemistry, molecular biology, or related field required. Please send curriculum vitae and three reference letters to: Lisa M. Salati, Ph.D., Department of Biochemistry, Health Sciences Center-P.O. Box 9142, West Virginia University, Morgantown, WV 26505. E-mail: LSALATI@hsc.wvu.edu.

POSTDOCTORAL POSITIONS to study (1) signaling paths in yeast (*JBC* **274**:33785) and (2) cell/molecular biology of the Fragile X Syndrome (in animal cells). Requirements: published experience in molecular cloning and green card or U.S. citizenship. Contact: Dr. A. Tartakoff, Pathology/Cell Biology, Case Western Reserve University, Cleveland, OH 44106. E-mail: amt10@po.cwru.edu.

POSITIONS OPEN



POSTDOCTORAL FELLOWSHIPS ARE NOW AVAILABLE IN THE FOLLOWING LABORATORIES

Kathleen H. Berecek, Ph.D. (gibson@physiology. uab.edu): "Brain and cardiac angiotensin II in hyper-tension." Harry Blair, Ph.D. (blair@path.uab. edu): "Role of calmodulin and cGMP in osteoclast control." Xu Cao, Ph.D. (cao@path.uab.edu): "Mechanisms of mesenchymal cell differentiation induced by BMP or TGF-β." Victor Darley-Usmar, Ph.D. (darley@path.uab.edu): "Modification of mitochondrial function by nitric oxide; implications for cell signaling." Craig C. Garner, Ph.D. (garner@ nrc.uab.edu): "Molecular mechanisms regulating the assembly of CNS synapses." Candece Gladson, M.D. (gladson@path.uab.edu): "Regulation of gli-oma cell migration *in vitro* and *in vivo*." Hanjoong Jo, Ph.D. (jo@path.uab.edu): "Role of integrins and caveolin in mechanosignal transduction in vascular endothelial cells." Dennis Kucik, Ph.D. (kucik@ path.uab.edu): "A biophysical approach to integrincytoskeleton interactions and their functional conse-Joanne E. Murphy-Ullrich, Ph.D. quences." (murphy@path.uab.edu): "Structural and mutational analysis of thrombospondin-TGF-B interactions." Thomas T. Norton, Ph.D. (tnorton@ icare.opt.uab.edu): "Biochemical and steady-state mRNA changes in sclera during myopia development." Mitchell Olman, M.D. (olman@pulm. dom.uab.edu): "Mechanisms of regulation of PAI-1 in atherogenesis and fibrosis." David G. Pritchard, Ph.D. (dpritchard@biochem-cellbio.bhs.uab.edu) "Characterization of Group B streptococcal hyaluronate lyase." Anne Theibert, Ph.D. (theibert@ neurobio.nrc.uab.edu): "The role of the PI 3kinase signaling cascade in neuronal development." Anne Woods, Ph.D. (awoods@bmg.bhs.uab.edu): "Transmembrane signaling in cell adhesion and matrix assembly.

POSTDOCTORAL RESEARCH POSITIONS DEPARTMENT OF PATHOLOGY Brigham and Women's Hospital Harvard Medical School

The Department of Pathology at Brigham and Women's Hospital and Harvard Medical School, Boston, Massachusetts, has available Postdoctoral research positions for M.D. and/or Ph.D. candidates and wishes to actively recruit minority applicants for these research Fellowships. The Department's principal research groups are working in the following areas: vascular cell biology, molecular oncology and development, immunology, molecular cytogenetics, experimental renal disease, and pulmonary pathophysiology. The Department has an extensive research program with 26 established investigators. Interested applicants should send curriculum vitae to: John L. Boucher, c/o Tucker Collins, M.D., Ph.D., Department of Pathology, Brigham and Women's Hospital, 221 Longwood Avenue, Boston, MA 02115. É-mail: jboucher@rics.bwh.harvard.edu. The Brigham and Women's Hospital is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS EUKARYOTIC TRANSCRIPTION

NIH-funded positions are available immediately to study the composition, function, and regulation of yeast and human RNA polymerase II elongation complexes. Strong background in biochemistry and molecular biology required. Applicants should send a curriculum vitae and three letters of reference to: Dr. Fred Ponticelli, Department of Biochemistry, 140 Farber Hall, State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Buffalo, NY 14214. The University at Buffalo is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITIONS CELLULAR AND MOLECULAR BIOLOGY OF HEMATOPOIESIS

Two Postdoctoral positions are available to study the cellular and molecular biology of normal and leukemic hematopoiesis and/or transplantation biology. A Background 1 cellular and/or molecular biology is preferred. Familiarity with *in vivo* models of hematopoeisis would be useful but not required. Send curriculum vitae to: Ronald Hoffman, Hematology/Oncology Section, University of Illinois College of Medicine at Chicago, Molecular Biology Research Building, Room 3150 (M/C 732), 900 South Ashland Avenue, Chicago, IL 60607. E-mail: ronhoff@uic.edu; FAX: 312-413-7963. University of Chicago is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION IN PROSTATE DEVELOPMENT

The developing mouse prostate is a model system of considerable interest because of its relevance to human prostate disease. There are opportunities for NIH and Department of Defense-funded postdoctoral study in two areas: (1) the role of the sonic hedgehog-Gli signaling pathway in prostate branching morphogenesis, and (2) the reactivation of developmental pathways in human prostate cancer. A strong background in molecular biology and/or developmental biology is preferred. Please send curriculum vitae and names of three references to: Wade Bushman, M.D., Ph.D., Department of Urology, Northwestern University, 303 East Chicago Avenue, Chicago, IL 60611 U.S.A. E-mail: w-bushman@nwu.edu.

POSTDOCTORAL RESEARCH TRAINING FELLOWSHIPS

Fellowships available to residents of North America with Ph.D., M.D., or comparable degree and less than one year of postdoctoral laboratory experience by application deadline for beginning training in basic biomedical research. The three-year award consists of a stipend of \$33,000 for the first year, \$35,000 for the second year, and \$37,000 for the third year, \$2,000 per annum research allowance; travel to fellowship location; annual meeting. Application deadline is August 15,2000; fellowships activate following July. For application forms, write: **The Helen Hay Whitney Foundation, 450 East 63rd Street, New York, NY 10021. FAX: 212-688-6794.**

POSTDOCTORAL POSITION in bioinformatics for a computationally inclined biologist. Join an established bioinformatics group to train in computational biology while contributing your biological knowledge of transcriptional regulation. Ideal candidate will have some quantitative background, a Ph.D. in a biological science, and a broad knowledge about the transcriptional regulation of genes. Unix and Perl experience are desirable. Send curriculum vitae, three letters of reference, undergraduate and graduate transcripts, and a short summary of your quantatitive background to: C. E. Lawrence, NYS Department of Health, Wadsworth Center, P.O. Box 509, Albany, NY 12201-0509. Website: www.wadsworth. org/res&res/bioinfo. Position funded through Health Research, Inc. Affirmative Action/Equal Opportunity Employer.

Indiana University School of Medicine has two **POSTDOCTORAL POSITIONS** opened immediately for a new spinal cord regeneration program. Postdoctor in first position will work on spinal cord stem cell. Candidate with experience in molecular biology/cell culture is desirable but not required. The second position is expected to study spinal cord injury, neuroanatomy, and behavior. Experience in these areas is desirable. Send application to: Dr. Feng C. Zhou, c/o Dr. Paul Nelson, Department of Neurosurgery, 545 Barnhill Drive, EH 139, Indiana University School of Medicine, Indianapolis, IN 46202.





Telethon Scientists

The Telethon Foundation, Italy, is seeking applicants in the field of genetic diseases (cancer is excluded) for 10 positions at the following career levels:

7 positions of Assistant Telethon Scientists

Candidates must have finished post doctoral training, or equivalent, have a good record of productivity tangibly demonstrated by their publications in international journals and are expected to carry out an independent research program.

2 positions of Associate Telethon Scientists

For scientists with about 5 years of independent work experience. Candidates must have a strong publication record, have already established the beginning of international reputation through their independent work and are expected to develop a vigorous and independent research program.

1 position of Telethon Scientist

Candidates must be highly productive scientists but with the potential of further scientific growth. They must have a well established international reputation for scientific excellence and be recognized leaders in their field. They must have the proven ability to initiate, stimulate and conduct innovative research and to provide scientific leadership both nationally and internationally.

Each position will be awarded a five-year renewable contract and will be supported by a substantial research grant. There are no citizenship restrictions. Prearranged and formal agreement with Italian research institutes or Universities are mandatory for these positions. Three letters of recommendation that consider both research potential and general professional achievements are needed. Further information can be obtained as of 27th March from: Fondazione Telethon, Via P. Santacroce 5, 00167 Rome, Italy. Tel: +39 06 66596, Fax: +39 06 66015436, email: telethon@mail.telethon.it. For more details, please visit the following website address as of 27th March, 2000: http://www.telethon.it/

Closing date for applications is 16th June, 2000.



RANDALL PROFESSOR OF BIOPHYSICS AND DIRECTOR OF RESEARCH CENTRE

UNIVERSITY OF LONDON

In 1998, Kings College and the United Medical and Dental Schools of Guy's and St Thomas' Hospital were merged to form one of the largest biomedical teaching and research institutions in the UK. We now invite applications for this Chair and Directorship, which is likely to be supported by the MRC and EPSRC. Based in a new state-of-theart research and teaching facility in London, the Centre will be devoted to application of physical and biophysical techniques in molecular and cell biology, to explore intracellular interactions linked to biological function.

The Director should have a background in physics and be internationally recognised for applying modern techniques - such as high resolution microscopy or fluorescence spectroscopy - to the investigation of biological mechanisms. He/she should be an outstanding scientist with the vision and breadth of understanding to identify new research opportunities in this field and the stature to lead a substantial team of pre- and post-doctoral scientists. The Director will be encouraged to develop research collaborations with other groups locally and internationally; on site, there are leading scientific Research Centres specialising in developmental neurobiology, vascular biology, muscle and cell motility, genetics, immunobiology and age related diseases, as well as good access to clinical medicine.

The Director will be appointed to the Randall Professorship at Kings College, with full tenure. The MRC and EPSRC will consider grant support to enable the Director to establish a laboratory.

------ For further information and to discuss your interest in strict confidence, please contact Dr Kevin Young, Euromedica plc. 7 Heron Quays, Docklands, London E14 4JB. UK Telephone 44-(0)207 536 7950. Fax 44-(0)207 538 8362. E-mail: kevinyoung@euromedica.com

MOLECULAR MODELER/ COMPUTATIONAL CHEMIST

The Molecular Research Institute invites applications for a POSTDOCTORAL or STAFF SCIEN-TIST position, available immediately. The successful candidate will participate in studies to elucidate molecular mechanisms of enzyme function, particularly the relationship between structure and function in heme proteins. The research is multifaceted, involving constructon of 3-D homology models of proteins; identification of substrate binding sites; MD simula tions of enzyme substrate complex, and use of ab initio quantum chemical methods to model enzyme mechanisms. Qualified candidate must hold a Doctoral degree in computational biochemistry/biophysics. Special consideration will be given to candidates with expertise in the construction and assessment of 3-D models of proteins. Entry-level candidates with appropriate background will also be considered. Please send résumés to: Dr. Gilda Loew, Molecular Research Institute, 2495 Old Middlefield Way, Mountain View, CA 94043. FAX: 650-210-0318; e-mail: loew@montara.molres.org. Visit our website: www.molres.org. The Molecular Research Institute is an Equal Opportunity Employer.

NATIONAL INSTITUTES OF HEALTH NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASE Laboratory of Immunogenetics

POSTDOCTORAL POSITIONS are available to study basic cellular and molecular mechanisms underlying B lymphocyte activation and regulation. Studies are focused on but not limited to the B cell antigen receptor and its role in initiation of signal transduction, MHC Class II antigen processing, and immunological memory. The National Institutes of Health offer an exceptional training environment for young research scientists, providing both the resources and stimulating colleagues conducive to success. Interested individuals may apply by sending a curriculum vitae and the names of three references to: Dr. Susan Pierce, Laboratory Immunogenetics, NIAID/ NIH/Twinbrook II, Room 2008, 12441 Parklawn Drive, Rockville, MD 20852 U.S.A. E-mail: spierce@niaid.nih.gov; Telephone: 301-496-9589; FAX: 301-402-0259.

POSTDOCTORAL POSITION available starting immediately for an NIH-funded project on calculation of heat capacities of proteins folding and binding. Ph.D. in physical chemistry, chemical physics, biophysics or related field and previous experience in molecular modeling, electrostatic calculations, or molecular dynamics on proteins is required. Competitive salary. Please send a curriculum vitae and three letters of reference to: **Dr. Kim Sharp, Department of Biochemistry and Biophysics, School of Medicine**, **University of Pennsylvania, Philadelphia, PA 19104-6059**. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION is available immediately to study ion-protein interactions. Techniques to be used include protein expression and purification, stopped-flow rapid reaction kinetics, and column chromatography. This extends our earlier work [Collins, *Biophysical J.* 72:65–76, 1997]. Please send a hard copy letter stating interest and qualifications, curriculum vitae, and the names and addresses (e-mail, postal, and telephone number) of three references to: Dr. Kim D. Collins, Department of Biochemistry and Molecular Biology, University of Maryland Medical School, 108 North Greene Street, Baltimore, MD 21201-1503.

POSTDOCTORAL POSITION available to investigate PI 3-kinase-regulated pathways in yeast (Molecular Cell 2:157). Please send or FAX a cover letter, curriculum vitae, and names of three references to: Dr. Chris Burd, Department of Cell and Developmental Biology, University of Pennsylvania, 421 Curie Boulevard, Room 609, Philadelphia, PA 19104-6160. FAX: 215-573-8606. Equal Opportunity Employer/Affimative Action.

POSITIONS OPEN

Postdoctorals, Penn State: **POSTDOCTORAL POSITION(S)** to investigate novel mitogenic/apoptotic pathways in Type 1 cytokine receptor systems and/or molecular mechanisms of hematopoietic lineage determination. Timely opportunity to join expanding programs in cell and developmental biology, immunobiology, and computational biology and to interact with the hundreds of active laboratories in Penn State's Life Science consortium. New facilities, space, and competitive salary. Send curriculum vitae and references to: Dr. D. M. Wojchowski, Position #S-6949, 115 Henning, The Pennsylvania State University, University Park, PA 16802. Telephone: 814-863-8329; FAX: 814-863-6140; email: dmwl@psu.edu. Affirmative Action/Equal Opportunity Employer.

OXIDATIVE DAMAGE IN AGING

Three **POSTDOCTORAL POSITIONS** are available immediately to study pharmacological interventions in mouse models of age-associated degenerative diseases. Techniques include gene expression profiling using high-density oligonucleotide arrays (see Lee et al., *Science* 285:1390–1393, 1999). Knowledge of molecular biology is desirable. Please send curriculum vitae, summary of research accomplishments, and contact information of three references to: Dr. Richard Weindruch, Department of Medicine, University of Wisconsin–Madison, 2500 Overlook Terrace, Madison, WI 53705. FAX: 608-280-7202; e-mail: rhweindr@facstaff.wisc.edu.

POSTDOCTORAL POSITIONS

Two Postdoctoral positions are available in the areas of NA,K-ATPase biology, utilizing knockout and gene replacement technology, globin gene expression, or kidney or lung development. Our laboratory and department provide an outstanding environment for the development of research careers. Transgenic, knockout, DNA, and gene array cores are available. Résumés should be sent to: Dr. Jerry B. Lingrel, University of Cincinnati, Department of Molecular Genetics, Biochemistry, and Microbiology, 231 Bethesda Avenue, Cincinnati, OH 45267-0524.

POSTDOCTORAL FELLOW. University of Arkansas for Medical Sciences (UAMS) Pain Neurobiology Laboratory, committed to research on longterm effects of pain, is seeking Fellows with experience in molecular/anatomical methods, handling rat pups, image capture, and quantification of cell staining/ ISH data. Salary/rank commensurate with experience; excellent benefits. Send curriculum vitae and three references to: K. S. Anand, Arkansas Children's Hospital, S-431, 800 Marshall Street, Little Rock, AR 72202. E-mail: anandsunny@ exchange.uams.edu. University of Arkansas for Medical Sciences is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL/RESEARCH SCIENTIST positions available to study the role of membraneanchored metalloproteinases in angiogenesis and mestastasis (*Cell* 95:365, 1998; *Cancer Res.* 58:5221, 1998; *JBC* 271:9135–9140, 1996; *Nature* 375:244– 247, 1995). Strong background in cell or molecular biology required. *U.S. atizens and resident aliens only.* Send curriculum vitae and letters of reference to: Stephen J. Weiss, M.D., Upjohn Professor of Medicine, University of Michigan Cancer Center, 5301 MSRB III, 1150 West Medical Center Drive, Ann Arbor, MI 48109-0640.

POSTDOCTORAL POSITION available immediately to study the enzymatic mechanisms of DNA recombinases and helicases. The research will include protein engineering and rapid kinetic methodologies. Experience in mechanistic enzymology, nucleic acid biochemistry, or protein chemistry is desirable. Send curriculum vitae and names of references to: Dr. F. R. Bryant, Department of Biochemistry and Molecular Biology, Johns Hopkins University, 615 North Wolfe Street, Baltimore, MD 21205. Email: fbryant@jhsph.edu. Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

NO AND INFLAMMATION

Position available for M.D. or Ph.D. **POSTDOC-TORAL FELLOW** for basic research in the mechanisms of nitric oxide effects in inflammation. *Requires U.S. citizenship.* Research involves defining mechanisms of dysregulated NO expression and resulting renal pathology due to NO overexpression. A multi-discipline mentorship committee is in place. State-of-the-art facility with competitive salary and benefits. Interested applicants should contact: Gary S. Gilke-son, M.D., Chief, Rheumatology Section, Ralph H. Johnson VAMC by e-mail: gilkeson@musc.edu or Telephone: 843-577-5011, extension 6798.

YALE UNIVERSITY SCHOOL OF MEDICINE

Applicants are invited to apply for **POSTDOC-TORAL POSITIONS** in developmental neurobiology. Projects: (1) Structure/function of brain-enriched PTPs using gene knockout techniques. Proven experience in gene knockout required. (2) Autoimmune disorders of the CNS, including TS and OCD. Proven experience in biochemical purification of proteins required. For funding, *must be American citizen or resident*. Send curriculum vitae and three references to: Dr. Paul Lombroso, SHM I–270, 230 South Frontage Road, Yale University, New Haven, CT 06520. E-mail: Paul.Lombroso@yale.edu.

POSTDOCTORAL RESEARCH POSITION at Princeton University immediately available to study the identification of genes, gene expression, and proteins in a single cell using innovative nanostructures. The successful candidate will have a Ph.D. with a strong background in molecular and cellular biology and biochemistry.

Please send a curriculum vitae and names of three references to: Professor Stephen Chou, Department of Electrical Engineering, Princeton University, Princeton, NJ 08544. E-mail: chou@ee. princeton.edu. Princeton is an Equal Opportunity/Alfirmative Action Employer.

POSTDOCTORAL POSITION to investigate signaling pathways in insulin action. We use biochemical, molecular, and genetic approaches to study the control of cellular function. Send curriculum vitae to: Dr. John C. Lawrence, Department of Pharmacology, University of Virginia Health System, P.O. Box 800735, 1300 Jefferson Park Avenue, Charlottesville, VA 22908. FAX: 804-982-3575. Email: jcl3p@virginia.edu.

University of Virginia is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL positions available to recent Ph.D.s with prior training in biochemistry, biophysics, or cell biology. The research focus will be on the structure-function aspects of Rho family small G-proteins and their regulatory GEFs and GAPs. Strong interests in signal transduction mechanisms required. Send letter, curriculum vitae, and names of references to: Dr. Yi Zheng, Department of Biochemistry, The Health Sciences Center, University of Tennessee, Memphis, TN 38163. E-mail: yzheng@ utmem.edu.

POSTDOCTORAL POSITION available to study cardiac transcriptional regulation and cardiac development. We utilize molecular techniques, including transgenic mouse models and knockouts, to investigate disease-causing pathways. Contact: Jeffery D. Molkentin, Ph.D., Children's Hospital Medical Center, Division of Molecular Cardiovascular Biology, 3333 Burnet Avenue, Cincinnati, OH 45229-3039. FAX: 513-636-5958.

POSTDOCTORAL POSITION is available at Harvard Medical School to study G protein signaling in the photoreceptor cells. Background in biochemistry or molecular biology is required. For further information, please visit our laboratory website: http:// www.howelaboratory.harvard.edu/arshavsky; htm or send e-mail to: Dr. Vadim Y. Arshavsky; e-mail: vadim_arshavsky@meei.harvard.edu.

POSTDOCTORAL AND RESEARCH ASSOCIATE POSITIONS

The Cardiovascular Research Program of VA Medical Center/SUNY Health Science Center at Brooklyn is recruiting for Postdoctoral and Research Associate positions in the REAP program "Cardiac Remodeling and Arrhythmogenesis." Candidates must have a Ph.D. or M.D. degree and accept appointment for at least two years. These positions are available immediately for qualified candidates with background and skills in patch clamping or molecular biology of cardiac ion channels. Previous experience with research in signal transduction pathways for myocardial hypertrophy or postinfarction remodeling is preferred. Salaries are commensurate with qualifications. Interested candidates should contact, or send a letter along with a curriculum vitae, to:

Dr. Nabil El-Sherif Professor of Medicine and Physiology Chief, Cardiology Section SUNY, HSC-B/VA-NYHHCS 800 Poly Place (111A-BK) Brooklyn, NY 11209 Telephone/FAX: 718-630-3740 E-mail: nelsherif@aol.com

Applicants for the Postdoctoral positions must have work permits. Applicants for Research Associate positions must be permanent residents or U.S. citizens.

COLUMBIA UNIVERSITY COLLEGE OF PHYSICIANS AND SURGEONS

A **POSTDOCTORAL POSITION** is available at Columbia University. We are studying physiological events involved in early stages of cortical development. Methods include patch clamp recording, neuroanatomical methods, calcium imaging in brain slices, and molecular biological approaches. Experience in patch clamp recording is preferred but not required. Additional training in molecular biology is desirable. Send curriculum vitae and names of three references to:

> Arnold R. Kriegstein, M.D., Ph.D. Department of Neurology Columbia University College of Physicians and Surgeons 630 West 168th Street, Box 31 New York, NY 10032

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ANNOUNCEMENTS

CAENORHABDITIS GENETICS CENTER (CGC)

The CGC acquires, maintains, and distributes genetic stocks of *Caenorhabditis elegans* for use by investigators initiating or continuing research on this nem atode. The CGC's collection of more than 3,650 strains includes one allele of each mapped gene, all available chromosome rearrangements, and selected multiply mutant stocks for genetic mapping. Requests for strains should include a brief statement of the research or training activity for which the stocks are intended. Recipients are asked to acknowledge the CGC, which is supported by NIH's National Center for Research Resources (NCRR), in publications resulting from use of the strains and to provide the CGC with reprints of those publications. The CGC also provides information about *C. elegans*, largely through the publication and distribution of a newsletter, the *Worm Breeder's Gazette*. Inquiries should be addressed to: Theresa Stiernagle; e-mail: stier@biosci.cbs.

Theresa L. Stiernagle, Curator Caenorhabditis Genetics Center 250 Biological Sciences Center University of Minnesota 1445 Gortner Avenue St. Paul, MN 55108-1095

POSITIONS OPEN

INTERESTED IN CLINICAL OR POSTDOCTORAL RESEARCH TRAINING?

The National Institutes of Health has both! For more information, visit our website which lists an array of clinical and postdoctoral opportunities, including tenure-track positions.

http://www.training.nih.gov NIH is dedicated to building a diverse community in

its training and employment programs.

EUROPEAN OPPORTUNITIES

The Swiss Federal Institute of Technology Zurich $(\rm ETHZ)$ invites applications for an

ASSISTANT PROFESSOR FOR SOLUTION NMR SPECTROSCOPY OF BIOLOGICAL MACROMOLECULES

This position is located in the Institute of Molecular Biology and Biophysics and is part of the Department of Biology. We look for an outstanding candidate to lead an active, independent research program in structural biology using solution NMR spectroscopy. Candidates specializing in methods development as well as candidates with a prime interest in applications of solution NMR spectroscopy to problems in biology will be considered. The participation in the teaching of biology at the undergraduate and graduate level is expected.

Applications with curriculum vitae, a list of publications, and research plans should be submitted to: the President of ETH Zurich, Prof. Dr. O. Kübler, ETH Zentrum, CH-8092 Zurich, no later than May 15, 2000. The ETHZ specifically encourages female candidates to apply with a view towards increasing the proportion of female professors.

UNIVERSITY OF VIENNA FACULTY OF NATURAL SCIENCES AND MATHEMATICS Institute for Anthropology (former Institute of Human Biology) Professorship in Biomathematics

The Faculty invites applicants for a tenure-track **PROFESSORSHIP** in biomathematics. The candidate will contribute to the ongoing research at the Institute of Anthropology (website: http://www.anthro.univie.ac.at/), particularly in morphogenesis, quantitative morphology, and related topics (e.g., biometrics, 3-D imaging, complexity). Furthermore, the candidate will be expected to develop courses in applied biomathematics and supervise and advise both magistral and doctoral thesis candidates.

Applicants should send a curriculum vitae, a list of publications, a selection of reprints which the candidate considers her or his most outstanding, and a research concept. Please send applications before the closing date (April 30, 2000) to: Dekanat NAWI, Dr. Karl-Lueger-Ring 1, A-1010 Wien.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP IN MOLECULAR GENETICS OF DIABETES NATIONAL INSTITUTES OF HEALTH

The Clinical Diabetes and Nutrition Section of the National Institute of Diabetes and Digestive and Kidney Diseases, located in Phoenix, Arizona, is seeking a junior- or senior-level **POSTDOCTORAL SCIEN-TIST**. The two-year fellowship is available in March 2000. Candidates must have either a Ph.D. or a M.D. with significant experience in molecular genetics and/ or physiology. The recipient will work towards identifying novel genes that predispose Pima Indians to Type 2 diabetes. Please send curriculum vitae and statement of research interests to: Leslie Baier, Ph.D., NIDDK, NIH, 4212 North 16th Street, Phoenix, AZ 85016. FAX: 602-200-5225. E-mail: Lbaier@phx.niddk.nih.gov.



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- 1. Lennon, G., Auffray, C., Polymeropoulos, M., Soares, M.B. (1996) Genomics 33, 151-152.
 - 2. http://www.ncbi.nlm.nih.gov/UniGene/index.html
 - 3. http://ratEST.utowa.edu

Ref

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(Actual Size)

Pathways[™] software was designed specifically for use with GENEFILTERS microarrays. The software imports and stores .gel or .tif files from phosphor imaging systems, and locates, calculates,

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