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The conference is aimed to encourage contacts and fruitful discussions between top talented young scientists up to the post-doctoral level and leading experts in the field.

Application:

The conference is open to 50 young scientists who will receive a travel award, if selected.

Applications should include the CV, a list of publications and a half page abstract of the putative poster content.

Travel awards include travel costs, accommodation and meals during the conference.

Deadline for application: May 31, 1999.

Andreas E. Busch
Hoechst Marion Roussel
Head of DG Cardiovascular, H821
D-65926 Frankfurt / Germany
Mail: andreas.busch@hmrag.com

Oktober 30. / 31. Frankfurt, Germany • Chairmen: Reiner Greger (Freiburg), Heini Murer (Zürich) Invited speakers:

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G. Burckhardt (Göttingen),
H. Daniel (Freising-Weihenstephan),
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June 24–27, 1999

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- Late-night informal discussion groups
- All participants contribute to the scientific program
- Posters remain up for the entire conference

**Limited to 200 participants,
accepted through abstract submission**

Scientific Program Organizers

Philip Hieter
University of British Columbia
David Valle
Johns Hopkins University

Keynote Speakers

Lee Hartwell
University of Washington
Maynard Olson
University of Washington

Application deadline: Friday, April 23, 1999

For a detailed program and application instructions please visit the ASM website at www.asmsa.org/mtgsrc/yeast.htm



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Chromosomes & Genome Stability

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Cell Cycle, Checkpoints, & Cancer

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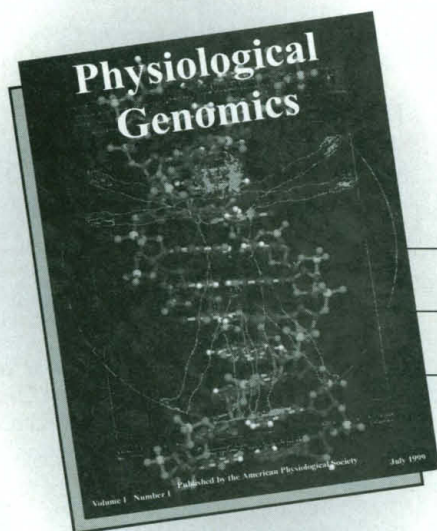
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The completion of the Human Genome Project will be one of the greatest achievements in biology. The speed at which the mapping and sequencing of genomes of the human and other diverse life forms is occurring has resulted in a revolution in the biological sciences. The enormous task of linking genes to function has now begun, punctuated by predictions that within 5 years nearly all of the 70-100,000 genes of the human genome will be mapped and sequenced. This revolution in genetics has paved the way for the next great challenge and opportunity for physiology and medicine.

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The Department of Physiology at West Virginia University invites nominations and applications for a tenure-track **ASSISTANT PROFESSOR** position to begin in the fall of 1999. We seek an individual with research interests in the neural control of anterior pituitary function. The new faculty member will be expected to establish an independent research program, collaborate with the Department Chair in reproductive physiology research, and contribute to the teaching and service missions of the Department. Applicants should have a Ph.D. or M.D. degree, post-doctoral experience, a potential to attract extramural funds, and teaching experience. Competitive salary and start-up fund will be provided. The initial review of applications will begin April 30, 1999. Applicants should send curriculum vitae, a statement of research interests, and future plans, and a list of at least three references to: **Dr. Paul Brown, Chair of Search Committee, Department of Physiology, West Virginia University Health Sciences Center, P.O. Box 9229, Morgantown, WV 26506-2992.**

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The University of Vermont College of Medicine is seeking a **DIRECTOR** to lead the Human Molecular Genetics Unit in the Department of Medicine. The successful candidate will be responsible for the development of teaching programs in human molecular genetics for medical students, housestaff, graduate students, and Fellows. He or she will be expected to develop and lead programs in clinical human genetics and molecular epidemiology. Applicants must have an M.D., Ph.D., or equivalent degree; demonstrated ability to initiate and support independent research; and a strong publication record and membership in prestigious professional societies. Applications accepted until June 1, 1999. Please forward inquiries to: **Steven Lidofsky, M.D., Ph.D., Chair, Human Molecular Genetics Search Committee, Department of Medicine, University of Vermont, Burgess 414 MCHV Campus, Burlington, VT 05401.** *UVM is an Affirmative Action/Equal Opportunity Employer. Applications from women and people from diverse racial, ethnic, and cultural backgrounds are encouraged.*

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FACULTY POSITIONS IN INTEGRATIVE CELL BIOLOGY AND PLANT BIOLOGY at Alfred University

Integrative cell biology. Tenure-track **ASSOCIATE** or **ASSISTANT PROFESSOR**. The Division of Biology invites applications for a faculty position in integrative cell biology with a joint appointment in the recently formed interdisciplinary Graduate Program in Biomedical Materials Engineering Science (BMES). For more information on the BMES Program see website: <http://LAS.alfred.edu/~bio/>. The research area of the successful candidate will involve aspects of integrative cell biology with direct applications to characterization and engineering at the interface between materials and cells. The preferred experimental system involves the use of human or mammalian cell/tissue culture to investigate some aspect of cell surface-mediated phenomena such as cell:cell recognition, signaling, or the extracellular matrix. We are especially interested in scientists with a productive track record of interdisciplinary collaboration. The successful candidate will have demonstrated significant research achievement and the potential to establish a vigorous extramurally funded research program. Senior candidates will already have such a program. The successful candidate will also be responsible for teaching appropriate graduate and undergraduate courses. Postdoctoral experience is highly desirable. Salary and benefits are competitive. Substantial start-up funding and modern laboratory space will be provided.

Plant Geneticist. Tenure-track **ASSISTANT PROFESSOR**. The Division of Biology invites applications for a faculty position in plant genetics with a strong interest in undergraduate science education. Primary responsibility will be development of an innovative inquiry-based introductory biology course for majors (two semesters). In addition the successful candidate will teach one upper-division course per semester; botany or plant physiology (alternate years) in the fall, and genetics in the spring. All courses will have associated laboratories. Required: earned Doctorate in biological sciences with plant genetics major. Postdoctoral experience preferred with an emphasis on organismal or ecosystems aspects of plant biology. Teaching is the first priority of this position so that excellent communication skills and documented teaching experience are required. The successful candidate will also provide evidence of potential to develop an extramurally funded research program involving undergraduate students. Alfred University is located in the Finger Lakes District of New York with numerous opportunities for field research. The Division also has a wide range of laboratory facilities. Salary and benefits are competitive.

Starting date for both positions is August 1999. Consideration of applicants will begin on 20 April 1999 and continue until the positions are filled. Candidates for both positions will send a detailed curriculum vitae, a statement of research plans/teaching interests, and have three letters of reference sent to: **Professor Alan H. Goldstein, Chair, Division of Biology, Alfred University, Saxon Drive, Alfred, NY 14802. Telephone: 607-871-2645; FAX: 607-871-2359; e-mail: fgoldste@bigvax.alfred.edu.**

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focus on careers

SCANDINAVIA ((Stimulates a Biology Boom))

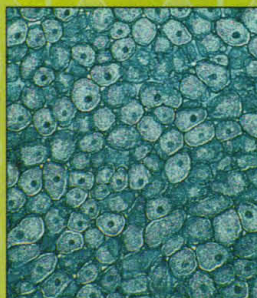
Inventive government, industry, and academic programs have sparked a surge in life science in Scandinavia. That success has put well-qualified life scientists at a premium.

Over a few short years, Scandinavian attitudes to industry have taken a 180-degree turn. Past suspicion has been replaced by present enthusiasm, which has taken tangible form in programs that train scientists to work in industry and start up their own companies.

In no field has this turnaround been more evident than in biotechnology and related disciplines. The "Medicon Valley," the region between Copenhagen and South Sweden, has one of the highest concentrations of biotechnology companies in the world. Funds from the European Union and Scandinavian governments continue to encourage entrepreneurship in life science. And excellent academic groups — for example, those specializing in proteomics and mass spectrometry at Odense University, and in bioimaging and bioinformatics at the Technical University of Copenhagen — are turning out technologies, as well as students, with strong industrial potential. Today, biotechnology is one of Scandinavia's fastest growing and most active areas.

Unfortunately, local universities aren't producing qualified life science graduates fast enough. Governments are trying to overcome that, through such initiatives as Denmark's "centers without walls." Those government-funded organizations involve companies, universities, and hospitals in training Ph.D.'s in areas of particular national strength. Meanwhile, Scandinavian institutions are looking abroad, both to persuade their own nationals to return from Ph.D. programs and postdoctoral fellowships overseas, and to attract foreign scientists. The Danish government recently introduced favorable tax breaks for foreign scientists.

Potential recruits can pretty much choose their field of activity. Specialists in function-



By Peter Gwynne

al genomics, molecular evolution, diagnostics, and bioinformatics are all in demand. So are protein chemists, enzymologists, and food scientists.

However, recruiters seek more than specific expertise. They emphasize the need for scientists who can cooperate seamlessly in interdisciplinary projects. Here, representatives of two pharmaceutical companies, a unique collaboration between a seed company and a national laboratory, and a specialist academic center discuss their requirements for recruits.

Bagsvaerd, Denmark: As the largest research enterprise in Denmark, with 3,000 individuals involved in R&D worldwide, pharmaceutical company Novo Nordisk A/S has long had its choice of the best and the brightest Danish graduates in life science. Now, that's changing. "Biotechnology is booming," explains Børge Diderichsen, director of research in Novo's corporate office. "So suddenly a number of young people realize that they have the opportunity to get jobs in, and perhaps be involved in establishing, new companies." In addition, Diderichsen observes, "there are too few of the very best life scientists coming out of Danish universities. Therefore, we welcome initiatives to support new graduate schools of excellence." And too many of the roughly 25 percent of Danish scientists who go overseas for Ph.D.'s or postdoctoral fellowships stay abroad. Novo Nordisk wants to encourage some of these bright young people to come back.

The company seeks individuals who can fit into interdisciplinary teams. "We use cells as efficient, recyclable biological factories," explains Diderichsen. "Everything related to that — gene technology, biotechnology, con-

Novo Nordisk A/S
DLF TRIFOLIUM/Risø National Laboratory
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A former editor of Newsweek, Peter Gwynne writes about science and technology from his base on Cape Cod, Massachusetts.

Continued ➤

trolling fermentous protein purification — is a core competence of ours. At another level come screening methodologies. And people who can handle vast amounts of data will be very popular.”

Novo Nordisk has high expectations of its researchers. “They have to be Ph.D’s. And we usually require that they have studied abroad, at some of the best universities in the world,” says Diderichsen. “The most straightforward criterion is that you can show you have done some profound and excellent research that has produced significant papers. You should also demonstrate the capacity to change direction in your research. And you have to radiate confidence and communicativeness. You have to show that you’re enthusiastic and energetic.”

Roskilde, Denmark: Klaus K. Nielsen straddles two worlds. He is employed by DLF-TRIFOLIUM, a seed company, but heads a program in the Danish government’s Risø National Laboratory. “This is a new idea in Danish research — a joint research group in one location,” Nielsen explains. “Last year, we moved in here and started a very goal-oriented research program. Our main goal in this program is control of stem and flower formation in grasses. Our overall goal is to engineer new tailor-made varieties that will meet the demands of future sustainable agriculture.”

Nielsen runs his program in Risø’s Plant Biology and Biogeochemistry Department, which carries out most of the life science research performed at the national laboratory. “Research in this department aims mainly at cost-efficient plant production with a minimum adverse effect on the environment,” he explains.

Nielsen’s own group is hiring from both Denmark and abroad. “We’re looking for people strongly experienced in molecular biology — not just plants, but generally,” he says. “We recruit internationally because there are not many scientists in Denmark. The biggest problem is that even Europeans are not ready to move that much.” So Nielsen has gone further afield. “We have Americans, Australians, and Chinese,” he says. “It’s always very stimulating to bring in foreigners.”

Language presents little difficulty. “In the lab, the daily language is English,” says Nielsen. “And there are internal courses in Danish that scientists can take, even in their working time.”

What qualities does Nielsen seek in recruits? “Our scientists need to be innovative,” he explains. “It’s very important to be focused on your goal, and not just doing science for the sake of it. People must be interested in the product.”

Lyngby, Denmark: The Bio/Chemical MicroSystems (BCMS) group at the Technical University of Denmark’s Microelectronic Center (MIC) applies microtechnology to medical sciences, biosciences, and chemistry. “We are directing our attention to micro total analysis systems, cell/particle handling in microflu-

idic systems, and array technology,” says group leader Pieter Telleman, who is an associate research professor.

Both BCMS and MIC have close links to industry. “Establishing contacts to and collaborative projects with industry is an intrinsic part of MIC’s philosophy,” says Telleman. “Most of our students are aiming at industrial positions after graduation. MIC also encourages graduates to start their own companies, as spin-offs of their activities here. Several students

have already written business plans. In a country like Denmark that depends on medium and small companies, scientists have a strong desire to start their own companies. We put them in touch with the right people.”

Meanwhile, BCMS itself seeks to hire scientists in all areas. “One of the key issues in establishing a research group that applies microtechnology to life sciences is to have a multidisciplinary group, including physicists, engineers, chemists, and biologists,” says Telleman. “We will never turn down applications from qualified scientists who have a definite interest in multidisciplinary work and a willingness to work on projects together with industrial partners.”

What does Telleman expect of life scientists who apply to work in his group? “They should not only be interested in the biology side of our research,” he says.

“They also need the drive to solve problems related to other scientific fields. Being just a biologist or just an immunologist doesn’t hack it any more.”

Hørsholm, Denmark: “The area of interest for us is immunology,” says Henning Løwenstein, executive vice president of research at ALK-Abelló, an 800-person company that specializes in allergy vaccines. “We also want molecular biologists who can work with several systems, and protein chemists.”

What qualifications does the company seek? “We expect at least a Ph.D.,” says Løwenstein. “We don’t need direct experience of allergy work; we expect to teach that ourselves.” The company is involved indirectly in training Ph.D. immunologists and molecular biologists, through the Danish Allergy Research Center, one of Denmark’s centers without walls.

ALK-Abelló emphasizes the ability to work in a team. And like other Scandinavian institutions, it welcomes life scientists who have studied or worked abroad. Beyond having scientists comfortable in different languages, points out Løwenstein, “it’s always healthy to get new ideas.” However, he continues, “we insist that Ph.D’s coming from abroad take an entry course in Danish, to understand our culture. They also have to speak Danish in the lab, to ensure that they survive in the long term. Scandinavians are a little closed in their way of thinking. You really won’t understand them unless you learn the language.” ■



For further valuable career features, go to www.scienceonline.org, click on **Science Careers**, then click on **Advice and Perspectives**.

SPECTRUM

MEDICAL SCIENCES Ltd. Oy
Helsinki, Finland

Spectrum is vaccine discovery company located in Finland, working closely with research groups at the National Public Health Institute (KTL) and Helsinki University. Spectrum, which is expanding all of its programs, will occupy new quarters in Helsinki Science Park in June. Applications are being solicited from scientists to work on the development of novel vaccines for two major bacterial infections, and on the supporting technology for antigen production in *Bacillus*.

Senior Scientists

Molecular Biologist - Head of gene expression programs and *Bacillus* laboratory

Molecular/Cell Biologist - Chronic intracellular bacterial infections

Junior and Postdoctoral Scientists

Molecular Biology

Protein Chemistry

Cell Biology

Immunology

Please send inquiries, resumé & relevant publications to:

Spectrum Medical Sciences Ltd. Oy Fax: +358-9-502-3610
P. O. Box 120
FIN-02631 ESPOO, Finland 100754.1212@Compuserve.com

HOPKINS MEMORIAL FOREST MANAGER

CENTER FOR ENVIRONMENTAL STUDIES (CES)

Williams College seeks a full-time Manager for the Hopkins Memorial Forest (HMF), a 2450 acre reserve in MA, NY, and VT managed by the Williams College CES. HMF provides opportunities for education, research and reflection in the liberal arts tradition. The major role of the Manager is to develop the potential of the HMF for research and teaching in areas represented by diverse academic departments and faculty members. Information about the HMF is available at: <http://www.Williams.edu/CES/hopkins>

The HMF Manager coordinates and promotes appropriate use of the Forest and its electronic databases. The responsibilities of the manager are to: (1) encourage research and teaching activities in HMF; (2) oversee the Rosenberg Center Field Station; (3) promote and coordinate events at HMF involving faculty, students, Williams Outing Club, and the public; (4) sponsor public educational activities; (5) supervise student forest caretakers; and (6) although not required, participate directly in research projects.

Candidates should possess a Master's or Ph.D. degree and at least three years' experience in environmental education, resource management, or related fields, or an equivalent combination of education and experience. Excellent writing and presentations skills, and the ability to work with students, faculty, staff and the public are required. Experience with environmental monitoring, database management and GIS are preferred.

This is a new, year-round position starting July 1, 1999 for a term of three years with the possibility of reappointment.

TO APPLY: Review of applications will begin on April 15, 1999 and continue until the position is filled. Send cover letter, c.v. along with three letters from work-related references to: Rosemary Moore, Assistant Director of Personnel, Job #1382, 15 Park St., Williamstown, MA 01267-2114. Phone: (413) 597-2681; FAX: (413) 597-4060.

Founded in 1793 and located in the Berkshire hills of western Massachusetts, Williams College is a highly selective, co-educational liberal arts college of 2,000 students. Williams especially welcomes applications from women and minority candidates.

EUROPEAN OPPORTUNITIES



KAROLINSKA INSTITUTE
Department of Neuroscience
Division of Molecular Neurobiology

TWO POSTDOCTORAL FELLOWSHIPS

**Molecular Neurobiology Lab seeks
Experienced Cellular/Molecular
Biologists**

We are looking for experienced cellular/molecular biologists to join our team investigating structural and functional aspects of neurotrophic factor signaling in the nervous system. Areas of immediate interest include: identification and characterization of genome-wide transcriptional responses to neurotrophic factors, functional studies in transgenic mice and cell-specific/inducible gene targeting. One of the posts requires expertise in histological techniques and nervous system development. The other post requires experience in molecular cloning, cell culture and flow cytometry techniques.

Funding is available for an initial period of two years, starting immediately. Application, including CV, list of publications and two letters of reference, should be sent to Professor Carlos F. Ibáñez, Karolinska Institute, Department of Neuroscience, Division of Molecular Neurobiology, Doktorsringen 12B, 171 77 Stockholm, Sweden. Telephone: 46-8-7287660; Fax: 46-8-339548; E-mail: carlos@cajal.mbb.ki.se; Lab web page <http://cajal.mbb.ki.se>; Deadline for submission of applications is April 30, 1999.

www.calydon.com

Research Scientist/ Molecular Virologist

*San
Francisco
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CALYDON, a privately held biotech company developing novel cancer therapeutics, seeks an experienced researcher to join our multidisciplinary R&D team.

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We offer competitive salaries, stock options, and excellent benefits. Please send resume to: Calydon, Inc., HR Dept, Attn: Job# SC0402-RSMV, 1324 Chesapeake Terrace, Sunnyvale, CA 94089; fax: (408) 734-1714. EOE



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Faculty position at Hillside Hospital is available for a Research Child Psychiatrist with strong clinical psychopharmacology background and research experience in childhood schizophrenia. Expertise in grant development, stressing research methodology and statistics required. Training in the use of structured interviews and rating scales with an interest in teaching and working in an academic environment preferred. Must be board eligible or certified.

Salary commensurate with training and experience. Send CV and three reference letters to John M. Kane, MD, Chairman, Department of Psychiatry, Hillside Hospital of Long Island Jewish Medical Center, Glen Oaks, NY 11004. Long Island Jewish Medical Center is the Long Island Campus for the Albert Einstein College of Medicine. Equal opportunity employer M/F/D/V.



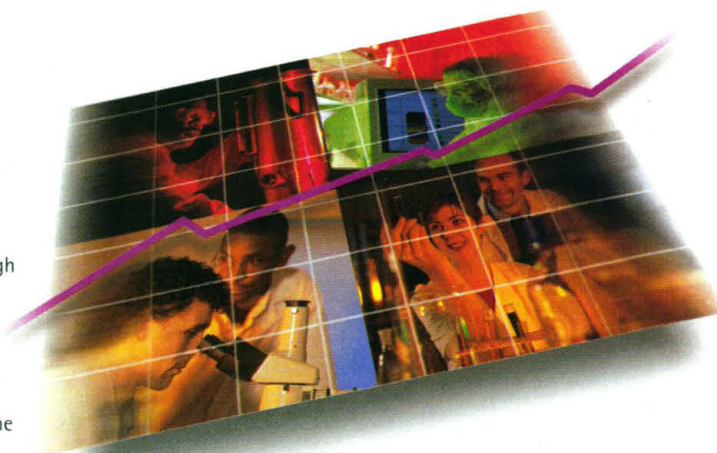
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ASSOCIATE SCIENTIST/SENIOR ASSOCIATE SCIENTIST **JOB CODE: CJM-99239**

In this complex position, you will perform experiments using high-volume screening techniques of optical measurements of cellular membrane potential and intercellular calcium levels to evaluate drug interactions with voltage and ligand-gated ion channels. Crucial responsibilities include analyzing, reporting and presenting data.

Both positions require a BS degree in Biological Science, Neuroscience or a related area. The **Associate Scientist** position requires 4-5 years of experience or an MS degree with 1-2 years of experience, while the **Senior Associate Scientist** position requires at least 6-10 years of experience or an MS degree with 2-5 years of experience. A background in Fluorescence Technology or Electrophysiology is a definite asset.

ASSOCIATE SCIENTIST/SENIOR ASSOCIATE SCIENTIST (BIOTECHNOLOGY) **JOB CODE: CJM-98559**

A position is available within Vascular & Cardiac Diseases for an individual with image analysis expertise to assist in the preclinical evaluation of novel therapeutics.

An MS degree in a Bioimaging-related field with 5+ years experience is required. A working knowledge of Angiography, PET, MRI, IVUS or near-IR spectroscopy is necessary. Experience in bio-medical imaging software, microscopy, and 3D imaging and exposure to *in vivo* animal testing and application of imaging devices suitable for small animals will be highly valued.

SCIENTIST/SENIOR SCIENTIST (BIOINFORMATICS) **JOB CODE: CJM-99245**

Working in our Bioinformatics group, Molecular Biology Department, you will analyze gene expression data, provide informatics support to various high-throughput gene expression systems, as well as work closely with other scientists to utilize the data, and help the Bioinformatics Technical Team develop algorithms and software for data mining.

This position requires a PhD in Molecular Biology or the Life Sciences and postdoctoral experience in bioinformatics or genomics research. Must have experience with programming in Perl, UNIX, SQL and relational databases, and web/CGI applications. The ability to manage projects and collaborate with other scientists is essential. Experience in handling data from high-throughput systems is highly desired.

POSTDOCTORAL RESEARCH FELLOWSHIP **JOB CODE: CJM-995943**

In this prestigious role, you will work on a project which focuses on regulating carrier-mediated transport and insulin signaling. The preferred candidate has a background in Molecular and/or Cellular Biology and demonstrated experience with standard molecular and cell biology techniques. An interest in biological transport and signal transduction is desirable.

POSTDOCTORAL FELLOWSHIP (PHARMACOLOGY) **JOB CODE: CJM-985537**

You will be responsible for intracellular signaling mechanisms associated with monocyte-macrophage differentiation and foam cell formation upon exposure to modified lipoproteins. This position is available within the Vascular & Cardiac Diseases department. Additional responsibilities include establishing *in vitro* macrophage systems to evaluate the intracellular signaling mechanisms associated with elaboration of pro-atherogenic molecules which are responsive to cholesterol loading. Further, the candidate would characterize the concentration- and time- dependent expression of these pro-atherogenic molecules in mouse models of atherosclerosis using *in situ* hybridization and where appropriate immunohistochemistry.

A PhD in Cell Biology with 0-2 years of technical experience in cell culture, co-culture systems, Western and Northern analysis, PCR and cloning techniques, RNA isolation and *in situ* hybridization are required. A broad biochemistry knowledge of intracellular signaling pathways would be helpful.

SENIOR ASSISTANT SCIENTIST/ASSOCIATE SCIENTIST **JOB CODE: RJB-99210**

Using your scientific expertise, you will assist in planning, conducting and summarizing studies intended for the assessment of safety pharmacology parameters of candidate therapeutic compounds. Vital responsibilities include ensuring compliance with US FDA GLP regulations; departmental standard operating procedures and safety practices. You will also perform veterinary surgery and anesthesia, compound dosing by various routes, and observe and accurately record experimental data.

The ideal candidate has a BS degree with 2-5 years of related experience, or an MS degree with 0-2 years of experience in physiology, pharmacology, whole animal biology or a related science. Experience with cardiovascular and pulmonary pharmacologic assessment techniques, along with *in vitro* isolated tissues and Electrophysiology are highly desirable. Familiarity with advanced computerized data acquisition systems is a definite asset.

ASSISTANT SCIENTIST **JOB CODE: RJB-99206**

In this important capacity, you will assist in planning, conducting, and summarizing results of various toxicology or safety pharmacology studies required to assess the safety of candidate therapeutic compounds. Vital job responsibilities include ensuring compliance with US FDA GLP regulations and departmental standard operating procedures. You will also schedule study procedures, procure equipment, administer test compounds, and accurately observe and record data.

The candidate will be required to have a BS degree with 0-2 years of experience. AALAS certification is very beneficial.

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We are seeking innovative Research Scientists to join our functional genomics laboratory that uses *Drosophila melanogaster* to define pathways and networks related to human disease. Results will ultimately be used in the development of new drug targets. Qualifications include a BS/MS in a relevant scientific discipline along with 2+ years of laboratory experience and a thorough knowledge of molecular and/or genetic techniques. Strong communication skills and the ability to work as an effective team member are essential. Experience working with *Drosophila melanogaster* is helpful. Also important is the ability to work independently, design appropriate experiments and convey their data and interpretations to other members of a function genomics team. Please refer to Position HB-5742 on resume and envelope, or as the subject of your e-mail.

PRINCIPALS ONLY: send your resume/curriculum vitae and letter of interest, indicating position code on resume AND envelope, or as the subject of the e-mail, to: R&D Staffing, Novartis Pharmaceuticals Corporation, 556 Morris Avenue, Building SEF 1029, Summit, NJ 07901. We are an equal opportunity employer M/F/D/V. We appreciate your interest in our Company. Unfortunately, we will only be able to respond to those candidates chosen for interviews or additional follow-up.

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Postdoctoral Research Fellow Model Organism Functional Genomics

Using *Drosophila* as a model system, you will conduct independent research to define genetic pathways that are relevant to human disease. You should have a Ph.D. in Molecular Biology, Genetics or a related discipline, along with a publication record demonstrating technical competence. Experience with *Drosophila* and strong verbal/written communication skills are a must. Our postdoctoral assignments, which encourage creative thinking and offer ample opportunities for publication and research presentations, are for one year and may be renewable for a second year by mutual agreement. Please refer to Position HB/PD-78 on resume and envelope, or as the subject of your e-mail.

PROFESSOR OF MICROBIOLOGY AND MOLECULAR GENETICS HARVARD MEDICAL SCHOOL

The Department of Microbiology and Molecular Genetics at Harvard Medical School invites applications for a tenure-level faculty position of Professor to direct or co-direct a new center for microbial postgenomic studies. The center will facilitate the functional genomic analysis of microbial pathogens using state-of-the-art approaches such as microarray technology, bioinformatics and proteomics. Candidates must have an outstanding international reputation and an active research program in microbiology, genetics or biochemistry. The appointed candidate will also be expected to make a commitment toward the teaching of both medical students and graduate students. Applicants must have a Ph.D. and/or an M.D. and a minimum of 10 years of teaching and/or research experience. Candidates should provide a curriculum vitae including a full list of publications, six selected reprints, and a brief statement of research, teaching and public service interests. These materials should be forwarded to:

**Chairman, Postgenomics Search Committee
Department of Microbiology and Molecular Genetics
Harvard Medical School,
200 Longwood Avenue, Boston, MA 02115**

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COURSES & TRAINING

Postdoctoral Research Associates Wright State University School of Medicine



announces a

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Faculty:

Steven Berberich: Mdm-2:p53 interactions in cell proliferation and differentiation.

Michael Leffak: Cis-acting elements and trans-acting factors involved in eucaryotic DNA replication.

Daniel Organisciak: Retinal light damage; visual cell death.

John Paietta: Regulation of gene expression, control of sulfur metabolism in *Neurospora*.

Lawrence Prochaska: Structure/function relationships in bacterial and mitochondrial cytochrome c oxidases.

Nicholas Reo: NMR in vivo; liver metabolism / chemical toxicology.

John Turchi: Eukaryotic DNA replication and repair.

Ph.D.'s with experience relevant to one or more areas above should send a cover letter indicating interest in a specific laboratory, a current curriculum vitae, copies of publications, and the names of three references to: **Postdoctoral Search Committee, Department of Biochemistry and Molecular Biology, Wright State University, 3640 Colonel Glenn Highway, Dayton, Ohio, 45435.** Salaries are commensurate with experience. Consideration of applications will begin on April 30, 1999.

Additional information about the department is available at:
<http://www.med.wright.edu/som/academic/BMB>

Wright State University is an Affirmative Action/Equal Employment Opportunity Employer. Minority applicants are encouraged to apply.



Chief, Clinical Gene Therapy Branch

National Human Genome Research Institute (NHGRI)
National Institutes of Health (NIH)

The National Human Genome Research Institute (NHGRI), National Institutes of Health (NIH) is seeking an outstanding researcher to direct its Clinical Gene Therapy Branch (CGTB). CGTB is a component of the NHGRI Division of Intramural Research. The NHGRI Intramural Program explores the most exciting arenas of human genetics, ranging from gene discovery and bioinformatics to medical genetics and gene therapy and diagnostics.

The CGTB Branch Chief will be expected to establish an outstanding clinical research program focusing on the use of cell and gene transfer technology to treat inherited or acquired human diseases. The candidate should have experience in managing a large, nationally-recognized research program in the field of clinical cell and gene therapy. Candidates should have a broad background, encompassing clinical and basic studies of a specific disease or diseases and the development of cell and gene transfer methodologies. The successful candidate will have the opportunity to initiate and facilitate collaborations involving human gene therapy trials with other NHGRI and NIH investigators.

The CGTB is located in the Clinical Center (Building 10) on the NIH Campus in Bethesda, Maryland. Compensation will be commensurate with education and experience.

All applications should include the following: a current curriculum vitae and bibliography, a one-page summary of research accomplishments and research plans, and the names, addresses, and telephone numbers of five professional references. Completed applications should be sent to:

Ms. Tina Suhana
National Human Genome Research Institute
National Institutes of Health
Building 49, Room 4A-22
Bethesda, Maryland 20892-4470

The deadline for receipt of applications has been extended to May 31, 1999. Requests for additional information may be obtained by contacting Dr. David Bodine, the Search Committee chairman, at the above address.

The NIH is an Equal Opportunity Employer. Applications from women, minorities, and persons with disabilities are strongly encouraged. The CGTB/NHGRI is a smoke-free workplace.



DIRECTOR

DIVISION OF EXTRAMURAL AFFAIRS
NATIONAL HEART, LUNG, AND BLOOD INSTITUTE
NATIONAL INSTITUTES OF HEALTH
ES-601/602-01/06 \$110,351 TO \$125,900

The National Heart, Lung, and Blood Institute (NHLBI), National Institutes of Health (NIH), located in Bethesda, MD, is seeking an individual with experience in developing and implementing research programs through grant and contract administration. Applicants must have experience in the mechanisms of grant and contract administration as they relate to the broad range of biological (particularly heart, lung and blood) and clinical research. Incumbent should possess scientific and managerial leadership skills necessary to direct the NHLBI's extramural program activities. The incumbent will advise the Director, NHLBI, on policy issues in the operational resource allocation, planning, and evaluation of extramural program activities. This is a permanent civil service position in the Senior Executive Service with an annual salary ranging from ES-1 (\$110,351) to ES-6 (\$125,900). Candidates may be eligible for relocation or other bonuses.

Position requirements and application procedures are provided on the vacancy announcement which can be obtained by visiting the OPM, NIH or NHLBI Websites at www.usajobs.opm.gov, www1.od.nih.gov/ohrm/hrinfo/ses/vacancy or www.nhlbi.nih.gov/nhlbi/nhlbi.htm or by calling 1-800-728-JOBS (fax file #4047) or Jill Beklik at 301-496-6477. Vacancy closes June 01, 1999.

To apply for this position, submit a curriculum vitae, bibliography and professional references to:

National Institutes of Health
National Heart, Lung and Blood Institute
Building 31, Room 5A28
31 Center Drive MSC 2484
Bethesda, MD 20892-2484
Attn: Jill Beklik

NIH/NHLBI is an Equal Opportunity Employer

NIH Postdoctoral Positions - HIV Research Entry Mechanisms, Env Interactions with Receptors & Coreceptors, Novel Treatment and Protection Strategies

Projects: 1) **Mechanisms of HIV entry.** Following our initial discoveries of the major HIV coreceptors CXCR4 and CCR5 [Science (1996) 272:872; Science (1996) 272:1955], we identified coreceptor activity for other chemokine receptors and related orphan proteins [J.Exp.Med. (1997) 185:2015; Nature (1997) 388:238; J.Biol.Chem. (1998) 273:23799; Ann.Rev.Immunol. (1999) 17: 657]. We now seek to unravel the sequential protein-protein interactions and associated conformational changes by which HIV Env uses CD4 and coreceptor to induce membrane fusion and virus entry. 2) **Novel HIV therapeutic and prevention strategies.** Using our knowledge of Env interaction with target cell molecules, we are devising novel therapeutic and protective agents [Proc.Natl.Acad.Sci. USA (1998) 95:11511]. 3) **Identification of new viral receptors.** Approaches previously developed to identify HIV receptors are being applied to other important pathogenic enveloped viruses.

Experimental approaches: molecular, genetic, immunochemical, and biophysical analyses of molecules involved in HIV entry; hybridoma technology to enhance novel vaccine strategies; in vitro systems and animal models to study novel anti-HIV agents; development of new functional cDNA library screening methods.

Experience in molecular biology, protein chemistry, virology, immunology, or membrane biochemistry strongly preferred. Send CV and names of three references to:

Edward A. Berger, Ph.D.
Chief, Molecular Structure Section
Laboratory of Viral Diseases, NIAID
Bldg. 4, Rm. 236
National Institutes of Health
Bethesda, MD 20892-0445
Fax: (301) 480-1147
email: edward_berger@nih.gov

Postdoctoral Fellowship in New Drug Development



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

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

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

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

Initial applications should include: 1) curriculum vitae containing education and training, research experience, awards, and a list of publications; 2) a statement describing research interests and experience, and how the proposed postdoctoral fellowship training relates to career goals; 3) one scientific reprint, which best describes the applicant's research results. The deadline for application is Friday, May 28, 1999.

Please submit applications to: Postdoctoral Fellowship in New Drug Development, Department of Clinical and Scientific Affairs, Pfizer Central Research, 235 East 42nd Street, 4th Floor, mail stop 17, New York, NY 10017-5755; Attn: Mary Beth Erb, Director, Employee Resources. Pfizer is an equal opportunity employer.

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CLONTECH offers a competitive salary and benefits package including a stock option plan. Please send/fax resume, indicating **Job Code: #SA9953PS**, to: CLONTECH Laboratories, Inc., Attn: HR, 1020 E. Meadow Circle, Palo Alto, CA 94303; fax: (650) 354-0775; or email: hr@clontech.com. EOE/AA/M/F.

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RESEARCH SCIENTIST I

Amgen* has dedicated more than 15 research years toward understanding the biology of diseases and the discovery and development of innovative treatments. In-depth knowledge and state-of-the-art cellular and molecular biology empower our scientists to discover and develop naturally occurring proteins and small molecules with the potential to serve as human therapeutics. Join Amgen's ongoing research which now supports hundreds of clinical trials in countries throughout the world investigating potential new treatments for many of today's unmet medical needs.

We have an immediate opportunity in our Pathology Department for a Research Scientist with a Ph.D degree and some post-doctoral experience. The work requires development of in vivo models for research and drug development. Good communication skills are essential.

Experience should include:

- In vivo modeling
- In vitro models isolating and using primary cultures and cell lines (esp. brain endothelium)
- Application of analytical methods to study function in tissues (including biochemical, e.g. HPLC, GC-MS, enzyme kinetics and molecular)
- Molecular biology (including PCR cloning, DNA sequencing, mutagenesis,

subcloning of DNA fragments, in vitro transcription, Southern and Northern blot analysis, mRNA isolation, DNA transfection into mammalian cells in culture)

- Experience with antibodies (including generation of polyclonal and monoclonal antibodies, ELISA, microscopy)
- Protein chemistry techniques (including protein purification, ion-exchange column/gel filtration column/hydrophobic column/affinity column chromatography, gel electrophoresis such as SDS-PAGE, non-denaturing PAGE and IEF, Western blot analysis, Immunoprecipitation, peptide sequencing by trypsin digestion and HPLC)

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CONFERENCE

FASEB Summer Research Conference Molecular Gerontology

July 4-9, 1999
Copper Mountain, Colorado

Chairs: Vilhelm Bohr and Michal Jazwinski

Topics: Oxidative DNA Damage Processing; Molecular Changes with Aging; Premature Aging Disorders (Cockayne and Werner's Syndromes); Genetics of Aging; Signal Transduction and more

Speakers: C. Harley (Keynote); D. Wallace (Keynote); L. Samson; S. Mitra; K. Kraemer; V. Bohr; J.-M. Egly; E. Friedberg; J. Hoeijmakers; L. Mullenders; J. Oshima; L. Loeb; J. Campisi; I. Hickson; M. Jazwinski; T. Johnson; J. Curtsinger; V. Christofalo; B. Gilchrest; M. Karin; C. Barrett; A. Richardson. *Additional speakers to be selected.*

For an application, contact:
FASEB Summer Research Conferences
FAX: (301) 571-0650 E-mail: ahewitt@faseb.org
For additional information, E-mail: vbohr@nih.gov

LONG TERM COLLABORATIVE RESEARCH POSITION

A position is available immediately for a supporting research scientist in the Laboratory of Molecular and Developmental Biology in the National Eye Institute, National Institutes of Health. This position involves collaborative experimentation on the various projects within the laboratory, including research on novel mechanisms for introducing subtle mutations into the mouse genome, and studying the function of alpha crystallin/small heat shock proteins using gene knockout and transgenic mice. This is intended to be a long term appointment and the chosen individual will have a major role in maintaining research continuity within the laboratory. The applicant must be a US citizen or permanent resident, have a PH.D and/or M.D. degree, and have previous experience in molecular biology, cell biology, tissue culture and/or biochemistry. The researcher will have the opportunity to attend national scientific meetings to present research and keep abreast of latest scientific developments. Salary ranges from \$58,000 to \$89,000 depending upon previous postdoctoral experience and education. The position is indefinitely renewable depending on mutual agreement. Please send curriculum vitae, bibliography, and names of three references to: Dr. Eric Wawrousek, Laboratory of Molecular and Developmental Biology, NEI, NIH, 6 Center Drive - MSC 2730, Building 6, Room 218, Bethesda, MD 20892-2730. Tel: (301) 496-8841; Fax: (301) 402-3603; e-mail: ericw@helix.nih.gov.

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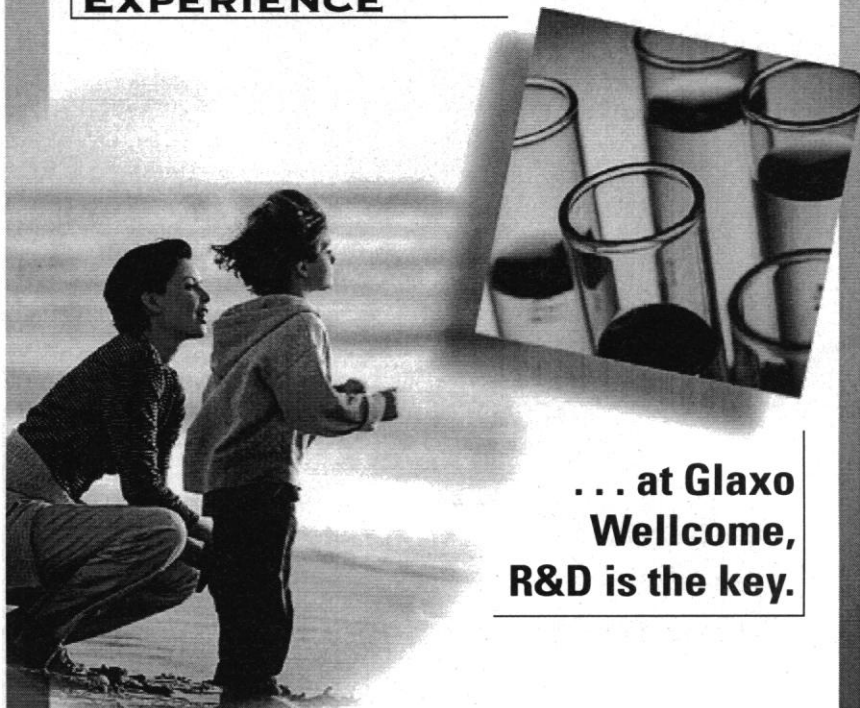
POSTDOCTORAL POSITION MAYO CLINIC ROCHESTER, MINNESOTA

A position is available for a postdoctoral fellow with an interest in the molecular mechanisms of cancer development in the Department of Pediatrics. Major emphasis will be on cell-cycle control and regulation of gene expression. Individuals with a strong background in biochemistry or molecular biology, and experience or interest in the use of knockout animals are encouraged to apply. Salary will be determined by the successful candidate's experience. There is also an attractive benefit package. Mayo Foundation is a non-profit physician lead clinical practice integrated with education and research in a unified multi-campus system. Applications including a curriculum vitae, summary of past accomplishments and the names of three references should be sent to:

Jan van Deursen, Ph.D.
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ASSOCIATE SCIENTIST/ RESEARCH SCIENTIST

Individual will be responsible for designing and performing in vitro and cell based experiments to provide biological validation of novel genes as targets for drug discovery. This will be accomplished by using biochemical and functional assays including protein expression and phosphorylation, cell cycle analysis, and cell proliferation, differentiation, and apoptosis.

Requires a BS/BA or MS in Molecular Biology (or a related field) with a minimum of 2 years relevant experience. Experience in general molecular and cellular biology techniques including: subcloning, library screening, microscopy/imaging, protein expression/purification, Western analysis, PCR, and cell culture is highly preferred. Familiarity with TaqMan or knowledge of signal transduction/cell cycle regulation is desirable. Candidate must have good oral/written communication skills and be able to work in a team environment. **Refer to Job ID #6886 on all resumes.**

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Send nominations and applications to: Dr. Harley W. Moon, 107 Beardshear Hall, Iowa State University, Ames, Iowa 50011. Applicants should send a letter describing interest, experience and qualifications; a curriculum vitae; and names, addresses, and telephone numbers of five references. Review of applications begins May 15, 1999, and continues until position is filled.

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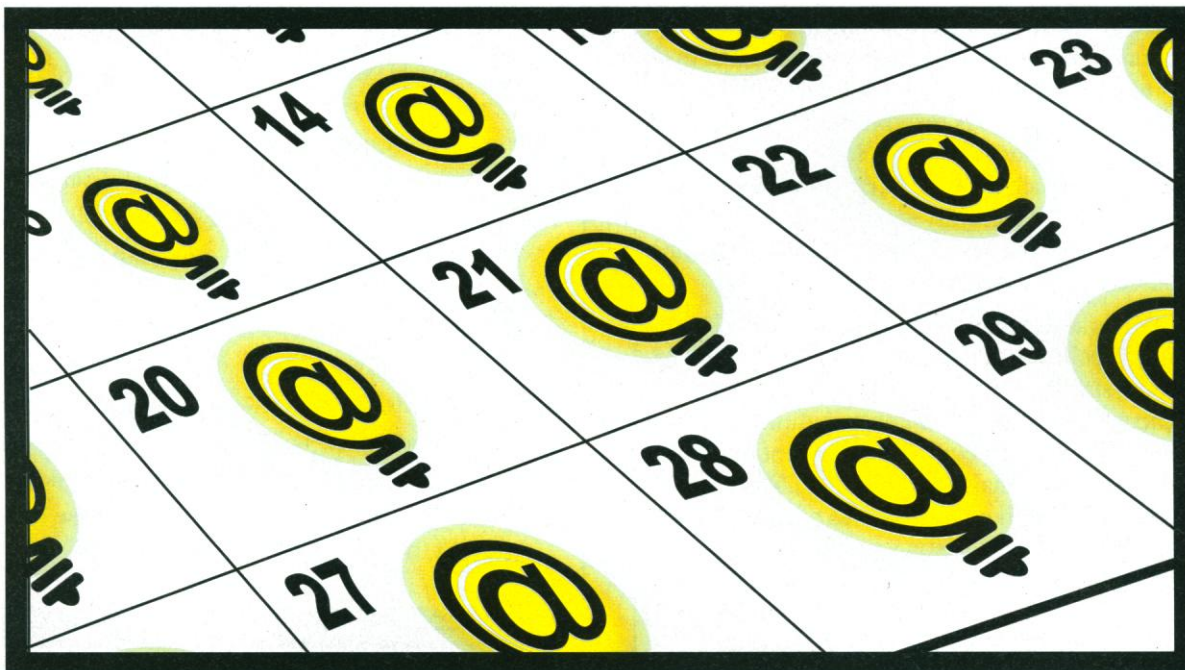
In this role, you will identify novel genes by whole genome DNA sequence analysis, differential gene expression data, and analysis of regulatory networks. Key responsibilities will include developing novel analysis and archival tools. You'll also work with biologists, chemists and statisticians to assist in the identification of novel therapeutic targets for drug discovery. To qualify, you must have your PhD and 3-5 years of directly related experience or a master's with a solid background in bioinformatics, computational biology or life science and experience with DNA sequence analysis, high density chip arrays and functional genomics. Dept Code 99010.

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Pacific Northwest National Laboratory Management Opportunity Molecular Biosciences

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This position is accountable for managing the Molecular Biosciences Technical Resource Unit including the administration, staff recruiting and development, business development and strategic planning and implementation with the objective of achieving a department of highest scientific quality while maintaining profitability. Will also direct and conduct marketing and sales of the Technical Resource's capabilities to existing and potential new customers and will be responsible for the technical quality and timely delivery of proposals and project/program objectives.

Development of enlightened and productive working relationships with internal and external clients is a primary function of this position. External relationships include Directors of Laboratories at institutions engaged in similar work, heads of major government programs, peers within the DOE family of Laboratories, Battelle Memorial Institute and other private sector counterparts, DOE Richland Office, and leaders within academia to develop collaborative research, establish professional interactions, and recruit staff.

This position requires that the incumbent possess a Ph.D. in the biological sciences, and 10–15 years of related experience, 5 of those years in a management capacity, with an outstanding record in health effects research or related fields. A proven record of successful contract research is required. Research accomplishments in molecular biology with applications of biotechnology in genomics, gene expression, structural biology, or the environment are preferred.

If interested, send letter of interest, resume and publication list to **Pacific Northwest National Laboratory, Attn: Mary Heaton, Ref. MBS-TRM, PO Box 999, Richland, Washington 99352** or electronically, mary.heaton@pnl.gov. PNNL is an Affirmative Action/Equal Opportunity Employer and supports diversity in the workplace. Applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

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Department of Defense Breast Cancer Research Program



The Fiscal Year 1999 Program Announcement has been released. Approximately \$110 million is available to support intramural and extramural breast cancer research.



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HBCU/MI Partnership Training Awards	Pre-doctoral Traineeship Awards
	Post-doctoral Traineeship Awards

The deadline for receipt of the above proposals is June 2, 1999.

The Program Announcement for the 1999 BCRP can be downloaded from the Congressionally Directed Medical Research Programs' website, <http://cdmmp.army.mil>; requested by fax at 301-682-5521; or requested by phone at 301-682-5517.

POSTDOCTORAL RESEARCH OPPORTUNITIES

Group A *Streptococcus* Pathogenesis and Tuberculosis Biology
Laboratory of Microbial Structure and Function
Rocky Mountain Laboratories

James M. Musser, M.D., Ph.D., Laboratory Chief

Postdoctoral positions are available beginning in July to study group A *Streptococcus* molecular pathogenesis. The following areas are being investigated: (1) molecular processes responsible for host tissue invasion and destruction, including the interaction of an extracellular streptococcal protease and human matrix metalloproteases; (2) molecular genetics of temporal variation in disease frequency and severity, especially infections caused by serotype M1 organisms. These investigations center on the role of a hypervariable extracellular protein that inhibits human complement function; (3) structure-function relationships and immunoprophylaxis studies pertaining to the streptococcal cysteine protease; (4) host genetics of susceptibility to infection.

Positions are also available to study several aspects of *Mycobacterium tuberculosis* biology, including (1) molecular genetics of drug resistance; (2) molecular basis of interstrain variation in host virulence, with special attention to naturally occurring clonal lines causing extrapulmonary infections; and (3) human genetics of susceptibility to infection.

The entry-level stipend range for these positions is \$27,500 - \$42,000.

The Rocky Mountain Laboratories is undergoing complete renovation. As part of this upgrade program, a new Biosafety Level 3 laboratory, animal care facility (including non-human primates), and research support facilities will be available. In addition, recruitment will soon begin for new principal investigators. RML is located in the scenic Bitterroot Valley in western Montana. There is ready access to a full array of outdoor recreational opportunities, including hiking, skiing, and fishing.

Send curriculum vitae, reprints, brief statement of career goals, and names, addresses, telephone numbers and email addresses of three (3) references to: **James M. Musser, M.D., Ph.D.** (jmusser@bcm.tmc.edu), Chief, Laboratory of Microbial Structure and Function, National Institute of Allergy and Infectious Diseases, National Institutes of Health, 903 South 4th Street, Hamilton, Montana 59840.



Plant Molecular Geneticist Permanent Position Hardwood Tree Improvement and Regeneration Center (USDA Forest Service and Purdue University)

A permanent research scientist position (GS-12/13/14) is available for development of DNA markers and protocols for their application in hardwood breeding and genetics. The position will be part of an interdisciplinary team of six university and federal scientists and tree improvement specialists whose research and development efforts will focus on improvement of central hardwood tree species and hardwood forest regeneration issues. The team will work in the Hardwood Tree Improvement and Regeneration Center (HTIRC) at Purdue University, West Lafayette, IN, which is a collaborative effort between North Central Research Station, Purdue Department of Forestry and Natural Resources, Indiana Department of Natural Resources Division of Forestry and Indiana Forest Industry.

Starting annual salary will be between \$47,891 and \$67,298.

The HTIRC will be located in 2500 sq. ft. of newly remodeled laboratory space within Purdue's new Agricultural Genomics Center (Whistler Ag Research Building) that includes a DNA analysis core facility.

Candidates should submit a resume, college transcripts, brief description of professional interests and goals, several recent publications, and the names, addresses and phone numbers of three professionals who can provide references, by **April 30, 1999** to: Jim Elioff, Personnel Management, USDA Forest Service, North Central Research Station, 1992 Folwell Avenue, St. Paul, MN 55108. Candidates must be US citizens and meet OPM Qualifications Handbook X-118 requirements for GS-12/13/14 positions. For information about the Office of Personnel Management qualification standards, or other personnel matters, please call Jim Elioff at (651) 649-5022 (email: jaelioff@nc.fs.fed.us). The official announcement will be posted at <http://fsweb.nc.fs.fed.us/pm/employment/Permanent>. The USDA Forest Service is an equal opportunity employer.

For information about the HTIRC and goals of this position, contact: **Dr. Charles H. Michler, Center Director**, at (715) 362-1113 or (765) 496-6016 (email: cmichler@nc_rh.fs.fed.us; cmichler@fnr.purdue.edu).

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Interested candidates should send a curriculum vitae to: **Biophysics Search Committee, c/o Dean's Office, Medical College of Wisconsin, 8701 Watertown Plank Rd., Milwaukee, WI 53226. E-mail: mrussell@mcw.edu.** For information about the Institute, please refer to <http://www.biophysics.mcw.edu>.

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DIRECTOR CENTER FOR ENVIRONMENTAL RESOURCE MANAGEMENT The University of Texas at El Paso

The University of Texas at El Paso (UTEP) invites applications and nominations for the position of Director of its Center for Environmental Resource Management (CERM). CERM provides university-wide leadership and coordination for environmentally related academic, policy, research, and service activities. Its mission is to address the environmental problems that threaten the health, safety, well-being, and economic development of the southwest border region of the United States and northern Mexico. CERM currently administers approximately 10 million dollars in federal, state, and private project funds. CERM focuses university resources to address hazardous waste, air quality, water availability and quality, ecosystem, and policy issues through an active program of research, outreach, policy, and academic programs. An important part of CERM's mission is to provide support for a culturally diverse student population to develop the skills necessary to become Environmental Engineers and Scientists. CERM administers the university's multidisciplinary Ph.D. in environmental science and engineering and works with faculty throughout the university in the implementation of this program. The successful candidate should show evidence of outstanding leadership capability in administering complex research and academic programs; have progressively responsible experience with public sector agencies or institutions; have substantial knowledge of environmental issues and policies affecting the United States-Mexico border region; have demonstrated the ability to secure and direct major externally funded programs; and be committed to UTEP's mission of providing a quality education. Situated in the largest metropolitan region on the United States-Mexico border, UTEP provides Doctoral, Master's, and undergraduate programs to over 14,000 students. Please send a letter summarizing your interest and capabilities, a detailed résumé, and list of three references to: **Dr. Paul C. Maxwell, Associate Vice President for Research and Sponsored Projects, The University of Texas at El Paso, Administration Building Room 209, El Paso, TX 79968-0587.** Applications will be accepted until the position is filled. *UTEP does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability in employment or the provision of services.*

IMMUNOLOGY FACULTY POSITIONS

Three tenure-track faculty positions at the rank of **ASSISTANT/ASSOCIATE PROFESSOR** have been opened to allow expansion of a highly collaborative research group focused on the cellular and molecular biology of chronic inflammatory responses and interactive with other research groups focused on infection, transplantation, and cardiovascular and autoimmune diseases. Generous start-up funds, 12-month state-line salary, and a supportive environment are provided. Successful candidates will have, or be clearly able to establish, a productive extramurally funded research program and will bring strong teaching capability to our graduate and medical (or dental) education programs. The rank of Associate Professor will be considered for individuals who have an established research program and significant extramural research funds. Preference will be given to candidates capable of establishing collaborative research projects in one or more of the focus areas. Applicants must have two or more years of postdoctoral research experience with clear evidence of productivity and fundability. The search will remain open until the three positions are filled. To apply, submit a curriculum vitae containing an abstract of research interest and arrange for four letters of reference to be sent to: **Robert D. Stout, Ph.D., Professor and Chairman, Department of Microbiology and Immunology, School of Medicine, University of Louisville, Health Sciences Center, Louisville, KY 40292.** *University of Louisville is an Equal Opportunity Employer.*

POSITIONS OPEN



DIRECTOR OF CONSERVATION SCIENCE INTERNATIONAL PROGRAMS

The Nature Conservancy seeks a Ph.D. scientist in conservation biology, natural resource management, ecosystem ecology, or a related field to manage a team of Conservation Ecologists, Program Managers, and Biodiversity Information Specialists to ensure excellence in site and multisite conservation. Director responsible for providing science services to operating divisions, building networks of resources, and identifying sites to maximize biodiversity conservation impact. Spanish required. Based in Arlington, Virginia. Projects in Latin America and Asia-Pacific. For detailed job description see [website: http://www.tnc.org](http://www.tnc.org) or contact e-mail: lpreece-gon@tnc.org. Submit application by April 30, 1999, to: **Brad Northrup, The Nature Conservancy, 4245 North Fairfax Drive, Arlington, VA 22203.**

DIRECTOR, RESEARCH PRODUCTS CENTER UNIVERSITY OF WYOMING

The University of Wyoming is seeking an energetic and experienced individual to serve as Director of the newly created Research Products Center (RPC). The RPC works in partnership with existing business support organizations to provide technology transfer and in assisting the growth of technology-related business in Wyoming.

Qualifications: A Master's degree, a Ph.D. is preferred, and senior-level experience in licensing and intellectual property activity in an academic environment or a relevant industrial area. Demonstrable experience working with patenting, copywriting, and trademarking processes is required, as well as experience in establishing technology marketing strategies. Should possess demonstrated skill in negotiating spin-out arrangements and providing management assistance to start-up companies.

Salary is commensurate with experience and qualifications. Start date is June 1, 1999, or as negotiated.

Applications are being accepted immediately and should be received by April 30, 1999, to ensure full consideration. Applications should include a curriculum vitae and names, addresses, and telephone numbers of five references. Application materials should be sent to: **Dr. William A. Gern, Vice President, Research Office, Box 3355, Laramie, WY 82071.** **Website:** http://www.uwyo.edu/om/research/res_office/rpc.htm. *UW is an Affirmative Action/Equal Employment Opportunity Employer.*

MOLECULAR BIOLOGIST FROSTBURG STATE UNIVERSITY

Frostburg State University (FSU) seeks a Molecular Biologist at the **ASSOCIATE PROFESSOR** or **PROFESSOR** level. The position is tenure-track in biology and salary commensurate with experience. Responsibilities: Establish a research program involving undergraduates and graduate students. Contribute to the general biology program. Teach courses in cell and molecular biology, biochemistry, and related areas, and coordinate biotechnology initiative. Minimum qualifications: Ph.D. in biology or related field and demonstrated excellence in teaching and research. Direct position questions to: **Dr. William Seddon, Telephone: 301-687-4707; e-mail: w.seddon@fre.fsu.umd.edu.** To apply send letter of interest, résumé, and the names, addresses, and telephone numbers of three professional references by May 2, 1999, to: **Frostburg State University, Office of Human Resources, Attn: Molecular Biologist (Position #99-1063), Frostburg, MD 21532.**

FSU 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.

POSITIONS OPEN

ASSOCIATE CHIEF OF STAFF/RESEARCH. Department of Veterans Affairs Medical Center, Philadelphia, and University of Pennsylvania. Applications are invited for the position of Associate Chief of Staff (ACOS) for Research at the Philadelphia Veterans Affairs Medical Center (PVAMC). This is a tertiary care medical center, which is a major teaching site for the University of Pennsylvania School of Medicine. The clinical and research programs of the PVAMC are all affiliated with the University of Pennsylvania and exemplify a commitment to academic, clinical, and research excellence. *Qualified candidates must possess U.S. citizenship and an M.D. degree, in addition to demonstrated excellence in research, experience in administration, leadership skill, and a commitment to sustaining and expanding an outstanding research program at the Philadelphia VAMC.* The individual should qualify for appointment as a tenured member of the faculty of the University of Pennsylvania at either the Associate Professor or Professor level. Please submit recommendations or applications, along with curriculum vitae to: **Bonnie Rossi, Director's Office, Philadelphia Veterans Affairs Medical Center, University and Woodland Avenues, Philadelphia, PA 19104.** **FAX: 215-823-4608.** *The University of Pennsylvania and the Department of Veterans Affairs are Affirmative Action/Equal Opportunity Employers, and applications from women and minorities are welcomed.*

BOARD OF TRUSTEES CHAIR CHEMISTRY AND BIOLOGY NORTHWESTERN UNIVERSITY

Northwestern University invites applications and nominations for a Board of Trustees Professorship in Chemistry and Life Sciences. Board of Trustees Chairs are the most distinguished endowed positions at Northwestern University. Candidates must have an outstanding record in chemistry and biology and a vigorous research program that spans these areas. The appointment will be made jointly in the Department of Chemistry and either the Department of Biochemistry, Molecular Biology, and Cell Biology or the Department of Neurobiology and Physiology.

Inquiries and applications (including curriculum vitae) should be sent to: **Board of Trustees Chair in Chemistry and Biology, c/o Dianne de Haseth, Department Assistant, Department of Chemistry, Northwestern University, 2145 Sheridan Road, Evanston, IL 60208-3113.** *Women and members of minority groups are especially encouraged to apply. Affirmative Action/Equal Opportunity Employer.*

MOLECULAR GENETICS/GENE THERAPY FACULTY POSITION

The school-wide program in human gene therapy and molecular genetics in the Department of Pediatrics at Stanford University School of Medicine is seeking an Academic Geneticist. The position is at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level in the University Tenure Professoriate. Requirements include an M.D. or M.D.-Ph.D. and training in pediatrics.

We are looking for a candidate with demonstrated interest and research skills and potentials in the development of gene therapy. Applications or nominations should be sent to: **Mark A. Kay, M.D., Ph.D., Director, Human Gene Therapy Program, Department of Pediatrics G305, Stanford University School of Medicine, Stanford, CA 94305-5208.**

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

ASSISTANT TO FULL PROFESSOR. Behavioral Medicine Division, Wayne State University School of Medicine, Department of Psychiatry and Behavioral Neurosciences. Ph.D. or M.D. with strong research record sought to conduct independent and collaborative research in cardiovascular physiology, genetics, hormones and vascular function, menopause, or related areas. Demonstrated funding ability required. Send curriculum vitae, reprints, and statement of research interests to: **Robert R. Freedman, Ph.D., Professor and Director, 275 East Hancock, Detroit, MI 48201.** *Wayne State University is an Equal Opportunity/Affirmative Action Employer.*

THE POWER OF SCIOS

Is the Empowering Strength of our Knowledge

SCIOS is a biopharmaceutical company engaged in the discovery, development, manufacture, and commercialization of novel human therapeutics. For the past decade, we have concentrated our research and development efforts on cardiorenal disorders and Alzheimer's disease and, as a result, we've developed an advanced knowledge base in these fields. Today, as we refocus our business strategies, we remain fiercely committed to our research in novel therapeutic approaches. We are currently seeking individuals whose expertise will further the empowerment of the dedicated SCIOS team.

MEDICINAL CHEMIST

Working closely with a pharmaceutical partner, you will join a multi-disciplinary group of scientists dedicated to the development of novel therapeutics for Alzheimer's disease. We will rely on your expertise in chemistry as you collaborate with biologists who perform assays on specific molecular targets and conduct basic research in Alzheimer's disease. Your responsibilities will include the generation of leads and their refinement through structure activity relations.

This position requires a PhD in Synthetic Organic Chemistry, with relevant postdoctoral experience. Candidates should demonstrate proficiency in the synthesis of novel small molecules, creativity in the design of new synthetic routes, and familiarity with modern analytical tools and techniques. An understanding of issues related to combinatorial chemistry and molecular modeling is a plus. Job Code 99-001

RESEARCH SCIENTISTS

Primarily focusing on the central nervous system, you will be responsible for preparing and maintaining critical cell and tissue culture systems to be used for independent and collaborative investigations. You will also perform biochemical and cytochemical *in vitro* and *in vivo* experiments to further our understanding of Alzheimer's disease.

Candidates must have a PhD or equivalent with 0-2 years relevant laboratory research experience. You must have proficiency in mammalian cell culture and tissue culture preparation methods. Demonstrated ability to perform quantitative culture-based assays, such as ELISA, is required. Experience with basic *in vivo* experimentation is desired. The ability to work in a team environment while taking initiative to manage individual assignments is essential. Job Code 99-002

SCIOS offers competitive salaries, a superior benefits package, and a very dynamic team environment. Please respond, indicating Job Code, to: SCIOS, Human Resources, 2450 Bayshore Parkway, Mountain View, CA 94043; FAX to (650) 962-5966; or email to jobs@sciosinc.com. SCIOS is proud to be an Equal Opportunity Employer.

To learn more about us, please see our website:

www.sciosinc.com

scios

POSTDOCTORAL RESEARCH in Cell and Molecular Biology and Immunology at The Wistar Institute

The Wistar Institute, an independent research organization located on the University of Pennsylvania campus, currently seeks postdoctoral applicants in the following areas:

DNA Vaccines - A position focusing on the development of optimized DNA vaccines for cancer and infectious diseases in a viral mouse model. Candidates must possess a M.D. or Ph.D. in Immunology or Virology, or from a related discipline such as Pharmacology or Genetics. Projects include: DNA Vaccines to HPV-16 Associated Cancer, and DNA Vaccine Design and Development. Reply to **Dr. Hildegund Ertl**.

Autoimmunity - Experience in cell culture and molecular biology. Also an interest in carrying out *in vivo* and *in vitro* studies of CNS autoimmune responses. Please reply to **Dr. Ellen Heber-Katz**.

Immunology - Research regarding human MHC non-restricted effector cells. Expertise in Immunology/Molecular Biology required. Candidate must have tissue culture skills to handle human lymphocytes; in addition, knowledge of basic immunological techniques is required. Successful candidate will work on either or both of these projects: 1.) Genetic engineering of human cytotoxic T-cells to increase their tumoricidal activity and/or homing to tumor sites. 2.) Identification of tumor target receptors and effector molecules. Reply to **Daniela Santoli**

Signal Transduction - To use molecular genetic, biochemical and cell biologic approaches to study mechanisms of antigen receptor-mediated signal transduction and gene expression using MicroArray analysis in lymphocytes. Individuals with experience in signal transduction, molecular genetics, and/or immunology are especially encouraged to apply to **Dr. Ellen Puré**.

Transcriptional Regulation - Function of histone acetylation by the adaptor GCN5 in transcriptional activation. Studies include genetic and biochemical approaches both in *S. cerevisiae* and in humans, focusing on the mechanism and biological role of protein complexes containing GCN5. Reply to **Dr. Shelley L. Berger**.

Eukaryotic Transcriptional Activity - (1) Mechanisms of eukaryotic transcriptional activation using viral and yeast model systems. (2) Role of EBNA1 in determining the cell cycle dependent DNA replication of latent Epstein-Barr virus. Individuals with backgrounds in biochemistry, molecular biology or yeast genetics are encouraged to apply. Reply to **Dr. Paul Lieberman**.

Transcriptional Regulation and DNA Repair - Biochemical and molecular characterization of the RNA polymerase II complexes in human cells using a fully defined *in vitro* transcription system. We are also characterizing the connection of the transcription machinery to that of DNA repair, with specific emphasis on the BRCA1 and BRCA2 proteins. *Nature* 374:283 (1995), and *Nature* 381:86 (1996). Experience in molecular biological techniques and protein purification preferred. Reply to **Dr. Ramin Shiekhattar**.

Nuclear Functions - Investigate at a cell and molecular level the concept of homeostatic control by protein segregation in the nucleus. Also immediate early interaction of viruses and host nucleus with the aim to interrupt transcription at the virus deposition site in the nucleus (see *BioEssays* 20:660-667 1998). Good background in molecular and cell biological techniques essential. Reply to **Dr. Gerd Maul**.

Successful candidates will have a Ph.D. and/or M.D./Ph.D. in the biological sciences. Please send a C.V. and three letters of reference to the **Human Resources Dept., Attn: (appropriate faculty member), THE WISTAR INSTITUTE, 3601 Spruce Street, Philadelphia, PA 19104.** EOE/AA/M/F/D/V.



POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSORS OF PHARMACOLOGY AND TOXICOLOGY

The Department of Pharmacology and Toxicology at the University of North Dakota School of Medicine and Health Sciences invites nominations and applications for two tenure-track twelve-month appointments at the Assistant or Associate Professor level. The appointments are anticipated to begin September 1, 1999. Applicants should have a Ph.D. in pharmacology and/or toxicology or related discipline and/or an M.D. with significant research experience. We seek excellence in research of any subdiscipline and excellence in teaching. Currently the departmental faculty is well funded from the NIH and NSF. The applicant will be expected to initiate and maintain a vigorous and independently funded research program. The applicant will also have significant participation in team-taught pharmacology and toxicology teaching at the undergraduate, graduate, and professional student level. Applicants should send a letter of application, complete curriculum vitae, statement of research interests and development plan, and names of three references to: **Search Committee, Department of Pharmacology and Toxicology, University of North Dakota School of Medicine and Health Sciences, 501 North Columbia Road, Grand Forks, ND 58202-9037.** Applications will continue to be accepted until the position is filled. Information on the department is available at **website:** <http://www.med.und.nodak.edu/depts/pharmtox/home.htm>. UND is an Equal Opportunity/Affirmative Action Employer.

TEMPORARY FACULTY POSITION VIROLOGY

The Department of Microbiology and Immunology invites applications for a one-year faculty position beginning fall 1999 with possible extension for an additional year. Teaching responsibilities will include lectures in medical virology to medical students and a graduate course in biology of animal viruses. Research opportunities available in other areas of microbiology. Applicants must have a Ph.D. Submit application noting teaching experience/preparation in virology, curriculum vitae, and names of three references to: **Dr. W. LaJean Chaffin, Department of Microbiology and Immunology, Texas Tech University Health Sciences Center, Lubbock, TX 79430.** Review of applications will begin May 1, 1999. TTUHSC is an Equal Employment Opportunity/Affirmative Action/ADA Employer.

BIOLOGY POSITION

The Department of Biology, University of Tampa invites applications for a two-year term appointment beginning in late August 1999 to teach introductory biology for majors, biological science for non-majors, and possibly an upper-level course in the department. The position will be re-evaluated prior to the end of the two-year term and may be renewed or converted to tenure-track pending administrative approval. Review of applications will begin on June 1, 1999. Additional information about the University, the Department of Biology, and the application procedure can be found at: **website:** <http://www.utampa.edu>. Equal Opportunity Employer/Affirmative Action.

RESEARCH ASSISTANT PROFESSOR and POSTDOCTORAL FELLOW positions in neurobiology at the Detroit VA in conjunction with Wayne State University and Henry Ford Hospital, to start within nine months. Research Assistant Professor position, requiring United States permanent residency, will facilitate transition to independently funded Assistant Professor. Individuals in either category will have experience in molecular neurobiology and will work on nitric oxide, catecholamine, and oncogene involvement in apoptotic neuronal death. Send curriculum vitae, statement of research interests, and names of three references to: **Robert A. Levine, Ph.D., Gossett Neurology Labs, Henry Ford Hospital, 1 Ford Place, 4D, Detroit, MI 48202.**

POSITIONS OPEN

FACULTY POSITION ARTHROPOD VECTOR BIOLOGY

The University of Texas Medical Branch is seeking applications for a tenure-track **ASSISTANT PROFESSOR** faculty position in the area of arthropod vector biology. Applicants must demonstrate the potential to develop and maintain an externally funded research program and to participate in teaching graduate and medical students. Preference will be given to individuals who will strengthen and expand a multidisciplinary program focusing on tropical and emerging vector-borne diseases, including epidemiology, genetics, and pathogenesis of arboviral diseases, population genetics of leishmaniasis and malaria vectors, mechanisms of protective immunity and pathogenesis of insect rickettsial and ehrlichial diseases, and molecular genetics of pathogen-vector interactions. We are seeking individuals whose research focuses on vector/parasite/host interactions at the molecular level. Areas of interest include, but are not limited to, biology and biochemistry of arthropod vector salivary components, the impact of salivary factors on pathogen transmission, pathogen development, replication and pathogenesis within the vector, and elucidation of mechanisms rendering vectors refractory or incapable of transmitting pathogens. Interested applicants should send a curriculum vitae, a statement of personal and academic goals, and names of three references by May 2, 1999, to:

**David H. Walker, M.D., Chairman
Department of Pathology
University of Texas Medical Branch
301 University Boulevard
Galveston, TX 77555-0609**

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

UNIVERSITY OF FLORIDA

Seeks an **ASSISTANT PROFESSOR** in the Department of Medicine, Division of Hematology/Oncology for a full-time, tenure-track position. M.D. or M.D.-Ph.D., Board-eligible/Board-certified in both hematology and oncology. Duties would include but not be limited to attending responsibilities for both inpatient and outpatient hematology/oncology divided between the VAMS and Shands Hospitals. Applicant should have a strong commitment to an academic career with responsibilities for teaching, patient care, and clinical research endeavors. Salary and benefits commensurate with experience. Recruiting deadline: April 22, 1999. Anticipated starting date: July 1, 1999. Interested applicants should submit curriculum vitae and a cover letter to: **University of Florida, James W. Lynch, Jr., M.D., FACP, Associate Professor, Box 100277, JHMH, Gainesville, FL 32610.** Affirmative Action/Equal Opportunity Employer.

Faculty positions. Two positions open in Department of Neuroscience at the **ASSISTANT or ASSOCIATE PROFESSOR** level. Approximately 25 percent teaching histology and neuroscience/neuropharmacology/neurophysiology to first-year medical students and 75 percent research. Applicant must hold an earned Ph.D., D.O., or M.D. degree, must be capable of independent research, and have prior teaching experience at the graduate level. Applicants should send curriculum vitae, a statement of research interests, and the names of three references to: **Dr. Brian H. Hallas, Chairman of Neuroscience, New York College of Osteopathic Medicine, Old Westbury, NY 11568.** The New York College of Osteopathic Medicine is an Affirmative Action/Equal Opportunity Employer.

BIOLOGY FACULTY POSITION

LeTourneau University, a residential, evangelical Christian university, offers position for tenure-track **ASSISTANT PROFESSOR** in biology. Ph.D. to primarily teach comparative morphology, animal physiology, and supervise undergraduate research. Start date August 15, 1999. E-mail or FAX letter and curriculum vitae to: **Dr. Glenn Sumrall, Provost, e-mail: sumrallg@letu.edu; FAX: 903-233-3227.** Applicants are considered without regard to race, age, sex, disability, or national origin.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR TREE PATHOLOGY

Applications are invited for a faculty position focusing on tree-microbe interactions. The successful candidate will be allowed broad latitude in determining research directions, although he/she will be expected to develop and sustain a nationally recognized program. Research areas of particular interest to the department include the cellular and molecular biology of tree pathology; the genetics of arboreal microorganisms; disease resistance mechanisms; biocontrol; hypovirulence; and emerging diseases. The department is, nonetheless, open to any research avenue in tree-microbe interactions for which a compelling case can be made of its relevance to the departmental enterprise. While preference will be given to individuals with forest pathology backgrounds, candidates with experience in pathology of urban trees and/or woody plants will also be considered. Although the position primarily carries research responsibilities, the successful candidate will be expected to develop and teach an undergraduate course in forest pathology. A Ph.D. in plant pathology or a related discipline is required, with postdoctoral experience desirable. Appointment at the Associate Professor level will require demonstration of appropriate professional accomplishments. Applicants should send curriculum vitae, transcripts, sample publications, outline of proposed research program, any other evidence of professional experience considered relevant, and the names, addresses (including e-mail, if available), and telephone numbers of at least three professional references (no letters should be requested at this time) to: **Dr. David A. Smith, Chair, Department of Plant Pathology, S-305 Agricultural Science Building-North, University of Kentucky, Lexington, KY 40546-0091. Telephone: 606-257-3901; FAX: 606-323-1961; e-mail: dasmith@ca.uky.edu.** Applications will be accepted until June 30, 1999, or until a suitably qualified candidate is found. Electronically transmitted applications will not be reviewed. The University of Kentucky is an Equal Opportunity Employer.

UNIVERSITY OF MICHIGAN ORAL MEDICINE/ORAL ONCOLOGY

The Department of Oral Medicine/Pathology/Oncology, University of Michigan School of Dentistry invites applications for a full-time, tenure-track position at the **ASSISTANT/ASSOCIATE PROFESSOR** level. Candidates must hold a D.D.S./D.M.D. degree, advanced degree/training in either oral medicine or oral oncology, and the ability to develop an independent, externally funded research program. We are particularly interested in candidates with interests in oral carcinogenesis, programmed cell death, signal transduction, gene therapy, and oral cancer prevention/treatment. Submit applications, with curriculum vitae, research interests, and five references to: **Dr. Jonathan A. Ship, Chair, Oral Medicine/Oral Oncology Search Committee, 1011 North University #2012, Ann Arbor, MI 48109-1078 USA.**

The University of Michigan is a nondiscriminatory, Affirmative Action Employer.

The University of Florida seeks an **ASSISTANT SCIENTIST** for the Department of Medicine, Division of Infectious Disease. 1.00 FTE, non-tenure-track position. Ph.D. degree with a minimum of one year of postdoctoral experience required. Responsibilities include tissue culture, microinjection, immunofluorescence, generation of recombinant proteins, Western blot analysis, and ligand-binding assays required. Salary and benefits commensurate with experience. Please reply with curriculum vitae to: **Bradley Bender, M.D., Professor, Department of Medicine, Division of Infectious Disease, Box 100277, JHMH, Gainesville, FL 32610.** Recruiting deadline: April 22, 1999. Anticipated start date: May 14, 1999. An Equal Opportunity/Affirmative Action Employer.

Pharmacologist/Chemist (Pharmaceuticals)

The National Institute of Child Health and Human Development (NICHD) in the National Institutes of Health (NIH) is seeking a Pharmacologist or Chemist specializing in pharmaceutical development for the Contraception and Reproductive Health Branch. The incumbent will be responsible for studies focused on development of potential fertility-related compounds for clinical trials, and will design and oversee studies focused on, but not limited to, bioassays of compounds and/or protocols for formulation of new compounds. The salary range is \$68,570 to \$89,142, and a recruitment or relocation bonus of up to 25% may be available.

Applicants for this position must have a bachelors degree and a minimum of at least six years of specialized experience in pharmaceutical research and development. A Ph.D. is desirable.

For additional information contact Ms. Janice Balin at (301)435-3416 or send e-mail to: janice_balin@nih.gov. The complete vacancy announcement can be found on the NICHD web-site at <http://www.nih.gov/nichd/jobs/>. All applications must be postmarked by **May 3, 1999**.

NIH is an Equal Opportunity Employer

COLLABORATIVE RESEARCH POSITION

A position is available immediately for a collaborative research scientist in the Immunopathology Section, Laboratory of Immunology in the National Eye Institute, National Institutes of Health, Bethesda, MD. This position involves collaborative experimentation on the various projects within the laboratory including several ocular infectious and non-infectious inflammatory models and ocular tissues with various human disorders. The chosen individual will have a major role in maintaining research continuity within the laboratory, will have the possibility to carry on an independent research project, attend scientific meetings and training courses to keep abreast of latest scientific developments. The applicant must be a US citizen or permanent resident, have a Ph.D. or M.D. degree, and previous experience in molecular biology, cell immunology, ocular pathology, immunohistochemistry, microsurgery, and knowledge of computers and sophisticated scientific equipment usage. This is a renewable position with an initial 5 year appointment. Salary ranges from \$58,000 to \$89,000 depending upon previous experience and education. Please send curriculum vitae, bibliography, and names of three references to the following address by **July 15, 1999**:

Chi-Chao Chan, M.D., Laboratory of Immunology, NEI, NIH, Bldg. 10, Rm. 10N103, 10 Center Drive - MSC 1857, Bethesda, MD 20892-1857. Fax: (301) 402-8664.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

ANNOUNCEMENT



AWARDS FOR INTERNATIONAL RESEARCH AND TRAINING FROM THE FOGARTY INTERNATIONAL CENTER AT NIH

The following new and ongoing programs are available:

INTERNATIONAL RESEARCH SCIENTIST DEVELOPMENT AWARDS

This individual award supports basic, behavioral and clinical postdoctoral scientists for mentored research in infectious, chronic/degenerative or mental health disorders at centers of excellence in developing countries.

Deadline: May 21

INTERNATIONAL MATERNAL AND CHILD HEALTH RESEARCH AND TRAINING PROGRAM

This institutional award supports collaborative research and training programs in maternal and child health threats that impact developing country populations.

Deadline: May 18

INTERNATIONAL TRAINING IN MEDICAL INFORMATICS

This institutional award supports training for Sub-Saharan African and Latin American scientists, in the context of an international research program, to apply state-of-the-art information and communication technologies to research and health surveillance activities in their home countries.

Deadline: May 20

MINORITY INTERNATIONAL RESEARCH TRAINING

This institutional award supports scientific training programs at U.S. universities to offer international research opportunities for minority undergraduate and graduate/medical school students.

Deadline: May 7

FOGARTY INTERNATIONAL RESEARCH COLLABORATION AWARD

This individual award provides funding to foster international research partnerships between NIH-supported U.S. scientists and their collaborators in developing countries.

FIRCA Deadlines: November 25, March 25, and July 25

AIDS-FIRCA Deadlines: January 2, May 1, and September 1

SENIOR INTERNATIONAL FELLOWSHIP

This individual award supports opportunities for mid- and senior-career level U.S. scientists to conduct biomedical and behavioral sciences research at foreign institutions.

Deadlines: April 5, August 5, and December 5

Information may be obtained from the Fogarty International Center web site:
<http://www.nih.gov/fic/opportunities> or by contacting:

**Fogarty International Center
Division of International Training and Research
Building 31 Room B2C39
National Institutes of Health
Bethesda, MD 20892-2220
Tel: 301-496-1653 Fax: 301-402-0779**

NIH is an Equal Opportunity Employer

POSITIONS OPEN

FACULTY POSITIONS MEDICAL GENETICS

DIVISION OF PEDIATRIC GENETICS University of Michigan Department of Pediatrics

A newly organized Division of Pediatric Genetics is soliciting Physician Scientists to apply for a faculty position with research and clinical medical genetic responsibilities. Applicants should have either a M.D. or M.D.-Ph.D. degrees, and demonstrated clinical and research expertise in the molecular genetics of human disease. We are recruiting tenure-track faculty in broad areas of human genetic research including (but not limited to) developmental genetics, neurogenetics, functional genomics, and computational genomics. Applicants should be certified or eligible for certification in clinical genetics by the American Board of Medical Genetics. Positions will be filled by Investigators at the ASSISTANT, ASSOCIATE, or FULL PROFESSOR of pediatrics level depending on qualifications.

Interested applicants should send curriculum vitae, a short statement of research plans, and the names of three references to: Jerome Gorski, M.D., Division of Pediatric Genetics Search Committee, Department of Pediatrics, 3570 MSRBII, Box 0688, The University of Michigan, Ann Arbor, MI 48109-0688. Telephone: 734-763-5276; e-mail: jlgorski@umich.edu. The University of Michigan is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

Faculty position in microbiology. The Department of Microbiology at North Carolina State University (NC State) welcomes applications for a 12-month, tenure-track faculty position at the ASSISTANT PROFESSOR level. We are interested in an individual capable of teaching the general microbiology course and graduate courses in his/her area of expertise. The successful candidate is expected to develop an independent research program in molecular microbial physiology (functional genomics) competitive for extramural support and serve as an advisor to undergraduate and graduate students. The Department of Microbiology has excellent facilities and enjoys interactions with other NC State departments, regional institutions, and biotechnology companies in the Research Triangle Park. Applicants must have a Ph.D. with at least two years of relevant experience. To apply, send curriculum vitae, reprints, statements of research and teaching interests, and names, addresses, telephone, FAX numbers, and e-mail addresses of three persons who may be contacted as references to: Dr. Gerry Luginbuhl, Chair, Faculty Search Committee, Department of Microbiology, Box 7615, North Carolina State University, Raleigh, NC 27695-7615. Closing date for receipt of all materials is June 15, 1999, or until a suitable candidate is found. North Carolina State University is an Equal Opportunity Employer and operates under Affirmative Action Policy. The University strongly encourages all qualified applicants. Individuals with disability desiring accommodations in the application process should contact the above individual.

ASSISTANT PROFESSOR of entomology. Penn State. Tenure-track. Research (80 percent) in insect pathology using molecular, biochemical, and/or physiological techniques to investigate mechanisms of insect pathogen interactions. Develop nationally recognized interdisciplinary research program with faculty in other disciplines. Collaboration on projects involving IPM. Extramural grant support required. Teaching (20 percent): participate in team-taught undergraduate entomology course and codelvelopment of a new graduate course in invertebrate pathogens. Mentoring of graduate students required. Ph.D. in biological sciences with expertise in invertebrate pathology required. Submit letter of application, curriculum vitae, transcripts, statement of research interests and teaching interests, and names and addresses of five professional references to: Dr. James L. Frazier, Head, Box S-4637, Department of Entomology, 501 ASI Building, Penn State, University Park, PA 16802. Closing date: April 30, 1999. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

TENURE-TRACK POSITION IN HUMAN MOLECULAR GENETICS University of California, San Francisco Department of Orthopaedic Surgery

A tenure-track position is available in the Department of Orthopaedic Surgery and Program in Biomedical Science for an ASSISTANT/ASSOCIATE PROFESSOR. Outstanding candidates whose research examines the genetic, molecular, or cellular basis of human diseases, affecting the musculoskeletal system will be given preference. The successful candidate will be expected to establish a vigorous, independent research program and contribute to teaching Residents and medical students. Qualifications include a M.D., Ph.D., or both. Candidates with demonstrated experience in teaching and success in acquiring independent funding are especially encouraged to apply.

Submit a letter of application, a summary of teaching research goals, a curriculum vitae with names of three references and send to: Dr. David S. Bradford, Department of Orthopaedics, University of California, San Francisco, 500 Parnassus Avenue, San Francisco, CA 94143-0728; Dr. Charles Epstein, Department of Pediatrics and Co-Director, Program in Human Genetics, University of California, San Francisco, Box 0748, San Francisco, CA 94143-0748; and Dr. Ira Herskowitz, Department of Biochemistry, University of California, San Francisco, Box 0448, HSE 201J, San Francisco, CA 94143.

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

RESEARCH ASSISTANT PROFESSOR

The Division of Pediatric Surgery at Duke University Medical Center invites applications for a position as DIRECTOR of the Pediatric Surgical Research Laboratory. Interested candidates should hold the Ph.D. degree and have had at least several years of postdoctoral experience. The current focus of the laboratory is the study of the genetics and molecular biology of neoplasms affecting children. Interested applicants should have expertise in all of the common molecular biological techniques. Particularly welcome are applicants with an established interest in the regulation of apoptosis and the relationship between neoplasia and abnormalities in programmed cell death signaling pathways. Responsibilities include the supervision of Research Fellows within the laboratory as well as the ultimate development of an extramurally funded research program. Contact: Dr. Michael A. Skinner, Division of Pediatric Surgery, Box 3815 Duke University Medical Center, Durham, NC 27710. FAX: 919-681-8353. Duke University is an Equal Opportunity Employer.

ASSISTANT PROFESSOR DREXEL UNIVERSITY

The Department of Bioscience and Biotechnology is seeking to fill a tenure-track position at the Assistant Professor level, to begin September 1999, pending availability of funding. We seek a colleague whose fundable research in the area of nutritional biochemistry complements our interests in membrane transport, developmental biology, or nutrition metabolism. The successful candidate will teach advanced and graduate courses in their area of specialty, and will have a genuine interest in participating in an innovative, nationally recognized undergraduate educational program. A Ph.D. and postdoctoral experience are required, and teaching experience is highly desirable. Interested individuals should submit a curriculum vitae, statements of teaching and research interests, and the names of three people who can be contacted for references to: Biochemistry Faculty Search Committee, Department of Bioscience and Biotechnology, Drexel University, Philadelphia, PA 19104. Telephone: 215-895-2624; FAX: 215-895-1273.

POSITIONS OPEN

PHYSICIAN RESEARCH

We are seeking a clinically trained researcher to join a multidisciplinary research effort designed to study radiation dosimetry in the application of brachytherapy for treatment of coronary artery disease. The candidate should have an in-depth experience in clinical medicine, nuclear medicine, and application of radiation therapy for coronary artery disease. The requirements include a minimum of two years of formal interventional cardiovascular training, one year of radiation therapy-related experience, and Board certification in cardiovascular disease. The incumbent Research Fellow will be expected to establish and implement independently funded research programs; but must also have the ability to interact collaboratively. Salary range is of a Research Fellow (\$50,000.00 to \$52,000.00). Curriculum vitae and three letters of reference to: The Heart Institute, Beth Israel Medical Center, 5 Baird Hall, 350 East 17th Street, New York, NY 10003, Attn: Kristen Graves.

RESEARCH ASSISTANT PROFESSOR. University of Utah, Department of Human Genetics. Candidate should be trained and demonstrably productive in use of NMR for structural analyses of RNA and proteins. Ph.D. degree plus at least three years of postdoctoral research experience required. Need expertise in other physical-structural methods. Must be capable of managing NMR facility, collaborating with large scientific group, and establishing funded, independent research program. Reasonable prior notice is needed to arrange accommodations. Send résumé to: Ms. Wanda Smith, University of Utah, Human Genetics Department, 15 North 2030 East, Room 2100, Salt Lake City, UT 84112-5330. TDD: 801-581-6789. The University of Utah is an Affirmative Action/Equal Opportunity Employer and seeks to provide Equal Access to its programs, services, and activities for people with disability.

The University of Florida seeks six (6) **CLINICAL ASSISTANT PROFESSORS** for the Department of Medicine, Division of Internal Medicine. 1.00 FTE, non-tenure-track position. M.D. degree, Board-eligible/Board-certified in internal medicine. The responsibilities will consist of treating patients on an outpatient and inpatient basis. Teaching medical students and Residents coinciding with the care of those patients. No research responsibilities. Salary and benefits commensurate with experience. Please reply with curriculum vitae to: Heather Harrell, M.D., Clinical Assistant Professor, Department of Medicine, Division of Internal Medicine, Box 100277, JHMH, Gainesville, FL 32610. Recruiting deadline: April 22, 1999. Anticipated start date: July 1, 1999. An Equal Opportunity/Affirmative Action Employer.

INFECTIOUS DISEASES SPECIALIST MOUNT SINAI SCHOOL OF MEDICINE

Mount Sinai School of Medicine is a leader in medical research and education. We currently seek a Board-certified/Board-eligible Infectious Diseases Specialist for an AIDS, substance abuse program in the inner city. Knowledge of Spanish required.

For consideration, send curriculum vitae to: Division of Infectious Diseases, Box 1090, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. We are an Equal Opportunity Employer fostering diversity in the workplace.

RESEARCH ASSOCIATE II. Conduct research on global regulatory protein in *Escherichia coli* called Lrp and study protein/DNA interaction. A Ph.D. with strong background in molecular biology and protein purification is required; experience with techniques, such as ultracentrifugation, fluorescence anisotropy, light scattering, microcalorimetry is essential.

To begin July 1, 1999, for a one-year appointment with possibility for renewal. Send curriculum vitae and three reference contacts to: Dr. Joseph Calvo, 452 Biotechnology Building, Cornell University, Ithaca, NY 14853.

An Equal Opportunity/Affirmative Action Employer.

NATIONAL INSTITUTES OF HEALTH

POST-DOCTORAL and TECHNICIAN POSITIONS MOLECULAR MECHANISMS OF GENETIC RECOMBINATION AND DNA REPAIR

Postdoctoral and technician positions are available in the Genetics & Biochemistry Branch at the National Institute of Diabetes, Digestive and Kidney Diseases, NIH, in Bethesda, MD. Applicants for Technician (Biologist) positions must be US citizens and should have experience in molecular biology. The Biologist position will be filled at the GS-7/9 level. This is a Term Appointment not to exceed 4 years. Areas of interest include:

R. Daniel Camerini-Otero -- Biochemistry and molecular biology of homologous recombination in eukaryotes and prokaryotes (including structural studies of some of the proteins and DNA-protein complexes involved and the generation of mouse knockouts of genes encoding recombination proteins), new methods for gene mapping and cloning (e.g., RARE) and gene targeting in mammalian cells and novel approaches to gene therapy (including the use of small molecules that promote gene targeting, such as miniRecAs). (Ferrin and Camerini-Otero (1991) *Science* 254: 1494; Voloshin et al. (1996) *Science* 272: 868; Wang et al. (1998) *J. Mol. Biol.* 277: 1; Ferrin and Camerini-Otero (1998) *PNAS* 95:2152; Hortnagel et al. (1999) *J. Mol. Biol.* 286: 1097)

Peggy Hsieh -- Alterations in chromatin structure during recombination and DNA repair; functions of recombination proteins that target the Holliday junction; structure-function studies of DNA mismatch repair proteins. (Grigoriev and Hsieh 1997 *Mol Cell Biol* 17: 7139; Biswas and Hsieh 1997 *J Biol Chem* 272: 13355; Malkov et al. 1997 *J Biol Chem* 272: 23811; Grigoriev and Hsieh 1998 *Mol Cell* 2:373)

The NIH offers a competitive salary and benefits package. Applications should include a CV with list of publications, a brief description of research experience and the names and addresses of 3 references. Send applications to R. Daniel Camerini-Otero or Peggy Hsieh at:

National Institutes of Health
Bldg. 10 Rm. 9D20
10 Center Dr. MSC 1810
Bethesda, MD 20892-1810 USA

Technician applications should be mailed to:

Peggy Hsieh
National Institutes of Health,
Bldg. 10 Rm. 9D04, 10 Center Dr. MSC 1810
Bethesda, MD 20892-1810 USA
Tel: 301 496-0306 Fax: 301 496-9878
hsieh@ncifcrf.gov

UNCF • Parke-Davis Scientific Initiatives Program Postdoctoral Fellowships



**United Negro
College Fund**



PARKE-DAVIS
Pharmaceutical Research,
Warner-Lambert Company

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 under-represented minority post-graduates in the biomedical research fields.

- Four (4) Fellowships Awarded in 1999
- 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 1998-99 academic year
- Appointed as a postdoctoral fellow during the 1999 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 APRIL 30, 1999

For application forms and more information, please contact:

Jerry L. Bryant, Ph.D., Director, Science Education Initiatives
The College Fund, 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.

POSITIONS OPEN

INTERDISCIPLINARY POSITION NORTHWEST FISHERIES SCIENCE CENTER

The Northwest Fisheries Science Center of the National Marine Fisheries Service (NMFS), NOAA seeks two **STATISTICIANS** (Biology), **RESEARCH FISHERY BIOLOGISTS**, or **POPULATION ECOLOGISTS** to serve on a multidisciplinary team of scientists studying fish passage, migration, and survival of Snake and Columbia River salmonids. The positions require the ability to perform research on, and evaluate population variability and distribution of, Pacific salmon. The individuals will participate in interagency committees and workgroups; review and evaluate analyses, reports, and publications; participate in cooperative modeling efforts to incorporate environmental effects on Pacific salmon life history and life cycle models; research proper methods and approaches for statistical analyses; and synthesize data from different sources for input to population models. The individuals will use modern quantitative tools to analyze, combine, and interpret data and develop predictions about population or ecosystem responses to fishery management; organize and write research reports and manuscripts for journals; and establish and maintain contacts with researchers in and outside of the NMFS. See website: www.usajobs.opm.gov/a9noaa.htm for complete application information and qualification requirements. Ph.D. or equivalent experience preferred. Applications should be sent to: **National Oceanic and Atmospheric Administration, Human Resources Division, 7600 Sand Point Way N.E., Seattle, WA 98115, Attn: W/NMF/990221.EB**, and postmarked no later than April 23, 1999. For further information, contact: **Cheryl Morisaki**, e-mail: cheryl.morisaki@noaa.gov. *The Northwest Fisheries Science Center is an Equal Employment Opportunity Employer.*

CARL F. ASSEFF ENDOWED RESEARCH PROFESSORSHIP IN OPHTHALMOLOGY

The Department of Ophthalmology, Case Western Reserve University (CWRU) School of Medicine and University Hospitals of Cleveland seek a distinguished scientist for our newly established Carl F. Asseff Endowed Research Professorship. The successful candidate will have a nationally recognized program in ocular biology and disease, with emphasis on the retina, and credentials for the Professor level. Considerable potential exists for collaborative research both within the CWRU Visual Sciences Research Center, including strong Departments of Genetics and Neurosciences. We offer substantial space and financial resources, enhanced by an NEI Core grant. Reply in confidence with a letter of interest, brief statement of research interests, and curriculum vitae to: **Jonathan H. Lass, M.D., Chairman and Director, Case Western Reserve University Department of Ophthalmology and Visual Sciences Research Center, 11100 Euclid Avenue, Cleveland, OH 44106-5068**. Review of applications will begin June 1, 1999, and continue until the position is filled.

Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer.

Research and development **INTERNATIONAL TECHNOLOGIST II** (cigar blends). Develop cigarette and fine-cut blends, with a focus on the Canadian and other strategic Virginia blend markets (Africa, Far East, and Middle East). Provide input/approval for Canadian and offshore Virginia tobacco purchases, and assist in the establishment of global leaf specifications. Maintain and develop Canadian cigar blends. Ensure adherence to leaf and blend specifications. Requirements: High school diploma plus two years of experience in job offered or in research and development of cigar blend tobacco products. Salary range: \$47,000 to \$55,900 per year, 37.5 hours per week, Monday-Friday, 8:00 a.m. to 4:30 p.m. Submit résumé to: **R. J. Reynolds Tobacco Company, Susan Clapp, Department NL, P.O. Box 1487, Winston-Salem, NC 27102-1487**.

POSITIONS OPEN

NUTRITIONAL BIOCHEMIST UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

The Department of Nutrition, Division of Nutritional Biochemistry invites applications from Investigators with an M.D. or Ph.D. for a tenure-track position at the **ASSISTANT PROFESSOR** level. The candidate's research interests should be in the general area of nutrition or metabolism at the cellular or molecular level. We particularly encourage applications from individuals who are using techniques of molecular biology to investigate nutrition-related questions in biochemistry, physiology, endocrinology, or gastroenterology, including aspects related to diabetes, obesity, or cancer.

The successful candidate is expected to maintain an independent research program, to mentor graduate students, and to teach a basic course in nutritional biochemistry/physiology. Our website: <http://www.sph.unc.edu/nutr/>.

Review of applications will begin on August 1, 1999. The search will remain open until the position is filled. A complete curriculum vitae, statement of research interests and goals, three letters of reference should be sent to: **Rosalind Coleman, M.D., Director of Nutritional Biochemistry, Department of Nutrition, CB# 7400, University of North Carolina-Chapel Hill, Chapel Hill, NC 27599-7400**. *The University of North Carolina is an Equal Opportunity/Affirmative Action Employer.*

Research and development **INTERNATIONAL TECHNOLOGIST** (Virginia blends). Maintain continuity and uniformity of existing cigarette and fine-cut blends, with a focus on the Canadian and other strategic Virginia blend markets. Maintain and develop bill of material structures required for the company's materials resource planning system. Provide input into the replacement of the materials resource planning system by a global product specifications system. Once the global product specifications system is in place, maintain the tobacco segment of the system for Canadian and other original blends. Participate in activities of Canadian industry and government agronomy agencies, and coordinate development work originating from those agencies. Liaise with other departments to ensure adherence to leaf and blend specifications. Requirements: High school diploma plus two years of experience in job offered or in research and development of Virginia blend tobacco products. Salary range \$47,000 to \$55,900 per year, 37.5 hours per week, Monday-Friday, 8:00 a.m. to 4:30 p.m. Submit résumé to: **R. J. Reynolds Tobacco Company, Susan Clapp, Department NL, P.O. Box 1487, Winston-Salem, NC 27102-1487**.

LABORATORY SPECIALIST LABORATORY SPECIALIST ADVANCED

Seeking entry-level Molecular Biologist for available Laboratory Specialist position. Candidates should have a minimum B.S. degree in chemistry, biochemistry, or related field with cursory laboratory training. Experience helpful.

Laboratory Specialist Advanced position also available. Candidates should have a B.S. degree, M.S. preferred. Must have demonstrated experience in chemical synthesis of DNA/RNA and/or PNAs with purification and their characterization.

Both positions require strong background in PC and/or Macintosh computers.

Commonwealth Biotechnologies, Inc. (CBI) is a cutting-edge biotechnology company located in Richmond, Virginia. This is an opportunity to join a rapidly growing and dynamic research and development support facility, dedicated to providing state-of-the-art analytical services to the biotechnology industry. Salary is commensurate with experience and background; excellent benefits package offered. Send résumé and cover letter to: **Director of Human Resources, 601 Biotech Drive, Richmond, VA 23235**. FAX: 804-648-2641; e-mail: cbi@i2020.net.

POSITIONS OPEN

FACULTY POSITION THERMAL-FLUIDS ENGINEERING Department of Mechanical Engineering Massachusetts Institute of Technology

The Department of Mechanical Engineering at MIT is seeking applications for a tenure-track faculty position in thermal-fluids engineering. Applications at the level of **ASSISTANT** or **ASSOCIATE PROFESSOR** (without tenure) are preferred, although tenured appointments may be considered when appropriate.

Applicants should hold an earned Doctoral degree in mechanical engineering or a related discipline. Candidates from all areas of thermal-fluids engineering, including heat transfer and thermodynamics, as well as those involved in thermal-fluids research related to energy conversion and storage, combustion, two-phase flow, microscale engineering, biological systems, supercritical fluids, manufacturing processes, and environmental issues related to energy conversion are encouraged to apply. Candidates having backgrounds outside traditional mechanical engineering such as the physics of condensed matter are also encouraged to apply if their interests intersect thermal-fluids technologies.

Applications should include a complete curriculum vitae, including citizenship and/or visa status; the names of at least three references who are familiar with the candidate's research abilities; a detailed statement of the candidate's research interests (this statement should indicate the scope of the research and its importance to basic technical and scientific knowledge or to specific technological need); a statement of teaching interests; one or two representative publications; summary of the candidate's course work (transcript if convenient).

Address all correspondence to:

**Thermal-Fluids Faculty Search
Department of Mechanical Engineering
Room 3-173
Massachusetts Institute of Technology
77 Massachusetts Avenue
Cambridge, MA 02139-4307**

MIT is an Equal Opportunity Employer and especially invites applications from women and underrepresented minorities.

Analytical Research and Development **SUPERVISOR** for pharmaceutical research and development company, Ft. Lauderdale. 40-hour week, 8 a.m. to 5 p.m., \$44,500 per year. Develop and validate analytical methods for drug substance and drug product as per USP. Generate protocols, standard operation procedures (SOPs), standard test methods (STMs). Analyze intermediates, finished products, and stability samples. Design experiments in support of formulation development and prepare regulatory documents in support of FDA Filings. Strong background in chromatography, spectroscopy, wet chemistry, and dissolution techniques. Experience in system validation, instrument calibration, troubleshooting, and FDA documentary requirements. Master of Science in chemistry analytical/organic. Two years of experience in job offered or two years as Analytical Chemist. Supervise two employees. Submit résumé to: **Bureau of Workforce Program Support, P.O. Box 10869, Tallahassee, FL 32302-0869, Re: Job Order No. FL-1928026**.

POSTDOCTORAL POSITION JOHNS HOPKINS UNIVERSITY ATP SYNTHASE

A Postdoctoral position is currently open for work on the structure and function of the mitochondrial ATP synthase complex and its role in major diseases. Highly motivated individuals with experience in both protein chemistry and molecular biology will be considered. Productive students having just completed or soon to be completing their Ph.D. thesis work are encouraged to apply. Please send by surface mail curriculum vitae and the names of three references to: **Dr. Peter L. Pedersen, Department of Biological Chemistry, Johns Hopkins University, School of Medicine, 725 North Wolfe Street, Baltimore, MD 21205-2185**. *Equal Opportunity Employer.*

Faculty Positions in Molecular & Cellular Cancer Biology

The Wistar Institute is the nation's oldest independent biomedical research institute and provides a collegial, stimulating environment for independent investigators. The Institute, located on the University of Pennsylvania campus, has an annual budget of \$30 million supporting 30 laboratories. We are seeking highly qualified candidates with a Ph.D. and/or M.D. at the Assistant and Associate Professor levels. Successful candidates will be expected to establish vigorous, independent research programs, which complement the Institute's current programs in Molecular Genetics, Structural Biology, Tumor Biology, and Immunology.

New areas of interest for this recruitment include (but are not limited to):

- 1) molecular biology/genetics of human brain tumors
- 2) developmental biology and models of human disease
- 3) tumor biology/physiology including mechanisms of vasculogenesis, angiogenesis
- 4) chromatin-induced gene regulation

Highly competitive start-up support, salary, and fringe benefits will be offered in addition to access to state-of-the-art core facilities funded by our NCI-designated Basic Cancer Center.

Send curriculum vitae and the names of three references to: **The Faculty Search Committee, c/o Human Resources Dept., The Wistar Institute, 3601 Spruce Street, Philadelphia, PA 19104.** EOE/AA/M/F/D/V.



DEFINING GENE FUNCTION

Lexicon Genetics is a genomics-based biopharmaceutical company focused on harnessing the power of molecular genetics for the discovery of novel gene-based therapeutics. Our proprietary gene trapping technology provides rapid and efficient access to the transcribed portion of the genome and enables the elucidation of gene function by insertional mutagenesis at an unprecedented rate. In addition, our rapidly expanding homologous recombination program efficiently generates custom alleles (e.g. subtle mutations, knock-ins, conditional mutations) in the mouse germ line using our proprietary KO system.

In our homologous recombination and full length cDNA sequencing programs, we seek to fill the following positions:

Scientist-Homologous Recombination Laboratory

Qualified candidates will possess a Ph.D. in Molecular Biology or related field, with proven expertise in animal cell culture, cDNA and genomic library manipulation, PCR, and computer proficiency. Experience in homologous recombination technology in ES cells is an advantage. The demonstrated ability to handle multiple projects, supervisory experience, excellent communication skills and team orientation are pluses.

Reply to File Code: **SCI-HR-1.**

Scientist-Full Length Cloning Laboratory

Selected candidates will possess a Ph.D. in Molecular Biology or related field, with proven expertise in the skills necessary to establish full length cDNA sequences including cDNA library manipulation, PCR, RACE, and working knowledge of sequencing software. Computer proficiency with experience utilizing bioinformatics to update, manage, and mine large data sets is required. Supervisory and post-doctoral experience, excellent communication skills, team orientation and multiple project management ability are pluses. Reply to File code: **SCI-GEN-1.**

Research Assistant/Associate

These positions require a B.S./M.S. in a biological science field. Molecular lab experience a plus. Reply to File Code: **SCI-RAA.**

Lexicon Genetics employees enjoy a pleasant working environment in The Woodlands, TX located 30 miles north of Houston where a full range of cultural experiences awaits.

We provide competitive salaries, stock options and benefits. Please send your CV and cover letter referencing File Code ____ to: **Human Resources, LEXICON GENETICS INCORPORATED, 4000 Research Forest Drive, The Woodlands, Texas 77381. Fax (281) 364-0406. Or, email to thompson@lexgen.com.** EOE



FACULTY POSITION CANCER MOLECULAR BIOLOGY/ENDOCRINOLOGY

A tenure-track faculty position for a Cancer Molecular Biologist is available at the Assistant Professor level at Strang Cancer Prevention Center in New York. Strang Cancer Prevention Center is dedicated to interdisciplinary research in cancer prevention and is affiliated with Cornell University Medical College and New York Presbyterian Hospital. We are seeking a well-qualified Ph.D. or M.D. who has productive postdoctoral experience and wishes to develop a vigorous research program in an interactive academic environment. Laboratory space will be provided at the Strang Cancer Research Laboratory, located on the Rockefeller University campus, and competitive start-up arrangements will be made. The successful individual would be recommended for a faculty appointment at Cornell University Medical College and would be encouraged to join the Cornell University Graduate School of Medical Sciences.

Preference will be given to applicants investigating mechanisms of hormonal carcinogenesis, such as the roles of hormone metabolites and steroid receptors in cancer. Well qualified applicants in other areas of molecular, cell or developmental biology, with particular relevance to breast, colon or prostate cancer will also be considered.

Applicants should send a full CV, one-page description of proposed research, and names of three references to: **Anthony M.C. Brown, Ph.D., Strang Cancer Prevention Center, 428 E. 72nd Street, New York, NY 10021, USA. Inquiries: 212-734-0567 x232 or by e-mail to amcbrown@mail.med.cornell.edu**

Strang Cancer Prevention Center is an equal opportunity employer.



Strang
Cancer Research Laboratory

ANNOUNCEMENT

DOES THIS SOUND LIKE YOU OR SOMEONE YOU KNOW?

"I suffered ridicule as I worked long hours in the lab in high school and college, and frank outrage when I received a grant to study bacterial genetics during my summers in college."

"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."

These are statements excerpted from applications recently submitted to the NIH LOAN REPAYMENT PROGRAM. NIH, the world's leading biomedical research and research training facility, has trained thousands in areas such as neuroscience, pathology, immunology, molecular genetics, developmental biology, cell biology, molecular biology, virology, and structural biology, to name only a sampling of areas in our intramural research program.

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

Have your interests 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.



For more information on Loan Repayment Programs and postdoctoral training programs, 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.

POSITIONS OPEN

POSTDOCTORAL POSITION IN ELECTROPHYSIOLOGY UCLA

Postdoctoral position available immediately to study synaptic competition and its role in learning and memory. The position will involve electrophysiological recording from synapses of *Aplysia*, both in cell culture and in the central nervous system. Prior experience in intracellular or whole-cell electrophysiology is essential. Candidates must have a Ph.D. degree, and be either a U.S. citizen or a permanent resident of the United States. A strong intellectual interest in learning and memory is desirable.

Interested applicants should post or e-mail a curriculum vitae, a brief statement of research interests, and the telephone numbers or e-mail addresses of three references to: **David L. Glanzman, Ph.D., UCLA Brain Research Institute, Gonda (Goldschmied) Neuroscience and Genetics Research Center, Box 951761, Los Angeles, CA 90095-1761. Telephone: 310-206-9972; e-mail: dglanzman@physci.ucla.edu.**

POSTDOCTORAL TRAINING IN CANCER RESEARCH at Case Western Reserve University

The Cancer Center at Case Western Reserve University, a Comprehensive Cancer Center as designated by the National Cancer Institute, seeks applicants for its multidisciplinary Research Oncology Training Program. Eligible candidates may hold the Ph.D., M.D., or M.D.-Ph.D. degree and must be U.S. citizens, nationals, or permanent residents. Research foci include apoptosis, signal transduction, cell adhesion, cancer genetics, gene therapy, and radiation biology. Send curriculum vitae, names of three references, and statement of research interest to: **Clark W. Distelhorst, M.D., Cancer Center, Case Western Reserve University, 10900 Euclid Avenue, Wearn 152, Cleveland, OH 44106-5065. E-mail: cancer@po.cwru.edu. In Employment as in Education, CWRU is committed to Affirmative Action and Equal Opportunity.**

POSTDOCTORAL POSITION IN MOLECULAR ENDOCRINOLOGY

An NIH-funded position is available to clone and characterize novel coregulatory proteins that function as transcriptional coactivators for nuclear hormone receptors (see: *PNAS* 93:8329). Applicants must have experience with (a) recombinant DNA and cloning, (b) mammalian cell culture and transfections, and (c) expression and purification of recombinant proteins. Applicants should send curriculum vitae and a list of three references to: **Dr. Joseph D. Fondell, Department of Physiology, University of Maryland School of Medicine, 660 West Redwood Street, Baltimore, MD 21201. FAX: 410-706-8341; e-mail: jfond001@umaryland.edu.**

A POSTDOCTORAL POSITION is available to study transcription mechanisms with emphasis on p53-dependent transcription. A Ph.D. degree with a strong background in molecular biology is required. Individuals with experience in transcription, cell cycle regulation, and protein chemistry are especially encouraged to apply. Applicants should send a curriculum vitae and three references to: **Dr. Xuan Liu, Department of Biochemistry, University of California, Riverside, CA 92521. E-mail: xuan.liu@ucr.edu.**

POSTDOCTORAL POSITIONS available to study integrins, integrin signaling in cell proliferation and survival, and cross-talk between cell adhesion and growth factor receptor signaling. Experience in molecular biology is essential, and cell/developmental biology background is preferred. Send curriculum vitae and names of three references to: **Kristina Vuori, M.D., Ph.D., La Jolla Cancer Research Center, The Burnham Institute, 10901 North Torrey Pines Road, La Jolla, CA 92037.**

POSITIONS OPEN



The USDA, Agricultural Research Service, Gene Evaluation and Mapping Laboratory, Beltsville, Maryland is seeking a **POSTDOCTORAL FELLOW** to participate in a transgenic livestock project designed to increase muscle mass in swine. Our initial approach will involve functionally reducing myostatin gene expression. The Fellow will have the opportunity to participate in the production and evaluation of transgenic mice, and once the most effective transgene has been identified, assist in the production of transgenic pigs. The successful candidate will be responsible for designing and conducting studies to evaluate growth performance and muscle development of the resulting transgenic swine. A Ph.D. is required. The position requires a working knowledge of growth, developmental or muscle biology, and a general understanding of molecular biology principles. Previous involvement in transgenic animal projects is not required. Demonstrated ability to plan, conduct, and complete research projects by the publication of first-author papers in peer-review journals will serve as a selection criteria. The appointment is for a period of three years. Starting salary will be \$40,714 per year. *Citizens from the United States and other countries (e.g., NATO, SEATO, RIO treaty member nations) will be considered.* Please send a curriculum vitae by e-mail and a list of references (with telephone numbers) to: **Dr. Robert Wall, e-mail: bobwall@lpsi.barc.usda.gov. USDA/ARS is an Equal Opportunity Provider and Employer.**

POSTDOCTORAL POSITION IN EPILEPSY

A Postdoctoral position is available for a NIH-funded position for studying the mechanisms underlying epilepsy and the development of early detection sensors using both animal models and humans. Experimental approaches that will be employed include *in vivo* and/or slice electrophysiology, kindling, and microdialysis. Experience in one or more of these areas is desirable. The applicant will work in a rich and highly interactive environment that provides outstanding collaborative opportunities. Send curriculum vitae and three references by June 15, 1999, to: **Dennis Spencer, M.D., Professor and Chair, Department of Neurosurgery, Yale University School of Medicine, P.O. Box 208082, New Haven, CT 06520-8082. Yale University is an Affirmative Action/Equal Opportunity Employer.**

REA POSTDOCTORAL FELLOWSHIP CARNEGIE MUSEUM OF NATURAL HISTORY

Applications are invited for a Postdoctoral Research Fellowship for specimen-based research in anthropology, botany, entomology, herpetology, mammalogy, or vertebrate paleontology. Position is for one year, renewable upon review for a second year. Applicants are encouraged to contact individual Curators with whom they intend to study prior to application, and should send curriculum vitae, three references, and plan of research by 1 July 1999 to: **Bradley C. Livezey, Dean of Science, Carnegie Museum of Natural History, 4400 Forbes Avenue, Pittsburgh, PA 15213.**

POSTDOCTORAL POSITION available to study genome-wide abnormal gene expression in leukemia (*Proc. Natl. Acad. Sci. USA* 95:11909-11914, 1998). Candidates with experiences in gene expression and molecular biology techniques are encouraged to apply. Send curriculum vitae, and names of three references to: **Dr. Janet Rowley, Section of Hematology/Oncology, University of Chicago Medical Center, 5841 South Maryland Avenue, MC2115, Chicago, IL 60637. Contact: Dr. San Ming Wang, Telephone: 773-702-6788; FAX: 773-702-3002; e-mail: swang1@midway.uchicago.edu.**

POSITIONS OPEN

OREGON HEALTH SCIENCES UNIVERSITY MOLECULAR BIOLOGY OF MEMBRANE PROTEINS

POSTDOCTORAL POSITION(S) are available to study structural aspects (topology, folding, organization of ligand-binding domains) and dynamics of cation-transporting P-type ATPases. The strategies of mutational analysis using baculovirus-infected insect cell expression systems and protein chemistry are currently employed. Strong background in biochemistry and/or molecular biology required, preferably with some experience in recombinant DNA techniques. Send curriculum vitae and names of three references to:

**Professor Jack H. Kaplan, Ph.D., F.R.S.
Department of Biochemistry and
Molecular Biology, L224
Oregon Health Sciences University
3181 S.W. Sam Jackson Park Road
Portland, OR 97201-3098
E-mail: kaplanj@ohsu.edu**

POSTDOCTORAL FELLOWSHIP UNIVERSITY OF ROCHESTER SCHOOL OF MEDICINE

A position is available to characterize plasma membrane transport proteins that are involved in multidrug resistance, xenobiotic elimination, and glutathione homeostasis (*JBC* 273:16184, 1998; *JBC* 273:33449, 1998). Experience with cDNA cloning, or with *S. cerevisiae* or *X. laevis* expression systems is desirable. Send curriculum vitae and names of three references to: **Dr. Ned Ballatori, Department of Environmental Medicine, Box EHSC, University of Rochester School of Medicine, Rochester, NY 14642. E-mail: ballatorin@envmed.rochester.edu. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITIONS available for studies of nuclear receptors/coactivators/corepressors in cancer biology and embryonic development. Experimental systems include primary tumors, embryonic stem cell cultures, and transgenic mice. Ph.D. graduate training in molecular biology, biochemistry, or mouse embryology is desirable. Send curriculum vitae and names of three references to:

**Dr. Li-Na Wei
Department of Pharmacology
3-249 Millard Hall
University of Minnesota
435 Delaware Street S.E.
Minneapolis, MN 55455
E-mail: weixx@maroon.tc.umn.edu
FAX: 612-625-8408**

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

POSTDOCTORAL POSITION for two years available immediately on an NIH training grant related to intracellular processing and secretion of PTH and other protein moieties by the mammalian parathyroid gland. Individual must have Ph.D., M.D., or D.M.D. and U.S. citizenship or permanent residency. Send curriculum vitae and references to: **D. V. Cohn, Ph.D., University of Louisville, Biological and Biophysical Sciences, Louisville, KY 40292. Telephone: 502-852-1299; e-mail: dvcohn@louisville.edu.**

POSTDOCTORAL POSITION available to study molecular mechanism of fatty acid transport in mammalian cells (*Cell* 79:427-436; *JBC* 273:28642-50). Ph.D., M.D., or V.M.D. and experience in molecular/cell biology required. Send curriculum vitae and names of three references, with their e-mail/FAX, to: **Dr. J. Schaffer, Washington University School of Medicine, 660 South Euclid Avenue, Box 8086, St. Louis, MO 63110. E-mail: jschaff@imgate.wustl.edu; FAX: 314-362-0186.**

**Principal Investigator and Research Fellow Positions
Available for
The Preparatory Office of Inst. of BioAgricultural Sciences
Academia Sinica, Taipei, Taiwan**

We are seeking to appoint qualified applicants to serve as Principal Investigators, ranking from assistant, associate to full research fellows. There are four research areas within our IBS Preparatory Office: crop plant improvement/bioreactors, animal vaccines, environmental/industrial enzymes, and Chinese medicinal plants. We encourage scientists to interact closely and effectively within and among these research groups. For this recruitment, we are searching for one senior transgenic plant biotechnologist, one cellular immunologist for vaccine development, one enzymologist or biochemist, one protein processing scientist/engineer, one plant secondary metabolite scientist, and one other plant or animal molecular biologist. New recruits can start in September 1999.

Requirements for the applicants include a Ph.D. or an equivalent degree. Principal investigators are required to engage in programmatic projects, serving as project team members and/or as collaborative research scientists. The senior research scientist must have at least 10 years' of research experience with demonstrated abilities in applied and/or basic research in one of the biotechnology areas indicated above, evidence of creativity and organizational skills. They would greatly benefit from their familiarity with Taiwan's cultural environment and language. Applicants are expected to conduct research in the above selected expertise or discipline of biology. Application should include a cover letter, a research proposal, a complete *curriculum vitae* as well as the names, addresses and telephone numbers and fax numbers of 5 references. Review of applications will begin around July 1999, and will continue until suitable candidates are recruited.

Applications should be addressed to: Ms. Melody C. J. Chien
The Preparatory Office of Inst. of BioAgricultural Sciences,
Academia Sinica, NanKang 11529, Taipei, Taiwan, R.O.C.



理化学研究所

脳科学総合研究センター

研究員/テクニカルスタッフの募集

脳科学総合研究センターでは、「脳を守る領域」発生・分化研究グループ内に新たに発足した「神経再生研究チーム」の研究員及びテクニカルスタッフを若干名公募します。

＜研究内容＞ 成体でも神経細胞が再生する特殊なモデルを用いて、分化転換、神経細胞の再生（再生）、神経幹細胞の同定、axon guidance、アポトーシスなどの領域の研究を行い、高等動物の中樞神経系障害の治療への応用を目指します。

＜応募資格＞ 研究員：博士号取得者（取得見込みを含む）で、神経細胞学、神経発生学の新しい局面を開拓する意欲と情熱のある方。生化学、分子生物学、生物物理学など、いずれかに経験や有する方。テクニカルスタッフ：修士又は大卒。上記いずれかの領域の経験・専門技術を有する方。

＜提出書類＞ 研究員：1) 履歴書、2) 研究業績リストと主要論文別冊、3) 主要業績の要約（2400字以内）、4) 今後の抱負、5) 推薦者（現指導者を含む3名）の氏名、連絡先、6) どの広告を見たか。

テクニカルスタッフ：上記の1)、4)、5)、6)に加え、2)と3)のうち提出可能なもの。

＜募集期間及び採用時期＞締め切り日は特に設けませんが、適切な人材が集まり次第募集を締め切ります。着任時期はできる限り早い時期としますが、相談に応じます。

＜選考方法＞ 書類審査後、面接。

＜待遇＞ 契約制。研究員は任期5年まで。給与は年俸制で、能力・実績に応じて決定。

＜書類提出先＞ 〒351-0198 埼玉県和光市広沢2-1

理化学研究所脳科学総合研究センター

神経再生研究チーム

＜問い合わせ先＞ ・梶原一人（スタンフォード大学神経生物学）

FAX: +001-1-650-725-0388

e-mail: kajiwara@cmgm.stanford.edu

＜国内連絡先＞ ・安部由紀子（担当秘書）

電話: 048-467-9792 FAX: 048-467-9744

e-mail: nrta@brain.riken.go.jp

**National Institutes of Health
National Heart, Lung, and Blood
Institute**

**Post-Doctoral Research
Fellowship Positions**

**The Pulmonary - Critical Care Medicine
Branch (P-CCMB), NHLBI**

Post-doctoral research fellowship positions are available for individuals interested in cell and molecular biology, as well as bench to bedside translational research. Opportunities for post-doctoral research fellowships exist within intramural PCCMB laboratories investigating clinical and basic research relating to signal transduction, nitric oxide, G proteins, protein modification, vesicular trafficking and cyclic nucleotide phosphodiesterases. Positions are available for a minimum of 2 years and may be extended for additional training. Candidates should possess a Ph.D. or M.D. degree or equivalent. Positions are available immediately. Interested individuals should submit a letter of interest, curriculum vitae, and three letters of recommendation to Joel Moss, M.D., Ph.D., Chief, Pulmonary-Critical Care Medicine Branch, NHLBI, NIH, Building 10, Room 6D03, MSC 1590, Bethesda, Maryland, 20892-1590.

**NIH IS AN EQUAL OPPORTUNITY
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ANNOUNCEMENT

**Research Grants from Mizutani Foundation
for Glycoscience
See <<http://mizutanifdn.or.jp>> for Details**

Mizutani Foundation for Glycoscience invites grant applications for basic studies in the field of glycoconjugates.

Grant: As much as 10,000,000 yen may be requested for one (1) year. No more than 10% of the grant may be used for indirect costs. (overheads), and no part of the grant may be used for stipends of the principal and/or collaborative investigators.

Application: An application form (in English) with instructions may be obtained by (a) downloading from the Foundation's Web site or (b) sending an e-mail or a fax (but no phone calls) to the Foundation. Please specify in your letter if you would like to receive the document via e-mail, fax, or airmail. Also, please indicate how and where you found this advertisement.

The e-mail version, which is Microsoft Word 95 for Windows format and encoded with MIME, will be attached to an e-mail. The fax version will be transmitted directly from our computer with a high resolution. The airmail version will be handled after mid May.

Deadlines: All applications will be accepted from July 1 through September 1, 1999 (Tokyo Time) at the Foundation. The successful proposals will be funded on April 1, 2000.

Mizutani Foundation for Glycoscience: Sen-i Kaikan Suite 5F, 3-1-11 Nihonbashi-honcho, Chuo-ku, Tokyo 103-0023, Japan; Fax: 81-3-3246-1265; E-mail: info@mizutanifdn.or.jp; URL: <http://mizutanifdn.or.jp>.

GLOBAL OPPORTUNITIES

**CSIRO Division of
Molecular Science -
Melbourne Australia**



Chief

CSIRO

CSIRO, Australia's largest and most diverse scientific and industrial research organisation, is seeking to appoint a person with an internationally recognised record of leadership, management experience and outstanding scientific and technological achievement and innovation to the position of Chief of the CSIRO Division of Molecular Science.

The Division is a centre of excellence for biological and chemical research and has over 350 staff and an annual budget of more than \$AUD43M. The Chief will be accountable to the Deputy Chief Executive (DCE) for the performance and strategic direction of the Division.

The appointment will be for an initial five-year term and will involve an annual performance contract with the DCE. The remuneration package will be highly competitive and includes superannuation, a fully maintained vehicle and relocation assistance.

Please contact Mr John Williams (tel: 61 2 9490 8229; fax: 61 2 9490 8190; email: John.Williams@exec.csiro.au) for more information and details on how to apply. Interested applicants are invited to discuss the position with Dr. R. H. Frater, Deputy Chief Executive (tel: 61 2 6276 6127; fax: 61 2 9490 8190; email: Bob.Frater@exec.csiro.au)

Applications close 23 April 1999.

35203

Australian Science, Australia's Future



United States Environmental Protection Agency National Center for Environmental Assessment Post-Doctoral Positions

The National Center for Environmental Assessment (NCEA) of the U.S. EPA Office of Research and Development (ORD) is seeking candidates to fill four or more **Federal, three-year postdoctoral research positions** during the coming year. NCEA serves as the national resource center for the overall process of human health and ecological risk assessment, integrating hazard, dose-response, and exposure data models to produce risk characterizations. NCEA occupies a critical position between laboratory/field researchers and EPA regulatory program offices and regions, with Divisions in Washington D.C., Research Triangle Park, NC., and Cincinnati, OH. Work is focused in three major areas: development of dose-response and exposure assessment methodologies to include deterministic and probabilistic approaches that reduce uncertainties in current risk assessment approaches, conducting assessments of contaminants and sites of national significance; and providing guidance and support to risk assessors. These non-laboratory, postdoctoral positions are ideal for scientists interested in a broader involvement in the assessment and application of toxicological, epidemiological and environmental data to improving human health and the environment. Selected individuals may also have the opportunity to implement a program of research in their field through federally-funded contracts and cooperative agreements. Priority research interests for the postdoctoral positions include:

- **Toxicology/Health Science:** Emphasizing mechanisms of toxicity, quantitative biological or pharmacokinetic modeling, and general, respiratory, molecular or immuno-toxicology;
- **Biostatistics/Epidemiology:** Focusing on the application of statistics and quantitative practices to risk assessment,
- **Ecology/Ecotoxicology/Conservation Biology:** Background in either general ecology, ecosystems, ecotoxicology, or conservation biology or a combination thereof; and
- **Environmental fate chemistry:** Emphasizing experience with quantitative structure-activity relationships (QSARs) and chemical fate and transport modeling.

Applicants with doctoral degrees in other human health, ecological or information management disciplines pertinent to the broad scope of environmental risk assessment are also strongly encouraged to apply.

The post-doctoral positions are three-year Federal Government term appointments that will begin in September 1999 at a salary range of \$39,960 - \$62,260, commensurate with qualifications. Selected candidates will be eligible for a **full benefits package**, including relocation expenses, health insurance, life insurance, retirement, and vacation and sick leave. Preferred candidates will have earned a Ph.D. in one of the above disciplines within the past five years, or will be eligible for award of the degree no later than August 31, 1999. United States citizens are preferred and will be given first consideration for all positions.

To apply for NCEA post-doctoral positions, **please send a curriculum vitae, letter of recommendations from your senior research advisor or other comparable official, additional reference(s) as available, and a letter indicating your research focus** to Dr. Bruce Rodan (8601D), ATTN: Post-Doctoral Positions, National Center for Environmental Assessment, U.S. Environmental Protection Agency, 401 M Street SW, Washington, DC 20460. A statement of location preference or availability (DC, NC, OH, all Divisions) should be included in the application. **Applications should be received by NCEA or post-marked by May 14, 1999.**

For more information on NCEA and the post-doctoral program, please access our Internet site at <http://www.epa.gov/ncea>.

The U.S. EPA is an Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP PROGRAM IN STRUCTURAL BIOLOGY NATIONAL CANCER INSTITUTE

A Postdoctoral position is available immediately for an individual to participate in structural studies of *Bacillus anthracis* lethal toxin components and *Yersinia pestis* virulence factors, with the overall aim of facilitating the design or discovery of effective countermeasures for these potential agents of bioterrorism. The ideal candidate already possesses strong X-ray crystallography skills and wants to maintain this focus while also gaining experience with state-of-the-art methods for recombinant protein expression and purification. This is an outstanding opportunity for a highly motivated person to capitalize on the superior technical resources available to affiliates of the Program in Structural Biology, including regular access to synchrotron radiation, and establish a foothold for themselves in the rapidly growing field of anti-bioterrorism research. The salary range for this position is \$29,000 to \$36,000. Please send a cover letter and curriculum vitae to: **David S. Waugh, Ph.D., Macromolecular Structure Laboratory, National Cancer Institute-Frederick Cancer Research and Development Center, P.O. Box B, Frederick, MD 21702.**

POSTDOCTORAL POSITION available immediately to investigate the role of a novel organelle present in trypanosomatids and Apicomplexan parasites, named the acidocalcisome. Candidates with strong background in molecular and cell biology and an interest in parasitology are encouraged to apply. Send résumé and names of three references to: **Dr. Roberto Docampo, Laboratory of Molecular Parasitology, University of Illinois, 2001 South Lincoln Avenue, Urbana, IL 61802. E-mail: rodoc@uiuc.edu. The University of Illinois is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITION HARVARD MEDICAL SCHOOL

Postdoctoral position available to study neural networks with molecular techniques at the single-cell level in the retina of transgenic mice. Background in molecular biology is required. *Funding for this position is contingent upon applicant being a U.S. citizen or a permanent resident.* Send curriculum vitae, statement of research experience, and names and e-mail addresses of three references to: **Elio Raviola, M.D., Ph.D., Harvard Medical School, Department of Neurobiology, Goldenson, B2-201, 220 Longwood Avenue, Boston, MA 02115. E-mail: elio_raviola@hms.harvard.edu. Harvard Medical School is an Equal Opportunity/Affirmative Action Employer.**

The University of Chicago invites applications for two non-tenure-track positions as **LECTURER** in the Biological Sciences Collegiate Division. The applicant will teach introductory general biology courses, which will include laboratories. We are seeking broadly trained Ph.D. applicants with teaching and research experience who are competent to teach cell/molecular, organismal, and population biology at the introductory survey level. Send curriculum vitae, three letters of reference, and a statement of teaching interest by May 1, 1999, to: **José Quintans, The University of Chicago, Biological Sciences Learning Center, Room 104C, 924 East 57th Street, Chicago, IL 60637. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available to study protein trafficking and protein interactions of the human hereditary hemochromatosis protein, HFE. Experience in protein chemistry preferred. Please send curriculum vitae and references to: **Dr. Caroline Enns, Department of Cell Biology L215, Oregon Health Sciences University, Portland, OR 97201.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH POSITION in retrovirology. Highly competitive salary, plus a generous benefits package depending on previous educational and research experiences. Research will be conducted in the NIH-funded laboratory of **Dr. Michael Lairmore** to study the molecular pathogenesis of HTLV-1. Projects include viral genetic determinants of infectivity and alterations of lymphocyte signal transduction using an *in vitro* or *in vivo* model systems. State-of-the-art research facilities include the Comprehensive Cancer Center, Biotechnology Center, and Center for Retrovirus Research. Preference will be given to candidates who have research experience in the study of retroviruses. The quality of life on campus and in the city is excellent. Please send a statement of career goals, curriculum vitae, and names of three references to: **Dr. Michael Lairmore, The Ohio State University, Center for Retrovirus Research, 1925 Coffey Road, Columbus, OH 43210-1093. E-mail: lairmore.1@osu.edu. The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Women, minorities, Vietnam-era veterans, disabled veterans, and individuals with disability are encouraged to apply.**

Two **POSTDOCTORAL POSITIONS** are available June 1, 1999, to study type I and type II interferons, with emphasis on post-receptor events, endocytosis, signal transduction pathways, and subsequent modulation of cell cycle. Areas of expertise should include immunology, biochemistry, and molecular biology. Please send curriculum vitae and the names of three references to: **Dr. Howard M. Johnson, Department of Microbiology and Cell Science, Box 110700, University of Florida, Gainesville, FL 32611. Telephone: 352-846-0968; FAX: 352-392-5922; e-mail: hjohnson@micro.ifas.ufl.edu.**

Connect the dots

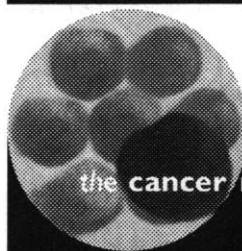
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Any way you connect them, you'll find *Science* Professional Network offers the best online career resource you can find anywhere. See it for yourself...

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EUROPEAN OPPORTUNITIES



the cancer research campaign

Career Development Fellowships

The Cancer Research Campaign is the largest supporter of cancer research in British universities and medical schools and is committed to developing the next generation of leaders in the field of cancer research.

The Campaign is pleased to invite preliminary applications for its Career Development Fellowships (formerly known as Senior Cancer Research Fellowships). The aim of this fellowship scheme is to support outstanding young investigators who have shown special promise in their initial studies in a cancer relevant research field and to provide them with an opportunity to establish an independent research group.

Candidates should have a PhD, have completed at least three years postdoctoral experience and should not normally be over 35 years of age. However, equal consideration will be given to those over this age where their career has been affected either by a late start, or by interruption for personal or family reasons. Applicants should not currently hold a tenured position at the proposed host institution.

The CRC Career Development Fellowships may be held in any CRC-funded research institute, laboratory or research group, or alternatively in an appropriate UK University department, subject to the usual CRC funding restrictions.

The fellowship will provide personal support for the CRC Fellow, research assistance, consumable costs and a set-up equipment grant in the first year. CRC Career Development Fellows will have the opportunity to apply for additional support (running costs for externally funded postdoctoral scientists, studentships and equipment) from The Campaign during the course of the fellowship. The award will be tenable for five years in the first instance. Renewal of personal support will be subject to a successful bid for programme grant funding during the course of the fellowship and the potential exists for negotiations with the host institution to secure a tenured appointment. The Campaign hopes to appoint five Career Development Fellows in the year 2000.

Applicants are invited to submit a two page preliminary proposal outlining their proposed programme of research, an indication of the likely host institution should be included, plus a full CV. Successful applicants will then be invited to submit a full application.

For further information please contact Dr Deborah Kidd on 0171 317 5178, e-mail: dkidd@crc.org.uk or write to:
**The Cancer Research Campaign, 10 Cambridge Terrace,
London NW1 4JL. Closing date for preliminary
applications: Friday 28th May 1999.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS CENTER FOR MOLECULAR NEUROBIOLOGY University of Louisville

Openings exist for candidates with strong neuroscience background and evidence of familiarity with molecular biology techniques. The Center is committed to promoting the full integration of neuroscience and molecular biology. Faculty affiliated with this Center are located in several departments and on two campuses. Interests are diverse including developmental neurobiology, visual neuroscience, neuropharmacology, neurophysiology, and neurogenetics. Stipends are consistent with National Science Foundation rates. Prospective candidates should send résumés with three letters of reference to:

Judy C. Hollkamp, Project Coordinator
Department of Anatomical Sciences
and Neurobiology
University of Louisville
Louisville, KY 40292
Telephone: 502-852-4880
FAX: 502-852-1475
E-mail: jcholl01@athena.louisville.edu
Website: <http://www.louisville.edu/medschool/neurobiol/>

Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION CARDIOVASCULAR PATHOPHYSIOLOGY

Two Postdoctoral Research positions are available to investigate the role of mast cells, fibroblasts, MMPs, and integrins in cardiac extracellular matrix remodeling. Candidates should have a Ph.D. in life sciences, with strong expertise in molecular techniques or tissue culture preferred. Application review will begin May 15, 1999, and continue until positions are filled. Send curriculum vitae and names and addresses of three references to: Joseph S. Janicki, Ph.D., 106 Greene Hall, Auburn University, Auburn, AL 36849-5517. Women and minorities are encouraged to apply. *Affirmative Action/Equal Opportunity Employer.*

Molecular medicine **POSTDOCTORAL/RESEARCH ASSOCIATE**. Several positions are available as part of an interdisciplinary research team using advanced technologies to determine how chromatin structure mediates development. Self-motivated individuals trained in molecular biology, genetics, and/or biochemistry are encouraged to apply. Applicants should forward their curriculum vitae and three letters of recommendation to: Dr. Stephen Krawetz, Department of Obstetrics/Gynecology and Center for Molecular Medicine and Genetics, Wayne State University School of Medicine, 275 East Hancock, Detroit, MI 48201. *WSU is an Equal Opportunity/Affirmative Action Employer. All buildings, structures, and vehicles at WSU are smoke-free. Wayne State University—people working together to provide quality service.*

POSTDOCTORAL POSITIONS IN HUMAN MOLECULAR GENETICS

Immediate candidates are sought to participate in physical mapping, cloning, mutation screening, or functional studies of various glaucoma genes. Candidates with previous experience should submit curriculum vitae and three references to: Dr. Mansoor Sarfarazi, Molecular Ophthalmic Genetics Laboratory, Department of Surgery, University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030-1110. *Equal Opportunity Employer.*

POSTDOCTORAL RESEARCH ASSOCIATE position (Ph.D. or M.D.) available immediately to study molecular mechanisms of ischemic tolerance in the retina. Neuroscience, physiology, or vision research background requested. Applications to: S. Roth, M.D., Anesthesia and Critical Care, University of Chicago, 5841 South Maryland, MC-4028, Chicago, IL 60637. Telephone: 773-702-4549; FAX: 773-834-0063; e-mail: rot8@midway.uchicago.edu. *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

RESEARCH OPPORTUNITIES at the dynamic Fred Hutchinson Cancer Research Center located in Seattle, a region with significant research, scenic, and recreation opportunities.

POSTDOCTORAL FELLOW. Two positions available on molecular epidemiology prostate cancer research team:

#SD-9247: Ph.D. in endocrinology, biochemistry, chemistry, or related field with interest and laboratory experience in endocrinology and biochemistry to study role of endogenous sex hormone in prostate cancer development. Experience in radioimmunoassays, organic extractions, and chromatography techniques essential.

#SD-9248: Ph.D. in molecular biology, biochemistry, or related field with expertise in molecular biology, cell biology, and biochemistry to study genetic factors that may contribute to development of sporadic prostate cancer. Requires Ph.D. in molecular biology, biochemistry, or related field.

Indicate job number on cover letter and send with curriculum vitae, three reference letters, and a description of current research endeavors and long-term interest to:

Dr. Chen
Program in Cancer Biology
Public Health Sciences
Fred Hutchinson Cancer Research Center
1100 Fairview Avenue North, DE-320
Seattle, WA 98109

STAFF SCIENTIST. One position available for Yeast Molecular Geneticist with postdoctoral experience in the Molecular Pharmacology Program.

#AS-9271: Ph.D.-level scientist to work in NCI-sponsored project as member of Yeast Profiling Team studying mechanisms of sensitivity for novel and established chemotherapeutics. Will direct construction and use of yeast damage response mutant collection. Indicate job number on cover letter and send with curriculum vitae, three reference letters, and a description of current research endeavors and long-term interest to:

Julian Simon, Ph.D.
Molecular Pharmacology Program
Fred Hutchinson Cancer Research Center
1100 Fairview Avenue North
Mailstop D2-100
Seattle, WA 98109

A POSTDOCTORAL POSITION is available immediately to study the interaction of *Pseudomonas* exotoxin with mammalian cells. Emphasis will be on structure-function studies and the interaction of this toxin with epithelial cells. A strong background in biochemistry and/or cell biology is required. Applicants must have a Ph.D. or M.D. degree and should have less than five years of postdoctoral experience. Send curriculum vitae and contact information with three references to: Dr. David FitzGerald, Laboratory of Molecular Biology, Building 37, Room 4B03, NCI, NIH, Bethesda, MD 20892-4255. E-mail: djpf@helix.nih.gov.

POSTDOCTORAL RESEARCH FELLOW-SHIP. Positions are available for Postdoctoral Fellows experienced in molecular biology, immunology, or protein chemistry. The research undertaken involves viral and immunological features of HIV pathogenesis. *Must be U.S. citizen or permanent resident.* Send curriculum vitae and the names of three references to: Jay A. Levy, M.D., Division of Hematology/Oncology, Department of Medicine, University of California, San Francisco, CA 94143-1270.

POSTDOCTORAL POSITION available to study ion channel localization and neuron-glial interactions in myelinated axons. Requires Ph.D. and experience in molecular biology and protein biochemistry. Please send a curriculum vitae and names of three references to: Dr. Peter Shrager, Department of Neurobiology and Anatomy, Box 603, Room 4-5428, University of Rochester Medical Center, 601 Elmwood Avenue, Rochester, NY 14642. E-mail: psshr@uhrs.cc.rochester.edu. *An Equal Opportunity Employer.*

POSITIONS OPEN

POSTDOCTORAL POSITIONS IN MOLECULAR AND CELL BIOLOGY OF CANCER Cornell University Department of Molecular Medicine

Postdoctoral positions of an NIH training grant are available to study aspects of viral oncogenesis (walleye dermal sarcoma virus; woodchuck hepatitis virus), pp60^{src} in mitogenesis and oncogenesis, receptor/G protein-coupled signaling, control of cell cycle and differentiation, retinoids in gene transcription, FAK and Pyk2 in integrin-mediated signaling, cell-cell adhesion and associated signaling in cancer metastasis, apoptosis, as well as naturally occurring anticancerous compounds (e.g., indolic alkaloids). A strong background in molecular biology, protein chemistry, and cell biology is highly desirable. Please send curriculum vitae and names and addresses of three referees to: Director, Office of Human Resources, S3007 Schurman Hall, Cornell University College of Veterinary Medicine, Ithaca, NY 14853.

Cornell University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study and mathematically model the mechanism of chemical-induced dermal irritation. Cytokine and chemokine measurements are used to discern the temporal responses of the skin to organic chemicals. The candidate must have Ph.D. and experience in biochemical and molecular biology techniques with cytokines. Experience in dermal toxicology/or skin penetration is desired. Please send curriculum vitae with names of two references to: James McDougal, Ph.D., Department of Pharmacology and Toxicology, School of Medicine, Wright State University, 3640 Colonel Glenn Highway, Dayton, OH 45435-0001. Position open until filled. *Wright State University is an Affirmative Action/Equal Employment Opportunity Employer.*

POSTDOCTORAL RESEARCH POSITION. Position is available at the Medical University of South Carolina's Hollings Cancer Center, to study the genetic aspects of antifolate resistance in childhood leukemia. The successful candidate will join an NIH-supported laboratory, and a reference laboratory for major cooperative group. Ph.D. and experience in molecular biology techniques essential. Send curriculum vitae with names of three references to: Dr. Julio Barredo, Department of Pediatrics and Biochemistry and Molecular Biology, Medical University of South Carolina Children's Hospital, P.O. Box 250911, Charleston, SC 29425. FAX: 843-792-8871; e-mail: barredo@muscc.edu.

POSTDOCTORAL POSITION to work with Dr. Wendy Johnson and Dr. Frank Rodgers on the association of *Campylobacter* with GBS funded by Canadian Bacterial Diseases Network. Ph.D. with expertise in molecular genetics, protein biochemistry, and cell biology. Stipend will be consistent with NSERC guidelines. Send brief description of research experience, résumé, and names of three references to: Dr. Frank Rodgers, National Laboratory for Enteric Pathogens, LCDC/Health Canada, 1015 Arlington Street, Winnipeg, Manitoba R3E 3R2 Canada.

POSTDOCTORAL POSITION to study initiation of DNA replication or gene expression during mammalian development. Applicants should send their curriculum vitae, and the names, telephone numbers, and e-mail addresses of three references to: Melvin DePamphilis, Building 6/Room 416, National Institutes of Health, 9000 Rockville Pike, Bethesda, MD 20892-2753. FAX: 301-570-8797; e-mail: depamphm@box-d.nih.gov. Job description is found at website: www.biomednet.com/jobs/JOBX.84480. Information about the NIH is found at website: www.nih.gov.



CALL FOR POSITIONS

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 at least finished post doctoral training, or equivalent, and a good publication record.

2 positions of Associate Telethon Scientists

For University researchers and associated professors, or equivalent, with at least 5-10 years experience. Candidates must have a strong publication record and will be expected to develop a vigorous and independent research program.

1 position of Telethon Scientist

Candidates must be scientists at the highest level of scientific production and a long-standing international reputation for scientific excellence. They must have the proven ability to initiate, stimulate and conduct innovative research and provide the scientific leadership to promote their activities both nationally and internationally.

Each position will be awarded a five-year renewable contract and will receive a substantial research grant. There are no citizenship restrictions. Prearranged and formal agreement with Italian research institutes are mandatory for these positions. Three letters of recommendation that consider both research potential and general activities are needed. Further information can be obtained from: **Fondazione Telethon**, Via P. Santacroce 5, 00167 Rome, Italy. Tel: +39 06 665961 Fax: +39 06 66015436, email: telethon@mail.telethon.it

For more details please visit the following web-site address: <http://telethon.tigem.it/news/guidelines.htm>

Closing date for applications is 15th June, 1999.



Universität Heidelberg

In der **Fakultät für Pharmazie** der Universität Heidelberg ist im Pharmazeutisch-Chemischen Institut eine

C3-Professur für Pharmazeutische Chemie mit Schwerpunkt Bioorganische Chemie

zu besetzen.

Einstellungsvoraussetzungen sind ein abgeschlossenes Hochschulstudium, pädagogische Eignung und Lehrerfahrung. Promotion und Habilitation oder eine vergleichbare Qualifikation.

Es wird erwartet, daß die/der erfolgreiche Bewerber (in) auf einem aktuellen Gebiet der Bioorganischen Chemie forscht und sich an der Lehre laut der Approbationsordnung für Apotheker beteiligt. Approbation zum Apotheker ist erwünscht, aber nicht Voraussetzung. Wir stellen uns eine Mitwirkung im Graduiertenkolleg 388 „Biotechnologie – molekularbiologische und biochemische Grundlagen“ vor.

Die Universität Heidelberg ist bestrebt, den Anteil an Frauen in der Wissenschaft zu erhöhen. Bewerbungen von Frauen werden daher bei gleicher Eignung bevorzugt berücksichtigt.

Bewerbungen mit Lebenslauf, Publikationsliste mit einer kurzen Zusammenfassung der jetzigen und zukünftigen Forschungsschwerpunkte, Angaben über eingeworbene Drittmittel, Kopien von fünf relevanten Publikationen sowie einem Verzeichnis der selbständigen Lehrveranstaltungen sind bis **sechs Wochen nach Erscheinen der Anzeige** an den **Dekan der Fakultät für Pharmazie, Herrn Prof. Dr. M. Wink, Im Neuenheimer Feld 346, D-69120 Heidelberg**, zu richten.

EU-FUNDED POST DOCTORAL FELLOWSHIPS IN MOLECULAR ONCOLOGY NATIONAL CANCER INSTITUTE MILAN, ITALY

Two Units presently funded by the European Union BIOMED program have openings for experienced and motivated postdoctoral fellows (PhD and/or MD) that desire to spend 2 years in Italy under the European Union (EU) sponsored Marie Curie Fellowship Program. This advertisement is therefore directed to citizens of the EU or Associated States of NON Italian nationality. Applicants will be asked to work together with the Unit directors to prepare and file an application to the EU (deadline May and June 1999).

The projects with available openings at the moment are based inside the following Units:

Oncogenic Fusion Proteins Unit (director Carlo Gambacorti MD, E-mail gambacorti@istitutotumori.mi.it): the Unit is focused on the targeting of genes and gene products causally involved in the process of malignant transformation, with the aim to develop innovative treatment modalities and to validate them in initial clinical studies. Active projects include the study of an ABL inhibitor in chronic myeloid leukemia, the analysis of the NPM/ALK fusion protein present in non Hodgkin's lymphomas, the identification of a new gene involved in skin cancer, and the study of Peptide Nucleic Acid (PNA) as an anti-gene molecule. Further information can be obtained at <http://www.cilea.it/tumori/Department/Gambacorti.htm>, or in JNCI, 91, 163-8 (related editorial at pages 102-103), 1999; Blood, 93, 1477-81, 1999; Nucl. Acid Res., 26, 1934-1938.

Polygenic Inheritance Unit (director Tommaso A. Dragani Ph.D, Email: dragani@istitutotumori.mi.it): the Unit is focused on (i) the genetic linkage mapping of loci affecting inherited predisposition and resistance to cancer in experimental mouse models; (ii) the cloning of candidate cancer susceptibility/resistance genes; (iii) population-based studies to confirm and extend in humans results obtained in the experimental systems. (Nature Genetics, 3:132-136, 1993; *ibid.*, 12, 455-457, 1996; *ibid.*, 17:7-8, 1997).

The National Cancer Institute in Milan is an internationally renowned Comprehensive Cancer Research Center. It comprises a staff of 1300, a department of experimental oncology with more than 200 researchers and 14 Units, and over 400 beds. Interested applicants can send their complete CV and names of 3 referees to: Carlo Gambacorti MD or Tommaso A. Dragani PhD, Istituto Nazionale Tumori — Dept. of Exp. Oncology, Via Venezian 1, 20133 Milano Italy; Fax +39.02.239-0764.

POSITIONS OPEN

POSTDOCTORAL POSITION available at the Hormel Institute, University of Minnesota, Austin, Minnesota, to study sphingolipid trafficking and domain formation in model and cellular membranes. Molecular biological cloning and site-directed mutagenesis to be used in conjunction with physical approaches (fluorescence, monolayer, freeze-etch EM, calorimetry) to investigate the role that glycolipid organization plays in regulating glycolipid transfer protein. Requires Ph.D. in biochemistry, molecular biology, or related discipline. Preference will be given to individuals with experience using molecular biological cloning and/or protein purification techniques as well as the physical approaches noted above. Send curriculum vitae and names of three references to: **Dr. Rhoderick E. Brown, The Hormel Institute, University of Minnesota, 801 16th Avenue N.E., Austin, MN 55912.** Position will remain open until a qualified candidate is found. *The University of Minnesota is committed to the policy that all persons shall have Equal Access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.*

POSTDOCTORAL INVESTIGATOR HARBOR BRANCH OCEANOGRAPHIC INSTITUTION

Postdoctoral Investigator (Estuarine Ecologist/Biogeochemist). Two-year funded position to conduct research on nutrient cycling in a South Florida estuary. Ph.D. in marine science or related discipline, with a demonstrated publication record required. Preference given to applicants with expertise in nutrient cycling at the sediment-water interface and/or within planktonic or benthic communities. Send cover letter, curriculum vitae, and three recommendation letters to: **Personnel, Harbor Branch Oceanographic Institution, 5600 U.S. 1 North, Ft. Pierce, FL 34946. FAX: 561-466-3644; e-mail: personnel@hboi.edu; website: www.hboi.edu.** Respond no later than May 14, 1999. *Equal Employment Opportunity/Affirmative Action/Disabled/Females/Minorities.*

POSTDOCTORAL POSITION WASHINGTON UNIVERSITY SCHOOL OF MEDICINE, ST. LOUIS

Available immediately. Three possible projects: (1) cytokine signal transduction and regulation of hematopoiesis; (2) oncogene cooperativity in leukemogenesis; (3) role of LIM proteins in regulation cell proliferation and differentiation. See **website: <http://longmore.wustl.edu>**. Send curriculum vitae and references to: **Dr. Greg Longmore, e-mail: longmorg@medicine.wustl.edu.** *Washington University School of Medicine is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION available immediately to study signal transduction in *S. cerevisiae*. We are investigating the regulation of $G_{\beta\gamma}$ signaling with particular emphasis on the role of the G_{α} subunit in downregulation of the yeast mating response. Expertise in protein biochemistry and molecular biology is required. Send a detailed curriculum vitae and names of three references to: **Dr. David Stone, University of Illinois at Chicago, Laboratory for Molecular Biology, 900 South Ashland Avenue (M/C 567), Chicago, IL 60607. FAX: 312-413-2691; e-mail: dstone@uic.edu.** *UIC is an Affirmative Action/Equal Opportunity Employer.*

Two **POSTDOCTORAL POSITIONS** positions are available June 1, 1999, to study type I and type II interferons, with emphasis on post-receptor events, endocytosis, signal transduction pathways, and subsequent modulation of cell cycle. Areas of expertise should include immunology, biochemistry, and molecular biology. Please send curriculum vitae and the names of three references to: **Dr. Howard M. Johnson, Department of Microbiology and Cell Science, Box 110700, University of Florida, Gainesville, FL 32611. Telephone: 352-846-0968; FAX: 352-392-5922; e-mail: hjohnson@micro.ifas.ufl.edu.**

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS IN CELLULAR AND MOLECULAR IMMUNOLOGY National Cancer Institute

Immediate openings exist for full-time, Postdoctoral Training Fellowships in the Tumor Immunology Section, Surgery Branch, National Cancer Institute, National Institutes of Health, Bethesda, Maryland to study the immune response to tumors in humans.

One project aims to study immune responses in breast cancer and requires a background in culture of fresh human breast cancers. For additional positions, we seek candidates with experience in cellular immunology, as well as molecular biology. Ongoing projects include the identification of new tumor-associated antigens, the study of immune tolerance to tumor-associated differentiation antigens, the development of synthetic and recombinant anticancer vaccines.

Send cover letter, résumé, and statement of research interests to:

Steven A. Rosenberg, M.D., Ph.D.
Chief of Surgery
National Cancer Institute
National Institutes of Health
Building 10, Room 2B42
Bethesda, MD 20892-1502
E-mail: sar@nih.gov

Selections for these positions will be based solely on merit, with no discrimination for nonmerit reasons such as race, color, religion, gender, national origin, politics, marital status, physical or mental disability, age, sexual orientation, or membership or nonmembership in an employee organization. NIH is an Equal Opportunity Employer.

A **POSTDOCTORAL POSITION** is available in the Department of Pharmacology, East Carolina University School of Medicine, to study the roles of molecular motor proteins in mammalian spermatogenesis. The successful candidate should have a Ph.D. in pharmacology, biochemistry, molecular biology, or related discipline. Preference will be given to applicants experienced in GFP/fusion protein expression, advanced molecular biology techniques, and immunocytochemistry. The anticipated start date for this position is August 1, 1999. Please submit curriculum vitae and three letters of reference by June 30, 1999, to: **Dr. Ann O. Sperry, East Carolina University School of Medicine, Department of Pharmacology, Greenville, NC 27858-4353. E-mail: asperry@brody.med.ecu.edu.** *Federal law requires proper documentation of identity and employability at the time of employment. East Carolina University is an Affirmative Action/Equal Opportunity Employer and invites applications from women and minority scientists.*

POSTDOCTORAL POSITIONS IN CANCER RESEARCH

Positions are available for Organic and/or Bioorganic Chemists to study mechanisms of initiation of human cancer by estrogen quinones. The research consists of synthesis of estrogen-nucleoside adducts and determination of biologically formed estrogen metabolites, as well as DNA and glutathione adducts, to identify biomarkers for susceptibility to cancer. Salary is competitive. Send curriculum vitae with names of three references to: **Dr. Ercole Cavalieri, Eppley Cancer Institute, 986805 Nebraska Medical Center, Omaha, NE 68198-6805. Telephone: 402-559-7237; FAX: 402-559-8068; e-mail: ecavalie@unmc.edu.** *Affirmative Action/Equal Employment Opportunity.*

A **POSTDOCTORAL POSITION** is available to study molecular mechanisms of G protein signaling. Requires Ph.D., M.D., or equivalent. Experience in the signal transduction area is desired. Send curriculum vitae and the names of three references to: **Dr. Nikolai Artemyev, Department of Physiology and Biophysics, The University of Iowa, Iowa City, IA 52242-1109. FAX: 319-335-7330; e-mail: nikolai-artemyev@uiowa.edu.** *The University of Iowa is an Equal Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply.*

POSITIONS OPEN

POSTDOCTORAL POSITIONS AT NIH

A Postdoctoral position is available immediately to work in the Laboratory of Molecular and Developmental Biology in the National Eye Institute, National Institutes of Health. The research involves studies on developmentally regulated, tissue-specific expression of genes in the lens and/or cornea and on genetic engineering of the cornea. Methodologies include cloning, expression, and molecular analyses of cDNAs and genes, and production and utilization of transgenic mice, gene knockout mice, and transfected cells. *Candidates must be U.S. citizens or permanent residents and have a Ph.D. or M.D. degree. Salary begins at \$30,000 and increases depending on experience. Please send curriculum vitae and the names of three references to: Dr. Joram Piatigorsky, Laboratory of Molecular and Developmental Biology, Building 6/Room 201, Bethesda, MD 20892-2730. E-mail: joramp@intrane.nih.gov.*

NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION. Autoimmunity/Neuroimmunology. Johns Hopkins University. Funded Postdoctoral position for three years to study exciting new strategies of antigen-specific immunotherapy for model autoimmune diseases. Projects involve specific therapy of experimental myasthenia gravis in animals and cell culture systems, using gene transfer, transgenic mice, stem cell-based therapy, and novel therapeutic agents. Strong background in immunology and molecular biology, and experience in cellular and antibody methods required. *Funding for U.S. citizens or permanent residents.* Curriculum vitae and list of references (e-mail preferred) to: **Daniel B. Drachman, M.D., Prof. of Neurology and Neuroscience, Johns Hopkins School of Medicine, 600 North Wolfe Street, Baltimore, MD 21287-7519, Meyer 5-119. E-mail: dandrac@aol.com; FAX: 410-955-1961.**

Equal Opportunity/Affirmative Action Employer.

PATCH CLAMP POSTDOCTORAL POSITION

Experienced individual in patch clamp needed to measure single channel recordings to start immediately. Unusual interdisciplinary project and environment. The single channel recordings will be used to learn about the structure and motions in K channels (**website: <http://www.ccs.fau.edu/~liebovitch/larry.html>**). Position is contingent upon availability of funding. Please send curriculum vitae by April 30, 1999, to: **Dr. Larry S. Liebovitch, Center for Complex Systems and Brain Sciences, Florida Atlantic University, 777 Glades Road, Boca Raton, FL 33431.** *Florida Atlantic University is an Equal Opportunity/Equal Access/Affirmative Action Institution.*

Position available for **POSTDOCTORAL FELLOW** for studies of regulation of cytokine production by airway tissues and cells from cystic fibrosis patients and normals, mice, and cell lines. Experience with RNA preparation, Northern blots, and RPA necessary. *U.S. citizenship required.* Correspondence to: **Melvin Berger, M.D., Ph.D., Case Western Reserve University, Department of Pediatrics, Rainbow Babies and Childrens Hospital, 11100 Euclid Avenue, Cleveland, OH 44106. Telephone: 216-844-3237; FAX: 216-844-7587; e-mail: mxb12@po.cwru.edu.** *CWRU is an Affirmative Action/Equal Opportunity Employer.*

Tennessee. **POSTDOCTORAL POSITION.** Position available immediately to study the role of human herpesvirus 8 in Kaposi's sarcoma. Applicants with Ph.D. or M.D.-Ph.D. degrees and experience in cell purification, culture, protein purification, and gene cloning should send curriculum vitae and names of three (3) references to: **Dr. Philip J. Browning, Vanderbilt University Medical Center, Division of Hematology-Oncology, 636 MRB II, Nashville, TN 37232-6838. E-mail: philip.browning@mcmail.vanderbilt.edu.** *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

POSTDOCTORAL ASSOCIATE

A Postdoctoral position is available at the Fox Chase Cancer Center to study the genetics of mammary cancer initiation and progression. Fox Chase has outstanding shared core facilities including tissue culture, cell sorting, electron and confocal microscopy, DNA sequencing, and a tumor bank available to support research projects. Experience in molecular biology, mouse genetics, and quantitative genetic analysis is desirable but not required. Information about research and the postdoctoral program at Fox Chase Cancer Center can be obtained from our website: <http://www.fccc.edu>. Applicants should send a curriculum vitae and the names of three references to: **Kent Hunter, Ph.D., Division of Population Science, 7701 Burholme Avenue, Philadelphia, PA 19111. E-mail: kw_hunter@fccc.edu.** *Equal Opportunity Employer. Applicants must qualify under the NIH guidelines, which include U.S. citizenship or permanent residency.*

We have several **POSTDOCTORAL POSITIONS** available for M.D. or Ph.D. applicants with less than four years of postdoctoral training. Research training will be in the area of neurodegenerative diseases, including but not limited to Alzheimer's disease and Parkinson's disease. Researchers are currently investigating the biochemistry, neuropathology, molecular biology, genetics, and clinical aspects of neurodegenerative diseases. The salary is \$41,000 and may be negotiable depending on the experience of the applicant. The appointments are for a minimum of two years and there is the possibility of obtaining a staff appointment at the VA Medical Center and the opportunity for VA funding. *Applicants must be U.S. citizens or eligible for citizenship within the period of the Fellowship.* Applicants should send curricula vitae to: **Dr. Richard Fine, Bedford, VA Medical Center, 182B, 200 Springs Road, Bedford, MA 01730. E-mail: rfine@bu.edu.**

COURSES & TRAINING

NEURAL DEVELOPMENT AND GENETICS OF ZEBRAFISH

August 15-27, 1999, Marine Biological Laboratory, Woods Hole, Massachusetts

An intensive lecture/laboratory course for advanced graduate and medical students, Postdoctoral and Clinical Fellows, and beginning independent investigators. Topics will include developmental stages of zebrafish, chemical and insertional mutagenesis, early development, organogenesis and zebrafish husbandry, the nervous system, its development, and the analysis of nervous system mutants. Laboratory exercises will introduce students to developing wild-type and mutant embryos, techniques of nucleic acid injection, cell transplantation, *in situ* hybridization, labeling of single cells, behavioral testing of wild-type and mutant animals, and axonal pathfinding techniques. Directors: **John Dowling**, Harvard University and **Nancy Hopkins**, MIT. Course Fee: \$2,500 (includes room and board). Financial assistance available. For information/applications, contact: **Carol Hamel, Admission Coordinator, Marine Biological Laboratory, 7 MBL Street, Woods Hole, MA 02543. E-mail: admissions@mbi.edu; Telephone: 508-289-7216; website: www.mbl.edu.** *An Equal Opportunity/Affirmative Action Institution.*

ANNOUNCEMENT

International Society of Psychiatric Genetics. Seventh World Congress on Psychiatric Genetics. October 14-18, 1999. Monterey, California. Abstracts due May 15, 1999. Qualifies for up to 24 hours of CME Category I credit. Sample topics include genetic factors and linkage studies in psychiatric disorders, candidate genes, pharmacogenetics, and ethical issues in genetics. For information, **Telephone: 516-444-7246; FAX: 516-444-7536; e-mail: kgreene@mail.psychiatry.sunysb.edu; website: www.uhmc.sunysb.edu/ispag/.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE IN IMMUNOLOGY

An NIH-funded position is available immediately to study the B lymphocyte-intrinsic Bcml-1 gene that causes premature B cell apoptosis, B cell deficiency, and loss of B cell memory in mice. The successful candidate will join a collaborative group mapping and cloning the Bcml-1 gene, and biochemically characterizing the Bcml-1 signaling pathway. Applicants should have a strong background in immunology and experience in molecular biology and biochemical techniques. Send a letter, curriculum vitae, recent reprint, and the names of three references to: **Dr. C. E. Hayes, Professor, Department of Biochemistry, University of Wisconsin, 433 Babcock Drive, Madison, WI 53706-1544. E-mail: hayes@biochem.wisc.edu.**

EUROPEAN OPPORTUNITIES

TECHNISCHE UNIVERSITÄT MÜNCHEN

The Biophysics Department E-22 offers two-year positions (renewable) for Biochemists, Cell Biologists, and Biophysicists.

BAT II a (POSTDOCTORAL POSITION) and BAT IIa/2 (Ph.D. STUDENTS).

Applicants should be familiar with routine techniques in protein purification. Knowledge in EM techniques desirable. Projects involve the structure and function of cytoskeletal proteins, including focal contact proteins, protein/membrane interaction, and signal transduction mechanisms.

Please send your applications to: **Prof. Dr. G. Isenberger, Technische Universität München, Biophysics Department E-22, James Franck Strasse, D-85747 Garching FRG.**

POSTDOCTORAL FELLOW in bioenergetics. We invite applications for a position (initially one year) as Postdoctoral Fellow in cell and molecular physiology. The successful candidate will join an ongoing project on the bioenergetics of brown fat mitochondria, in particular in UCPI-ablated mice. Further information from **e-mail: jan@metabol.su.se**. Applications to: **Prof. Jan Nedergaard, The Wenner-Gren Institute, The Arrhenius Laboratories F3, Stockholm University, SE 106 91 Stockholm, Sweden by April 30, 1999.**

CALL FOR PAPERS FRACTAL 2000

"Complexity and Fractals in the Sciences"
6th International Multidisciplinary Conference
16-19 April 2000, Singapore

Further details from: **Dr. M. M. Novak, School of Physics, Kingston University, Surrey KT1 2EE UK. E-mail: novak@kingston.ac.uk; website: http://www.kingston.ac.uk/fractal/.**

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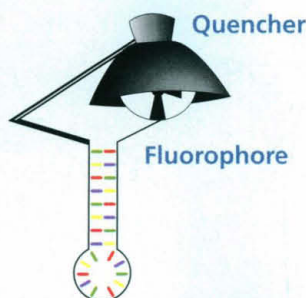
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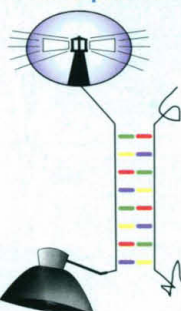
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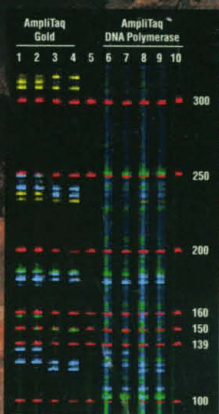
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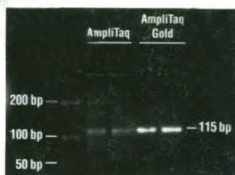
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