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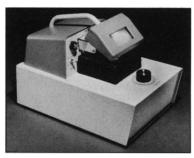
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#### ADVERTISER DIRECTORY

# European Careers

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# European Careers

A SPECTRUM OF SPECIALTIES

Life scientists who seek opportunities to carry out new and challenging research and development in Europe have a choice among several subdisciplines. Here's a sampler.

**Amersham Pharmacia Biotech** 

Bayer A.G.

**Janssen Research Foundation** 

**Leiden Institute of Chemistry** 

By Peter Gwynne

Information technology. Combinatorial chemistry. Genomics, proteomics, and pharmacogenomics. Drug-receptor interactions. Metals in living systems. These are among the active new areas pursued by research groups in European universities, R&D organizations, and industrial laboratories.

The entry requirements are equally diverse. Industrial employers and faculty recruiters generally expect a Bachelor's degree in a foundation subject such as molecular biology or chemistry, with higher qualifications in more specialized fields. International experience, at the Ph.D. or postdoctoral level, is frequently desirable. And managers in the pharmaceutical and biotechnology industries look for evidence that candidates have the ability to become team players.

Here, we talk about recruitment needs with representatives of a pharmaceutical company and a science and technology development company headquartered in Europe, a research foundation connected to a U.S.-based pharma, and an academic chemistry institute. They discuss their specific needs for life scientists, and the types of qualifications and skills that they expect of new recruits.

LEVERKUSEN, Germany: Bayer A.G. has 1,400 individuals in pharmaceutical research worldwide, and 2,000 more in development. Those personnel carry out research in most therapeutic areas, including anti-infectives, anti-viral drugs, and treatments for coronary heart diseases, central nervous system conditions, sclerosis, neurology, pain, depression, cancer, osteoporosis, and metabolic disorders, as well as chronic pulmonary diseases such as asthma. "In our group," says Wolfgang Hartwig, executive vice president of international pharma research, "we are looking for small molecule drugs and protein drugs."

Hartwig's group consists of individuals trained in several fields, from chemistry to pharmacology. It seeks particularly to recruit sci-

entists in two areas. "We have a need for chemists now, particularly in the field of combinatorial chemistry," says Hartwig. "We now have 30 to 40 people involved solely in combinatorial chemistry, but not all were trained in this discipline. We are looking worldwide for about 100 chemists."

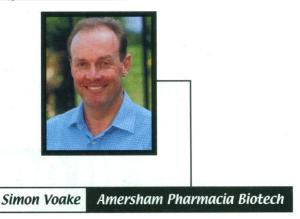
Finding them in Europe has proved difficult, continues Hartwig, because not many German academic groups work in the discipline. As a result, he says, "we have to train organic chemists inhouse." Bayer carries out the training with an eye on the future. "In the long run," explains Hartwig, "every chemist should be able to use this new technology to produce hundreds of compounds per week, rather than per year."

Like other pharmaceutical companies, Bayer has a strong need for scientists with skills in information technology. "For the next 30 years we will have to cope with a plethora of information," he says. Unfortunately, European colleges and universities are not producing enough individuals skilled in bioinformatics and related fields. "It's not just the number; it's a question of quality," says Hartwig. "We are looking for smart people, but we don't get enough. It's a problem to get the right bioinformatics people at the right time, especially now with the Y2K problem taking up the time of informatics experts. Therefore we formed an alliance with LION BIO-SCIENCE, an expert company in this field."

Bayer's R&D headquarters looks worldwide for the combinatorial chemists, experts in bioinformatics, and other scientific personnel that it needs. "We certainly recruit people from U.S. universities and from other companies," says Hartwig. "Twice a year, on the East Coast and West Coast, we have a postdoc meeting in the United States. We invite German postdoctoral fellows in U.S. chemistry and biology departments. This is a very effective recruiting tool. The scientists we hire have different expertise from those who stayed in Germany."

**CARDIFF, Wales:** "In Europe, we have three sites with major R&D units," says Simon Voake, human resources manager at Amersham Pharmacia Biotech. "All are involved in the development of advanced technology platforms for industrial-scale biological separations, technology for high-throughput drug screening, and downstream lead optimization. We also have research programs focused on mutation detection analysis and functional proteomics."

Amersham Pharmacia Biotech seeks scientists with qualifications in several areas. These include particular applied scientific disciplines to explore and exploit opportunities in genomics, functional proteomics, ultra-high-throughput screening, pharmacogenomics, informatics, and separation systems. "The majority of our development scientists embrace more than one discipline, and there are few narrow specialists," says Voake. "As a consequence, we don't look just for specialist skills, but for people who have a broad interest in science, and who are able to embrace new disciplines and work in multidisciplinary teams involved in a broad range of technologies. Even if we hire a scientist for a particular area of



expertise, we are careful to pick someone sufficiently flexible to adapt to the pace of change in the life sciences."

Breadth of scientific thinking has become something of a tradition in Amersham Pharmacia Biotech. "A lot of the molecular biologists in the 1980s in this organization were chemists by training," says Voake. "They were almost self-trained molecular biologists, who made the transition from a traditional field to a new and emerging one." That tradition has continued. "Your very best scientists," says Voake, "can provide a link between disparate areas of science."

Voake spreads his net wide in his search for personnel. "We look for scientists fresh from university and those with commercial and research experience beyond university," he says. "We typically advertise worldwide to reflect our global R&D organization, but we are becoming increasingly imaginative in the way we source scientific talent. Postdoctoral research positions and collaborations are becoming increasingly common alongside the traditional employment contract." Transferring scientists among different R&D units of Amersham Pharmacia Biotech around the world is also becoming common, with assignments lasting from a week to a year or more.

What advice does Voake offer to life scientists interested in career opportunities with his company? "Show some interest beyond the science," he suggests. "Get some feel for working in a commercial environment. Whilst basic research is crucially important, and we are careful to allocate significant resources to these activities, our primary focus has to be on products valued by our customers that can underpin our company's success."

**BEERSE, Belgium:** Since it was established in 1953, the Janssen Research Foundation (JRF) has developed and taken to market more than 80 new compounds. Now part of the pharmaceutical arm of multinational company Johnson & Johnson, the foundation aims to develop ground-breaking medicine for several diseases. "We are one of the discovery organizations for Johnson & Johnson," says Didier de Chaffoy, senior vice president, JRF Discovery Research worldwide. "Organizationally, Beerse targets four major fields — the central nervous system, gastrointestinal diseases, metabolic disorders, and oncology."

To staff his discovery group of 700 people, Chaffoy seeks doctors of medicine, doctors of veterinary science, and Ph.D's in

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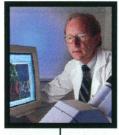
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Jan Reedijk

Leiden Institute of Chemistry



physics, chemistry, biology, psychology, and pharmacology. "It's a very broad spectrum," he says. "In our research laboratories, we have a ratio of one Ph.D. to three technicians, although this differs from lab to lab. In labs with a quite a lot of behavioral experiments the ratio is smaller. In biotechnology, most individuals have Ph.D's."

JRF Discovery Research needs a steady input of scientists with expertise in state-of the-art science. For this reason, it seeks post-docs from academic environments in areas of interest to JRF. It expects them to bring their know-how into the organization. This is organized in a flexible way; the postdocs are usually hired on a temporary basis, and do not necessarily need to make short-term contributions to established projects. "I am convinced that if these postdocs are allowed to freely explore how their know-how can be incorporated in our research and brought in line with our objectives, this will be the most fruitful approach," says de Chaffoy.

The JRF has a difficult task convincing the best and the brightest in life science to come aboard. "I think that research in universities is still regarded as having a higher social status and providing a higher level of science than research in a pharmaceutical company," de Chaffoy says. "Our approach offers them the opportunity to continue their high-level science in an environment with only a minimum of boundaries on their innovative work. Further, the transition period between academic research and research in an industry environment offers people the chance to learn the discovery process on the job, and offers management the opportunity to judge on their capabilities from in-house experience."

de Chaffoy expects his recruits to possess both broad exposure to life science topics and narrower specialization. He doesn't always find that in Europe. "European universities deliver enough graduates in life science, but most have a fairly traditional training," he says. "I think there's a lot of value in basic general training. But after that it's very important for young scientists to be exposed to scientific excellence. In Europe, centers of excellence in life science are rare, mostly because of the lack of focus. So the time that scientists need to build up expertise is too long." Thus he recruits in North America. Several of the European scientists who join the foundation have worked on their postdoctoral fellowships in the United States.

**LEIDEN, The Netherlands:** "We're doing a lot of structural work, and a lot on membranes and metal-DNA interactions," says Jan Reedijk, director of the Leiden Institute of Chemistry at Leiden University, and leader of its Coordination and Bio-Inorganic Chemistry Group. "We have several links with neighboring institutes. In fact pharmaceutical research takes place in the same building as ours."

The Netherlands has a strong tradition in training life scientists. Leiden is one of nine Dutch universities that offer Ph.D's in chemistry and biology. The Leiden Institute of Chemistry has about 100 students pursuing Master's degrees, another 100 working on Ph.D's, and about 30 postdoctoral fellows. The assemblage has an international flavor. As in most Dutch scientific groups, the common language is English. "And the postdocs in my group are people from England, France, and Germany," says Reedijk. Indeed, Reedijk encourages his top students to pursue their postdoctoral studies outside Europe, and he often seeks recommendations for open faculty positions from colleagues in the United States. "It's an unspoken rule that the best people try to have postdoctoral fellowships in the best schools in the United States to make them ready for faculty positions here," he asserts. "It's a route that has a good chance of success."

Its research on metal compounds in living systems puts the Leiden Institute of Chemistry in the forefront of a hot area of life science. "We combine classical coordination chemistry with modern biochemical research," explains Reedijk. "We study a range of subjects, all connected to each other and all about the behavior of metals. The group's work has a direct relationship with medicine. "Metal-DNA interactions are of major importance for the curative effects of anti-tumor medicines containing platinum or ruthenium," Reedijk continues. "Understanding of platinum interactions at the molecular level is very advanced for platinum [a component of several cancer treatments]. This has generated interest in other metals and other applications."

The research also sets up students for employment in the pharmaceutical and biotechnology industries. "Currently, about 20 to 30 percent of our graduates go into those industries," says Reedijk. "That percentage is slightly increasing, as industrial interest moves more to life science applications of chemistry."

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

# SEARCH FOUNDATION

The **Janssen Research Foundation** is a global R&D organisation discovering and developing the new medicines marketed by Janssen-Cilag (international sales \$ 8 billion). Janssen is part of the Johnson & Johnson group of companies and has its European R&D centre, which employs 1,500 research staff, located for easy access just north of Brussels.

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# Chief Executive Officer Medicines for Malaria Venture (MMV)



Geneva

MMV is being set up under the auspices of the International Federation of Pharmaceutical Manufacturers Association (IFPMA) and the World Health Organization (WHO) as a not-for-profit Foundation under Swiss law.

Its Mission is to discover, develop and register affordable new drugs to treat malaria in disease endemic countries and to make arrangements for the production and commercialisation of products for which regulatory approvals are obtained. Its modus operandi is that of a small pharmaceutical company but it is conducting both its research and its development using a virtual approach. Resources are being provided jointly by various public sector agencies and IFPMA companies. It is currently being overseen by a Strategic Planning Group (SPG) representing these groups; once the Foundation is established, this role will be taken over by a Governing Board.

The SPG now wishes to appoint a CEO to take charge of its operations. Initial objectives will include finalisation of the business and resource mobilisation plans and recruitment of key members of the managerial team. He/she will report to the Chair of the SPG/Governing Board. Applicants should ideally have thorough knowledge, experience and expertise of the research-based pharma industry, especially in the context of the discovery, development, regulatory approval and commercialisation of NCEs, including IPR and commercial agreements, most likely obtained by working in that industry over a number of years. Total fluency in spoken and written English; working knowledge of other languages would be advantageous, especially French. A rolling 1 year contract will be offered. The post will be Geneva-based, with overall terms and conditions similar to those available in the private sector. Because MMV is a not-for-profit foundation, these will be restricted to base salary plus a performance related component of no more than 20% and normal fringe benefits.

Details of MMV and copies of the Post Description and Person Profile for its CEO are available on request by e-mail to MMV's Geneva office <mmv@who.ch>. Alternatively or additionally, interested parties can contact in the strictest confidence by phone Dr Win Gutteridge at WHO Headquarters, Geneva (+41 22 791 3769) or Dr Trevor Jones at the Association of British Pharmaceutical Industries in London (phone +44 171 930 3477).

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Ref: HC4952SI

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# RESEARCH SCIENTIST IN IMMUNOLOGY

our mission will be to define strategies and technical innovation in the area of human immunology. Your expertise in human cellular immunology will be of particular value in the elaboration of new vaccines as in the improvement of those already existing.

hD in viro-immunology with one Post-Doc, you will propose strategic research approaches as part of a project team, and be responsible for a research unit (2-3 people) within the immunology department. You will develop a network of scientific collaborations in order to maintain a high level of professional, scientific and technical competence in your discipline. Qualified in human cellular immunology, experience in the area of anti-viral immunity and a knowledge in virology will be an advantage. Your team spirit and management skills are essential to success. Fluency in English and in French is required.

Male or female candidates should send a comprehensive CV and a hand-written letter (ref. S-01) to Cabinet DERUAZ - 187, rue Duguesclin - 69003 LYON - FRANCE.





#### KAROLINSKA INSTITUTET

Department of Biosciences at Novum Center for Biotechnology

# Postdoctoral positions in Protein Biochemistry/Structural Biology:

Structure-function relationship of nuclear receptors and associated cofactors.

Experienced molecular biologists/biochemists required for structural and biochemical studies on nuclear receptor-cofactor complexes with focus on estrogen receptors (see, for example NATURE 389, 1997, EMBO J. 18,17, 1999). Proven research skills in high level protein expression/coexpression in procaryotic and eucaryotic (baculovirus) systems and protein purification are an absolute must for these positions, as is additional experience in one of the following protein techniques: mass spectroscopy, surface plasmon resonance (BIAcore), FRET, crystallography. The posts will be situated in a newly established protein laboratory at the Department of Biosciences (headed by Prof. Jan-Åke Gustafsson) and will be integrated into an existing multidisciplinary team working in collaboration with the KaroBio AB (Sweden) and the Department of Structural Biology at the University of York (England).

Applications should be submitted to: Eckardt Treuter, PhD, Karolinska Institute, Department of Biosciences at Novum, Center for Biotechnology, S-14157 Huddinge, Sweden, Tel +46 8 608 9160, Fax: +46 8 774 5538, together with CV, relevant publications and two recommendation letters.

Closing date: November 15, 1999.

#### HUNTSMAN Polyurethanes

**HUNTSMAN ICI**, located at Everberg (near Brussels), Belgium, is looking for a

#### **TOXICOLOGIST**

for its Polyurethanes business.

Huntsman Polyurethanes is an exciting business which is continually seeking to expand its product range and also to develop new applications for polyurethanes. Product stewardship is a key activity in the business.

The job holder will be required to review and interpret data to assess the impact of products on man and the environment. The job holder's toxicological qualifications will enable him/her, following internal business training, to become a key advisor to development project teams.

Opportunities for travel and participation in European and International fora will evolve as experience grows.

The preferred candidate has a degree in Toxicology or Biochemistry (or equivalent) and completed his/her education with a post graduate qualification. He/she has a very strong scientific background, has excellent oral and written communication skills, is IT literate and is able to work independently as well as part of a team. English is the prime working language.

If you are interested in this vacancy, please send your CV to the attention of Martine Van Roey, HR Officer, Huntsman ICI Europe Limited, Everslaan 45, 3078 Everberg, Belgium.

# Senior Lecturer/Lecturer in Veterinary Anatomy

You should have an established research record, or be able to demonstrate potential research leadership, in one of the areas in which the Department is already strong, i.e. in musculoskeletal science including biomechanics, equine science, glycobiology, reproduction, neuroendocrinology or neuroscience. Possession of a veterinary degree will be an advantage.

An appointment may be made at the Senior Level if there is an appropriate qualified candidate.

You will be based in the main University precinct in Bristol, within the recently built Pre-Clinical School of Veterinary Science, which has well equipped research and teaching facilities. You will be required to contribute to Departmental teaching and administration.

Salary range: £17,238 - £35,670 per annum depending on experience. Information about the Department can be found at http://www.bristol.ac.uk/Depts/Anatomy Previous applicants for this position need not apply.

For further details telephone +44(0) 117 954 6947, minicom +44(0) 117 928 8894 or E-Mail Recruitment@bris.ac.uk (stating postal address ONLY) quoting reference 5868.

The closing date for applications is 15th November 1999.

#### UNIVERSITY OF BRISTOL

AN EQUAL OPPORTUNITIES EMPLOYER

# Create a storm

#### **European Career Opportunities**

Procter and Gamble is a world leader in the research, development, manufacture and marketing of a wide variety of consumer products including detergents, fabric care products, toilet soaps and health care products, disposable personal hygiene products, household care products, beverages and pharmaceuticals. Annual sales exceed 38.1 billion USD/year and our annual R&D budget is 1.73 billion USD.

#### **Human Safety Toxicologists**

Available immediately, P&G has several entry-level openings for human safety scientists/toxicologists (m/f) in our Technical Centres in Brussels (Belgium), Frankfurt (Germany), and London (UK). Candidates will have an excellent academic record with a PhD in toxicology or a life science-related area such as biochemistry, cell/molecular biology, microbiology, immunology, pharmacology or a related discipline. Successful candidates will work within the business environment to develop and coordinate safety programs for our products utilizing state-of-the-art toxicology approaches and regulatory compliance considerations. Where appropriate, communication of our programs with the external professional community will also occur. Successful candidates will have strong technical and communication skills, a high level of initiative and leadership, a good command of English and be eligible to work in the European Union. Candidates expecting to meet these requirements and being available for employment now or within the next 6 months are invited to apply. P&G offers excellent career prospects in a successful, strong and growing company, providing an environment which will stimulate both personal and professional growth. We have a policy of "promotion from within" based on contribution. Salaries are highly competitive and coupled with an excellent benefits package which provides for pension, health care and paid relocation.

To apply, please send your resume and publication list to : Mrs. C. L'heureux, Procter and Gamble Eurocor, Temselaan 100, B-1853 Strombeek-Bever, Belgium.

http://www.pg.com/careers

recbelgium.im@pg.com

Procter&Gamble Spread your wings

New scientific discoveries are based on innovation, sharing knowledge and synergy of skills. This philosophy is a priority for the Institut de Recherche Jouveinal/Parke-Davis, one of the European R&D facilities of Parke-Davis Pharmaceutical Research, located in the suburbs of Paris. In our Research Centres in Ann Arbor (USA), Cambridge (UK) and Fresnes(FR), scientists are working on a broad range of mechanistic approaches to discover and develop new drugs for important human diseases.

In France, our focus is the discovery and development of new drugs in the fields of gastroenterology, allergy, inflammation, and pain. With our continuing growth, we are looking for a

l'alliance ouvre les portes de la découverte

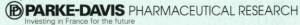
#### **Bioinformatics scientist**

As a part of the Department of Cell & Molecular Biology, you will be responsible for Bioinformatics aspects of several drug discovery projects within the therapeutic areas of interest to our French R&D Facility. You will be in charge of liaising with research scientists leading drug discovery programs across all scientific disciplines, to assist in the application of Functional Genomics data as a part of drug discovery process. The selected candidate will work in a team with other bioinformatics scientists and information technology support personnel, and act as the key liaison between France and our Cambridge and Parke-Davis Ann Arbor (Michigan) based Bioinformatics teams.

The ideal candidate should have a PhD/MSc in Molecular Biology, Biochemistry or related subject, with minimum 2 years experience in Bioinformatics. Knowledge of DNA Protein sequence database and the ability to manipulate these is essential. Proficiency in programming C, C++, Java or Perl, in Unix and Windows NT environment, is required. Also experience in design of relational database and SQL would be an advantage. Flexible and team player, the ideal candidate must have demonstrated the ability to manage research projects and collaborate closely in a multicultural scientific environment.

Because we are looking for excellence in people and science, we are dedicated to fostering an environment which encourages scientific innovation and creativity, by sharing ideas and experiences.

If you are interested by this challenging position, please send your application (letter of interest, resume, references) quoting reference Bioin/sc, to Marie-Aude Julien, Human Resources Department, Institut de Recherche Jouveinal/Parke-Davis, 3/9 rue de la Loge, BP 100, 94265 Fresnes Cedex, France - Fax: (33.1) 40 96 77 32



www.recherche.parke-davis.fr



# ASSOCIATE KEEPER OF PALAEONTOLOGY

Starting salary £39k - £43k per annum

We aim to appoint a scientist of international research reputation to act as deputy to the Keeper (Head) of the Palaeontology Department of this world famous museum.

As an international centre for research in systematics and earth science and for collections, The Natural History Museum makes a major contribution to science and to tackling issues of contemporary concern. Through its exhibitions and education services, it aims to increase the public's understanding and enjoyment of the natural world.

The Department has outstanding palaeontological collections that form a major resource for its internationally renowned research, including that on micropalaeontology, and invertebrate and vertebrate palaeontology.

The Associate Keeper will be responsible for working in collaboration with the Keeper to facilitate the contribution that the Department makes to the interdisciplinary research themes of the Museum, and for managing the Department's staff, collections, consultancy and facilities. You will be expected to lead research at a high level and to aid the Museum's scientific development. You will also play a role in the formulation and implementation of the Museum's science policy and corporate objectives.

You should have a good research degree and a proven track record in Palaeontological research, including income generation through grants, commissioned research or sponsorship. Experience of management is essential, as is evidence of scientific leadership skills.

The successful candidate will take up the position in the year 2000.

Application is by CV and covering letter, including the names and addresses of three referees.

For further information, please send an A5 SAE to Ismail Patel, Department of Human Resources, The Natural History Museum, Cromwell Road, London

Cromwell Road, London SW7 5BD. Fax: 0207 942 5298 Web: http://www.nhm.ac.uk/science

The closing date for receipt of applications is 2 November 1999.



The Natural History Museum is working towards Equal Opportunities.





# **EMBL**

#### Hamburg Outstation

The European Molecular Biology Laboratory (EMBL), an international research organisation with its Headquarters Laboratory in Heidelberg (Germany), Outstations situated in Grenoble (France), Hamburg (Germany) and Hinxton (UK), and a Research Programme at Monterotondo (Italy) has the following vacancy at the Hamburg Outstation:

# STAFF SCIENTIST (ref. no. 99/53) INSTRUMENTATION

EMBL currently operates seven beam lines at the DORIS storage ring at DESY. This post is in the EMBL instrumentation group, which designs, builds and maintains these beam lines. In addition, the group develops and builds instruments for specialised and user friendly applications at these beam lines, in cooperation with the local research groups in X-ray crystallography, small angle scattering and X-ray absorption spectroscopy.

For more information on this post visit the EMBL websites: http://www.embl-hamburg.de and

http://www.embl-heidelberg.de/ExternalInfo/jobs

EMBL is an inclusive, equal opportunity organisation.

Applicants should submit a CV, including a description of current professional activities, and names and addresses of three referees, quoting ref. no. 99/53, to:

The Personnel Section, EMBL, Postfach 10.2209, D-69012 Heidelberg, Germany. Fax: +49 6221 387555, email: jobs@EMBL-Heidelberg.de



For our international Nestlé Research Center near Lausanne, Switzerland, we are currently looking for an experienced

#### SOLID STATE NMR SPECTROSCOPIST

to strengthen research in food materials, biological polymers, polysaccharides, gels and emulsions.

The person selected will be responsible for developing a wide variety of solid state NMR applications for food research. The duties include the operation and maintenance of a fully equipped, 400 MHz, dedicated solid state NMR spectrometer.

Candidates should have a high level of expertise in solid state NMR including Ph.D. with post-doctoral and/or industrial experience. A commitment to work in concert with other research groups within Nestlé R&D is a prerequisite. Previous experience in the fields of diffusion measurements and imaging by NMR would be advantageous. Fluency in English is required, knowledge of French would be a plus.

If you are interested, please send your application to Nestlé Research Center, Human Resources, Attn. A. Dolci Rey, P.O. Box 44, 1000 Lausanne 26, Switzerland.



# **FONDATION ARES-SERONO**THE ARES-SERONO FOUNDATION

# The Ares-Serono Foundation Fellowships in Biomedicine

2000 Award Announcement

#### FELLOWSHIPS IN NEUROLOGY

Two Fellowships will be awarded by the Ares-Serono Foundation for postdoctoral training pertaining to studies in the field of neurology, particularly related to molecular or immune mechanisms potentially leading to therapeutic application, based on an international competition.

#### **Fellowship Terms**

Full-time postdoctoral training 2 years of support USD40,000 annual grant towards salary and direct expenses for postdoctoral training

#### **Eligibility**

- 1. Applicants must have completed a PhD and or MD or equivalent degree within 3 years from the start date of a fellowship.
- 2. Candidates applying for a second postdoctoral fellowship must be changing institutions.
- 3. Ability to communicate fluently in English (verbal and written)

#### **Schedule**

Application deadline Grants announced After July 15, 2000 Pellowships start October 2000

# For the Application form and Eligibility Guidelines, please contact

The Ares-Serono Foundation 12 chemin des Aulx 1228 Plan-Les-Ouates, Geneva Switzerland

Fax +41-22-706-9398

Internet address Deborah.Moore@Serono.com

Bayer is a globally active, research-based company in the fields of chemicals and lifesciences, headquartered in Leverkusen/Germany. With total annual sales of DM 55 billion and an annual R&D budget of DM 4 billion in 1998, we can offer a very attractive working environment for highly-motivated people. (For more details refer to http://www.bayer.com)

In our Central Research division in Leverkusen/ Germany, a job opportunity is available for a scientist.

## Biologist/Biochemist

As a research scientist with a PH.D. you will participate in a project aiming at the identification of ligands from biological peptide libraries and natural sources containing bioactive peptides for novel, pharmacologically important receptors. Emphasis will be put on the purification and characterization of peptide pools from organ extracts but also on the development of phage and bacterial display peptide libraries. Practical experience in either field should exist. You should have a background in peptide biochemistry and molecular biology.

The position is designated as a laboratory head within a multidisciplinary team of molecular biologists, cell biologists and biochemists working on target identification and assay development for life science units.

For further details please contact Dr. Joerg Konze (E-Mail: Joerg.Konze.JK1@bayer-ag.de). If your background and personal experience fits this profile, please send your complete application quoting ref.-No. 1041 to:

Bayer AG, Hochschulmarketing Hauptstraße 119, 51368 Leverkusen, Germany



#### **Hoechst Marion Roussel**

HMR is a global healthcare company whose pharmaceutical research is focused on the delivery of the most effective medicines to treat the unmet medical needs of the next millennium.

HMR Anti-infectives research is based in Romainville, near Paris, France, in new purpose built laboratories. The Anti-infectives Group is a dynamic international team dedicated to the discovery of novel antibacterials and antifungals that are effective against pathogens resistant to clinical agents. To meet the rapidly changing needs of our Genomics driven Anti-infectives research, we offer the following position:

# HEAD OF LABORATORY: ANTIFUNGAL DRUG EVALUATION

We are seeking a dynamic, innovative and team-oriented scientist holding a Ph.D, or equivalent, in Microbiology or Pharmacology and with the desire and ability to manage an antifungal drug evaluation group.

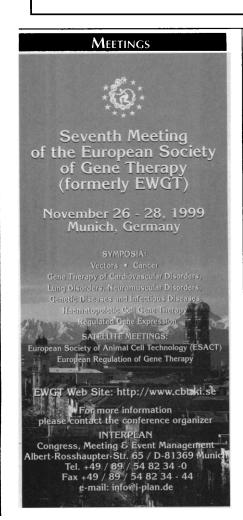
To succeed in this role you must be able to :

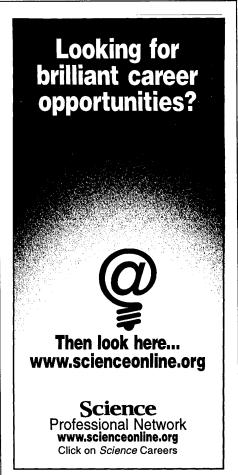
- Demonstrate success in the in vitro and in vivo evaluation of drug candidates
- Provide stategic input to advance pre-clinical antifungal programmes especially through interactions with multidisciplinary project teams
- Plan and execute research to meet agreed timelines
- Initiate innovative research within the strategic scope of the research centre
- develop and implement new in vivo technologies for drug evaluation and target validation
- · Identify and develop partnerships to access new technologies
- Fluency in English and French preferred (training will be provided).

If you are interested, please forward your resume and list of publications to: HOECHST MARION ROUSSEL Marie-Christine LACHAIZE 102 Route de Noisy 93235 ROMAINVILLE CEDEX.



Hoechst Marion Roussel The Pharmaceutical Company of Hoechst







# KAROLINSKA INSTITUTET Microbiology and Tumorbiology Center

#### **Postdoctoral Positions**

Several positions are immediately available in the fields of:

Vaccine research. Work will employ recombinant nucleic acid vectors (including recombinant suicidal virus particles and naked DNA) as vaccines in a variety of viral disease models and cancer. Work will also involve clinical trials.

Immunology. To study mechanisms of antigen delivery and presentation and the role of professional antigen presenting cells. The work will also study effects of cytokines, chemokines and costimulatory factors.

**Biotechnology**. To develop novel techniques for gene delivery and protein expression in mammalian cell systems. This includes both in vitro and in vivo applications.

Molecular Virology. To study mechanisms driving assembly and budding of enveloped viruses, in particular alphaviruses.

The Microbiology and Tumorbiology Center (MTC) is located at the Stockholm main Campus and is, with a personnel of 350, the largest unit of the Karolinska Institute. MTC is adjacent to the Swedish Institute for Infectious Disease Control (SIIDC) where some 250 scientists work on questions related to clinical microbiology and immunology. Together MTC and SIIDC form one of the largest centers in Europe focusing on microbiology, immunology and infection biology.

Applicants should send a full CV and the names and addresses (including e-mail) of at least two referees to Prof Peter Liljeström, Microbiology and Tumorbiology Center, Karolinska Institutet, Box 280, S-171 77 Stockholm, Sweden. Informal enquiries may be submitted by e-mail to Peter. Liljestrom@mtc.ki.se, and more information obtained at www.mtc.ki.se/Mtchome/mtc.htm. Closing date for applications is November 15, 1999.



#### **Life Science Head Positions**

NAP AG is a newly founded pharmaceutical company with a strategic focus on drug intervention for cytoskeletal disturbances of neurons, most notably Alzheimer's disease. Its facilities are conveniently located in the heart of Munich, Germany. With intellectual property from industrial and academic centers of international excellence and solid financial backing, an outstanding career opportunity has become available to build a team of highly talented and motivated scientists.

If you have 5-10 years industry experience in active drug development, you may be qualified for one of our two key positions:

#### Head of Biology

You have a background in biochemistry, cell biology, and molecular pharmacology.

You have demonstrated your expertise in the following areas:

- Development and design of screening assays
- · Constructive interaction with chemists
- · Use of antibodies in drug development
- · Signal transduction
- · Pharmacological target validation
- · Team development and leadership

#### Head of Pathology

You have a background in pathology and toxicology, especially of the CNS, but understand molecular rationales.

You have demonstrated your expertise in the following areas:

- Histological techniques and immunohistochemistry relevant to the CNS
- Analysis and interpretation of anatomical and cytomorphological abnormalities in disease and toxicity
- Experience in filing preclinical registration documents
- Strong experimental skills, e.g. in surgical procedures
- · Team development and leadership

#### The Opportunity

- · Competitive salary
- Participation in a targeted stock option program
- A dynamic environment in a desirable location
- A key position in shaping new therapeutic approaches in a new company

Qualified applicants please send a CV with names of two relevant referees and a letter of interest stating your career objectives to NAP AG, Landsberger Str. 50, 80339 München, Germany.

#### **Biostatistician Faculty Positions**

Located in Seattle, the Fred Hutchinson Cancer Research Center (FHCRC) is a world-renowned research institution. The FHCRC's Public Health Science Division is currently recruiting two Associate or Full Members depending upon qualifications. As well, depending on qualifications and interest, corresponding affiliate, research or regular Associate or Full Professor appointment at the University of Washington is possible (a regular appointment at the University of Washington would require teaching).

The successful candidates will join the FHCRC-based, NIH-funded Statistical Coordinating Center which is part of an international research network conducting clinical trials of HIV vaccines and other HIV prevention interventions. They will have an important leadership role within the network, serving as protocol team members, collaborating in the development of the scientific agenda, assuming lead responsibility for study designs, developing statistical analysis plans, and supervising and presenting interim and final analyses. Faculty statisticians work closely with Masters-level statisticians ensuring that studies have appropriate data collection, participant randomization, data management, and data analysis procedures. Responsibilities include close collaboration with study principal investigators and scientific working groups, as well as conducting methodologic research.

Requirements: Ph.D in biostatistics or related field; extensive clinical trials experience serving as a lead statistician; a minimum of five years experience in infectious diseases and vaccine and or prevention research with a preference for an HIV focus; strong publication record in applied, methodologic, and collaborative research.

A letter summarizing biostatistical experience (both independent and collaborative) and research interests and a complete CV including names of three references should be sent to:

Dr. Steven G. Self
Head, Biostatistics Program
Fred Hutchinson Cancer Research Center
1100 Fairview Ave. N. MP-900
Seattle, WA 98109

The Fred Hutchinson Cancer Research Center and the University of Washington are equal opportunity / affirmative action employers. Both institutions are building culturally diverse faculty and strongly encourage applications from female and minority candidates.

# Purdue Biopharma L.P.

#### Advancing Careers in Molecular Biology

Purdue Biopharma, L.P., is a new R&D facility located in **Princeton**, **New Jersey**. We are seeking highly motivated professionals to support our rapidly growing research efforts.

#### MOLECULAR IMMUNOLOGIST

Successful candidate will help interface with our Immunology group. Requires a Ph.D. in Molecular Biology or related field, 5 years' pharmaceutical experience following completion of postdoctoral training and a strong molecular biology/immunology background. Must have a proven track record cloning and manipulating DNA fragments encoding antibodies, as well as supervising Ph.D./non-Ph.D. level scientists. Knowledge of antibody structure and functional importance of different domains/sequences is essential, along with strong MB skills, including DNA cloning, site-directed mutagenesis, PCR, cell culture and expression of recombinant proteins in mammalian cells. An understanding of oncology and/or infectious diseases a plus

#### **SCIENTISTS**

Ideal applicants must possess a BA, BS or MS Degree in Molecular Biology or a related discipline and 2-5 years' solid laboratory experience. Working knowledge of cloning techniques, PCR, automated DNA sequencing, mammalian cell culture and the expression of recombinary proteins in bacteria/mammalian cells required. Experience in immunology and/or cancer biology would be advantageous. Basis computer skills and familiarity with DNA sequence analysis software a plus.

We offer competitive compensation, an attractive benefits package and opportunities for personal advancement and professional growth. For immediate consideration, qualified applicants should mail or fax resumes, indicating position of interest and salary requirements, to: Associate Director, Human Resources Services, Dept-SM, Purdue, 100 Connecticut Avenue, Norwalk, CT 06850; FAX: (203) 851-5300. Corporate standards require drug testing and background investigation. We are an equal opportunity employer committed to a diverse workplace.



Science into Practice

#### **Program Officer: Marine Biologist**



The Office of Naval Research (ONR) is seeking a qualified individual to plan sponsored basic/applied research together with exploratory and advanced development programs and projects in the broad areas of marine and environmental biology.

This is a Federal Civil Service position at the GS-13/14/15 level (\$53,793-\$97,201 plus a 7.87% locality adjustment), depending on individual qualifications.

As Program Officer in the broad areas of marine and environmental biology, the incumbent plans, evaluates, directs, and coordinates broad basic and applied research and advanced development projects essential to the Navy and Department of Defense. The incumbent will conceive, organize, direct, and defend integrated science and technology programs in their specific areas. Specific technical and programmatic fields or applications include, but are not limited to, environmental biology, marine microbiology, bioreactors, sediment biogeochemistry, and biodegradation.

The successful candidate should have (1) a degree in the biological sciences, agriculture, natural resource management, chemistry, or related disciplines appropriate to the position; or (2) a combination of education and experience—courses equivalent to a major, as shown in (1) above, plus appropriate experience or additional education.

Interested persons should submit their application and a list of publications to: Office of Naval Research, Human Resources Office, Attn: Announcement #99-34 (S), 800 North Quincy Street, Arlington, Virginia 22217-5660.

All applications must be postmarked by 10/29/99. We request that applicants complete the appropriate supplemental forms. Applicants may download a copy of the vacancy announcement from ONR's web site (http://www.onr.navy.mil/hr/). Those applicants who do not have access to the Internet may request a copy of the vacancy announcement from ONR's Vacancy Hotline at 703-696-0972. For further information concerning this vacancy, applicants may contact Jon Thomas on 703-696-4653. Hearing-impaired applicants may use our TDD number at 703-696-6357. For technical information concerning this position, applicants may contact Dr. Harold Guard at 703-696-4986.

U.S. CITIZENSHIP REQUIRED

AN EQUAL OPPORTUNITY EMPLOYER

# Department Head Department of Biology and Health Sciences

Meredith College, a private liberal arts college for women with approximately 2600 students of all ages, located near the Research Triangle in Raleigh, North Carolina, seeks a Head for the Department of Biology and Health Sciences. We seek a person who has earned a Ph.D., with administrative and leadership skills who is committed to undergraduate education, interested in making a difference in the science education of women, enthusiastic about guiding student research, and who can demonstrate the above through her/his extensive teaching experience. The person we seek will be qualified to teach Vertebrate Physiology and should possess experience in areas of human anatomy, general biology, and/or human health. The newly-appointed Department Head will have a significant role during the construction of our new science facilities.

Applications should include, in addition to the resume, a brief statement about the candidate's vision for biology in a liberal arts institution and the names of three references who could be contacted in confidence. Level of appointment will' be commensurate with experience and background. All correspondence and materials should be directed to: **Dr. Robert K. Reid** 

Chairman of the Search Committee Department of Biology and Health Sciences Meredith College 3800 Hillsborough St. Raleigh, NC 27607-5298.

Processing of applications will begin November 15, 1999. An equal opportunity employer. Visit our website at www.meredith.edu

# Editor-in-Chief The American Journal of Pathology Term: July 1, 2000 to June 30, 2005

For five years, *The American Journal of Pathology*, a leading multidisciplinary journal with the latest research in the basic mechanisms of disease, has achieved the highest citation ranking of any general pathology journal (from ISI). The Editor-in-Chief will inherit the support of an experienced, centralized editorial office that facilitates the rapid review and efficient handling of more than 1,300 original manuscripts per year among geographically divergent editors.

Submit CV and Objectives To:
Dorothy Bainton, M.D., Search Committee Chair
c/o American Society for Investigative Pathology
9650 Rockville Pike
Bethesda, Maryland 20814-3993

For more information go to <a href="http://asip.uthscsa.edw/eicad.html">http://asip.uthscsa.edw/eicad.html</a>

Application Deadline: November 15, 1999

# The University of Texas at Tyler **Department of Biology**

The University of Texas at Tyler Department of Biology seeks qualified applicants for three tenure-track positions at the level of Assistant Professor. The successful candidates will have a recent record of outstanding teaching in both classroom and laboratory and provide evidence of potential to develop a strong research program which will involve both undergraduates and masters level graduate students. Position 1) Microbiologist with a background in cell molecular biology or biochemistry to teach microbiology and biochemistry, candidates with research experience in molecular systematics preferred; 2) Physiologist with a background in pathology to teach anatomy and physiology and pathophysiology, candidates with research experience in comparative physiology preferred; 3) Ecologist (plant or animal) to teach general biology and advanced courses in specialty, candidates with research experience in community dynamics and biodiversity preferred. It is expected that the new faculty members will be committed to developing productive careers through teaching, advising, research, and service. This is an excellent opportunity for talented individuals to join an active department with modern facilities and strong undergraduate and graduate academic programs. Browse http://www.uttyler.edu/ sciencemath/biology/Biology.html for departmental information. Applications will be reviewed beginning in October, 1999. Positions will begin fall semester, 2000. All positions are contingent on funding. A letter of application specifying position of interest, statement of teaching philosophy, summary of research interests, curriculum vitae, and names, telephone numbers, and addresses of three references should be sent to: Search Committee (indicate position), Department of Biology, The University of Texas at Tyler, 3900 University Blvd., Tyler, TX 75799. Official transcripts will be required of applicants selected for interview. The University of Texas at Tyler is an affirmative action equal opportunity employer.

# Predoctoral Fellowships in Biological Sciences

#### 2000 Competition

80 Fellowships will be awarded by the Howard Hughes Medical Institute for study toward a Ph.D. or Sc.D. degree in the biological sciences listed below. Awards, based on an international competition, focus on research directed to understanding basic biological processes or disease mechanisms. Fellowships may be held at academic or research institutions with appropriate degree programs.

#### **Fellowship Terms**

- Full-time study toward the Ph.D. or Sc.D.
- Up to five years of support possible
- \$16,000 annual stipend
- \$15,000 annual cost-of-education allowance

#### **Eligible Fields of Study**

biochemistry epidemiology
bioinformatics genetics
biophysics immunology
biostatistics mathematical and
cell biology computational biology
developmental biology microbiology

molecular biology neuroscience pharmacology physiology structural biology virology

#### Eligibility

- At early stages of graduate study—college seniors or graduates, first-year graduate students, medical students, or physicians with less than one year of postbaccalaureate graduate study (prior study toward a medical degree does not rule out eligibility; eligibility for those with an M.P.H. will be determined on a case-by-case basis)
- Not in a funded M.D./Ph.D. program
- No citizenship requirements for application; U.S. citizens may study abroad, but others must study in the United States

#### Schedule

Application deadline: November 9, 1999 Awards announced: early April 2000 Fellowships start: June 2000–January 2001

# 2000 Program Announcements, Eligibility Guidelines, and Applications

Hughes Fellowship Program Fellowship Programs Unit National Research Council 2101 Constitution Avenue Washington, DC 20418 United States of America Telephone (202) 334-2872 Fax (202) 334-3419 E-mail infofell@nas.edu http://fellowships.nas.edu

The Howard Hughes Medical Institute, an Equal Opportunity Employer, welcomes applications from all qualified candidates and encourages women and members of minority groups to apply.

# UNIVERSITY OF HAWAII AT MANOA DIRECTOR, INSTITUTE FOR ASTRONOMY (Search reopened)

The University of Hawaii at Manoa solicits applications for the position of Director, Institute for Astronomy. This is an Executive/Management (E/M) position, but also carries with it a tenurable faculty position. The Institute is headquartered on the Manoa campus of the University, in Honolulu, and operates observatories and manages the astronomical sites on Haleakala (Maui) and on Mauna Kea (Big Island of Hawaii). The Institute staff totals about 209, including 50 faculty. The Director has responsibility for the health and development of the research program of the Institute, for operation of the University's observational facilities, and for liaison with and support of other organizations sited on Haleakala and Mauna Kea. The Director represents the scientific concerns of the University of Hawaii in discussions with other astronomical groups interested in Hawaii, prepares and presents testimony to Legislative committees, and is responsible to the University for providing leadership with respect to the use of Haleakala and Mauna Kea for astronomical purposes The Director interacts with the media and community groups on issues involving the Haleakala and Mauna Kea astronomical sites. Minimum Qualifications: A Ph.D. in Astronomy, Physics, or related discipline, and attainment of professorial rank or comparable professional experience prior to appointment. Applicants should have a distinguished record of achievement in astronomical or related scientific research and in working with funding agencies; a demonstrated ability for administration of scientific research programs; a demonstrated ability to work effectively with faculty, administrators, students, staff, and external agencies. Desirable Qualifications: Experience to work within a culturally diverse environment and University. Application dossiers should contain the following information: 1) A detailed letter explaining the candidate's interest in the position and specifying how the minimum and desirable qualifications for the position are met; 2) a detailed resume including list of publications and other relevant information such as extramural research funding, work on national and international advisory committees, etc; and 3) the names, addresses, telephone and fax numbers and e-mail addresses of at least three persons from whom professional references can be obtained. Applications should be sent to Chair, IfA Search Committee, 105 Bachman Hall, University of Hawaii at Manoa, 2444 Dole Street, Honolulu, Hawaii 96822.

Application deadline is November 30, 1999. Further details may be obtained from Dr. Klaus Keil, Chair of the Search Committee (phone 808-956-8761; fax 808-956-3188; e-mail keil@pgd.hawaii.edu).

The University of Hawaii is an Equal Opportunity/Affirmative Action institution.

## Biochemistry and Cell Biology Faculty Positions

The Department of Biochemistry and Cell Biology, at the State University of New York at Stony Brook, invites applications for two tenure-track faculty positions.

One of these positions will be a junior or intermediate level position. The second will be at the intermediate or senior level.

We seek applicants with interests in fundamental problems in biochemistry, broadly defined, using plant, animal, fungal or microbial systems.

Please send by October 15, 1999, a cover letter, curriculum vitae, and a summary of research interests. Applicants for the junior position should also have three letters of reference sent.

All material should be mailed to: Chair, Faculty Search Committee Department of Biochemistry and Cell Biology 450 Life Sciences Building SUNY/Stony Brook Stony Brook, NY 11794-5215

Stony Brook is an affirmative action/equal opportunity educator and employer.



## COLUMBIA UNIVERSITY

College of Physicians and Surgeons

Faculty Positions in the Departments of Physiology and Cellular Biophysics, Pathology, Anatomy and Cell Biology, Biochemistry and Molecular Biophysics, Genetics and Development, and The Center for Neurobiology and Behavior

As part of a continuing expansion in developmental neurobiology at Columbia University, we invite applications for tenure-track faculty positions. Preference will be given to candidates who address fundamental questions in areas ranging from cell lineage and specification, transcriptional regulation, and signalling to axon guidance and synaptogenesis and whose interests complement those of the existing groups of investigators of developmental neurobiology at this campus.

Applicants must hold an M.D. or a Ph.D. and be capable of establishing and maintaining a strong, independent research program.

Please send a curriculum vitae, a brief statement of research interests, and three letters of reference, by December 1, 1999, to:

Ms. Nontrel K. Carwell Neurobiology Search Columbia University P&S 11-511 630 West 168th Street New York, NY 10032

E-mail applications will not be accepted.

Columbia University is an equal opportunity/ affirmative action employer.



BD BIOSCIENCES, headquartered in Sparks, Maryland, a suburb of Baltimore, is actively searching for Scientists to join its R&D team in the development of viral products targeted to the molecular diagnoses of human diseases. Highly motivated Scientists will develop molecular virology assays utilizing BD Strand Displacement Amplification technology. The product development process will include processing clinical samples, selection of assay specific sequences, measurement and quantification of amplified products, and the selection of cost efficient reagents. Opportunities are immediately, available in the following areas:

#### **ANALYTICAL CHEMISTRY**

Along with a PhD Degree in analytical Chemistry, Organic Chemistry or Chemistry, you must possess 2-7 years post doctoral or industrial experience in various aspects of development and characterization of quality control methods for DNA and RNA products, enzymatic reactions and quantification of amplified DNA products. A proven track record demonstrating comprehensive knowledge in areas stated is required. Industrial experience in the development of molecular products and medical devices is preferred.

#### **MOLECULAR BIOLOGISTS**

A PhD Degree in Virology, Molecular Biology or Microbiology, 2-7 years post doctoral experience in various aspects of DNA and RNA viral biology, and a proven track record demonstrating comprehensive knowledge of Virology, Molecular Biology and DNA amplification technology are required. Industrial experience in the development of molecular products and medical devices is preferred.

As an integral contributor to this major, very important effort, you will receive an attractive compensation package including comprehensive benefits. Relocation assistance will be provided, if necessary. For immediate consideration pleasee-mail, FAX or mail a detailed resume to: JRNL099A. BD BIOSCIENCES, P.O. Box 8255, Gaithersburg, MD 20898. FAX: (301) 519-8403 or (888) 771-9898. E-Mail: BD@alexus.com We are an equal opportunity/affirmative action employer. Minorities, females, and individuals with disabilities are encouraged to apply. VISIT our WEBSITE for a complete listing of opportunities: www.BD.com

> BECTON DICKINSON

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Biophysical Chemistry, Biophysics or Related Areas Unilever is a leading consumer products company with world sales exceeding \$40 billion. To support our global business, Unilever has six international central research centers employing over 4000 scientists. Unilever's U.S. laboratory employs over 300 scientists and is the designated headquarters for leading personal wash and skin care research. We are located on the Hudson River in Edgewater, New Jersey, within 20 minutes of midtown Manhattan with its diverse entertainment, arts and cultural resources.

Our success is built on innovation through collaborative scientific research and product development efforts, resulting in over 1000 nationally and internationally known brands including Dove, Lever 2000, Vaseline Intensive Care, Suave, Pond's as well as premium fragrance and skin care products including Elizabeth Arden and Calvin Klein Cosmetics. To support our continued success and growth, Unilever is seeking a number of creative scientists with strong leadership potential and excellent communication skills. To qualify you must have a PhD or equivalent with expertise in one or more of the following disciplines:

# Physical Chemistry, Material Science or Chemical Engineering with emphasis on:

- surfactant science
- polymer science
- · interactions in colloidal dispersions and polymer systems
- · wetting, adhesion, and thin films
- · rheology
- spectroscopic and separation methods of analysis

POSITION CODE: PC-SM

## Biophysical Chemistry, Biophysics or Related Areas with emphasis on:

- skin biophysics
- biophysical measurements
- non-invasive medical diagnostic techniques, i.e., imaging, spectroscopy, and tribiology of biological systems
- bioengineering

POSITION CODE: BC-SM

We offer a competitive salary, flexible benefits and excellent opportunities for both personal and professional growth. We encourage our people to broaden their perspective and think beyond conventional scientific boundaries. If you would like to be a part of this dynamic team-based environment, we invite you to respond. For consideration please use the position codes as the subject in your e-mail response or in the address on your envelope. Forward your resume to: Human Resources Dept., Unilever Research US, 45 River Road, Edgewater, NJ 07020 or E-Mail: job.mca@unilever.com We appreciate your interest in our company and will contact applicants who most closely meet our immediate requirements. Applicants must be authorized to work in the U.S.A. Unilever is an Equal Opportunity Employer m/f/d/v.



Unilever Research

For more information about Unilever Research and Unilever visit our Internet Web Site at http://www.unilever.com

Penn State has made a major commitment to promoting excellence in life sciences research and education through the university-wide Life Sciences Consortium, including addition of approximately 50 new faculty. The Department of Biochemistry & Molecular Biology, together with the neighboring Biology and Veterinary Science Departments, offers a highly interactive environment with active groups studying transcription, chromatin, yeast cell cycle and protein trafficking, microbial biology, Drosophila, Arabidopsis, and mouse development, apoptosis, signal transduction and molecular immunology and virology. For faculty research interests see www.bmb.psu.edu/deptpage/faculty/default.htm. The Department has an excellent research environment augmented by shared technology facilities, and provides competitive startup packages. State College offers a university town atmosphere with proximity to major East Coast metropolitan centers. Applications will be accepted immediately, and interviews will be scheduled for early 2000. We hope to have the successful candidates join us in Summer of 2000.

#### CELL/DEVELOPMENTAL BIOLOGIST

The Department of Biochemistry and Molecular Biology at Penn State's main University Park campus is searching for a new Assistant Professor who utilizes C. elegans as her/his experimental system. We will favor a scientist who is making full use of the newly available genomic information for their research.

#### **HOST-MICROBE INTERACTIONS**

The Department of Biochemistry and Molecular Biology at Penn State's main University Park campus is searching for a new Assistant Professor who utilizes genetic and biochemical approaches to study the interaction of prokaryotes or viruses with their hosts. Preference will be given to candidates with expertise in host immune responses to viral/bacterial pathogens.

Applicants should send a curriculum vitae and a short summary of research plans to one of the two addresses listed below. Arrangements should also be made to have three letters of reference sent in support of the application.

Developmental Biology Search Committee 108 Althouse, Box 308-S The Pennsylvania State University University Park, PA 16802 Host-Microbe Search Committee 108 Althouse, Box 433-S The Pennsylvania State University University Park, PA 16802

 $Penn\,State\,is\,committed\,to\,affirmative\,action,\,equal\,opportunity\,and\,the\,diversity\,of\,its\,work force.$ 





#### FUNDING AVAILABLE

CaP CURE, the Association for the Cure of Cancer of the Prostate, is soliciting proposals for its 1999/2000 funding year. The organization's goal is to find a cure for advanced prostate cancer.

Applications are competitive and accepted from individuals with or without institutional affiliation. Awards range from \$50,000 - \$250,000 for the year. Applications (3-5 pages) can be for clinical investigations, basic research or a combination and must be relevant to the treatment of advanced prostate cancer. We encourage interdisciplinary collaborations between basic scientists and clinicians. (For-profit companies are not eligible.) Applications will be accepted August 15, 1999 through October 30, 1999. Notification of awards is expected by December 31, 1999.

For consideration, request application guidelines:

#### CaP CURE

1250 Fourth Street, Suite 360 Santa Monica, CA 90401

Phone: (310) 458-2873 Fax: (310) 458-8074 (800) 757-2873 E-mail: capcure@capcure.org



#### Postdoctoral Positions Neuropharmacology & Neuroscience

The Neuropharmacology and Neuroscience Research Group of Albany Medical College has several postdoctoral positions available within the following areas: cerebral ischemia, nervous system development, synaptic plasticity, and the neurobiology of drug addiction. Some of these positions are part of a new NIDA-supported training program focusing on the behavioral, neurochemical and molecular bases of drug addiction and dependence. Fellows will be mentored by one or more of fourteen NIH-funded training faculty in fully-equipped state-of-the-art laboratories. Candidates, who must be US citizens or permanent residents, should submit a curriculum vitae and three letters of reference to:

Dr. Stanley D. Glick
Department of Pharmacology &
Neuroscience
Albany Medical College
MC-136, 47 New Scotland Avenue
Albany, New York 12208-3479

e-mail: GLICKS@MAIL,AMC.EDU

AA/EOE

#### UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

Up to two tenure track positions at the ASSIS-TANT, ASSOCIATE, or FULL PROFESSOR levels will be offered in UCSF's Cardiovascular Research Institute. Access to Graduate Programs and a joint appointment in a Basic Science or Clinical Department will be provided. Individuals working in the genetics of the cardiovascular system, broadly construed, will be considered. Possible topics range from genetics of human cardiovascular diseases to use of genetics in vertebrate and invertebrate models to dissect processes fundamental to cardiovascular biology, including but not limited to angiogenesis, inflammation, hemo stasis and thrombosis, and development or regeneration of the heart, blood vessels, or lungs. Candidates should hold an M.D. or Ph.D. degree and will be expected to establish an exciting research program, to actively contribute to CVRI training programs, and to participate in graduate education through the Program in Biological Sciences or Biomedical Sciences Program. Candidates for the Associate and Full Professor levels will have already established leading programs in their fields. By December 15, 1999, submit a curriculum vi tae, summary of research accomplishments, description of research plans, major publications, and three to five letters of recommendation to: Ira Herskowitz, Ph.D., c/o Search Committee, Box 0130, CVRI, University of California, San Francisco, CA 94143-0130.

UCSF is an Affirmative Action/Equal Opportunity Employer. The University undertakes affirmative action to assure equal employment opportunity for underutilized minorities and women, for persons with disabilities, and for Vietnam-era veterans and special disabled veterans.

# EVOLUTIONARY GENETICIST Department of Biological Sciences Dartmouth College

Applications are invited for a tenured or tenure-track position at open rank to begin in the fall of 2000. We seek a person using modern molecular techniques to address important questions in evolutionary biology. We are particularly interested in those examining questions concerning molecular evolution, the evolutionary genetics of development, population genetics, or phylogeography. This is the first of four positions in evolutionary biology to be filled over the next few years. The successful candidate will be expected to develop a vigorous, externally funded research program and teach courses at the undergraduate and graduate level.

Ph.D. or equivalent and postdoctoral experience are required. Please submit curriculum vitae, statements of research and teaching interests, recent reprints, and three letters of recommendation to:

Mark A. McPeek, Chair Evolutionary Genetics Search Committee Department of Biological Sciences Dartmouth College Hanover, New Hampshire 03755-3576 USA

Review of applications will begin on 8 October 1999. Although applications can be submitted initially by FAX to (603) 646-1347, original documents are also required. For more information on the department, please see <a href="https://www.dartmouth.edu/artsci/biology/index.html">https://www.dartmouth.edu/artsci/biology/index.html</a>. Women and minority applicants are strongly encouraged to apply.

Dartmouth College is an Equal Opportunity/ Affirmative Action Employer.

#### PROGRAM COMMITTEE

Peter A. Jones, Chairperson Carlos L. Arteaga, Co-Chairperson Franco M. Muggia, Co-Chairperson Geoffrey M. Wahl, Co-Chairperson Alice S. Whittemore, Co-Chairperson Members listed on inside back cover

#### LOCAL ARRANGEMENTS COMMITTEE

Jay A. Levy, Chairperson

#### **EDUCATION COMMITTEE**

Branimir I. Sikic, Chairperson

#### **EXHIBITS COMMITTEE**

David R. Spriggs, Chairperson

#### **Further Information:**

AACR Office

Public Ledger Building • Suite 826 150 S. Independence Mall West

Philadelphia, PA 19106-3483

Telephone: 215-440-9300 • FAX: 215-351-9165

E-mail:meetings@aacr.org • Website: www.aacr.org

AMERICAN ASSOCIATION FOR CANCER RESEARCH

> ANNUAL MEETING April 1-5, 2000

> > The Moscone Center • San Francisco, CA

**EDUCATIONAL SESSIONS AND METHODS WORKSHOPS** 

Deadline: November 1

1999

(SATURDAY AFTERNOON, APRIL 1, 2000)

To Be Announced

OFFICIAL OPENING EVENT (SUNDAY MORNING, APRIL 2, 2000)

Presidential Address (Daniel D. Von Hoff)
Plenary Session: New Frontiers in Cancer Research

Genetic Approaches to Cancer Prevention (Malcolm C. Pike) Genomics: What Is It, Where Is It Going? (Francis Collins)

Chromatin and DNA Methylation (Adrian P. Bird) Telomeres: From Basic Science to Therapy

Therapeutic Targeting of Genetic Alterations (Dennis J. Slamon)

#### SYMPOSIA

Chemoprevention of Cancer of the Respiratory Tract (Lee W. Wattenberg)

Cancer Vaccines (Drew M. Pardoll) Apoptosis: Basic Mechanisms DNA Repair and Genetic Stability

Transcription (Beverly M. Emerson)

Gene/Environment Interactions

Diet and Cancer: Molecular Determinants The Cancer-Chromatin Connection (Alan P. Wolffe)

Angiogenesis (Douglas Hanahan and S. Gail Eckhardt) Breast Cancer (Karen S. H. Antman and Edith A. Perez)

Melanoma (Nicholas Hayward)
Prostate Cancer (Alice S. Whittemore)

Bladder Cancer (Margaret Knowles and Richard J. Cote)

Colorectal Cancer

Brain Tumors (Francis Ali-Osman and Webster K. Cavenee) Exploiting the Genetic Defects of Pediatric Tumors (Mark A. Israel)

Apoptosis: Therapeutic Implications (John A. Hickman)

Cytotoxic Chemotherapy: Making the Transition to the New Millennium (Joseph R. Bertino and Susan P. C. Cole)

Molecular-targeted Therapeutics: New Strategies (William G. Kaelin) Radiation Oncology and Chemotherapy: Understanding the Issues

(C. Norman Coleman and Silvia Formenti)

Aging and Cancer: Focusing on Preneoplastic Changes (J-P. Issa) Mouse Models and Cancer (Terry A. Van Dyke)

Development and Cancer (Matthew P. Scott)
Epigenetics of Cancer: New Mechanisms for Silencing Tumor

Suppressor Genes (Paula M. Vertino)
The Tumor Microenvironment and Cancer Biology: Role of Epithelial

Cells in Metastasis (Mina J. Bissell and Ann F. Chambers)
MAP Kinase Signaling (Channing Der)

Prevention and Treatment of Intraepithelial Neoplasia (Joyce A. O'Shaughnessy) Late-Breaking Science (Speakers To Be Selected Shortly Before the Meeting)

FORUMS (To Be Announced)

#### "MEET-THE-EXPERT" SUNRISE SESSIONS

Pain Management Inherited Cancers of the Kidney (Berton Zbar)

Cloning Animals

Pharmacogenetics: Drug Discovery in the Post-Genomic Era

Molecular Approaches to Cancer Detection (Jonathan W. Uhr)
Papillomaviruses and Cervical Cancer (Denise A. Galloway)

p13 Kinase Hepatitis Viruses and Liver Cancer

Helicobacter pylori and Gastric Cancer (Eiichi Tahara) The Steroid Receptor Superfamily

Control of the Restriction Point p53: Structure, Function, and Clinical Potential (Karen H. Vousden)

Cancer Genome Anatomy Project Growth Regulation through Protein Phosphorylation

New Approaches in Cancer Cytogenetics (Joe W. Gray)
Perspectives on Cancer Chemotherapy: Past, Present, and Future (Emil Frei, III)

Genetic Imprinting (Benjamin Tycko)
The Li-Fraumeni Syndrome and Cancer (Louise C. Strong)

Drug Discovery Pancreatic Cancer (James L. Abbruzzese)

New Platinum Compounds (Nick Farrell) Physical Activity and Cancer (Leslie Bernstein)

Tobacco and Cancer (Stephen S. Hecht) Genetic Testing

TGFß Receptor Signaling (Jeffrey L. Wrana)
Ink 4/ARF Tumor Suppressor Locus (Martine F. Roussel)

Her-2 neu Signaling and Epithelial Neoplasms (Yosse Yarden) Mammary Stem Cells and Carcinogenesis in Mice (Daniel Medina and Gilbert Smith)

Tamoxifen and SERMS (C. Kent Osborne) Molecular Fingerprinting and Its Impact on Therapy (Edison T. Liu)

Clinical Trials in Gene Therapy (Stanton L. Gerson) Cox-2 Regulation and Function (Harvey Herschman)

The E-Cadherin System: Function and Dysfunction in Cancer (Barry Gumbiner) Signaling by IGFs

Inhibition of Bone Resorption (James R. Berenson) Monoclonal Antibodies in the Treatment of Hematologic Malignancies

Ubiquitin/Proteasome System (Michele Pagano) HIV-related Malignancies (Ellen G. Feigal)

Tumor-Stromal Interactions (Gerald R. Cunha)

Hypoxia and Cancer Cancer Treatment-related Secondary Tumors

Overview of Cancer in High-Risk Families (Frederick P. Li)

Tumor Cell Signaling and Radiation Therapy New Methods in Clinical Trials (Susan G. Arbuck)

Cytokines and Cancer

Lung Cancer (Takashi Takahashi)

Nuclear Organization and Gene Expression (David L. Spector)

## 2000-2001 Congressional Science and Engineering Fellowships

**PROGRAM:** Fellows spend one year working as special assistants on the staffs of members of Congress or congressional committees, working in legislative areas requiring scientific and technical expertise. The program includes an orientation on congressional and executive branch operations and a year-long seminar program on issues involving science and public policy. Fellows receive stipends from their sponsoring societies.

**PURPOSE:** To provide a unique public policy learning experience, to demonstrate the value of science-government interaction, and to make practical contributions to the more effective use of scientific and technical knowledge in government.

**CRITERIA:** A prospective Fellow must be a postdoctoral to midcareer scientist or engineer; demonstrate exceptional competence in some area of science or engineering; be cognizant of many matters in nonscientific areas; demonstrate sensitivity toward political and social issues; and perhaps most important, have a strong interest and some experience in applying personal knowledge toward the solution of societal problems.

**SPONSORS:** More than twenty-five national professional scientific and engineering societies will sponsor or cosponsor Congressional Science and Engineering Fellows in 2000–2001.

American Agricultural Economics Association

American Association for the Advancement of Science

American Association of Colleges of Pharmacy

American Chemical Society

American Dental Association

American Geological Institute

American Geophysical Union

American Institute of Physics

American Nuclear Society

American Physical Society

American Psychological Association

American Society for Microbiology

American Society of Agronomy/

Soil Science Society of America

American Society of Civil Engineers

American Society of Human Genetics

American Society of Limnology and Oceanography

American Society of Materials (ASM International)

American Society of Mechanical Engineers

American Veterinary Medical Association

American Welding Society

Computing Research Association

Federation of Animal Science Societies

Geological Society of America

Institute of Electrical and Electronics Engineers

Institute of Food Technologists

International Society for Optical Engineering

Materials Research Society

Optical Society of America

Applicants should apply directly to the appropriate professional society. It is acceptable to apply to more than one society. Stipends, application procedures, timetables, and deadlines vary by society. Minorities and persons with disabilities are encouraged to apply. Further information about the program and a list of the participating societies, with mailing addresses and contact people, is available from:



Congressional Science and Engineering Fellowship Program 1200 New York Avenue, NW, Washington, DC 20005 202/326-6700 Fax: 202/289-4950 E-mail: science\_policy@aaas.org Web: fellowships.aaas.org



# EMPLOYMENT OPPORTUNITIES IN DEVELOPING AIDS VACCINE AND PREVENTION INTERVENTIONS

The National Institute of Allergy and Infectious Diseases, Division of AIDS, Vaccine and Prevention Research Program (VPRP) has a need for dynamic and committed individuals with scientific, medical, and/or management experience to help lead a global effort to develop safe and effective AIDS vaccines and other prevention strategies. Senior leadership positions will be available in preclinical research and in prevention research. Starting salary ranges from \$80,658 - \$104,851 and is commensurate with experience/present salary. In addition, there are positions for medical officers, pediatricians, microbiologists, virologists, and/or immunologists at various levels. Starting salary ranges from \$58,027 - \$89,142 and is commensurate with experience/present salary. Physician compensation allowances are available where appropriate.

The VPRP directs an extensive multidisciplinary research program into basic and clinical microbiology, immunology and virology, design, development and clinical evaluation.

For inquiries regarding current vacancies please contact:

#### **Blanche O'Neill**

Vaccine & Prevention Research Division of AIDS, NIAID, NIH OAD/Room 4100

6700-B Rockledge Drive, MSC-7628 Bethesda, Maryland 20892-7628 Phone:(301) 435-3726

Fax: (301) 402-3684

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#### Research Post-Doctoral Fellow *Genetics*

The Children's Hospital of Philadelphia has an exciting NIH funded postdoctoral position available to gain knowledge of genomic imprinting.

The successful candidate will be invited to study novel imprinted genes. Current approaches involve microarray analysis of robertsonian and reciprocal translocation chromosomes.

Interested applicants should send letter of interest, CV, and three references to: Dr. Rebecca Oakey, The Children's Hospital of Philadelphia, Division of Human Genetics, 1002 ARC, 34th & Civic Center Blvd., Philadelphia, PA 19104; or email: oakey@mail.med.upenn.edu. EOE WF/D/V.



The Children's Hospital of Philadelphia

A pediatric healthcare network



U.S. DEPARTMENT OF ENERGY OFFICE OF BIOLOGICAL AND ENVIRONMENTAL RESEARCH



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P.O. Box 117 Oak Ridge, TN 37831-0117 (423) 576-9975

Effective 10-1-99 the area code changes to 865.

Deadline January 15, 2000

#### POSITIONS OPEN

#### FACULTY POSITION IN BIOMEDICAL ENGINEERING NORTHWESTERN UNIVERSITY

The Biomedical Engineering Department, in the McCormick School of Engineering and Applied Science at Northwestern University, has an opening for a full-time, tenure-track faculty member. The new faculty member will be expected to conduct a distinguished research program and contribute to the teaching and advising of graduate and undergraduate students. The specific research area is open, but it should fit with current areas of interest, which include rehabilitation engineering, cardiopulmonary engineering, quantitative neuroscience, biotechnology, and medical devices. The level of appointment is open. Approximately 80 graduate students are pursuing M.S. and M.S.-Ph.D. degrees in biomedical engineering on both the Evanston and Chicago campuses, and the Department graduates about 60 students per year from its ABET-accredited undergraduate program. Applicants should send a letter, curriculum vitae, names of references, and statement of research interests to: Chair, Search Committee, Biomedical Engineering Department, Northwestern University, 2145 Sheridan Road, Evanston, IL 60208-3107. More information about the department is available at website: http://www.nwu.edu/bme. The position will remain open until filled, but for full consideration, applications should be received by November 1, 1999. The earliest starting date is September 1, 2000. Women and candidates from underrepresented minority groups are encouraged to apply. Northwestern University is an Affirmative Action/Equal Opportunity Employer. Hiring is contingent upon eligibility to work in the United

# FACULTY POSITION IN PROSTATE BIOLOGY DEPARTMENT OF MOLECULAR AND INTEGRATIVE PHYSIOLOGY Division of Urology

The University of Kansas School of Medicine

The University of Kansas Medical Center invites applications for a tenure-track position at the ASSIST-ANT PROFESSOR level. The primary appointment will be in the Department of Molecular and Integrative Physiology with a joint appointment in the Division of Urology. The successful candidate should have a record of productive research in the area of prostate biology and is expected to establish an independent research program. Outstanding candidates whose research examines the genetic, molecular, or cellular basis of prostate cancer will be given preference. Qualifications include a M.D., Ph.D., or both and postdoctoral research experience. Applications will be reviewed until December 15, 1999. To apply, submit a statement of research interests, curriculum vitae, and three letters of recommendation to: Chair, Faculty Search Committee, Department of Molecular and Integrative Physiology, University of Kansas Medical Center, 3901 Rainbow Boulevard, Kansas City, KS 66160. FAX: 913-588-7430; Telephone: 913-588-7488.

The University of Kansas Medical Center is an Equal Opportunity/Affirmative Action Employer.

#### FACULTY POSITIONS IN IMMUNOLOGY DUKE UNIVERSITY MEDICAL CENTER

The Department of Immunology invites applications for TENURE-TRACK faculty positions at all levels.

Candidates working in molecular and cellular immunology, lymphocyte signal transduction, immunogenetics, cancer immunobiology, and animal models of human disease are encouraged to apply.

Interested individuals should send a curriculum vitae, a statement of research interest, and the names of three references to: Dr. Thomas F. Tedder, Department of Immunology, P.O. Box 3010, Duke University Medical Center, Durham, NC 27710. Website: www.duke.edu/~immune/.

Duke University Medical Center is an Equal Opportunity/ Affirmative Action Employer.

#### **POSITIONS OPEN**



# TWO FACULTY POSITIONS ECOLOGY AND EVOLUTIONARY BIOLOGY UNIVERSITY OF KANSAS

Mycologist: ASSISTANT/ASSOCIATE PROFESSOR. Required qualifications: (1) Ph.D. in appropriate discipline that provides a strong background in botany or the biological sciences; (2) an active research program in one or more areas of wholeorganism fungal biology (e.g., biodiversity, development, interorganism interactions, physiology, etc.); (3) ability to teach a comprehensive, general mycology course and other courses including general biology as well as seminars in areas of expertise.

Plant Systematist: ASSISTANT/ASSOCIATE PROFESSOR and ASSISTANT/ASSOCIATE CURATOR. Required qualifications: (1) Ph.D. in appropriate discipline that provides a strong background in systematics and plant biology; (2) conduct an active research program in the systematics of plants emphasizing collections-based approaches and contemporary analytical methods; (3) serve as Curator in the Division of Botany of the Natural History Museum and the Biodiversity Research Center, participating in the care of the plant collections and contributing to the Museum's research, education, and service goals; (4) ability to teach courses in systematic botany, organismal diversity, and/or general biology and other core courses as well as seminars in areas of expertise. Preference will be given to individuals having demonstrated curatorial experience with botanical systematic research collections.

Candidates for both positions must be committed to excellence in teaching and mentoring at undergraduate and graduate levels, able to interact with colleagues in related disciplines, and willing to contribute to the overall service of the University. Preference will be given to individuals with postdoctoral experience, demonstrated teaching ability and experience, and the ability to attract external funding. Positions are nine-month appointments beginning August 18, 2000, have salaries commensurate with experience, and are contingent upon budgetary approval.

Review of applications for both positions will begin 1 November 1999 and will continue until they are filled. Application materials include (1) curriculum vitae; (2) concise statements of (a) research interests and future directions, and (b) teaching philosophy, experience, and interests, to include description(s) of course(s) the applicant is qualified to teach; (3) copies of selected publications and/or manuscripts; (4) letters of reference from at least three persons to be submitted to: Ms. Berry Clemens, Department of Ecology and Evolutionary Biology, University of Kansas, Lawrence, KS 66045-2106. Telephone: 785-864-5889; FAX: 785-864-5860; e-mail: bclemens@falcon.cc.ukans.edu; website: http:// www.ukans.edu/~eeb. Equal Opportunity/Affirmative Action Employer

A position in organic chemistry at the University of Houston is open and we are accepting applicants at the JUNIOR LEVEL in organic chemisry with preference given to applicants with interests in chemical biology, medicinal chemistry, biotechnology, or biochemistry. The position is TENURE-TRACK in a department with several active faculty in organic chemistry. Postdoctoral experience is required and applicants will be expected to have strong potential in research and a commitment to education at all levels Preference will be given to applicants whose field complements current strengths in oganic chemistry at this Department. Please send a curriculum vitae, research plans, and three letters of recommendation by November 1, 1999, to: Prof. B. M. Pettitt, Department of Chemistry, University of Houston, Houston, TX 77204-5641. The University of Houston is an Equal Opportunity Employer. Women, minorities, and veterans are encouraged to apply.

#### **POSITIONS OPEN**

# TWO FACULTY POSITIONS IN STRUCTURAL BIOLOGY Indiana University, Bloomington

The Department of Biology seeks two STRUC-TURAL BIOLOGISTS who employ X-ray crystallography to investigate structures of biological macromolecules. Appointments will be made at any level from ASSISTANT to FULL PROFESSOR. A successful candidate at the Full Professor level may be appointed GILL PROFESSOR OF BIOLOGY, an Endowed position with a substantial income. The successful candidates will join a strong and growing group of Structural Biologists, Biochemists, and Chemists in the Biology, Chemistry, and Medical Science Departments. Excellent X-ray analysis facilities are available in the Chemistry Department and will soon be available in the Biology Department, along with a dedicated state-of-the-art synchrotron port. Junior candidates should send a curriculum vitae, a statement of past, present, and planned research, and representative publications, and arrange to have four letters of reference sent to: Dr. Cheng Kao, Chair, Structural Biology Search Committee, Department of Biology, Indiana University, 1001 East Third Street, Bloomington, IN 47405-3700. FAX: 812-855-6705; e-mail: ckao@bio.indiana. edu. Senior candidates should send a letter of interest and a curriculum vitae. Application review will begin November 15, 1999, and will continue until suitable candidates are identified. For more information about our Biology and Chemistry Departments, see our websites: http://www.bio.indiana.edu and http: //www.chem.indiana.edu. We are committed to increasing the representation of women, minorities, and disabled individuals and encourage applications from such candidates. Inquiries from two-career couples are welcome.

#### FACULTY POSITION UNIVERSITY OF ILLINOIS AT CHICAGO

The Department of Physics at the University of Illinois at Chicago (UIC) is planning to fill two tenure-track ASSISTANT PROFESSORSHIP positions. The appointments shall begin fall 2000. The department has a strong commitment to both undergraduate and graduate education and is dedicated to excellence in research. At present, we have 30 faculty members active in many areas of physics and biophysics. Our search will give special consideration to candidates in the areas of condensed matter physics (experiment and theory) and biophysics. Successful candidates will have a Ph.D. degree or equivalent, are expected to develop top-quality research programs, and should show high promise of obtaining external research funding. Applicants should submit a curriculum vitae and a statement of research interests and future plans. They should also arrange to have three letters of recommendation sent to: **Prof. Inder P.** Batra, Head, Department of Physics, University of Illinois at Chicago (MC 273), 845 West Taylor Street, Room 2236, Chicago, IL 60607-7059. Applications received by January 3, 2000, shall receive fullest consideration. The University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer.

A position in macromolecular crystallography at the University of Houston is open and we are accepting applicants at **ALL FACULTY LEVELS**. The position is TENURE-TRACK in a department with several active faculty in organic and biophysical chemistry. Postdoctoral experience is required and junior applicants will be expected to have strong potential in research and a commitment to education at all levels. Exceptional applicants for a SENIOR TENURED position with an established track record and a strong commitment to teaching will be considered. Preference will be given to applicants whose interests complements current strengths in chemistry at this Department. Please send a curriculum vitae, research plans, and three letters of recommendation by November 1, 1999, to: Prof. B. M. Pettitt, Department of Chemistry, University of Houston, Houston, TX 77204-5641. The University of Houston is an Equal Opportunity Employer. Women, minorities, and veterans are encouraged to apply.

#### **Program Officer**

# National Center for Medical Rehabilitation Research National Institute of Child Health and Human Development, National Institutes of Health

The National Center for Medical Rehabilitation Research (NCMRR), National Institute of Child Health and Human Development (NICHD), is seeking applicants for the position of Medical Officer for the Clinical Practices Research Program (CPRP). As director of the CPRP, this individual is responsible for NCMRR-supported research that is concerned with strengthening the scientific basis of practices and technologies that comprise medical rehabilitation practices and the life-long healthcare of people with physical disabilities. Included is research directed at increasing the efficacy of rehabilitative interventions which may be pharmacological, surgical, physiotherapeutic, behavioral, or psychological in nature. Also included is outcomes research intended to assess the effectiveness of contemporary practices in medical rehabilitation. The director of the CPRP is responsible for the scientific direction of the program and serves as a primary interface between NCMRR and the extramural research community. This position is located in Rockville, MD, and is a permanent full-time civil service position with a salary of \$68,570 to \$89,142 plus recruitment/retention and physicians' comparability bonuses where applicable. U.S. citizenship is required.

Applicants for this position must have an M.D. and have experience in clinical practice and clinical research of relevance to medical rehabilitation. Further information regarding mandatory qualifications, application procedures, and materials are available on the NICHD Home Page at http://www.nichd.nih.gov/, or by calling the NICHD Human Resources Management Branch at 301-496-3367. Applications must be postmarked by **October 25, 1999.** 

Send applications to:

Mr. Christopher Parker

NICHD Personnel Management Specialist, Building 31, Room 2A25 9000 Rockville Pike, Bethesda, MD 20892-2425 cp58r@nih.gov

NIH is an Equal Opportunity Employer

#### PRIZES



#### POTAMKIN PRIZE FOR RESEARCH IN PICK'S, ALZHEIMER'S AND RELATED DISEASES

A prize of \$100,000 will be awarded by the American Academy of Neurology to a person(s) in recognition of major contributions to the understanding of the causes and the prevention, treatment, and ultimately the cure for Pick's, Alzheimer's and related diseases.

Candidates may be nominated on a world-wide basis from any of the biological disciplines including bio-chemistry, molecular biology, molecular genetics, pharmacology, immunology, physiology, cell biology, neuropathology or epidemiology.

A nomination application, nominating letter citing the scientific accomplishments of the candidate in detail, two supporting nominating letters, a curriculum vitae, and up to six (6) selected reprints in twelve (12) complete sets are required.

The deadline for receipt of materials is **December 1, 1999**. No nomination will be considered unless it is complete. The awardee(s) must be present at the AAN Presidential Plenary Session on Tuesday, May 2, 2000 held during the AAN Annual Meeting in San Diego, California.

REQUEST APPLICATION AND SUBMIT NOMINATION TO:

American Academy of Neurology

Potamkin Prize for Research In Pick's, Alzheimer's and Related Diseases
1080 Montreal Avenue
St. Paul, MN 55116

St. Paul, MN 55116 Phone: 800-879-1960

The Potamkin Prize is funded through the Potamkin Foundation.

# PENN

# ASSISTANT PROFESSOR IN DEVELOPMENTAL AND REPRODUCTIVE BIOLOGY

The Department of Cell and Developmental Biology and the Center for Research on Reproduction and Women's Health invite applications for tenure-track faculty positions in developmental and reproductive biology. Individuals working in mammalian and non-mammalian systems relevant to reproduction, germ cell determination and early embryonic development are encouraged to apply. Successful applicants will have primary appointments in the Department of Cell & Developmental Biology and occupy newly constructed laboratory space in the Center for Research on Reproduction and Women's Health. Successful candidates will be expected to establish extramurally funded research programs and participate in the training of medical and doctoral students. Candidates should submit a curriculum vitae, summary of research accomplishments, future research plans, and three letters of reference by December 1, 1999 to:



Drs. Norman B. Hecht & Stephen DiNardo, Co-Chairs, Faculty Search Committee c/o Ms. Victoria McManus 1157 BRB II/III, 421 Curie Blvd. University of Pennsylvania School of Medicine Philadelphia, PA 19104-6058 USA

AN AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EMPLOYER

#### POSITIONS OPEN

#### FACULTY POSITION CELL BIOLOGY

As part of an ongoing expansion, the Department of Cell Biology and Molecular Genetics at the University of Maryland at College Park invites applications for a TENURE-TRACK faculty position in the area of cell biology. The rank for this appointment is open. Applicants must have an earned Doctorate degree in an appropriate area of biology, at least two years of postdoctoral experience, evidence of significant research accomplishments, and a commitment to excellence in teaching. Salary is competitive and commensurate with experience. Senior candidates will be expected to have attained national and international stature. The successful applicant will be expected to direct a competitively funded research program that is focused on an important, fundamental problem in cell biology using a model system. There are multiple opportunities for research interaction and collaboration with faculty in the Department in the areas of signal transduction, pathogenesis, developmental genetics, and cell and molecular biology, using animal, fungal, microbial, and plant systems. Collaborations are also possible with faculty in other Departments across campus. College Park is the flagship campus of the University of Maryland System, and is located in the Baltimore-Washington, D.C. corridor. Its location provides easy access to a large number of educational and governmental institutions. All faculty members of the Department participate in the instructional programs at both the undergraduate and graduate levels. Additional information about the Department can be found at our website: http://www. life.umd.edu/CBMG. Applications should be received by December 1, 1999, to receive full consideration, but the search will continue until the position is filled. Materials, including a letter of application, curriculum vitae, statements of research and teaching interests, and the names and addresses of four references should be directed to:

> Dr. Stephen M. Wolniak, Chair Cell Biologist Search Committee Department of Cell Biology and Molecular Genetics HJ Patterson Hall University of Maryland College Park, MD 20742

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

#### TENURE-TRACK POSITION AVAILABLE

The Department of Pharmacology and Toxicology and Institute for Drug and Alcohol Studies at the Medical College of Virginia, Virginia Commonwealth University invite applications for a tenure-track faculty position. Rank is open, with candidates being considered for rank based upon experience and qualifica-tions. The primary duties will be to implement an independent, high-quality program of neuroscience research, teach in professional and graduate school courses in cellular and molecular biology and pharmacology, and to perform the normal service functions expected of faculty. The successful applicant must have a Ph.D. or equivalent, with at least two years of relevant postdoctoral experience. The successful applicant will also have an outstanding record of research accomplishments appropriate for his/her years of experience, as judged by the quality and quantity of research and scholarly publications. The individual selected must have research funding or be able to quickly establish a fully funded laboratory. Neuroscientists using molecular approaches, such as transgenic/knockout mouse models, receptor cloning, neurotransmitter signaling, and whose work is relevant to drug and alcohol abuse are especially encouraged to apply. Applicants should submit a curriculum vitae and the names and addresses of three references, by November 15, 1999, to: Search Committee (F0128), Virginia Commonwealth University, P.O. Box 980613, Richmond, VA 23298-0613. Position description available. VCU is an Equal Opportunity/Affirmative Action Employer and encourages women, minorities, and persons with disability to apply.

#### **POSITIONS OPEN**

# DIRECTOR THE GRADUATE CENTER FOR NUTRITIONAL SCIENCES University of Kentucky

An exciting state-supported tenure-track position to oversee and lead the development of a newly established multidisciplinary Graduate Center for Nutritional Sciences. The Center has 60 joint appointment faculty from 22 academic departments and more than 50 graduate students. Institutional resources are committed to support the Center to attain national prominence. Applicants should have attained national and international stature in the field of nutritional sciences. Administrative experience, a well-established research program, and the vision and leadership skills necessary to lead a multidisciplinary faculty are required. Interested individuals should send a letter of interest, curriculum vitae, and names of three references by December 1, 1999, to: Claire Pomeroy, M.D., Search Committee Chair, University of Kentucky, Medical Sciences Building, Room MN 672, 800 Rose Street, Lexington, KY 40536-0298. E-mail: cpomer0@ pop.uky.edu. The University of Kentucky is an Equal Opportunity Employer.

#### UNIVERSITY OF UTAH DEPARTMENT OF BIOCHEMISTRY

A TENURE-TRACK FACULTY POSITION is available for autumn 2000, in the general areas of structural or mechanistic biochemistry. We are looking for strength and originality in the characterization of biological macromolecules and elucidation of their mechanisms of action. Macromolecule crystallography is an area of particular, but not exclusive, interest. Applicants should hold a Doctoral degree and have a strong record of research accomplishment. Preference will be given to applicants at the level of Assistant Professor; however, candidates at more senior ranks will also be considered. The successful candidate will join an interactive and diverse faculty and will participate in campuswide training programs. Send curriculum vitae, a statement of research background and interest, and three letters of recommendation to: Dr. Dana Carroll, Faculty Search Committee, Department of Biochemistry, University of Utah School of Medicine, Salt Lake City, UT 84132 USA. Deadline for applications is November 15, 1999. Late applications will be considered if an opening is still available. The University of Utah is an Equal Opportunity/ Affirmative Action Employer and seeks to provide Equal Access to its programs, services, and activities to people with disability.

#### GLASER DISTINGUISHED VISITING PROFESSORSHIP IN BIOLOGICAL SCIENCES Evolutionary Developmental Biology

Applications are solicited from distinguished scientists interested in visiting the Department of Biological Sciences at Florida International University (FIU), the State University of Florida at Miami. For the 2000 Glaser Visiting Professorship we are specifically interested in scientists with expertise in the area of evolutionary developmental biology. The Glaser Professor will offer a short course (10 lectures over a two-week period sometime during the spring 2000 semester), give a departmental seminar, and interact with faculty and students. Remuneration is \$8,000 for travel, lodging, and honorarium. FIU is a growing, dynamic public university with 30,000 students. The Department of Biological Sciences has 36 faculty and 110 graduate students (M.S. and Ph.D.). Apply with letter of intent, brief course outline, résumé, and reprints of relevant publications before 1 November 1999 to: Dr. Timothy Collins, Glaser Committee Chair, Department of Biological Sciences, Florida International University, Miami, FL 33199. Women and minorities are especially encouraged to apply. FIU is an Affirmative Action/Equal Opportunity Employer.

#### POSITIONS OPEN

#### DIRECTOR OF LABORATORY ANIMAL SCIENCE CENTER

Boston University Medical Campus, located in Boston's historic South End, is one of the nation's leading centers for biomedical research. The Laboratory Animal Science Center (LASC) provides essential support to the robust and growing research programs at Boston University Medical Campus, its affiliates, Boston Medical Center, and the Biosquare Biomedical Research Park.

Reporting directly to the Provost of the Medical Campus/Dean of the School of Medicine, the Director of the LASC will have primary responsibility for the management and administration of the LASC and its various component parts located throughout the Medical Campus and the greater Boston Metropolitan area. The Director will have chief responsibility for glal operational, financial, scientific, and research programs as well as educational activities related to animal research facilities and services provided by the LASC. In addition, the Director will serve as the chief veterinary medical officer for the Boston University Medical Center.

The successful candidate for this highly visible and challenging position will possess a D.V.M. degree, maintain a license in good standing to practice veterinary medicine, and possess 10 or more years of experience managing a large, complex university/academic medical center animal research facility with demonstrated leadership performance.

strated leadership performance.

Please send curriculum vitae and cover letter along with salary requirements to: George T. Snowdon, Office of Personnel, Boston University Medical Campus, 715 Albany Street, Boston, MA 02118.

Boston University is an Affirmative Action/Equal Opportunity Employer.

#### FACULTY POSITION

The Division of Transplantation at the University of Miami School of Medicine is seeking a Molecular Biologist/Biochemist for an entry-level researchtrack faculty position. This is an opportunity for an enthusiastic young scientist to apply his/her talents to ongoing studies on the effects of bone marrow cells in generating immunological tolerance in solid organ transplantation. Qualified applicants must possess a Ph.D. in molecular biology and have at least two years of relevant postdoctoral experience. We are especially interested in applicants with experience in recombinant eukaryotic gene transfer and expression. Additional experience in molecular and cellular immunology is highly desirable. For immediate consideration, interested individuals should send a curriculum vitae and the names of three references to:

Julio Mesa, Administrator
Department of Surgery (R-440)
Division of Transplantation
University of Miami School of Medicine
P.O. Box 012440
Miami, FL 33101

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

#### FACULTY POSITION IN PHYSIOLOGY

The Department of Physiology at Loyola University Chicago, Stritch School of Medicine seeks applicants for tenure-track positions at the ASSISTANT or ASSOCIATE PROFESSOR level. Applicants (with Ph.D., M.D., or equivalent) are expected to establish a strong research program. More senior applicants should have a strong record of research productivity and extramural support. Applicants whose research complements and extends existing research strengths in cellular and molecular aspects of Ca regulation and ion channels in the cardiovascular system are especially encouraged (see website: www. meddean.luc.edu/lumen/DeptWebs/physio/ index.html). Send letter, curriculum vitae including research plans, and names of three references to: Donald M. Bers, Ph.D., Chair, Department of Physiology, Loyola University Chicago, 2160 First Avenue, Maywood, IL 60153. Loyola is an Equal Opportunity/Affirmative Action Employer.

# opportunity. Recognition.

#### ASSOCIATE/FULL PROFESSOR POSI-TIONS IMMUNOLOGY PROGRAM H. LEE MOFFITT CANCER CENTER

Applicants are invited for tenure-track Associate/Full Professorships in the Immunology Program at the H. Lee Moffitt Cancer Center & Research Institute and the College of Medicine at the University of South Florida. Preference will be given to applicants with documented expertise in molecular aspects of tumor immunology and future research plans that address molecular mechanisms that can be translated into therapeutic strategies for cancer treatment. Very competitive personal and professional start-up packages are available to join a vibrant, extramurally funded Immunology Program, whose members work on signal pathways in bone marrow stem cells, lymphocytes and neutrophils, MHC Class I and II gene regulation and antigen processing in tumor cells, as well as molecular approaches to immunotherapy. Successful applicants will be able to interact with clinical and translational researchers with ongoing studies in cancer patients and animals. The laboratories are in new state-of-the art facilities, shared by collaborative and supportive scientists focused on molecular oncology and signal transduction.

Individuals for Associate Professor must have demonstrated extramural funding and at least 5 years of active and sustained participation as an Assistant Professor. Individuals for Full Professor must have a proven track record of independent research, leadership ability and training experience as evidenced by publications and extramural funding as well as 5 years of active and sustained participation as an Associate Professor. These positions will be assigned to specific, mutually agreed-upon departments within the College of Medicine

# Research the possibilities.



Send current curriculum vitae and a brief statement of major academic interest to W. J. Pledger, Ph.D., Associate Center Director for Basic Research, H. Lee Moffitt Cancer Center and Research Institute, 12902 Magnolia Drive, Tampa, Florida 33612. Applications must be postmarked by the deadline of

The H. Lee Moffitt Cancer Center & Research Institute is a free-standing, newly designated National Cancer Institute Cancer Center located adjacent to the Health Sciences Center on the Tampa campus of the University of South Florida. In addition to a 162-bed full-service cancer treatment facility, the Center has over 200,000 sq ft of research laboratory space, with another Research Building to begin construction this fall.

The University of South Florida is accredited by the Commission of Colleges of the Southern Association of Colleges and Schools to award degrees at the baccalaureate, master's, specialist and doctoral levels, including the Doctor of Medicine. The Moffitt Cancer Center and the University of South Florida are Equal Opportunity/Equal Access/Affirmative Action employers. For disability accommodations, contact Sue Morissette at (813) 975-7884 a minimum of five working days in advance.





CANCER CENTER & RESEARCH INSTITUTE

At the University of South Florida A NATIONAL CANCER INSTITUTE DESIGNATED CANCER CENTER

www.moffitt.usf.edu

#### **Tenure Track Assistant Professor** Neuroscientist

The Department of Biology at Rider University is recruiting an Assistant Professor for a full-time tenure track faculty position beginning September 2000. Successful applicants will be broadly trained in behavioral, cellular, computational, or cognitive neurosciences and be able to teach courses as part of a growing Biopsychology program. The ability to establish and sustain an active research program involving undergraduates is expected.A Ph.D. and postdoctoral experience are required. Interested applicants should send their curriculum vitae, statements of teaching philosophy and research interests, and three references to: Rosemary Molloy, Manager of Employment, Human Resources, Rider University, 2083 Lawrenceville Rd., Lawrenceville, NJ 08648 by December 10, 1999, Rider University is an equal opportunity/ affirmative action employer and does not discriminate on the basis of age, race, sex, disability, sexual orientation, national origin, religion, or any other non-job related criteria.

Ph.D. Postdoctoral Molecular Biologist

1 year renewable postdoctoral position

The Procter & Gamble Company has an opening for a Ph.D. postdoctoral molecular biologist in our Pharmaceuticals Division, located in Cincinnati, Ohio.

A position is available in the Muscle/Obesity group for an individual with a background in molecular and cellular biology. The project will focus on the cloning and mutagenesis of receptors involved in neurological signaling. Successful candidates will have a Ph.D. in cell biology, pharmacology or related disciplines and should have demonstrated experience with standard molecular and cell biology techniques. Previous experience in obesity or G-protein coupled receptors is desirable.

Candidate must have a Ph.D. in cell biology, pharmacology or related discipline. Experience in molecular cloning and cell biology techniques required.

The Procter & Gamble Company is a world leader in the research, development, manufacture and marketing of a wide variety of health care, beauty care, laundry & cleaning, cosmetics & fragrances, food & beverage and paper products. P&G's annual sales exceed \$38 billion and our annual R&D investment is more than \$1.7 billion. P&G offers a competitive salary and benefits package placing us in the top 5% of U.S. firms. The Company's R&D organizations provide excellent opportunities for both personal and professional growth.

#### Procter&Gamble

If you meet the qualifications for this position, please apply on-line at P&G's web site at: www.pg.com/careers/applynow. Please use ad code NAUSRD000203.

NO agency referrals. Applicants must be presently authorized to work in the U.S. on a full-time basis. Procter & Gamble is An Equal Opportunity Employer.

Visit Rider University on the Web at www.rider.edu

#### **POSITIONS OPEN**

# DEPARTMENT HEAD DEPARTMENT OF PLANT PATHOLOGY AND MICROBIOLOGY Texas A&M University

Texas A&M University, a land grant institution, invites applications and nominations for Department Head, Department of Plant Pathology and Microbiology. Department faculty have major roles in the missions of the Agriculture Program at Texas A&M University. We are seeking an individual with proven leadership experience and the interpersonal skills required to direct this important academic department. In addition to being an excellent academician, the new Head must be able to advance the research, educational, and extension missions of the department. Our website: http://www.plantpathology.tamu.edu contains further details about the department.

Review of candidates will begin November 15, 1999, and will continue until an appointment is made. Applicants should submit a complete curriculum vitae, statement of research interests, and names of five references. All correspondence should be addressed to:

Plant Pathology and Microbiology Head Search Attn: Terry Thomas, Search Committee Chair Department of Biology Texas A&M University College Station, TX 77843-3258

Texas A&M University is an Equal Opportunity Employer. Women, minority, and international candidates are encouraged to apply.

#### ADVANCED UNDERGRADUATE LABORATORY DIRECTOR ASSOCIATE DEVELOPMENT ENGINEER

The Department of Chemistry at the University of California, Irvine currently has an excellent opportunity for an individual to assist with upper-division laboratories in analytical, instrumental, and physical chemistry. In consultation with the faculty, the successful candidate will develop new laboratory experiments, assist in coordination of laboratories, coordinate usage of and training on instruments, maintain instruments, participate in the preparation of proposals, papers, and reports on curriculum development and the teaching program as appropriate. Manage daily laboratory operations and work collaboratively with other professional staff. Requires experience in chemistry or physics, successful interpersonal skills to work effectively with a variety of individuals, and oral and written communication skills. A Ph.D. or equivalent experience in chemistry or physics is strongly preferred. Salary commensurate with experience. Interested candidates should send a résumé, referencing Job #SCU-3638L, and a list of references by November 3, 1999, to: University of California, Irvine, Human Resources Department, Berkeley Place Building, Suite 2500, Irvine, CA 92697-4600. Résumés and materials will continue to be accepted until the position is filled. Visit us on the World Wide Web at website: www.hr.uci.edu. The University of California is an Affirmative Action/Equal Opportunity Employer.

As a part of a continuing expansion in the life sci-Georgia Institute of Technology announces TENURE-TRACK FACULTY POSITIONS in molecular biology in the School of Biology and the School of Chemistry and Biochemistry. Particular emphasis is in molecular and cellular aspects of structural biology, including X-ray diffraction and NMR techniques, as well as structural/functional genomics and genome stability. Joint appointments will be considered. All applicants should send a letter, curriculum vitae, and a summary of research plans. Candidates for a junior-level position should request three letters of reference to be sent, while senior-level candidates should enclose names and addresses of three references. All materials should be sent to: Molecular Biology Search Committee, c/o Susan Longuepee, Institute of Bioengineering and Biosciences, Georgia Institute of Technology, 315 Ferst Drive, Atlanta, GA 30332-0363. Applications will be considered beginning November 1, 1999. Georgia Tech is an Equal Education/Employment Opportunity Institution.

#### POSITIONS OPEN

#### FACULTY POSITION FRESHWATER INVERTEBRATE BIOLOGIST

Oklahoma Biological Survey and Department of Zoology University of Oklahoma

The University announces a 12-month joint tenure-track position in the Oklahoma Biological Survey and the Department of Zoology starting 1 July 2000 for an ASSISTANT HERITAGE ZOOLOGIST/ASSISTANT PROFESSOR of zoology. Responsibilities include developing an active research program in area of specialty, teaching one course per year, inventorying and evaluating priority species and biological communities in Oklahoma, interacting with conservation agencies, and participating in public outreach. Ph.D. required. Successful applicant must demonstrate research productivity and potential for external funding; ability to conduct field studies; broad knowledge of freshwater fauna; skills in teaching and in oral and written communication.

Screening will begin on 15 January 2000 and continue until the position is filled. Please provide a résumé, a written summary of how the requirements outlined above are met, reprints, and three confidential letters of recommendation to: Bruce Hoagland, Search Committee Chair, Oklahoma Biological Survey, University of Oklahoma, Norman, OK 73019. Telephone: 405-325-1985; FAX: 405-325-7702; e-mail: bhoagland@ou.edu.

The University of Oklahoma is an Equal Opportunity/ Affirmative Action Employer. Women and minorities are encouraged to apply. The University has a policy of being responsive to the needs of dual-career couples.

#### STRUCTURAL BIOLOGY DARTMOUTH COLLEGE

The Chemistry Department of Dartmouth College seeks an individual with a nationally recognized research program in structural biology to join its FAC-ULTY at an appropriate rank. This will be the first of three hires in this area in chemistry and, along with recent hires in biochemistry and the newly created Department of Genetics, will form the core of a structural biology and biophysical chemistry group at Dartmouth. Preference will be given to individuals who study the structural properties of biological macromolecules to understand their function. Expertise with atomic resolution methods, such as NMR spectroscopy or X-ray crystallography, as well as other spectroscopic, physical, and computational methods, will be particularly attractive. Teaching will be expected in upper-level courses of our biophysical chemistry major, graduate courses in one's specialty, and introductory courses in either general or organic chemistry. Applicants should submit a curriculum vitae, a statement of their scientific accomplishments and future research directions, and a statement about their teaching experience and interests. Applicants should also arrange to have three letters of recommendation sent on their behalf. All inquiries and applications will be treated confidentially. Application materials should be sent to: Professor Robert S. Cantor, Structural Biology Search Committee, Department of Chemistry, 6128 Burke Laboratory, Dartmouth College, Hanover, NH 03755-3564. The Committee will begin to consider completed applications on October 31, 1999. Dartmouth College is an Equal Opportunity/Affirmative Action Employer.

SENIOR FACULTY POSITION (Associate to Full Professor) in microbiology, immunology, and parasitology (MIP). Individual should have a current NIH grant-funded research program involving viral pathogenesis of cancer and utilize the latest biotechnological methods. Also, experience in teaching and interactions with a University Service Core Laboratory is required. Please send a curriculum vitae and the names of three references by November 15, 1999, to: Dr. Ronald Luftig, Chair of MIP Search Committee, Louisiana State University Health Sciences Center, 1901 Perdido Street, Box P6-1, New Orleans, LA 70112-1393. LSUHSC is an Affirmative Action/Equal Employment Opportunity Employer.

#### **POSITIONS OPEN**

The School of Chemistry and Biochemistry of the Georgia Institute of Technology seeks to fill several TENURE-TRACK FACULTY POSITIONS. Exceptional candidates in all areas are encouraged to apply; however, particular needs exist in the area of organic (bioorganic or polymer) chemistry, surface chemistry, bioseparations, and molecular and structural biology. Outstanding candidates for advanced rank positions are strongly encouraged. Interdisciplinary candidates will be considered for joint appointments with other departments. Further information is available on our website: www.chemistry.gatech. edu. Candidates at the entry-level should send an application letter, curriculum vitae, and a summary of research plans, and should request three letters of reference. Advanced candidates should send a curriculum vitae and the names of three references. All materials and requests for information should be directed to: Chair, School of Chemistry and Biochemistry, Georgia Institute of Technology, Atlanta, GA 30332-0400. Applications will be considered beginning October 31, 1999, but applications past that date will be considered until the positions are filled. Georgia Tech is an Equal Education/Employment Opportunity Institution.

BIOLOGY FACULTY. Possible faculty position to teach, in English, courses in general biology and a core curriculum course in scientific thinking. Ph.D. required. University teaching experience required. Two-year appointment begins September 2000. Renewal of the appointment depends upon institutional needs and/or the appointee's performance. The normal teaching load is three courses per semester. Salary and rank according to scale based on-qualifications and professional experience. For expatriates, housing, annual round-trip air travel for appointee and accompanying family, plus schooling for up to two children are included. In view of The American University in Cairo's protocol agreement with the Egyptian Government, which requires specific proportions of Egyptian, U.S., and third-country citizen faculty, at this time preference will be given to qualified applicants who are U.S. citizens. Mail letter of application specifying Job Number BIO-1 with curriculum vitae and names and addresses of three references to: Dr. Earl (Tim) Sullivan, Provost, The American University in Cairo, 420 Fifth Avenue, Floor 3-S, New York, NY 10018-2729 before November 15, 1999. AUC is an Equal Opportunity Employer.

INSTRUCTOR in the sciences. Demonstrated professional experience in at least two of the following areas: biology and ecology (especially oriented to fieldwork), biotechnology, chemistry, environmental science, science and technology, physics. Two years of post-secondary teaching experience (Teaching Assistant acceptable). Demonstrated commitment to undergraduate teaching. Developing record of professional involvement as a scholar. Preference may be given to candidates with a Ph.D. (A.B.D. candidates must complete their degree within one year of hire) and/or candidates with demonstrated experience or interest in community partnerships. Full-time position beginning in the fall of 2000 to 2001. Salary competitive; attractive benefits package. Submit letter of interest, curriculum vitae, two brief course proposals, names and addresses of three professional references to: Amanda Ames, Milwaukee Institute of Art and Design, 273 East Erie Street, Milwaukee, WI 53202. Deadline postmarked November 5, 1999. Women, minorities strongly encouraged to apply.

#### FACULTY POSITION VOLLUM INSTITUTE

ASSOCIATE PROFESSOR preferred; FULL PROFESSOR considered. Research area should complement existing strengths in molecular/cellular neuroscience of the current 21 faculty (See website: www.ohsu.edu/vollum). Send curriculum vitae, research statement, and list of three to four references by November 15, 1999, to: Faculty Search, Vollum Institute of 1.474, Oregon Health Sciences University, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201-3098. OHSU is an Equal Employment Opportunity/Affirmative Action Employer. Minority and women applicants are encouraged to apply.



#### **FACULTY POSITIONS**

#### Leonard and Madlyn Abramson Family Cancer Research Institute at the University of Pennsylvania Cancer Center

The UNIVERSITY OF PENNSYLVANIA seeks outstanding candidates for tenure-track faculty positions in the recently created Abramson Family Cancer Research Institute, which is an integral part of the University of Pennsylvania Cancer Center and the School of Medicine. Faculty appointments will be based in the School of Medicine. Faculty rank will be commensurate with experience and qualifications.

Candidates who have scientific interests and experience in any field of cancer biology, including, but not limited to cell cycle control, tumor suppressor genes, oncogenes, cancer genetics, signal transduction, angiogenesis, apoptosis, and translational research, should send a letter of interest, curriculum vitae and the names of references to:



Craig Thompson, M.D.
Scientific Director
The Abramson Family Cancer
Research Institute
4th Floor - BRB II/III
421 Currie Blvd.
Philadelphia, PA 19104

THE UNIVERSITY OF PENNSYLVANIA IS AN EQUAL OPPORTUNITY/ AFFIRMATIVE ACTION. EMPLOYER. WOMEN AND MINORITY CANDIDATES ARE ENCOURAGED TO APPLY.

## THE UNIVERSITY OF TEXAS - HOUSTON HEALTH SCIENCE CENTER



#### Medical School

#### Department of Microbiology & Molecular Genetics Seeks Assistant Professor

The Department of Microbiology & Molecular Genetics at The University of Texas Medical School at Houston, seeks an exceptional scientist for a tenure track position at the Assistant Professor level. The successful candidate should have a Ph.D. and/or M.D. and several years postdoctoral experience. Excellence in research is of greater significance than the particular area of research; however, areas of interest might include prokaryotic or lower eukaryotic molecular genetics, cell biology, biochemistry, genomics, pathogenesis or physiology. The successful candidate will join a department with strengths in the area of cell signaling, signal transduction and the molecular genetics of prokaryotes and lower eukaryotes involving a diversity of microbial systems. The successful candidate will receive a competitive salary and start-up package and will be expected to teach graduate students and medical students. The applicant should submit a curriculum vitae, the names of at least three references and a statement of their research goals and interests, including a description of how their research program reflects the future directions of microbiology. For full consideration, completed applications should be submitted by December 3

Applications should be submitted to:

Samuel Kaplan, Ph.D.
Microbiology & Molecular Genetics
The University of Texas Medical School
P.O. Box 20708
Houston, TX 77225
(713) 500-5502

Fax: (713) 500-5499 skaplan@utmmg.med.uth.tm

E-mail: skaplan@utmmg.med.uth.tmc.edu Web Address: www-mmg.med.uth.tmc.edu

The University of Texas Health Science Center-Houston is an Equal Opportunity Employer. Women and Minorities are encouraged to apply.

# INNOVATING AT THE SPEED OF LIGHT

#### Ground Floor R&D Opportunities

The ability to create new science and new businesses has been a hallmark of innovation management at Corning for decades. Today's revolution in life science research is creating new opportunities for drug discovery and testing technologies. These technologies build on Corning strengths in polymers and surface chemistry allowing us to apply new developments in molecular biology to produce a growing range of tools for genomics, combinatorial chemistry and high-throughput screening.

Today, Corning is a leading producer of advanced microplates to support the high-speed automated testing of potential drug candidates. An extensive stream of new products targets additional DNA analysis and drug discovery markets expected to grow dramatically by 2005. For example, Corning's new CMT-GAPS coated slides are just the first of many innovations to come from Corning Microarray Technology, an innovative new family of advanced research tools.

If you enjoy the challenge of product development research and the collegial atmosphere of a scientific discovery environment, we invite you to learn more.

#### **Applications Support Scientists**

(Job Code: AD/SCIENCE/993328)

We have several opportunities for individuals who have strong customer relations skills and experience involving customer training, needs assessment and sales/marketing. These positions will support the product development, sales and marketing groups in Corning Microarray Technology. 20-50% travel is involved.

- · Ph.D. in Molecular Biology or equivalent experience
- Experience in RNA, cDNA desired
- · Experience in microarrays preferred

#### Molecular Biologists

(Job Code: AD/SCIENCE/980598)

- RNA, gene expression, cDNA background essential
- Ph.D. in Molecular Biology, Genetics or Cell Biology
- · Statistical analysis experience highly desired
- · Post-doctoral experience desirable
- Ability to work across chemistry, materials science and molecular biology disciplines required

#### **Biochemists**

(Job Code: AD/SCIENCE/993503)

- · Ph.D. Biochemistry with strong Chemistry and Biology
- · Experience in biochemistry, protein chemistry preferred
- Array experience a plus
- Ability to work across chemistry, materials science and molecular biology disciplines required

Corning offers a rich infrastructure of world-class materials research, development and manufacturing expertise, enabling wide-ranging support for innovative approaches to product development. Projects generally are customer driven and are for near-term commercial application. Location is Corning, NY. Some travel will be required.

We invite you to learn more about us at www.corning.com. All resumes must reference the associated Position Title and #, and should be submitted in MS WORD format via e-mail to: corning@aonhros.com. Mail to: Corning, Attn: Ad Code #\_\_\_\_\_\_ PO Box 1262, Findlay, OH 45840 Corning is an equal opportunity employer with a strong commitment to workforce diversity.



#### **POSITIONS OPEN**

#### TENURE-TRACK FACULTY POSITION COMPUTATIONAL CHEMISTRY

The Department of Chemistry and Biochemistry at Old Dominion University seeks to fill a tenure-track position in computational chemistry at the ASSIST-ANT PROFESSOR level. This position will be available beginning the fall semester of 2000 and the possibility exists that additional tenure-track positions in computational chemistry will become available in the near future. We are interested in applicants with a strong background in theoretical chemistry or theoretical biochemistry. A Ph.D. is required, and post-doctoral experience is preferred. A strong commitment to teaching at the graduate and undergraduate levels is required, as well as the ability to conduct a vigorous, externally funded research program.

The university is supporting this initiative with the acquisition of a SUN Enterprise 10,000 HPC. The computer, which has 32 UltraSPARC 400 MHz processors and 32 gigabytes of fully addressable shared memory, will be available to support the successful applicant's research interests.

The Department of Chemistry and Biochemistry presently offers B.S. degrees in both chemistry and biochemistry and graduate degrees in chemistry (M.S.) and biomedical sciences (Ph.D.).

Applicants should send a curriculum vitae; a statement describing teaching interests and philosophy; a research proposal; and the names, telephone numbers, and addresses of three references to: Computational Search Committee, Department of Chemistry and Biochemistry, Old Dominion University, Norfolk, VA 23529-0126. For further information contact Dr. John B. Cooper, Telephone: 757-683-4096; e-mail: jcooper@odu.edu. Review of applications will begin 1 November 1999 and continues until the position is filled. Old Dominion University is an Equal Opportunity/Affirmative Action Institution and requires compliance with the Immigration Reform and Control Act of 1986.

University of Oklahoma. The Department of Chemistry and Biochemistry invites applications for a tenure-track faculty position at the rank of ASSIST-ANT PROFESSÓR in the area of biochemistry, beginning August 2000. Candidates must have a Ph.D. degree, postdoctoral experience, the ability to develop a productive research program, and a commitment to teaching excellence. Interests in all areas of biochemistry will be considered, but Investigators working in the areas of nucleic acids, enzyme mechanisms, membrane biochemistry, or protein structure and function are especially encouraged to apply. Applicants should submit a complete curriculum vitae, a two-page description of ongoing work and future research plans, and should request three letters of reference sent to: Dr. Phillip E. Klebba, Ph.D., Biochemistry Search Committee Chairman, Department of Chemistry and Biochemistry, University of Oklahoma, 620 Parrington Oval, Room 208, Norman, OK 73019. Review of the applications will begin on October 15, 1999. The University of Oklahoma is an Equal Opportunity/Affirmative Action Employer, Women and minorities are encouraged to apply. OU is responsive to the needs of dual-career couples.

Plant evolutionary biology. The Department of Environmental, Population, and Organismic Biology at the University of Colorado invites applications for a tenure-track ASSISTANT PROFESSOR position in plant evolutionary biology, broadly defined. Candidates with interests in plant systematics and diversity, phylogenetic theory, developmental evolution, molecular evolution, coevolution, the evolution of plant-microbial interactions, and paleobotany are especially encouraged to apply. The successful candidate will be responsible for teaching in plant diversity courses. Application materials (cover letter, curriculum vitae, statements on research and teaching, the names of three potential referees) should be sent to: Dr. Pamela Diggle, Department of Environmental, Population, and Organismic Biology, Campus Box 334, University of Colorado, Boulder, CO 80309 and must be received by November 15, 1999. The University of Colorado is committed to Diversity and Equality in Education and Employment.

#### **POSITIONS OPEN**

#### DEPARTMENT OF BIOLOGICAL SCIENCES

The Department of Biological Sciences at Idaho State University invites applications for the position of DEPARTMENT CHAIR. The successful applicant will have a Doctorate-level degree in one of the biological sciences, a commitment to undergraduate and graduate education, an excellent record of publication and extramural support, and strong leadership skills. Salary will be commensurate with qualifications and experience. Review of applications will begin December 15, 1999, and will continue until the position has been filled.

The Department has 35 tenure-track and additional adjunct faculty with diverse teaching and research interests, and there is a strong commitment to undergraduate and graduate education. We offer a variety of undergraduate and Master's programs and two Doctoral-level degrees, and our curriculum supports several health-related programs. Additional information regarding the Department can be accessed through the departmental website: www.isu.edu/departments/bios/ and a special Chair Search information website: www.isu.edu/departments/bios/chair.html. General information regarding the University can be found at the University website: www.isu.edu.

Applicants should send a letter of interest that includes qualifications and leadership philosophy, a curriculum vitae, and a list of three references to: Chair Search Committee, Department of Biological Sciences, Campus Box 8007, Idaho State University, Pocatello, ID 83209. Idaho State University is an Equal Opportunity Employer.

#### FACULTY POSITIONS IN BIOCHEMISTRY AND MOLECULAR BIOLOGY SUNY Health Science Center at Syracuse

We invite applications for up to two positions at any rank and in any area of biochemistry or molecular biology. Candidates at the ASSISTANT PROFES-SOR level must have a Ph.D., M.D., or equivalent degree, postdoctoral experience, demonstrated research productivity, and a commitment to excellence in teaching medical and graduate students. Candidates at the ASSOCIATE or FULL PROFESSOR level must, in addition, have a strong record of extramural research funding. Send letter of application (with curriculum vitae and summary of past and future research) and have three letters of reference forwarded to: Dr. Patricia Kane, Faculty Search Committee, Department of Biochemistry and Molecular Biology, State University of New York Health Science Center at Syracuse, 750 East Adams Street, Syracuse, NY 13210. Review of applications will begin December 1, 1999, and continue until the positions are filled.

An Affirmative Action/Equal Employment Opportunity/ ADA Employer.

The Department of Genetics at the Stanford University School of Medicine is seeking qualified applicants for a tenure-track position at the **ASSISTANT PROFESSOR** level.

The Department occupies newly renovated laboratories and has established programs in genetic and genomic studies of a wide variety of eukaryotic and prokaryotic organisms.

Candidates should have a strong record of research accomplishment in any field of genetics and should expect to become involved in teaching human and/or general genetics to graduate students and medical students.

Candidates should send their curriculum vitae, bibliography, statement of research interests, and the names of three references to: Dr. David Botstein, Search Committee Chairman, c/o Louann Kosmerl, Department of Genetics, Stanford University School of Medicine, 300 Pasteur Drive, L329, Stanford, CA 94305-5120.

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

#### **POSITIONS OPEN**

# TENURE-TRACK FACULTY POSITIONS DEPARTMENT OF CHEMISTRY SAN DIEGO STATE UNIVERSITY

The Department of Chemistry at San Diego State University is announcing three tenure-track faculty positions in analytical, organic, and biochemistry at the ASSISTANT PROFESSOR level with appointments to begin fall 2000. Preference will be given to applicants with background and research interests in one or more of the following areas: macromolecular structure, metabolic or signaling pathways, bio-organic chemistry with an emphasis on synthesis, and the analytical chemistry position requires a research focus in separations science. The Department is particularly interested in hiring in interfacial areas that will promote and strengthen interactions with the rapidly growing biotechnology and pharmaceutical industries in San Diego. Postdoctoral research experience is essential, and the successful candidates will be expected to maintain vigorous research programs that attract external funding. Applicants should also be willing to participate in the department's instructional program at any level from freshman chemistry through the Ph.D. program. Applicants must submit a cover letter indicating in which area they are applying, a complete curriculum vitae, a description of research plans with an estimated equipment budget, relevant reprints and preprints, and a brief description of teaching interests, and arrange to have three letters of recommendation sent to: Faculty Search Committee Chair, Department of Chemistry, San Diego State University, San Diego, CA 92182-1030. Website: http://www.chemistry.sdsu.edu/chemistry. Review of completed applications will begin on October 25, 1999, and continue until the position is filled. SDSU is an Equal Opportunity Employer and does not discriminate against persons on the basis of race, religion, national origin, sexual orientation, gender, marital status, age, or disability. Women, ethnic minorities, and persons with disability are encouraged to apply.

#### CELL PHYSIOLOGIST AND PLANT ECOLOGIST

The Department of Biology at William Jewell College invites applications for two entry-level positions. (1) Cell Physiologist: Teach physiology, human anatomy, cell physiology, introductory biology, and honors course in membranes. (2) Plant Ecologist: Teach introductory biology, plant ecology and conservation, and general botany. Both positions require teaching in the General Education Program and mentoring undergraduate research. Positions begin August 2000, and are renewable annually for three years, after which they may become tenure-track. To apply, send a curriculum vitae, statements of teaching philosophy and research interests, three recommendation letters, and unofficial graduate and undergraduate transcripts to: Dr. Judith Dilts, Chair, Department of Biology, William Jewell College, Liberty, MO 64068. For further information, contact: Dr. Dilts, e-mail: diltsj@william.jewell.edu or see website: http:// www.jewell.edu/~biology. Reviews begin 22 October 1999. Women and minorities encouraged to apply.

#### EUKARYOTIC CELL BIOLOGIST

Nine-month, tenure-track ASSISTANT PRO-FESSOR position beginning August 2000. Teaching responsibilities will include cell biology, introductory biology for majors and nonmajors, and participation in advanced courses in the candidate's area of expertise. Candidate is expected to pursue extramurally funded research involving undergraduate and M.S. students. Ph.D. by date of application required; postdoctoral teaching or research experience and ability to participate in department's Biotechnology Center preferred. Further details available at website: http://bioweb. wku.edu. Submit curriculum vitae, separate statements of teaching and research interests, and three letters of recommendation by 3 January 2000, to: Chair, Cell Biologist Search Committee, Department of Biology, Western Kentucky University, 1 Big Red Way, Bowling Green, KY 42101-3576. Western Kentucky University is an Affirmative Action/Equal Opportunity Employer Institution.



#### Novartis Agribusiness Biotechnology Research, Inc.

ANALYTICAL PROTEIN CHEMIST ANALYTICAL ORGANIC CHEMIST **BIOCHEMIST ENTOMOLOGIST FUNGAL MOLECULAR BIOLOGIST INSECT CELL BIOLOGIST** INVERTEBRATE BIOLOGIST MICROBIAL GENETICIST **MICROBIOLOGIST MOLECULAR BIOLOGIST PLANT BIOCHEMIST** PLANT TRANSFORMATION PROTEIN MOLECULAR BIOLOGIST SYNTHETIC ORGANIC CHEMIST

#### **HOW TO APPLY FOR POSITIONS** AT NABRI:

Go to www.us.novartis.com Click on either Text Site or Graphic Site Click on Human Resources

Click on Employment Opportunities

Click on Apply Online

Novartis Agribusiness Biotechnology Research, Inc. (NABRI), located in Research Triangle Park, North Carolina, is the central hub for Novartis agricultural biotechnology research, with an emphasis on identifying and experimentally evaluating opportunities for biotechnology to impact our businesses. The 280+ scientists at NABRI conduct research on the validation of novel targets in plants, fungi, and invertebrates; implementation of assay technology for identifying novel ligands; and synthesis follow-up on hits from the resulting assays. Successful projects sponsored by the Seed Division include disease and insect tolerance, output traits, and development of novel transformation technologies.

Novartis has just launched a new resume database which allows applicants to submit their resume for any open position at any division of Novartis in the United States. At NABRI, we invite applications from scientists at all levels with expertise in plant, fungal, and insect molecular biology, microbiology, plant transformation, entomology, biochemistry, and analytical and synthetic organic chemistry.

Please enter Job Code 9960-SM, select the job category that most closely matches your field of expertise, fill in the required fields, and paste in your cover letter and resume. Job code 9960-SM is the job code equivalent of "any open position at NABRI". Your resume will remain on file for 90 days. As new positions open up, we will search the resume database and alert all qualified candidates. Future advertisements for specific positions will direct you to update your resume with a new job code. Please enter your resume into this new database even if you have previously submitted your resume to NABRI during the past six months as we will be phasing out our old resume database. An Equal Opportunity Employer

# Growth through ISCOVERV



Parke-Davis is devoted to discovering, developing, manufacturing and marketing quality pharmaceutical products. We have the following opportunity available in **ANN ARBOR, MI**:

#### SCIENTIST - Job Code: HS\99-1608SC

We are seeking a qualified individual with a physical chemistry and crystallography background that can apply crystallographic molecular analyses toward the understanding of physical properties. Research will require the following: grow single crystals of small molecules for X-ray crystallographic studies; collect diffraction data utilizing a platform goniometer and CCD detector; solve and refine structures; analyze crystal structures for H-bonding graph sets and other molecular interactions; perform some molecular modeling; and experimentally characterize physical properties. This position will require a Ph.D. in Chemistry with crystallography training. In addition, a research background regarding crystallographic analysis of the impact of intermolecular interactions is highly desirable.

We offer competitive salaries, outstanding benefits, and an environment conducive to professional growth. We have the above opportunity in ANN ARBOR, MI. For confidential consideration, please forward your resume indicating Job Code, to: Warner-Lambert, Resume Processing Center, P.O. Box 549231-Suite 24, Waltham, MA 02454-9231. Fax: 877-663-2497 (Toll-free). To apply online, visit us at www.warner-lambert.com



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#### SYMPOSIUM



INTERNATIONAL SYMPOSIUM ON PHYSICO-CHEMICAL PROCEDURES FOR THE **CHARACTERIZATION OF VACCINES** 

Organized by the Marcel Mérieux Foundation and the International Association for Biologicals (IABS) Les Pensières, Veyrier-du-Lac, France (near Annecy, French Alps)
1-3 December 1999

#### SCIENTIFIC COMMITTEE

Carine Capiau (SmithKline Beecham). Mike Corbel (NIBSC), Betty Dodet (Fondation Mérieux). Willam Egan (FDA/CBER), Reinhardt Glück (Berna). Elwyn Griffiths (WHO), Florian Horaud (Institut Pasteur), François Lacoste (Merial), Michael Lubeck (Wyeth-Lederle Vaccines). John Petricciani (IABS), John Mays (Pasteur Merieux Connaught). Michael Pfleiderer (Paul-Flich Institut). Alan Show (IEDMA). Paheat Sitain (Morak) Erlich-Institut), Alan Shaw (IFPMA), Robert Sitrin (Merck)

The purpose of this symposium is to bring together scientists working in the the purpose of this symposium is to bring together scientists working in the field of vaccines, to review the recent progress in various physico-chemical methods that can be applied to the characterization of bacterial and viral antigens. Their correlation with biological methods and their role in vaccine standardization and quality control will be discussed.

#### Information and registration

Fondation Mérieux
17 rue Bourgelat, BP 2021, 69227 Lyon Cedex 02, France.
Tel: 33 (0)4 72 40 79 72 - Fax: 33 (0)4 72 40 79 50
E-mail: bdodet@fond-merieux.org & fmerieux@asi.fr
Web site: http://www.fond-merieux.org

#### **POSITIONS OPEN**

#### ASSISTANT, ASSOCIATE, OR FULL PROFESSOR

As part of an ongoing expansion, the Department of Cell Biology and Molecular Genetics is seeking a faculty member with a research program in host-microbe interactions. Applicants must have earned a Doctoral degree, provide evidence of significant research accomplishments, and possess a commitment to excellence in teaching. We are particularly interested in applicants who use bacteria, fungi, or viruses to dissect cellular and molecular pathways involved in microbial infections; study some aspect of host cellpathogen interactions; or study responses to infection at the molecular level. College Park is the flagship campus of the University of Maryland System and is located in the Washington, D.C. metropolitan area, in close proximity to NIH and other government research agencies. Successful applicants will be expected to participate in teaching at the undergraduate and graduate levels. Preference will be given to individuals whose research complements that of existing departmental faculty in immunology, microbiology, and cell biology (see website: www.life.umd.edu/cbmg/). The level of appointment will reflect the experience of the candidate selected.

Review of applications will begin on November 15, 1999. Applicants should submit a curriculum vitae; selected reprints; a description of research interests and goals; their history of past and present grant support; and arrange to have three reference letters sent to:

Dr. Daniel C. Stein Chair, Pathogenesis Search Committee Department of Cell Biology and Molecular Genetics University of Maryland College Park, MD 20742

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

#### AQUATIC ECOLOGIST

Applications are invited for a tenure-track position in plant or animal aquatic/marine ecology at the rank of ASSISTANT or ASSOCIATE PROFESOR. Candidates must have postdoctoral training. The appointee will be expected to develop an active research program, acquire external funding, participate in graduate training, and teach courses in ecology and/or genetics and advanced courses in area of specialization.

Review of applications will begin 1 November 1999 and continue until position is filled. Send curriculum vitae, statement of interests, and names of three references to:

Daniel D. Jones, Ph.D. Department of Biology CH 109 1530 3<sup>rd</sup> Avenue South Birmingham, AL 35294-1170

The University of Alabama at Birmingham is an Equal Opportunity/Affirmative Action Employer.

GENETICIST. The Department of Biology at the University of North Carolina-Greensboro (UNCG) invites applications for a new tenure-track position at the level of ASSISTANT PROFESSOR. Successful candidate will teach in the newly established Genetics Counseling graduate program and Biology Department. UNCG offers highly competitive start-up funding and excellent facilities. Successful candidate will be expected to develop an extramurally funded research program in genetics/genomics involving biology students. Opportunities exist for interaction with North Carolina's thriving biomedical/biotechnology community and nearby colleges and universities. Send curriculum vitae, reprints, statement of teaching and research interests, and arrange for three reference letters to be sent by November 22, 1999, to: Chair, Genetics Search, Department of Biology, P.O. Box 26174, University of North Carolina-Greensboro, Greensboro, NC 27402-6174. For information about us, please visit website: www. uncg.edu/bio. Equal Employment Opportunity/Affirmative Action/Women/Minorities/Veterans/Disabled.

#### POSITIONS OPEN

#### FACULTY POSITION IN MICROBIOLOGY Western University of Health Sciences

The discipline of microbiology invites applications for a tenure-track position in microbiology at the ASSISTANT PROFESSOR level. A Ph.D. is required. The candidate is expected to teach medical microbiology to first- and second-year osteopathic medical students. Major emphasis is on teaching and service to the college, but research is encouraged. Send current curriculum vitae, transcripts, three letters of recommendation, and a statement of teaching philosophy and career objectives no later than December 1, 1999, to: Chair, Microbiology Search Committee, Western University of Health Sciences, College of Osteopathic Medicine of the Pacific, 309 East Second Street, College Plaza, Pomona, CA 91766.

#### **GROSS ANATOMIST**

Full-time, tenure-track position available for a Medical Gross Anatomist at the ASSISTANT or ASSOCIATE PROFESSOR level. The curriculum is conducted in a team-taught setting and primarily encompasses medical gross anatomy (lectures and laboratories), histology (laboratories only), and neuroanatomy (laboratories only). Candidates must have a Ph.D. in anatomy or closely related field and significant teaching experience. Western University has modest research facilities, and the new faculty member will be encouraged to develop scientific research and/or innovative academic programs. Send current curriculum vitae, statements of teaching and research interests, and three letters of recommendation to: Chair, Anatomy Search Committee, Basic Sciences Department, Western University of Health Sciences, 309 East Second Street, College Plaza, Pomona, CA 91766.

#### FACULTY POSITION IN PHARMACOLOGY

Full-time, tenure-track position available at the level of ASSISTANT/ASSOCIATE PROFESSOR. Candidates should have a Ph.D. degree in pharmacology and at least two years of postdoctoral experience. The successful candidate is expected to participate in teaching in the medical and allied health programs, as well as to establish a research program. Previous teaching experience in central nervous system pharmacology is desirable. Send current curriculum vitae, letter of interest, and three letters of recommendation no later than December 1, 1999, to: Dr. Stanley Wong, Western University of Health Sciences, 309 East Second Street, College Plaza, Pomona, CA 91766. Telephone: 909-469-5228; FAX: 909-469-5698; e-mail: swong@westernu.edu.

Western University of Health Sciences is an Equal Opportunity/Affirmative Action Employer.

Biochemistry position, Stetson University. The Department of Chemistry continues its search for a tenure-track ASSISTANT PROFESSOR to begin service in August 2000. A Ph.D. in biochemistry is required, with postdoctoral experience preferred. The successful candidate will assume direction of a newly developed Biochemistry Program now enrolling about 30 undergraduate biochemistry majors, will teach the Program's two-semester sequence of biochemistry courses, and will be expected to pursue a vigorous program of research involving undergraduates. Stetson University is a selective, primarily undergraduate institution of about 2,000 students, and is committed to a strong liberal arts tradition (see our website: www.stetson.edu). The Chemistry Department employs five faculty, stresses excellence in teaching, and is ACS-approved. Applicants should submit a curriculum vitae, copies of undergraduate and graduate transcripts, statements of teaching philosophy and research interests, and should arrange to have three letters of recommendation sent to: Dr. Kenneth G. Everett, Chair, Department of Chemistry, Stetson University, DeLand, FL 32720. Review of applications will begin in October 1999 and continue until the position is filled. Stetson University, an Equal Opportunity Employer, affirms the values and goals of diversity and strongly encourages the applications of women and candidates from historically underrepresented groups.

#### **POSITIONS OPEN**

# IMMUNOLOGIST DEPARTMENT OF MICROBIOLOGY-IMMUNOLOGY Interdepartmental Immunobiology Program Northwestern University Medical School

The Department of Microbiology-Immunology and the Interdepartmental Immunobiology Program of the Northwestern University Medical School seeks applicants for a full-time, tenure-track position at the ASSISTANT PROFESSOR level. The Program is committed to promoting immunobiology research across both basic science and clinical departments. The Program is interested in applicants applying molecular biological approaches to any area of modern immunology, which complements current areas of immunology research at Northwestern including lymphocyte development, signaling, and homing; T cell activation and regulation; autoimmunity; immunity to infectious agents; and antigen processing. Candidates are expected to have a Doctoral degree, to have completed appropriate postdoctoral training, to have a demonstrated record of significant research accomplishments, and to be able to develop an outstanding research program with extramural support. To ensure full consideration, applications must be received by January 1, 2000. Applications including curriculum vitae, bibliography, a statement of future research interests, and the names, addresses, telephone, and email of three referees should be submitted to: Immunology Faculty Search Committee, Department of Microbiology-Immunology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611-3008. The proposed starting date is September 1, 2000. Salary is negotiable. Northwestern University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply. Hiring is contingent upon eligibility to work in the United States.

# CRANIOFACIAL MOLECULAR BIOLOGISTS VIRGINIA COMMONWEALTH UNIVERSITY Institute of Oral and Craniofacial Molecular Biology School of Dentistry

The Institute of Oral and Craniofacial Molecular Biology at the School of Dentistry, Virginia Commonwealth University (VCU) in Richmond, Virginia is seeking applicants for two positions as ASSIST-ANT or ASSOCIATE PROFESSORS. Candidates must have training and expertise in molecular biology with emphasis in head and neck molecular oncology, or craniofacial molecular genetics. Ph.D. or equivalent degree and two or more years of productive postdoctoral experience required. Appointees will be expected to maintain extramurally supported research programs. Responsibilities will also include professional school and graduate teaching, and institutional service assignments. Candidates must be qualified to be appointed as affiliate faculty in a basic science department at VCU. Experience in a culturally diverse environment is highly preferred. Candidates must submit a statement of research interests and a curriculum vitae, and should arrange to have at least three letters of reference provided. Materials should be sent by December 31, 1999, to: Dr. Francis L. Macrina, Virginia Commonwealth University, School of Dentistry, Box 980566, Richmond, VA 23298-0566. Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer. Women, minorities, and persons with disability are encouraged to apply.

#### ASSISTANT PROFESSOR SURGICAL SCIENCE

M.D. background with technical proficiency in orthopedic research/surgery. Experience with orthopedic applications, soft tissue remodeling, cartilage defects. Candidates should mail curriculum vitae to: Lisa McQueen, Columbia University, Department of Surgery, MHB 78K, 177 Ft. Washington Avenue, New York, NY 10032. Columbia University is an Affirmative Action/Equal Opportunity Employer.



# TENURE-TRACK POSITIONS IN CELL BIOLOGY

The Department of Cell and Developmental Biology invites applications for tenure track faculty positions at the Assistant Professor, Associate Professor, and Professor levels. Individuals working in fundamental mechanisms of cellular function, including areas of research such as cell cycle control, cell motility, signaling and transport, cell polarity, chromosome architecture/nuclear function, and extracellular matrix/cell interactions are encouraged to apply. All successful applicants will be expected to establish extramurally funded research programs and participate in the training of medical and doctoral students. Candidates should submit a curriculum vitae, summary of research accomplishments, future research plans, and three letters of reference by December 1, 1999 to:



Charles P. Emerson, Ph.D. c/o Ms. Victoria McManus Cell & Developmental Biology 1157 BRB II/III 421 Curie Boulevard Philadelphia, PA 19104 USA

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# A Proven Formula for

As a leader in the discovery & development of innovative treatments for cancer and viral diseases, **Progenics Pharmaceuticals**, Inc. is able to offer you these superior opportunities for technical & professional growth. Our team of motivated, dedicated and highly trained scientists seek experienced colleagues in the following areas:

SCIENTIST In this role, you'll perform basic molecular biological techniques to create DNA constructs for protein expression studies. You'll also be responsible for culturing, transfecting,

and screening cell lines for recombinant protein expression. Qualifications include a BS/BA & MS/MA, preferably in Molecular/Cellular Biology. Must have 3-5 years relevant laboratory experience in molecular biology, along with 2+ years industry experience. Must be proficient in PCR, cloning and mutagenesis, eukaryotic & prokaryotic cell culture, transfection and cell line development. Experience with retro and other viral vectors is helpful. Response Code: S.

#### ASSOCIATE RESEARCH SCIENTIST

Primary responsibilities will include clinical manufacturing; analytical testing; fermentation downstream processing, cGMPs, process development & scale up. Qualifications include 2+ years Pharma or Biotech clinical manufacturing experience; and working knowledge of protein purification. cGMP experience is a must. Ultrafiltration/microfiltration and SOP writing is a plus. Response Code: ARS.

**INVESTIGATOR** You'll be responsible for purification and characterization of recombinant proteins; development of enzymatic assays, and construction of stable cell lines. Qualifications include an MS in Biology and 2+ years experience in an industrial setting in the areas of Immunology & Virology. Technical skill set must include protein expression, purification and analysis enzymology, and cell culture. **Response Code: I.** 

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

Progenics, HR Dept, Response Code of Interest, P.O. Box 549, Tarrytown, NY 10591.
Fax: 914-789-2863.
Fax: 11 hr@progenics.com

E-mail: hr@progenics.com
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Success

#### Courses & Training

#### 2000 Complex Systems Summer School June 4 to June 30, 2000 in Santa Fe, New Mexico USA

An intensive introduction to complex behavior in mathematical, physical and living systems for graduate students and postdoctoral fellows. Students are expected to attend the full four weeks. No tuition.

The first week will consist of an intensive series of lectures and demos introducing some core ideas and tools of complex systems research. The topics will include nonlinear dynamics and pattern formation, statistical mechanics and stochastic processes, information theory and computation theory, adaptive computation, and computer modeling tools. Homework problems. (Prior to week one, there may be an optional intensive two-day math review.)

Weeks two and three will consist of short courses on current research in complex systems. Computer laboratory.

Week four will be devoted to completion and presentation of student projects.

Planning Directors: Ray Goldstein, Physics, University of Arizona; Melanie Mitchell, Biophysics, Los Alamos National Laboratory; and Lynn Nadel, Psychology, University of Arizona.

Location: Held on the campus of the College of Santa Fe. Administered by the Santa Fe Institute.

Application instructions: Provide a current resume with publications list, statement of current research interests, comments about why you want to attend the school, and two letters of recommendation from scientists who know your work. Include your e-mail address and fax number. Send only complete application packages by postal mail to:

Summer School, Santa Fe Institute 1399 Hyde Park Road Santa Fe, New Mexico USA 87501 505-984-8800 ext. 235 (v); 505-982-0565 (fax)

February 7, 2000 deadline. Women and minorities encouraged to apply.

Further information at <a href="http://www.santafe.edu/sfi/education/indexCSSS.html">http://www.santafe.edu/sfi/education/indexCSSS.html</a> or <a href="mailto:summerschool@santafe.edu">summerschool@santafe.edu</a>



## TENURE-TRACK POSITION AT NIH Molecular Mechanisms of Protein Trafficking

A tenure-track position is available in the Cell Biology and Metabolism Branch (CBMB), National Institute of Child Health and Human Development, to develop an independent research program on the molecular mechanisms of protein trafficking or degradation, preferably in connection to human disease. Candidates must have M.D. or Ph.D degree, and a proven record of productivity in the subject area of the search. The CBMB has a tradition of excellence in various areas of cell biology research. Other groups at the CBMB are headed by Juan Bonifacino, Richard Klausner, Mary Lilly, Jennifer Lippincott-Schwartz, Tracey Roualt, Gisela Storz and David Wassarman. The recruitment package includes generous start-up and operational funds, three post-doctoral or technical positions, and renovated lab space. Applicants should submit C.V., bibliography, a two-page statement of research interests, and three letters of recommendation to: Chair, CBMB Search Committee, Bldg.18T, Rm.101, NIH, 18 Library Drive, MSC 5430, Bethesda, MD 20892-5430. Applications must be postmarked by November 15, 1999.

NIH is an Equal Opportunity Employer

#### POSITIONS OPEN

#### DEPARTMENT OF CELL BIOLOGY

The Department of Cell Biology, Faculty of Medicine and Dentistry at the University of Alberta invites applications for a tenure-track position at the ASSIST-ANT/ASSOCIATE PROFESSOR level. We seek an individual who will complement our existing strengths in neurobiology, cell signaling/cell cycle, protein targeting and organelle biogenesis, and cellcell interactions. Applicants should have a proven record of research achievement and will be expected to apply for funding from the Alberta Heritage Foundation for Medical Research. The successful candidate will be expected to carry on an independent research program, but will also have the opportunity for collaborative interactions with several multidisciplinary research groups within the University. A contribution to the Department's teaching program will also be expected. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. If suitable Canadian citizens and permanent residents cannot be found, other individuals will be considered. Please send a curriculum vitae, a two-page statement of research interests, and arrange to have three letters of reference sent on your behalf to: Dr. Teresa Krukoff, Search Committee Chair, Department of Cell Biology, 5-14 MSB, University of Alberta, Edmonton, Alberta T6G 2H7 Canada. Deadline for receipt of applications is December 15 1999. Further information about the position and department can be obtained at website: www. ualberta.ca/cellbiology. The University of Alberta is committed to the principle of Equity in Employment. As an employer, we welcome diversity in the workplace and encourage applications from all qualified women and men, including Aboriginal peoples, persons with disability, and members of visible minorities.

# DEPARTMENT OF IMMUNOLOGY THE LERNER RESEARCH INSTITUTE CLEVELAND CLINIC FOUNDATION

We seek to appoint an individual at the level of ASSISTANT PROFESSOR who exhibits exceptional potential to establish an independent and vigorous research program focused on cell signaling in the development of immune/inflammatory responses. Preference will be given, but not limited, to scientists (Ph.D. and/or M.D.) with research interests that complement and enhance established programs in autoimmunity, transplantation, tumor immunology, and innate immunity (see website: http://www.ccf.org/ri/pi/).

The Lerner Research Institute has a long-standing

ommitment to excellence in basic research and currently comprises over 100 independent laboratories and more than 600 employees funded by more than \$30 million in external support. Laboratory space will be provided in a newly constructed state-of-the-art \$100 million research and education complex, which opened in February of 1999. Start-up support, salary, and benefits are excellent.

Send curriculum vitae and three letters of reference by November 15, 1998, to: **Dr. Thomas Hamilton**, Chair, Immunology Search Committee, Lerner Research Institute NB-30, The Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195.

The Cleveland Clinic Foundation is an Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSISTANT PROFESSOR in the Department of Anesthesiology at the University of Illinois at Chicago. Non-tenure-track position for Independent Investigator with research interests in the area of cerebral ischemia. Candidates should be committed to excellence in research and training and have substantial outside funding. Interested persons should address correspondence to: Ronald F. Albrecht, M.D., Head, Department of Anesthesiology, University of Illinois at Chicago, 1740 West Taylor, m/c 515, Chicago, IL 60612, Attention: June Palmer, Ph.D. Please include curriculum vitae, names of three references, and a brief description of research program. Affirmative Action/Equal Opportunity Employer.

#### POSITIONS OPEN

# MOLECULAR BIOLOGY/TWO POSITIONS MCGILL UNIVERSITY DEPARTMENT OF BIOLOGY

The Department of Biology at McGill University invites applications for two tenure-track positions at the ASSISTANT PROFESSOR level in the area of molecular biology. One position is for a Molecular Cell Biologist. The other position is for a Molecular Biologist in any area that complements the strengths of the Department; preference will be given to candidates whose research addresses fundamental problems in plant molecular biology, functional genomics, or developmental biology. Applicants should hold the Ph.D. degree in biological sciences and have demonstrated research proficiency through postdoctoral training.

The successful applicant will join a large and dynamic department with research strengths in cellular, molecular, and developmental biology, ecology, evolution, and neurobiology, with extensive affiliations with the Faculty of Medicine and local research institutes. Additional information on the Department is available at website: http://www.mcgill.ca/Biology/biology1.htm. Duties will involve the development of a vigorous research program and teaching at the undergraduate and graduate level. The expected starting date is July 1, 2000.

Applications, including a curriculum vitae, a statement of research interests, and three letters of reference should be sent to: Dr. Donald L. Kramer, Chair, Department of Biology, McGill University, 1205 Docteur Penfield Avenue, Montreal, Quebec H3A 1B1 Canada. E-mail: don kramer@maclan.mcgill.ca. The deadline for applications is December 1, 1999, but applications will continue to be considered until the position is filled. In accordance with Canadian immigration requirements, this advertisement is directed in the first instance to Canadian citizens and permanent residents. McGill University is committed to Equity in Employment.

PLANT GENETICIST. Denison University, a selective liberal arts college, invites applications for a one and a half-year SABBATICAL REPLACE-MENT position to begin January 15, 2000. Teaching responsibilities include an introductory survey course in plant biology and an advanced course in genetics (teaching load is two courses per semester with laboratories). Demonstrated ability in undergraduate teaching and a research program that may involve undergraduates are expected. Denison offers summer support for student and faculty research, departmental greenhouse, herbarium, and a 350-acre Biological Reserve with field station near campus. Ph.D. required. Candidates should send letter of application, curriculum vitae, statements of teaching philosophy and research interests, transcripts (graduate and undergraduate), and the names, e-mail addresses, and telephone numbers of three references to: Chair, Plant Geneticist Search Committee, Biology Department, Denison University, Granville, OH 43023 by October 25, 1999. Denison is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

Ithaca College Biology Department seeks applications for two tenure-track ASSISTANT PROFES-SOR positions in community/landscape ecology and animal physiology for August 2000. Candidates are expected to develop an active research program with undergraduates and to contribute to introductory biology and non-science major courses. Teaching experience desirable. Community/landscape ecology: Re-search emphasis on plants. Use of GIS desirable. Teaching duties include general ecology/advanced ecology courses. Animal physiology: Teaching duties include advanced course in area of specialization. More information can be found at website: http:// www.ithaca.edu/biology/. Send curriculum vitae, statement of teaching experience/philosophy, research interests and three letters of recommendation to: Biology Search Committee, specify Ecology or Physiology, Biology Department, Ithaca College, Ithaca, NY 14850-7278. Application deadline: November 15, 1999.

#### POSITIONS OPEN

#### ASSISTANT PROFESSOR PHYSIOLOGY/BIOPHYSICS University of Nebraska Medical Center

The Department of Physiology and Biophysics at the University of Nebraska Medical Center invites applications for a tenure-track faculty position at the Assistant Professor level. We seek an individual who will complement an existing faculty involved in various aspects of renal, neuro, and cardiovascular physiology. While the successful candidate should utilize cellular and molecular techniques to understand cardiovascular and/or renal function, we will entertain applications from individuals investigating novel integrative techniques combined with molecular approaches. The candidate should have a Doctorate and at least two years of postdoctoral experience. Evidence of, or the potential to acquire, extramural support will be an important consideration.

The successful candidate will join a well-funded department composed of 11 full-time faculty. He or she will be expected to establish a research program and teach in one of our physiology courses to either medical or allied health students. We offer significant laboratory space and a competitive salary set-up package.

Please send by December 1, 1999, a curriculum vitae, statement of research goals, and names of three references to: Steven C. Sansom, Ph.D., Chair of Search Committee, Department of Physiology and Biophysics, University of Nebraska Medical Center, 984575 Nebraska Medical Center, Omaha, NE 68198-4575. The University of Nebraska Medical Center is an Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.

# ASSISTANT PROFESSOR DEPARTMENT OF BIOLOGICAL CHEMISTRY AND MOLECULAR PHARMACOLOGY Harvard Medical School

The Department of Biological Chemistry and Molecular Pharmacology (BCMP) invites applications for a tenure-track position at the Assistant Professor level. We seek individuals in the area of structural biology with focus on NMR spectroscopy of biological macromolecules. The Department has developed a strong and vibrant program in structure biology, and the successful candidate will enjoy the possibility of interacting with members of the entire Harvard Medical School research community.

Applicants should submit, by November 1, 1999, a

Applicants should submit, by November 1, 1999, a curriculum vitae, bibliography, a brief statement of research plans, and arrange for four letters of recommendation to be sent to:

Professor Gerhard Wagner c/o Roberta Montgomery Harvard Medical School BCMP, C1-213 240 Longwood Avenue Boston, MA 02115-5730

Harvard University is an Equal Opportunity Employer/ Affirmative Action Employer and encourages the applications of analified women and minorities.

#### LANDSCAPE ECOLOGIST

We seek a tenure-track, ASSISTANT PROFES-SOR (biology) with training and postdoctoral experience in landscape ecology. The candidate must demonstrate potential to build a strong research program, including publications and grant-seeking, and to advise Master's and undergraduate students in ecological research. The candidate must-be able to teach courses contributing to our Department's undergraduate concentration in environmental biology, including a course in landscape ecology. A curriculum vitae, statements of teaching and research interests, representative reprints, and three reference letters should be sent, by 15 November 1999, to: Dr. John Lepri, Chair of the Landscape Ecology Search Committee, Department of Biology, University of North Carolina at Greensboro, Greensboro, NC 27402-6174. For information about us, please visit website: www.uncg.edu/bio. Equal Employment Opportunity/Affirmative Action/Women/Minorities/Veterans/Disabled.

#### **FACULTY POSITIONS (NMR) STRUCTURAL BIOLOGY**

SENIOR POSITION (SB99-2). Applications are invited for a tenure-track senior faculty position, Associate or Professor level, in structural biology. Preference will be given to applicants with expertise in NMR spectroscopy applied to problems of macromolecular structure. The successful candidate must have a record of research and academic productivity commensurate to academic rank and a record of having established and supported from extramural sources an independent research laboratory. The applicant is expected to apply interdisciplinary interest in continuation of research and in the teaching of graduate and undergraduate students in courses adopted by the School of Biological Sciences. New facilities and complementary expertise in crystallography and electron microscopy (see http://sgi.bls.umkc.edu) are available as well as competitive start-up financial packages.

ASSISTANT PROFESSOR (SB1). The School of Biological Sciences as part of the expansion of its structural biology program, which has been selected for comprehensive development within the school, seeks investigators with outstanding potential in any aspect of molecular or cellular structural biology to complement or expand existing activities in spectroscopy (including a new NMR facility), crystallography or microscopy. (UMKC faculty, as part of the Southeast Regional Collaborative Access Team, can use the Advanced Photon Source at Argonne National Laboratory to conduct research.) Excellent start-up package, competitive salary and state of the art instrumentation available. Successful candidates for this tenure-track position will participate in undergraduate and graduate-level instruction and must have two to three years postdoctoral experience in an appropriate field. In addition, candidates must have received graduate, and preferably undergraduate, instruction in an English-speaking environment (a seven-year residence in such environments will satisfy this requirement).

Evaluation of applications will begin November 1, 1999. Candidates should provide *curriculum vitae*, a brief statement of research interests and the names, addresses, and telephone numbers of four references to:

Search Committee, Position (specify SB99-2 or SB 1)
Office of the Dean, School of Biological Sciences
5007 Rockhill Road, University of Missouri-Kansas City
Kansas City, MO 64110-2499

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# ASSOCIATE DEAN FOR ADMINISTRATION COLLEGE OF MEDICINE THE UNIVERSITY OF TENNESSEE, MEMPHIS

The University of Tennessee, Memphis, College of Medicine seeks nominations and applications for the position of Associate Dean for Administration, who provides overall administrative and financial direction for all budgetary and fiscal affairs of the College. The Associate Dean reports directly to the Dean and works in close collaboration with the Vice-Chancellor for Business and Finance.

The College of Medicine comprises medical and graduate medical programs with 23 departments, 7 centers, and units in Chattanooga and Knoxville in the eastern part of the State. The college employs approximately 528 full time faculty, 930 residents, and over 2,000 staff.

Applicants should possess a Master's level degree, preferably in business or health care administration, or its equivalent, with a minimum of 5-7 years in an academic institution or health care setting; a minimum of 5 years upper level supervisory experience; strong interpersonal and leadership skills; and demonstrated competency of effective decision making. The College is particularly interested in attracting women and minority candidates.

Review of applications will begin immediately and will continue until the position is filled. Qualified applicants should submit a letter of interest accompanied by a curriculum vitae, and the names and addresses of three references to:

Richard D. Peppler, Ph.D.
Chair, Associate Dean Search Advisory Committee
University of Tennessee, Memphis
P.O. Box 63647
800 Madison Ave.
Memphis, TN 38163

The University of Tennessee is an EEO/AA/Title VI/Title IX/Section 504/ADA/ADEA employer and encourages applications from qualified women and minorities.

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Vacancy announcements and application procedures at

#### WWW.ARS.USDA.GOV/AFM/HRD/RESJOBS

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U.S. Department of Agriculture • Agricultural Research Service ARS is an equal opportunity employer.

Biology: microbiology. North Central College invites applications from broadly trained Microbiologists for a tenure-track appointment as ASSISTANT or ASSOCIATE PROFESSOR to begin September 2000. Ph.D. required; postdoctoral experience preferred. Applicants should have a strong commitment to excellence in undergraduate teaching and research. Teaching assignments include courses in microbiology and two other areas of biology from genetics, immunology, or plant physiology. Additionally, the successful candidate will participate in our introductory biology sequence and direct undergraduate students in research. North Central College, located in Naperville, 30 miles west of Chicago in Illinois' research and development corridor, is a 138year-old comprehensive liberal arts college of 2,600 students with a strong tradition in biology. For more details contact: Peggy Lang, Telephone: 630-637-5181; e-mail: mell@noctrl.edu. Send letter of application, curriculum vitae, outline of undergraduate research plans, graduate and undergraduate transcripts, and have three letters of recommendation sent to: Dr. Terrence Marsh, Search Committee Chair, c/o Academic Affairs Office, North Central College, P.O. Box 3063, Naperville, IL 60566-7063. Review of applications begins December 1, 1999, and continues until the position is filled. For more information see website: www.noctrl.edu/acad/majors/ biology. We encourage applications from women and minority candidates. Equal Opportunity Employer.

### MAMMALIAN ECOLOGIST

We seek applicants for a tenure-track ASSISTANT PROFESSOR position starting July 2000. Ph.D. required; teaching and postdoctoral research experience desirable. The successful candidate will teach undergraduate courses at all levels such as ecology, environmental physiology, and vertebrate zoology. There will also be an expectation to contribute to introductory biology, the Énvironmental Studies Program, and the university-wide liberal arts core program. The appointee will join and contribute to a biology faculty that is committed to the involvement of undergraduate students in their research. Individuals with research interests in physiological ecology, community ecology, and/or management issues are especially encouraged to apply. Please forward a letter of application with curriculum vitae, transcripts, statements of teaching and research interests, and arrange to have three letters of recommendation sent to: **Dr. Ron Hoham**, Chair of Search, Department of Biology, Colgate University, Hamilton, NY 13346-1398. The review of applications will begin October 22, 1999, and continue until the position is filled. We intend to begin interviewing candidates by mid-November 1999.

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

### MOLECULAR GENETICIST

The University of Arizona in Tucson is seeking a Molecular Geneticist with interests in cancer research. This position is tenure-track at the ASSISTANT or ASSOCIATE PROFESSOR level with an appointment in an appropriate academic basic science department. The successful candidate will be expected to build an independent research program. The Arizona Cancer Center, an NCI-designated Comprehensive Cancer Center, offers an outstanding environment for multidisciplinary and translational research.

Applicants must have a Ph.D., M.D.-Ph.D., or equivalent degree. Preferred: Postdoctoral experience in molecular genetics and experience with transgenic and/or knockout animals.

Applicants should send a curriculum vitae and the names and addresses of three references to: Daniel Von Hoff, M.D., Arizona Cancer Center, 1515 North Campbell Avenue, Tucson, AZ 85724-5024. The Search Committee will begin reviewing applications beginning November 19, 1999, and will continue until position is filled. The University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer. Minorities/Women/Disabled/Veterans.

### POSITIONS OPEN

# WASHINGTON & JEFFERSON

One of America's Revolutionary Colleges

BOTANY/PLANT ECOLOGY

Washington and Jefferson College ("W&J") seeks a Field Botanist/Plant Ecologist with a background in both terrestrial and aquatic systems for a tenure-track ASSISTANT PROFESSOR position in the Biology Department. A Ph.D. is preferred.

Teaching duties will include laboratory and lecture sections in general biology, botany, and field biology. Candidates should be committed to advising students, participating in interdisciplinary teaching, and guiding undergraduate research. A willingness to seek external funding and facility with current computer technology are expected.

Nominations and applications, with the names and telephone numbers of at least three references, should be sent by November 5, 1999, to: The Associate Dean of Academic Affairs, Botany Search, Washington and Jefferson College, 60 South Lincoln Street, Washington, PA 15301.

WEJ is a private, coeducational, national liberal arts college and an Affirmative Action and Equal Opportunity Employer. Women and minority professionals are encouraged to apply.

### ANIMAL PHYSIOLOGIST ASSISTANT PROFESSOR

Applications are invited for a tenure-track position, starting August 2000, in the Department of Biological Sciences within the Columbian School of Arts and Sciences, the liberal arts college of The George Washington University. Responsibilities include establishing an extramurally supported research program involving graduates and undergraduates in an area of physiology employing modern cellular and molecular approaches, teaching undergraduate and graduate courses in animal physiology and in the fields of candidate's expertise. Special consideration will be given to candidates with postdoctoral experience and interests in environmental physiology, neurobiology, protein/receptor interactions, or immunology, with a focus on nonhuman model systems. Review of applications begins October 1999 and continues until the position is filled. Please send a letter of application that includes a statement of research plans, a description of courses you are prepared to teach, a curriculum vitae, up to three reprints, and at least three letters of reference to:

Chair of the Search Committee
Department of Biological Sciences
Lisner Hall 340
The George Washington University
Washington, DC 20052
E-mail: biology@gwu.edu
Website: http://www.gwu.edu/~biology/

The George Washington University is an Affirmative Action/Equal Opportunity Employer.

### U.S. GENOMICS

U.S. Genomics is a radically different genomics company focused on the development of superior genetics technologies. We are looking for a few dashing individuals to pursue advanced genetic technologies.

MOLECULAR BIOLOGY MAESTRO, Ph.D.

MOLECULAR BIOLOGY MAESTRO, Ph.D. Must be able to harmonize excellent oral and communication skills with technology and assay development. Experience should include industry protocol/sample preparation development, BACs, genomics DNA isolation, and DNA hybridization.

**OPTICS/FLUORESCENCE BIOENGINEER, M.S.** Seeking an individual whose many facets include optics, fluorescence, microfabrication, and instrument design skills.

**DEDICATED TECHNICIAN, B.S.** Position requires standard treasure trove of laboratory tricks, including PCR, gel purification, PAGE, and DNA hybridization.

Please reply to: U.S. Genomics, Attn: Human Resources, 8 Saint Mary's Street, Boston, MA 02215. FAX: 617-358-0016.

### **POSITIONS OPEN**

### ASSISTANT PROFESSOR MOLECULAR BIOLOGIST

The Department of Physiology at the University of Kentucky College of Medicine invites applications for two tenure-track positions at the Assistant Professor level. We seek individuals who will establish a strong research program investigating physiological functions at the molecular level and participate in the department's teaching programs. To complement existing strengths, candidates studying the nervous, endocrine, renal, respiratory, or cardiovascular systems will be given special consideration, although outstanding candidates in other areas will also be considered. Applicants must have a Ph.D. or M.D. and at least three years of postdoctoral experience. Interactions with other faculty within the College of Medicine, School of Biological Sciences, College of Agriculture, Sanders Brown Center on Aging, the Markey Cancer Center, and the Tobacco and Health Research Institute provide a stimulating research environment and ample opportunity to collaborate with other researchers. Visit our website: http://physiology. uky.edu.

Applicants should send curriculum vitae, a detailed statement of past experience, future research plans, and have letters from three references sent to: Phyllis M. Wise, Chair, Department of Physiology, Colege of Medicine, University of Kentucky, Lexington, KY 40536-0298. Review of applications will begin on November 15, 1999.

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

### COMPARATIVE PHYSIOLOGIST/ MORPHOLOGIST

The Department of Biological Sciences at Wright State University invites applications for a tenure-track position at the ASSISTANT PROFESSOR level. Applicants should have a Ph.D. and will be expected to establish an independent, extramurally funded research program and to direct graduate students. Postdoctoral experience is preferred. Research should have an evolutionary perspective; a focus on vertebrates is preferred. Opportunities exist to collaborate with research groups in cell/molecular biology and environmental/organismal biology. Graduate programs include M.S. degrees in biology and in environmental sciences, as well as the interdepartmental biomedical sciences Ph.D. program. Teaching will include introductory and advanced courses in evolution, comparative vertebrate anatomy, or physiology. Applicants should submit a curriculum vitae, statements of research and teaching interests, and the names, telephone numbers, and e-mail addresses of three individuals we can contact for letters of reference to: Physiologist/Morphologist Search Committee, Department of Biological Sciences, Wright State University, Dayton, OH 45435. Review of candidates will begin on November 1, 1999. Information about Wright State University and the Department of Biological Sciences is available through the World Wide Web at: website: http://biology. wright.edu/PhysMorph.html. Wright State University is an Affirmative Action/Equal Opportunity Employer.

DOCTORAL-LEVEL SCIENTIST with expertise in magnetic resonance microscopy (MRM) needed to supervise newly created facility consisting of a Bruker Avance 9T vertical-bore spectrometer equipped for microimaging, and spectroscopy, and a Bruker Biospec 71.20cm horizontal-bore imager equipped for both specimen and live-animal imaging. Off-line computational facilities also available. Emphasis will be the development and application of microimaging techniques for pathology. Applicants should send curriculum vitae, statement of research interest and expertise, and three current letters of recommendation along with salary requirements to: Mr. Dan Urquhart, Department of Cellular Pathology, Room G135, Armed Forces Institute of Pathology, Washington, DC 20306-6000. FAX: 202-782-7623; e-mail: urquhart@afip.osd.mil.

Review of applications will begin on 15 October 1999.

### **Faculty Position Maize Functional Genomics** University of Missouri-Columbia

The successful candidate is expected to conduct a vigorous, extramurally funded research program applying genomics to understanding how gene sequences, combinations, and expression patterns relate to development, variation, and phenotypes

Excellence in teaching at the graduate and undergraduate levels is required. The successful candidate will participate in the vibrant Maize Biology Research Group which is part of the rapidly expanding plant genomic initiative at the University of Missouri. The position is provided with a generous start-up package and will be located in a newly renovated laboratory designed specifically for genome analysis. Appointment at assistant (tenure track)/associate/full professor levels will be considered. College/departmental affiliation will be based on the program and preferences of the successful candidate

Target date is Oct. 31, 1999. Interested candidates should send a letter including both research and teaching philosophy, curriculum vitae and contact information of three references to

Dr. Joe Polacco Chair of Maize Functional Genomics Search 117 Schweitzer Hall University of Missouri Columbia, MO 65211

MU is an Equal Opportunity/Affirmative Action/ADA Institution

### **FELLOWSHIPS**

### **Dartmouth Medical School Postdoctoral Training Opportunities** in Cancer Research

Postdoctoral fellowships supported by an NIH Training Grant in Cancer Biology are available for outstanding candidates with a Ph.D. or M.D. degree in a relevant field. This is an interdisciplinary program covering areas of Biochemistry, Immunology, Molecular Biology, Medicine and Pharmacology. The research areas of program faculty are described below; see further details under education at www.nccc.hitchock.org.

Bradley Arrick Molecular and cellular biology of breast cancer

Constance Brinckerhoff Matrix metalloproteases and metastasis Nucleocytoplasmic export of mRNA Charles Cole

Ruth Craig Hematopoietic cell viability, differentiation and tumorigenesis Ethan Dmitrovsky Retinoids and their receptors in therapy and prevention Alan Eastman

Michael Fanger Targeted cancer therapeutics and vaccines

William Green Cytolytic T lymphocyte responses to retroviruses and tumors

Joshua Hamilton Modulation of gene expression by drugs and toxins

Christopher Lowrey Novel gene therapy strategies

Raymond Perez Molecular determinants of response to cancer chemotherapy Michael Spinella Mechanisms of retinoid-induced tumor cell differentiation

Nancy Speck Hematopoiesis and leukemia Michael Sporn Novel chemopreventive agents

Candidates must possess a PhD and/or MD degree. Minorities are strongly encouraged to apply. Only US citizens and permanent residents are eligible for these positions. Applicants should send a curriculum vitae, a description of research interests identifying a potential adviser(s), and names of three references to: Alan Eastman, Ph.D., Department of Pharmacology and Toxicology, Dartmouth Medical School, Hanover, NH 03755.

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### NATIONAL INSTITUTES OF HEALTH NATIONAL EYE INSTITUTE

### **Job Opportunities**

The National Eye Institute Intramural Program at the NIH campus, Bethesda, MD., is seeking highly qualified Postdoctoral Fellows, Research Associates and Staff Scientists in the following areas:

- Molecular Biology
- Cell Biology
- Immunology
- Psychophysics
- Biochemistry

Salaries range from \$27,500 to \$118,400 per annum, based on experience and type of appointment.

NEI offers an extensive benefits package that you may be eligible for, depending on the appointment mechanisms: Health Benefits, Life Insurance, Retirement Benefits, Annual and Sick Leave, Formal Training Program, Recruitment Bonus, Retention Allowance, Relocation Allowance, Loan Repayment Program, and Travel Benefits.

Candidates interested in specific job opportunities at the NEI may visit the NEI web site at http://www.nei.nih.gov/ listing the most current positions available.

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- QA/QC
- environmental sciences
- bioinformatics
- computer science
- engineering
- procurement

SAIC Frederick is a contemporary biotechnology organization dedicated to the development of knowledge and tools for diagnosis, treatment and prevention of human cancer and AIDS. In fact our headstart efforts at the National Cancer Institute's Frederick Cancer Research & Development Center (NCI-FCRDC) often pave the way for new programs at other labs worldwide.

As part of the SAIC team, you will work closely with colleagues of distinguished reputation — true pioneers in the quest to conquer cancer and related diseases. You'll work in the most progressive environments where creative research equipment and state-of-the-art highperformance tools will be at your disposal.

Our commitment to excellence in all aspects of cancer and AIDS research is the foundation of our progress. If you share our commitment, explore these opportunities that will challenge your interests. Check out our Web site at: http://saic.ncifcrf.gov. EOE, M/F/D/V.



ASSISTANT/ASSOCIATE/FULL PROFES-SOR of molecular biology of muscle (cardiac, skeletal, or smooth) in the Department of Veterinary and Comparative Anatomy, Pharmacology, and Physiology (VCAPP), Washington State University seeks to fill a tenure-track position at any level to begin July 1, 2000. The successful candidate will be expected to develop an independent externally funded research program. Required: Ph.D., M.D., or D.V.M., or equivalent, and a minimum of two years of postdoctoral research experience in molecular biology of muscle. Preferred: Publications in high-impact journals; interest in teaching professional students in pharmacology, physiology, or anatomy; willingness and ability to collaborate in current ongoing research; an interest in integrative biology; and demonstrated communication and interpersonal skills. Review of applicants will begin November 15, 1999, and will continue until the position is filled. The application should include a cover letter that indicates rank sought, a curriculum vitae, description of teaching experience, summary of research interests and potential projects, and the names, addresses, and telephone numbers of three references. Mail application materials to: Muscle Search Committee, Department of Veterinary and Comparative Anatomy, Pharmacology, and Physiology, Washington State University, Pullman, WA 99164-6520. E-mail: bmorton@vetmed.wsu.edu.

Washington State University is an Equal Opportunity/ Affirmative Action Educator and Employer. People of color, women, persons of disability, Vietnam-era and disabled veterans, and/or persons between the ages of 40 and 70 are encouraged to apply.

# ASSISTANT PROFESSORS BIOCHEMISTRY AND MOLECULAR GENETICS University of Colorado Health Sciences Center

We are seeking individuals for two faculty positions, one in cancer biology including DNA repair, oncogenes, ES cell biology, and tumor virology. The second position is more broadly defined in the areas of molecular genetics, structural biology, or genomics. Candidates should have a strong record of research accomplishments, and will be expected to pursue a vigorous, independent research program. Teaching interests and expertise should be appropriate for courses in biochemistry or genetics. Applicants should include a curriculum vitae and a statement of research plans. Candidates should also arrange to have three letters of reference forwarded to:

Dr. Tom Blumenthal, Chairman Department of Biochemistry and Molecular Genetics Box B-121 University of Colorado Health Sciences Center 4200 East 9th Avenue Denver, CO 80262

For full consideration completed applications should be received by December 1, 1999.

The University of Colorado Health Sciences Center is committed to Equal Opportunity and Affirmative Action.

# RESEARCH FELLOW TRAUMA RESEARCH CENTER DEPARTMENT OF SURGERY University of Colorado Health Sciences Center

A Research Fellow position is available to study the roles of proinflammatory cytokines in myocardial injury. Applicants should have a Ph.D. degree or equivalent with strong backgrounds in cardiovascular physiology and molecular biology or immunology. Experience with cell culture, PCR, Northern blotting, immunoblotting, and electrophoretic mobility shift essay is desirable. Salary will be commensurate with education and experience. Send a curriculum vitae and names of three references to: Dr. Xianzhong Meng, Department of Surgery, Box C320, University of Colorado Health Sciences Center, 4200 East 9th Avenue, Denver, CO 80262. FAX: 303-315-0007; e-mail: meng\_x@defiance.uchsc.edu.

### POSITIONS OPEN

Molecular immunology faculty position. The Department of Biomedical Sciences and Pathobiology, Virginia-Maryland Regional College of Veterinary Medicine invites applications for a calendar-year tenure-track ASSISTANT PROFESSOR position. The appointee will be expected to develop an independent and extramurally funded research program focusing on the molecular aspects of the development of antibody and/or cell-mediated mechanisms of mucosal immunity, including the role of cytokines as immunomodulators. The appointee will also collaborate with other college faculty in an ongoing research program focused on vaccine development, and participate in the Virginia Tech Pharmaceutical Engineering Institute. The successful applicant will also be expected to take part in the instructional programs of the College as appropriate. Applicants must have the Ph.D. and postdoctoral experience. In addition, the D.V.M., M.D., or equivalent medical degree is preferred. Send a letter of application, description of research goals, curriculum vitae, and names of three references to: Dr. Ludeman Eng, Head, Department of Biomedical Sciences and Pathobiology, College of Veterinary Medicine, Virginia Tech, Blacksburg, VA 24061. Review of applications will begin on November 1, 1999, but applications will be accepted until a suitable candidate is identified. Virginia Tech has a strong commitment to the principle of diversity and, in that spirit, seeks a broad spectrum of candidates including women, people of color, and people with disability. Individuals with disability desiring accommodations in the application process should notify: Dr. Eng, at the address above, or Telephone: 540-231-4652; e-mail: laeng@vt.edu; Virginia Telecommunications Relay Service: 800-828-1120.

ASSISTANT PROFESSORS. The Department of Physiology invites applications from outstanding scientists with Ph.D., M.D., or equivalent degrees for three tenure-track Assistant Professor positions. Of particular interest are candidates who will develop independent research programs in integrative biology using genetic engineering approaches to study physiological processes in tissues and whole animals. Additional areas of interest include molecular and biophysical approaches to cell physiology involving the fields of motility and the cytoskeleton in addition to transport and ion channels. However, the excellence of the successful candidates is more important than the particular area of research. These positions are part of the continuing growth of the Department at one of the country's leading academic medical centers and will be supported by significant laboratory space, competitive salaries, and exceptional start-up packages. The University of Texas Southwestern faculty includes four Nobel Prize winners and 11 members of the National Academy of Sciences, and supports more than 1,900 research projects annually totaling more than \$160 million. Applicants should submit a curriculum vitae, a brief statement of research plans, and arrange to have three letters of reference sent to: James T. Stull, Ph.D., Department of Physiology, The University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-9040. An Affirmative Action/Equal Opportunity Employer

### RESEARCH ASSISTANTS/ASSOCIATES

We are recruiting for several positions to support ongoing NIH-funded programs in viral pathogenesis and vaccine development for HIV/SIV and hepatitis C virus. Successful candidates will be an integral part of a multidisciplinary team that has expertise in molecular virology, immunology, and nonhuman primate models of infectious diseases. Requirements include a B.S., M.S., or Ph.D., and demonstrated experience in mammalian cell culture, immunology, virology, or molecular biology. Rank and salary will be commensurate with qualifications and experience. Applicants should send a current curriculum vitae, cover letter, and three letters of reference to: Dr. Philip R. Johnson or Dr. Christopher Walker, Room 591, Children's Hospital, 700 Children's Drive, Columbus, OH 43205. Children's Hospital Inc is an Affirmative Action/Equal Opportunity Employer.

### **POSITIONS OPEN**

### ACADEMIC POSITION FORENSIC CHEMIST

West Chester University of Pennsylvania

West Chester University of Pennsylvania's Department of Chemistry invites applications for a tenure-track position in forensic chemistry at the rank of ASSISTANT PROFESSOR beginning August 2000. A Ph.D. in chemistry or a closely related discipline is required. Forensic laboratory experience is preferred. The successful candidate will be required to demonstrate effective communication and teaching during an on-campus interview. Responsibilities of the position will include teaching forensic chemistry courses, courses in the person's specialty, and introductory chemistry courses. The candidate will be expected to establish a vigorous program of research. Inclusion of undergraduates in research is a primary goal.

Applicants should submit a letter of interest, curriculum vitae, transcripts, three letters of recommendation, and a statement of research plans, preferably including one detailed example. Submission of additional evidence of teaching effectiveness is encouraged. All materials must be postmarked by November 12, 1999, and sent to: Dr. H. G. Reid, Chemistry Search Committee, Chemistry Department, West Chester University, West Chester, PA 19383. FAX: 610-436-2890; e-mail: hreid@wcupa.edu. West Chester University is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR of biology. Applications are invited for a full-time tenure-track faculty position beginning August 2000. Applicants must have a Ph.D. degree in biology or a related area (expertise in animal ecology or zoology with conservation biology emphasis preferred). Successful candidate will conduct research and teach introductory biology (evolution, systematics, and ecology) for majors, environmental biology for non-majors, and upper-level courses in area of specialization. Purdue University Calumet, a campus of the Purdue system, enrolls over 9,000 students in more than 80 Associate, Bachelor's, and Master's degree programs in 16 academic departments. The 12-building, commuter campus is situated on 180 wooded acres in northwest Indiana, less than one hour by car or train from Chicago. The Department of Biological Sciences offers programs leading to a B.S. degree and an M.S. degree

To apply, send a statement of teaching and research experience and interest, curriculum vitae, copies of transcripts, and three letters of recommendation to: Search Committee, Biological Sciences, Purdue University Calumet, Hammond, IN 46323. Reviewing process begins November 15, 1999; applications will be accepted until position is filled. Purdue University Calumet is an Equal Opportunity/Affirmative Action Employer.

### ASSISTANT AND/OR ASSOCIATE PROFESSOR OF PHYSIOLOGY

The Department of Physiology at the University of Texas Health Science Center at San Antonio invites applications for tenure-track faculty positions. Applicants should have a degree in physiology or related discipline and several years of postdoctoral experience. The department is especially interested in persons with expertise in cellular and molecular physiology who can apply such expertise to physiological and biophysical problems as related to renal or vascular biology. The department currently has international stature in aging biology, bone and lung biology, and cardiovascular regulation. This position provides a unique opportunity for an outstanding young Investigator. Send curriculum vitae and names of three references to: Dike N. Kalu, Ph.D., Professor, Department of Physiology, 7703 Floyd Curl Drive, University of Texas Health Science Center, San Antonio, TX 78284-7756. E-mail: kalu@uthscsa. edu. Physiology website: http://physiology.uthscsa. edu/.

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

### BIOINFORMATICS/ COMPUTATIONAL BIOLOGY SEARCH

The Albert Einstein College of Medicine invites applications for one or more tenure-track appointments. The successful candidates will be part of a significant expansion of expertise in Bioinformatics and Computational Biology at the institution and contribute to the emerging research programs in structural and functional genomics, proteomics, computational chemistry, biophysical modeling and imaging. Appointments are expected at the Assistant and Associate Professor level. Applicants must have a Ph.D. and are expected to have Post Doctoral research experience in relevant biological areas.

The College of Medicine provides nationally competitive start-up packages for qualified faculty applicants. The applicant will be expected to build and maintain a vigorous, independent research program with excellent opportunities for active collaborations within the institution.

Applicants should send a CV, a 1-2 page statement of research interests, and arrange to have 3 letters of reference sent to: Ms. Julie Herrick, Assistant Dean, Albert Einstein College of Medicine, Jack & Pearl Resnick Campus, 1300 Morris Park Ave, Belfer Building-Room 312, Bronx, NY 10461.



### **Tenure Track Scientist**

National Institute of Neurological Disorders and Stroke (NINDS)

National Institutes of Health (NIH)

The Division of Intramural Research of the National Institute of Neurological Disorders and Stroke invites applications to fill a tenure-track position and establish an independent and imaginative research program at the NIH. Candidates should be working on a defined neural system primarily at the synaptic and/or cellular level including the use of in vitro systems. A Ph.D. or M.D. and two or more years of productive postdoctoral research are required. Research support (positions, laboratory budget and space) will be provided by NINDS.

Applicants should send curriculum vitae, bibliography, statement of research interests and the names of three references to:

Story Landis c/o Glenn Hartzoge 36 Convent Drive MSC-4152 Bethesda, MD 20892

Applications must be received by 11/15/99. NIH is an equal opportunity employer



BD BIOSCIENCES, headquartered in Sparks, Maryland, a suburb of Baltimore, is embarking on a comprehensive program in clinical diagnostics for oncology through an alliance with Millennium Predictive Medicine, the leader in functional genomics for diagnostics.

Highly motivated and talented professionals are sought to create molecular pathology assays based on fluorescence microscopy in the form of immunohistochemistry and in situ hybridization. These commercial systems will utilize tumor markers arising from our alliance and will guide physicians in the treatment of cancer by providing patients with individualized diagnostic and prognostic information.

Along with a PhD, MD, or engineering degree and 2-7 years experience in various aspects of fluorescence spectroscopy including optics (standard and microscopy), biomolecular labeling, dye chemistry and/or ligand binding, you should possess a proven track record (publication list) demonstrating comprehensive knowledge and first-hand experience with related experimental techniques such as FISH, cytogenetics, microarrays, and/or immunofluorescence. Familiarity with clinical diagnostics and/or cancer biology would be a strong plus.

As an integral contributor to this major, very important effort, you will receive an attractive compensation package including comprehensive benefits. Relocation assistance will be provided, if necessary. For immediate consideration please e-mail, FAX or mail a detailed resume to: JRNL099B. BD BIOSCIENCES, P.O. Box 8255, Gaithersburg, MD 20898. FAX: (301) 519-8403 or (888) 771-9898. E-Mail:BD@alexus.com We are an equal opportunity/affirmative action employer. Minorities, females, and individuals with disabilities are encouraged to apply. VISIT our WEBSITE for a complete listing of opportunities: www.BD.com

# BECTON DICKINSON

# Staff Scientist Position for Report on Carcinogens (HNV99-29) National Toxicology Program

National Institute of Environmental Health Sciences Research Triangle Park, North Carolina

The National Toxicology Program is recruiting a staff scientist to assist in preparing the Report on Carcinogens (RoC). The RoC is an informational scientific and public health document that provides a list of known and reasonably anticipated human carcinogens to regulatory and research agencies. The list is supported by a comprehensive compilation of human and animal cancer studies of listed substances and a description of the potential for human exposure to these substances. The successful applicant will serve as an expert resource on the toxicology and chemical carcinogenesis of substances nominated for listing in the RoC. Specific responsibilities will include providing scientific review and coordination for the preparation of background documents that will summarize the available information on the toxicology, chemical carcinogenesis, epidemiology, and human exposure of nominated substances; participating in multistep reviews of the nominations for listing in the RoC; and serving as project officer to oversee the contract supporting preparation of the RoC.

Minimum qualifications include a Ph.D. or equivalent in toxicology or a related discipline, with an emphasis on chemical carcinogenesis and ability to synthesize and interpret evidence from related fields including epidemiology and exposure assessment. The successful applicant must have strong organizational skills and ability to function in an interactive and cooperative work environment. S/he must be able to write clearly and concisely and to make oral presentations to a wide variety of audiences including scientists and nonscientists. The position will be a rolling five-year appointment. Salary will be commensurate with background and experience; Federal employee benefits apply.

Information about the National Toxicology Program can be obtained by accessing its internet home page at: http://ntp-server.niehs.nih.gov. For additional information about this position, contact Dr. C.W. Jameson at 919/541-4096, fax 919/541-2242, or e-mail jameson@niehs.nih.gov. Applications from women and minority groups are particularly encouraged. Interested parties should submit a curriculum vitae with bibliography and a brief statement of research interests and experience, and arrange for three letters of recommendation to be sent to: Ms. Naomi Teasley (HNV99-29), Human Resource Management Branch, NIEHS, P.O. Box 12233 (MD EC-11), Research Triangle Park, NC 27709, 919/541-5151.

NIEHS/NIH is an Equal Opportunity Employer

# Postdoctoral Fellowships in Complex Systems Studies at the Santa Fe Institute

The Santa Fe Institute expects to have openings for one or more Postdoctoral Fellows beginning in September 2000.

The Institute's interdisciplinary research program is devoted to the study of complex systems in a wide variety of fields, including biology (e.g., evolutionary biology, ecology, immunology), computer science (adaptive computation, novel forms of computation, simulation), physics (nonlinear systems, statistical physics, biophysics), cognitive science, neuroscience, and the social sciences including anthropology, economics, and political science. Applications are also welcome from disciplines other than those listed here.

Postdoctoral Fellows work either on existing research projects or on projects of their own choosing. Research at the Institute focuses primarily on mathematical and computational approaches, although applicants whose research will include an experimental or data-collection component in collaboration with offsite colleagues are also encouraged to apply.

Candidates should have a Ph.D. (or expect to receive one before September 2000) in the mathematical, computational, physical, biological or social sciences, with an academic record of scientific excellence, a demonstrated ability for independent research, and a strong interest in interdisciplinary approaches and collaboration.

### TO APPLY

Applicants should submit a curriculum vitae, list of publications, and statement of research interests. Arrange for three letters of recommendation to be sent.

Non-U.S. applicants are eligible to apply. Successful foreign applicants will enter the U.S. on either a J or, less likely, an H visa.

All application materials must be received by **January 14, 2000**. Decisions will be made by April 2000. Send complete application packages, by postal mail to the address below. Include your e-mail address and/or fax number.

Postdoctoral Committee Santa Fe Institute 1399 Hyde Park Road Santa Fe, NM 87501

Questions should be addressed to cg@santafe.edu.

SFI is an equal opportunity employer.

### POSITIONS OPEN

### COMPUTATIONAL MOLECULAR BIOLOGY/FUNCTIONAL GENOMICS

The Department of Biological Sciences at Carnegie Mellon University seeks an outstanding candidate for a tenure-track appointment at the intersection of computer science and molecular biology. Successful candidates will have strong credentials in both areas, and will be prepared to take advantage of the University's world-class strength in computer science and the strong tradition of interdisciplinary research in the Department of Biological Sciences. Applicants pursuing purely theoretical or mixed experimental/theoretical approaches to genomic and proteomic questions will be considered. Appointment will be made at a level commensurate with the experience of the applicant. Interested applicants should send curriculum vitae, statement of research interests, and three letters of recommendation to: Dr. Robert F. Murphy, Department of Biological Sciences, Carnegie Mellon University, 4400 Fifth Avenue, Pittsburgh, PA 15213. Review of applications will begin on November 1, 1999, and will continue until a suitable candidate is recruited. Our department is eager to diversify its faculty: we encourage women and minorities to apply. Carnegie Mellon University is an Equal Opportunity/Affirmative Action Employer.

GROSS ANATOMIST. Full-time position for an ASSISTANT PROFESSOR to teach gross anatomy. Position involves 75 percent research and 25 percent teaching. Ph.D. and experience teaching gross anatomy required. Research area open; prefer candidates specializing in evolutionary morphology, paleontology, or physical anthropology. Please submit curriculum vitae detailing research and teaching experience, as well as the names, addresses, and e-mails of three references to: Dr. Arnold L. Nagler, Senior Associate Dean or Dr. Nikos Solounias, Chair of Anatomy, New York College of Osteopathic Medicine, Old Westbury, NY 11568.

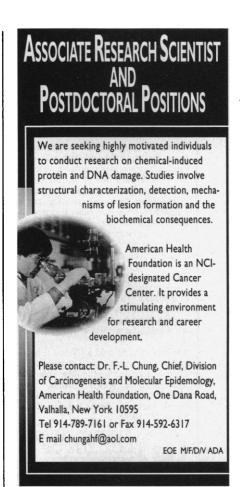
### **POSITIONS OPEN**

### ASSISTANT PROFESSOR ORGANIC CHEMISTRY

Elizabethtown College invites applications for a tenure-track appointment at the Assistant Professor level beginning August 2000. A Ph.D. in chemistry is required. Applicants should have a strong commitment to undergraduate learning. The successful candidate will have teaching responsibilities for organic chemistry at the introductory and advanced levels and will be expected to establish vigorous undergraduate research that complements existing programs. Additional strength in biochemistry or molecular modeling is desirable. Information on the department's facilities and program is available at website: www.etown.edu.

Review of applications will begin on November 1, 1999. To apply, send letter of application, curriculum vitae, statements of teaching philosophy and research interests, and names and contact information of three references to: Nancy E. Florey, Director of Human Resources, Elizabethtown College, One Alpha Drive, Elizabethtown, PA 17022-2298. E-mail: floreyne@acad.etown.edu. Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSOCIATE POSITION available to study the role of carcinogen and drug metabolizing enzymes in environmental carcinogenesis and toxicity. Position requires a Ph.D. or equivalent, and five or more years of postdoctoral experience are preferred. Applicants must have experience with laboratory rodents, in analytical and preparative HPLC/GC and enzymology. Salary is commensurate with experience and a comprehensive benefits package is available. Please send a curriculum vitae, statement of research interests, and names of three references by October 31, 1999, to: Dr. Paul E. Thomas, Laboratory for Cancer Research, College of Pharmacy, Rutgers—The State University of New Jersey, 164 Prelinghuysen Road, Piscataway, NJ 08854-8020. FAX: 732-445-0687.



### **POSITIONS OPEN**

# TENURE-TRACK ASSISTANT PROFESSOR VANDERBILT UNIVERSITY MEDICAL CENTER

As part of an expansion of the signal transduction program in the Department of Molecular Physiology and Biophysics at the Vanderbilt University School of Medicine, we invite applications for a tenure-track faculty position at the Assistant Professor level. Preference will be given to candidates who address fundamental questions on cell signaling in mammalian cells, and whose interests complement those of existing programs. (Visit our website: http://www.mc.vanderbilt.edu/vumcdept/mpb/.)

Interested applicants should forward a curriculum vitae, a short summary of research plans, and three letters of recommendation by November 1, 1999, to:

Search Committee (c/o Roland Stein, Head)
Department of Molecular Physiology
and Biophysics
Vanderbilt University School of Medicine
708 Light Hall
Nashville, TN 37232

Vanderbilt University is an Affirmative Action/Equal Opportunity Employer committed to increasing the representation of women and minority groups on its faculty.

### RESEARCH ASSOCIATE POSITION AVAILABLE

An NIH-funded Research Associate position will soon be available at the Research Institute on Addictions in Buffalo, New York to study the cellular changes in the brain after prenatal ethanol exposure using patch-clamp or single-unit recording techniques. An M.D. or Ph.D. degree in neuroscience or related field is desirable. Applicants should have experience in electrophysiological techniques and interests in substance abuse. For more information, contact: Dr. Roh-Yu Shen, Research Institute on Addictions, 1021 Main Street, Buffalo, NY 14203. Email: shen@ria.org.

# COSMOLOGY AND FINE-TUNING RESEARCH PROGRAM.

### Research Grants - Request for Proposals

The John Templeton Foundation has made \$1 million available for research grants relevant to the question "Is there evidence of universal purpose in the cosmos?" The aim of this science-focused project is to develop new and useful scientific and philosophical insights on the extent to which the Universe can be said to be fine-tuned for life. Topics include research in physics, cosmology, biochemistry, neuroscience and mathematics. Examples of previously published work can be found at www.templeton.org/cftrp.asp. Grants are available to support researchers working in academic and other research-active institutional contexts for projects of up to three years duration and up to \$150,000 per grant.

### **Dates and Deadlines**

- Proposal summaries due by October 31, 1999
- Invitations for submission of full proposals will be awarded by November 30, 1999 (Invitations will be made to no more than 50 applicants)
- Full proposals due by December 31, 1999
- Grant award announcements are expected to be made by March 20, 2000

Specific application guidelines, including application forms and rules for electronic submission are available on the John Templeton Foundation website at www.templeton.org/cftrp.asp. For more information, contact the John Templeton Foundation at 610-687-8942.



JOHN TEMPLETON FOUNDATION

100 Matsonford Rd. Radnor Corporate Center Radnor, PA 19087

# Associate Director for Radiology & Imaging Sciences Warren G. Magnuson Clinical Center National Institutes of Health

The Warren G. Magnuson Clinical Center (CC) of the National Institutes of Health is seeking a Radiologist with extensive clinical, research, and management experience for the position of Associate Director for Radiology and Imaging Sciences. The successful candidate will oversee a \$27 million budget that includes the clinical and research activities of the departments of diagnostic radiology, nuclear medicine and positron emission tomography and the laboratory of diagnostic radiology research. Substantial opportunities exist for both independent and collaborative research.

Basic Requirements: Doctor of Medicine or Doctor of Osteopathy from an accredited and approved medical school in the United States or Canada or graduation from a foreign medical school in which a U.S. equivalency from an authorized source has been obtained (ECFMG Certification) is required. Position requires a full, unrestricted license to practice medicine in a State, the District of Columbia, the Commonwealth of Puerto Rico, or a territory of the United States.

Qualifications: Board Certification in Diagnostic Radiology is required. Salary is commensurate with experience and level of accomplishments and will range up to \$200,000. A Recruitment Bonus of up to 25% of base pay or a Relocation Bonus of up to 25% of base pay may also be available.

Specific application procedures apply. Interested persons should send a curriculum vitae to Alice Owens at aowens@mail.cc.nih.gov by 11/22/99. Additional information about the position and the department is available at http://www.cc.nih.gov/drd/. Informal inquiries may be directed to Dr. David Henderson, Deputy Director for Clinical Care at 301-496-3515. Notice to displaced and surplus Federal employees: you must submit specific information as proof of eligibility for special selection priority. Call 301-496-6924 for more information.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER



### Assistant Professor



### Molecular & Environmental Microbiology University of Colorado at Boulder

The Department of Molecular, Cellular and Developmental Biology (MCDB), and the Cooperative Institute for Research in Environmental Sciences (CIRES) at the University of Colorado at Boulder seek applicants for a tenure-track faculty position in microbiology. Preference will be given to candidates at the Assistant Professor level, but all applicants will be considered. The successful candidate will have a record of scholarly achievement in molecular and environmental microbiology with an emphasis on prokaryotic molecular biology and be interested in collaborative research in environmental sciences. Research areas of special interest include a) the application of molecular methods to problems in environmental sciences and b) extremophile biology. For more information about MCDB and CIRES, please see our Web sites at http:// mcdb.colorado.edu and http://cires.colorado.edu. Send or fax (303-492-1149) a cover letter, CV and statement of research interests, and arrange for three letters of reference to be sent to:

> Professor Norman Pace Professor Shelley D. Copley CIRES/MCDB Campus Box 216 University of Colorado at Boulder Boulder, CO 80309-0216

Screening of applications will begin on Nov. 30, 1999, and will continue until the position is filled.

The University of Colorado at Boulder is committed to diversity and equality in education and employment.

### **Faculty Positions in Biophysics**



### Washington University School of Medicine

The Department of Biochemistry & Molecular Biophysics is seeking to fill two assistant professor positions in Molecular Biophysics. The successful candidates should be able to develop independent research programs utilizing biophysical approaches to address important biological problems. We are particularly seeking individuals in two areas of research: 1) use of single molecule techniques to study the function and properties of biological molecules; and 2) use of cryoelectron microscopy to study molecular systems. Candidates should have a broad perspective with regard to the biology and biophysical properties, and be interested in applying different approaches to their studies. Applicants should submit curriculum vitae, selected reprints, a short research summary, and the names of three references to:

Kathleen B. Hall, Ph.D.
Chair, Molecular Biophysics Search Committee
Washington University School of Medicine
Department of Biochemistry and Molecular Biophysics
Box 8231, 660 S. Euclid Avenue
St. Louis, MO 63110

### ASSISTANT PROFESSORS IN BIOLOGY

The Department of Biology seeks applicants for two tenure-track Assistant Professors.

Position One: Primary teaching responsibilities are human anatomy and human physiology lectures and laboratories. Preference will be given to candidates with prior experience in using human cadavers in teaching anatomy and an interest in teaching a wide array of courses.

Position Two: Primary teaching responsibilities are cell biology/molecular biology lecture and laboratories and introductory biology. Preference will be given to a Cell Biologist who can apply molecular techniques to a broad range of biological problems and assist faculty, undergraduate, and Master's-level research students in basic molecular techniques.

For both positions, Ph.D. required (other Doctoral degrees may be considered depending upon experience), strong communication and organizational skills, and primary interest in undergraduate education. Successful candidates must actively participate in a general biology program, engage in professional development, and assist with departmental and University service.

Interested applicants should submit (1) an official letter of application highlighting work experience and accomplishments relevant to the position; (2) a résumé; (3) the names, addresses, and telephone numbers of five professional references to: Dr. Bonnie Amos, Department of Biology, Angelo State University, San Angelo, TX 76909. Official transcripts will be required of applicants selected for interview. Deadline is open but may be closed at any time after November 1, 1999.

### ASSISTANT PROFESSOR MOLECULAR AND CELLULAR BIOLOGY HARVARD UNIVERSITY

The Department of Molecular and Cellular Biology (MCB) is seeking outstanding candidates for the position of Assistant Professor (entry-level appointment). Our department covers a broad range of topics including cellular biology, developmental biology, molecular biology, molecular evolution, molecular genetics, neurobiology, and structural biology. We are particularly interested in candidates working in the following areas: neurobiology; cell biological and evolutionary approaches to development; structural biology; genomics; and molecular approaches to understanding gene function.

Applications should include curriculum vitae, reprints of publications, and a statement of present and future research plans (one to three pages). Complete applications and three letters of recommendation, solicited by the applicant, should be received no later than October 15, 1999. Mail applications to:

### MCB Search Committee Harvard University 7 Divinity Avenue Cambridge, MA 02138

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

A SCIENTIST position is available immediately for the purification, formulation, and biochemical characterization of foreign proteins derived from transgenic plants, fungi, and bacterial cultures. Applicants should possess a Doctoral degree in biochemistry, molecular biology, or a related field, and have documented skills and extensive experience in molecular biology and biochemistry techniques. In addition, favorable candidates should have demonstrated success in areas of protein and metabolic engineeering including predictive modeling, rational design, and or speeded evolution. Finally, candidates should have a working knowledge of molecular biology strategies for enhanced expression of proteins in a variety of recombinant hosts. Please send a curriculum vitae, brief statement of research experience, and the names of references to: Dr. Brian S. Hooker, Bioprocessing Group, Environmental Technology Division, Pacific Northwest National Laboratory, Richland, WA 99352. E-mail: bs\_hooker@pnl.gov.

### POSITIONS OPEN

### ASSISTANT OR ASSOCIATE PROFESSOR BIOINFORMATICS AND COMPUTATIONAL BIOLOGY Harvard Medical School

As part of a campuswide initiative, Harvard Medical School is establishing two new faculty positions at the Assistant or Associate Professor level, in the area of bioinformatics or computational biology. The appointing department will be the Biological Chemistry and Molecular Pharmacology Department. Qualifications include a strong potential for imaginative research in the areas of bioinformatics, genetic epidemicology, computational functional genomics, biological network modeling, and/or computational research in chemical biology. These positions offer remarkable scholarly and scientific resources for independent research and collaborations as well as the opportunity to teach graduate and medical students with a strong interest in modern bioinformatics research.

Applicants should submit a curriculum vitae, bibliography, a brief (limit of 500 words) description of research interests, and arrange to have four letters of recommendation sent. These materials should be directed to:

Professor Christopher T. Walsh c/o Ms. Roberta Montgomery BCMP, Harvard Medical School 240 Longwood Avenue, C-213 Boston, MA 02115-5730

Harvard University is an Equal Opportunity/Affirmative Action Employer and encourages the applications of qualified women and minorities.

### ASSISTANT PROFESSOR ECOLOGY BIOLOGY DEPARTMENT Williams College

Tenure-track position at the rank of Assistant Professor beginning July 2000 for an Ecologist to teach courses in community/ecosystem ecology, conservation biology, evolution, and, on occasion, introductory biology. A senior appointment is possible in exceptional circumstances. The course load in the department is one course and two laboratory sections, or an equivalent load, per semester. Faculty members are expected to establish an independent research program that attracts external funding and involves undergraduates.

Ph.D. and postdoctoral experience and a strong academic research record are required. Please send curriculum vitae, one-page statements of teaching and research interests, and three letters of recommendation by November 15, 1999, to: Dan Lynch, Department of Biology, Williams College, Williamstown, MA 02167.

An Equal Opportunity/Affirmative Action Employer, Williams College especially welcomes applications from women and minority candidates.

### RESEARCH SCIENTIST ANESTHESIOLOGY

The Department of Anesthesiology of The Pennsylvania State University College of Medicine is currently recruiting an outstanding candidate to redevelop the basic science research program in a strong clinical department. Particular interests in neuroscience and cardiorespiratory medicine exist. Strong opportunities exist for multidepartmental collaboration as well as collaborative activity with Clinicians. The position includes teaching and mentorship opportunities. Interested candidates should send their curriculum vitae, publication reprints, a statement of present and future research plans, and three letters of recommendation to:

Garfield B. Russell, M.D., F.R.C.P.C.
Eric A. Walker Professor and Chair
Anesthesiology
Penn State University College of Medicine
The Milton S. Hershey Medical Center
P.O. Box 850, M.C. H187
500 University Drive
Hershey, PA 17033-0850

We are an Equal Opportunity Employer.

### POSITIONS OPEN

### PULMONARY, ALLERGY, AND CRITICAL CARE MEDICINE

The University of Pittsburgh Medical Center (UMPC) and the University of Pittsburgh School of Medicine are seeking a CHIEF for the Division of Pulmonary, Allergy, and Critical Care Medicine in the Department of Medicine. The Division has a tradition of excellence in basic and clinical research as well as in clinical activities. It has an NIH-funded Training Grant. The Search Committee seeks a nationally recognized pulmonary/critical care Physician Scientist with an established record of achievement in research who can foster continued growth in the funded research and clinical activities of the Division. The Division's teaching programs as well as its growing clinical programs.

The UPMC, highly ranked nationally as an academic medical center, is committed to provide the resources necessary to accomplish the goals of the Division, including support for the recruitment of additional faculty.

Interested applicants should send a curriculum vitae with cover letter to:

Andrew F. Stewart, M.D.
Chair, Pulmonary Search Committee
University of Pittsburgh Medical Center
Division of Endocrinology
E-1140 Biomedical Science Tower
200 Lothrop Street
Pittsburgh, PA 15213

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

### TENURE TRACK SWARTHMORE COLLEGE CHEMISTRY DEPARTMENT

We invite applications for a tenure-track position in bioorganic chemistry/chemical biology at the level of ASSISTANT PROFESSOR. The initial appointment will begin on September 1, 2000. Ph.D. required; postdoctoral experience preferred. We seek outstanding candidates who can teach organic and biological chemistry and who have research interests at the interface of chemistry and biology. For complete information on our facilities, curriculum, and faculty, interested individuals may consult our World Wide Web page at website: http://www. swarthmore.edu/NatSci/chemistry/. Candidates should submit a curriculum vitae, copies of graduate and undergraduate transcripts, and statements of teaching interests and research plans, and arrange for three letters of recommendation to be sent to: Prof. Robert F. Pasternack, Department of Chemistry, Swarthmore College, 500 College Avenue, Swarthmore, PA 19081-1397. Application materials must be complete by November 8, 1999, to assure full consideration. Women and members of underrepresented minorities are especially encouraged to apply

### MICROSCOPY FACILITIES MANAGER

Ph.D.-level scientist with demonstrated excellence in microscopy is sought to serve as Director for light, confocal, transmission, and scanning electron microscopy facilities. For full details see website: http://www.bio.indiana.edu/research/imcb/. Send résumé and three letters of references to: Dr. R. A. Raff, Indiana Molecular Biology Institute, Indiana University, Jordan Hall, 1001 East 3rd Street, Bloomington, IN 47405. Deadline November 1, 1999. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study mechanisms of T cell activation in a mouse model of infection with Leislmania major. Work will involve the analysis of T cell lines and clones and interactions of these cells with various antigen-presenting cells. The candidate should have a Doctoral degree and experience with immunological techniques. Send curriculum vitae and the names of three references to: Dr. Richard G. Titus, Department of Pathology, College of Veterinary Medicine and Biomedical Sciences, Colorado State University, Fort Collins, CO 80523.

### Dean, College of Life Sciences

The University of Maryland, College Park invites applications and nominations for the position of Dean of the College of Life Sciences. This is one of the core academic colleges at the University, and in recognition of its growing importance, the University has targeted this college for substantial enhancement with new faculty positions and increased budgetary support. The faculty of the college are organized in four departments: Biology; Cell Biology and Molecular Genetics; Chemistry and Biochemistry; and Entomology. Students may also earn graduate degrees in several inter-college and intercampus interdisciplinary programs. The Dean, who reports directly to the Senior Vice President for Academic Affairs and Provost, provides both academic and administrative leadership for the College.

The University of Maryland, College Park, is a comprehensive research-oriented, public university of Carnegie I category with almost 35,000 students in baccalaureate, master's and doctoral programs. It is located on a 350 acre campus just outside Washington, D.C. The University has established relationships with major research laboratories in the area such as NIH, NASA, NIST and the Smithsonian Institution, which provide opportunities for partnerships for students, faculty and programs in the life sciences. Most recently the College joined the Federal Drug Administration in a joint Institute for Food Safety and Applied Nutrition.

The College, which is one of the most popular for undergraduate majors, has approximately 130 tenured and tenure-track faculty. It serves approximately 2300 undergraduate majors and 540 graduate majors, and provides science courses to large numbers of students from across the University. It has a large and growing research base, with nearly \$9M in research expenditures in the most recent fiscal year and an annual state supported budget of \$16.7M. Further information on the College can be found at <a href="http://www.life.umd.edu">http://www.life.umd.edu</a>.

The person selected to fill the position of Dean of the College of Life Sciences should have the scientific distinction, vision and energy to lead a top-ranked science college into the 21st century, and experience in recruiting and retaining faculty of the highest caliber, promoting collaborative research partnerships, and managing a complex academic enterprise. Candidates should possess an earned doctorate, have a record of accomplishment commensurate with appointment as a tenured professor in a department of the College, and possess a demonstrated capacity for creative and effective leadership. The successful candidate must have demonstrated a commitment to fostering diversity.

Salary will be competitive and commensurate with experience. Applicants should submit a letter of interest, curriculum vitae, and the names, addresses, and telephone numbers of at least four persons who can be contacted by the search committee for references. Nominations are encouraged and will be received at any time. Review of nominations and applications for this position will commence on November 1, 1999, and continue until the position is filled. All materials should be sent to:

Search Committee for the Dean of the College of Life Sciences Attention: Mrs. Sheila Mahaffy 1119 Main Administration Building University of Maryland College Park, MD 20742

Telephone inquiries to discuss the position are welcome. Please feel free to call the chair of the committee, Dr. John E. Osborn, Professor of Mathematics, at 301-405-5129 or direct inquiries via e-mail to ≤jeo@math.umd.edu≥.

The University of Maryland, College Park, actively subscribes to policies of Affirmative Action and equal education and employment opportunities. Women and ethnic minority candidates are encouraged to apply.



### Research Chemist

The USDA-ARS New England Plant, Soil, and Water Laboratory (NEPSWL), located on the University of Maine campus, is seeking a staff scientist to conduct basic and applied research on quantitative analysis of organic materials. Incumbent will develop a new, independent research program to apply/develop analytical methods necessary to identify and characterize the labile nitrogen and phosphorus containing compounds in animal manure, soil organic matter, and crop residues; develop methods to label and trace their transformations into plant-available forms; and develop chemical/biological assays ("quick tests") that accurately quantify each compound. The NEPSWL is well-equipped with modern instrumentation (GC, HPLC, IRMS, EA, AA) and facilities. Candidates must have a degree in the biological or physical sciences with specialization in chemistry and demonstrated accomplishments in the area of biochemistry, organic chemistry, or analytical chemistry. This is a permanent, full-time position and comes with a permanent, full-time laboratory technician. Beginning annual salary ranges from \$39,960 to \$62,260. Promotion potential is open-ended. Attractive benefits are offered. Applications must be postmarked by November 1, 1999 and submitted to Bonnie Breeden, USDA-ARS, 5601 Sunnyside Avenue, Beltsville, MD 20705-5104. For a more detailed position description and application procedures, visit www.ars.usda.gov/ afm/hrd/resjobs or call Susan Bartley at 207-581-3266. Refer to Announcement # ARS-X9E-9441. Candidates must be U.S. citizens.

USDA-ARS IS AN EQUAL OPPORTUNITY EMPLOYER. Women and minorities are encouraged to apply.

### **A**NNOUNCEMENTS

# RAPID ACCESS TO PREVENTIVE INTERVENTION DEVELOPMENT - "RAPID" National Cancer Institute

The National Cancer Institute announces a new initiative: Rapid Access to Preventive Intervention Development (RAPID). RAPID will make available to academic investigators the preclinical and early clinical drug development contract resources of NCI's Division of Cancer Prevention. The goal of RAPID is the rapid movement of novel molecules and concepts from the laboratory to the clinic for clinical trials of efficacy. RAPID will assist investigators who submit successful requests by providing any (or all) of the preclinical and phase 1 clinical developmental requirements for phase 2 clinical efficacy trials. These include, for example, preclinical pharmacology, toxicology, and efficacy studies; bulk supply, GM manufacturing, and formulation; and regulatory and IND support and phase 1 clinical studies. Suitable types of agents for RAPID may range from single chemical or biological entities to defined complex mixtures with the potential to prevent, reverse, or delay carcinogenesis. For more detailed information, visit the web site, http://dcp.nci.nih.gov/CB/

Requests for RAPID resources are to be submitted as described in the web site. Written requests will be evaluated by a specially constituted RAPID panel, consisting of selected NCI staff and outside experts from academia and industry. Requests must be received on or before November 1, 1999. Applications should be submitted directly to the office listed below. Inquiries are encouraged, and the opportunity to clarify issues or questions is welcome. See also NIH Guide, release date April 29, 1999. Please contact:

### **RAPID**

James A. Crowell, Ph.D.
Division of Cancer Prevention, NCI
Executive Plaza North, Suite 201
6130 Executive Blvd.
Bethesda, MD 20892
Rockville, MD 20852 (for express/courier service)
telephone (301) 594-0459
fax (301) 402-0553, (301) 594-2943
email: jc94h@nih.gov

### ORGANISMAL DEVELOPMENTAL BIOLOGIST

The Department of Integrative Biology seeks an innovative, problem-oriented Biologist who uses a diversity of techniques to explore the evolution of developmental processes and patterns of evolution in animals with an emphasis on the organismal level. Research areas of interest include, but are not limited to: the genetic, molecular, and cellular bases of the development of form, developmental dynamics (cell/tissue interactions), musculoskeletal development, or comparative ontogenesis. Teaching responsibilities include an undergraduate course in organismal developmental biology, participation in a core course, and the development of graduate seminars in the areas of the candidate's interests.

The position is open to Ph.D. scientists at the Assistant Professor level and will complement the current departmental faculty, which includes Evolutionists, Physiologists, Morphologists, Systematists, Ecologists, Behaviorists, and Population Geneticists, all of whom work interactively and multidisciplinarily. Completed applications must be postmarked by November 15, 1999. The appointment commences on July 1, 2000.

A curriculum vitae, publications, statements of teaching and research interests, and the names of three referees should be sent to the address below:

Search Committee Organismal Developmental Biologist Department of Integrative Biology 3060 VLSB #3140, University of California Berkeley, CA 94720-3140

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

### DIRECTOR ESTUARINE RESEARCH CENTER OF THE ACADEMY OF NATURAL SCIENCES

The Academy of Natural Sciences seeks a dynamic leader to be Director of its Estuarine Research Center located in St. Leonard, Maryland. The position is responsible for providing leadership and management of scientific research, fundraising, community relations and constituency building, and educational and outreach programs of the Center. The Director will implement the strategic plans of the Center within the Academy's overall strategic plan, which calls for the advancement of scientific excellence and building of endowment. The Director is also a Vice President and a member of the Administrative Council of the Academy, which is charged with creating a collaborative and integrated institutional plan for research, education, and public programs. In addition to leading a group of scientists, the successful candidate will have a track record of publications and grants and evident success at fundraising and external relations. Ten years of research experience and five years of management are preferred. Applicants should apply in writing to: President, The Academy of Natural Sciences, 1900 Benjamin Franklin Parkway, Philadelphia, PA 19103-1195. No telephone calls. Applications will be reviewed in the order in which they are received. Visit our website: www.acnatsci.org. Equal Employment/Affirmative Action Employer.

POSTDOCTORAL POSITION at Monell Chemical Senses Center. Available immediately, USDA-funded research on chemical irritation in mammals and birds. Transduction mechanisms mediating pain and irritation will be studied in cultured avian and mammalian trigeminal neurons using fluorescence imaging of calcium and voltage-sensitive dyes. Successful candidate will have a strong background in neurophysiology, cell culture experience, and completed Doctorate. Stipen is NIH scale. Interested applicants should send a curriculum vitae, brief statement of research interests, and the names and telephone numbers of three references to: **Bruce Bry**ant, Ph.D., Monell Chemical Senses Center, 3500 Market Street, Philadelphia, PA 19104. E-mail: bryant@monell.org. Monell is an Equal Opportunity Employer,

### POSITIONS OPEN



### ORIDIGM

Oridigm is a bio/pharmaceutical company in Seattle, Washington focusing on drug discovery and development of small molecules to modulate cell growth. Oridigm has discovered multiple drug candidates through a focused approach on polyamine metabolism. Because of these successes, Oridigm has two SENIOR SCIENTIST positions available.

MOLECULAR BIOLOGIST/BIOCHEMIST. The position requires a Ph.D. with a strong background in molecular biology or biochemistry. The scientist will be a project leader and contribute to assay development and mechanism of action studies of lead drug candidates. Experience with cell culture and bioanalytical techniques (especially HPLC) are preferred. The candidate will be expected to apply initiative and creative leadership to the identification of new therapeutic targets while working both independently and on team projects.

ORGANIC/MEDICINAL CHEMIST. The Ph.D. candidate (Organic or Medicinal Chemist) should have multistep synthetic skills and be able to interact with a team to optimize novel drug candidates. Skills required include thorough knowledge of modern synthetic reactions and analytical techniques (NMR, UV, HPLC, TLC), together with the ability to purify both organic and aqueous soluble organic products. Synthetic experience with polyamines and nucleosides, together with solid-phase synthetic methods, are desirable.

For more information, visit website: www. oridigm.com. Send curriculum vitae to: Oridigm Human Resources, 4010 Stone Way North #220, Seattle, WA 98103. FAX: 206-675-8881.

### NEUROSCIENCE

POSTDOCTORAL POSITION available to study GABA, receptor biophysics, mechanisms of inhibitory synaptic transmission, and the role of inhibitor in neural information processing. Techniques include whole-cell and excised patch electrophysiology, rapid solution exchange, and computer modeling. See website: http://www.physiology.wisc.edu/www/jones.html for further information. Send a letter of application, curriculum vitae, and the names and contact information for three references to: Mathew V. Jones, Ph.D., Department of Physiology, University of Wisconsin–Madison, 123 Service Memorial Institutes, 1300 University Avenue, Madison, WI 53706 USA. E-mail: jonesmat@physiology.wisc. edu.

### POSTDOCTORAL POSITIONS

Two fully funded Postdoctoral positions available immediately to study regulatory networks of the tumor suppressor protein p53 and its related proteins. Another ongoing project involves functional genomics (PNAS 94:12473–8, 1997). Candidates should be highly motivated with a strong background in molecular and cell biology. Send research interests, curriculum vitae, and three references to: C. Wilson Xu, Ph.D., Box 362, Memorial Sloan-Kettering Cancer Center and Graduate School of Medical Sciences of Cornell University, 1275 York Avenue, New York, NY 10021. FAX: 212-639-2767; e-mail: w-xu@ski.mskcc.org.

POSTDOCTORAL POSITION in molecular immunology/cell physiology. A one- to two-year temporary position is available immediately to study the *in vitro* mechanisms of cytokines on muscle growth and physiology. Candidates should have a strong background in cell culture, molecular biology, immunology. Send curriculum vitae, reprints, and names and telephone numbers of references to: Katherine M. Byrne, D.V.M., Ph.D., Department of Animal Sciences, Washington State University, P.O. Box 646351, Pullman, WA 99164-6351. E-mail: kbyrne@wsu.edu; FAX: 509-335-4246. *WSU is an Equal Opportunity/Affirmative Action Employer.* 

### POSITIONS OPEN

### NEUROENDOCRINOLOGY AND BREAST CANCER

Positions available immediately for a POSTDOC-TORAL FELLOW, and two RESEARCHER I and/or II to study effects of cannabinoids on neuroendocrine function in vivo, and the effects of novel herbal therapies on breast cancer cell proliferation in vivo and in vitro. Postdoctoral Fellow applicants should have a Ph.D. and/or M.D. in physiology, biochemistry, or a related field. Researcher I applicants should have a B.S. in physiology, biochemistry, or related field. Researcher II applicants should have a M.S. in physiology, biochemistry, or other related field. Laboratory experience is preferred and those with demonstrated experience in animal care, cell and molecular biology, and/or radioactive assays will be given priority. Experience using computers for data analysis is also desirable. Deadline for applications is October 19, 1999, or until positions are filled.

Please send curriculum vitae, statement of research interests, and names, addresses, and telephone numbers of three references to:

Laura L. Murphy, Ph.D.
Associate Professor
Department of Physiology
Southern Illinois University
School of Medicine
Carbondale, IL 62901-6523
E-mail: lmurphy@som.siu.edu

Southern Illinois University is an Equal Opportunity/Affirmative Action Employer.

Towson University, Department of Chemistry. Two tenure-track positions, one in environmental chemistry and one in biochemistry, each at the AS-SISTANT PROFESSOR rank, Ph.D. in an appropriate area required, postdoctoral experience desirable. Candidates are expected to demonstrate an aptitude and interest in undergraduate teaching and research. Significant contribution to interdisciplinary programs in environmental science and studies or molecular biology/biochemistry/bioinformatics is expected. Please send a letter specifying the position of interest, a description of teaching philosophy and research plans, a detailed curriculum vitae, copies of transcripts of undergraduate and graduate education, and three letters of recommendation to: Search Committee, Department of Chemistry, Towson University, Towson, MD 21252-0001. Applications must be postmarked by November 19, 1999. Additional information is available at website: www. towson.edu/chemistry/facultypositions. University is an Equal Opportunity/Affirmative Action Employer and has a strong institutional commitment to diversity. Women, minorities, persons with disability, and veterans are encouraged to apply.

POSTDOCTORAL FELLOW. University of Pennsylvania. A Postdoctoral position is available for studies on male germ cell genetic modification. Projects involve culture and expansion of male germ line stem cells (spermatogonia), followed by transfection and introduction of the transformed cells into the testis. (Sem. Cell Dev. Biol. 9:401–409, 1998; PNAS 96:5504–5509, 1999). A background in cell and molecular biology is preferred. Send curriculum vitae, names of three references, and a letter describing research experience to: Dr. R. L. Brinster, School of Veterinary Medicine, University of Pennsylvania, 3850 Baltimore Avenue, Philadelphia, PA 19104.

### ANIMAL MOLECULAR GENETICS/ BIOTECHNOLOGY POSITION Department of Animal Science Oklahoma State University Stillwater, OK 74078

For complete position announcement or information: Archie Clutter, Telephone: 405-744-6070; FAX: 405-744-7390; e-mail: accosu@okstate.edu; website: http://www.ansi.okstate.edu/positions.

The University of Michigan School of Medicine, Section of Urology has been awarded a National Institutes of Health Training Grant in the Urologic Sciences. The following mentors are part of this program:

| Mentor  | Area of Research Interest  | Mentor                   | Area of Research Interest   |
|---|--|--------------------------|---|
| Kenneth J. Pienta, M.D.                             | Understanding the mechanisms underlying prostate cancer metastasis   | Jill A. Macoska, Ph.D.   | The role of Chromosome 8 alterations in prostate tumorigenesis                                      |
| Alfred E. Chang, M.D.                               | The development of adoptive immunotherapy strategies for the treatment of renal cell cancer  | Gabriel Nuñez, M.D.      | Genetics and biochemistry of apoptosis  |
| Michael F. Clarke, M.D.<br>Kathleen A. Cooney, M.D. | The genetic control of apoptosis The molecular genetics of sporadic  | Dana Ohl, M.D.           | Understanding the basis of male infertility   |
| Mark L. Day, Ph.D.                                  | and familial prostate cancer<br>Mechanisms of apoptotic signal<br>transduction   | John Park, M.D.          | The role of bladder and renal prostaglandin synthesis regulation via cyclooxygenase pathways in the |
| Jack Dixon, Ph.D.                                   | Mechanisms of phosphatase signal transduction  |                          | setting of bladder obstruction, inflammation and development  |
| Eric J. Fearon, M.D., Ph.D.                         | Genetic aberrations in bladder cancer<br>and the development of diagnostic<br>markers for bladder cancer                                 | Diane Robins, Ph.D.      | Molecular control of the androgen receptor  |
| Paul Hollenberg, Ph.D.                              | The control of P450 enzymes in health and disease  | Mark Rubin, M.D.         | Identification of biomarkers for prostate carcinoma   |
| Michael Imperiale, Ph.D.                            | The role of BK virus, in the etiology of prostate cancer   | Martin Sanda, M.D.       | Development of gene therapy strategies for prostate and bladder                                     |
| Evan Keller, D.V.M., Ph.D.                          | The role of cytokines and androgen   |                          | cancer  |
|   | receptor activity in the development<br>of androgen-independent<br>prostate cancer and the biology of<br>prostate cancer bone metastases | David Schottenfeld, M.D. | Epidemiology of prostate cancer   |
|   |  | Jeremy Taylor, Ph.D.     | Development of statistical method-<br>ology   |
| Michael Long, Ph.D.                                 | Understanding the mechanisms underlying the acquisition of the aneuploid phenotype   | Stuart Wolf, M.D.        | Development of novel tissue reconstruction strategies for the urinary tract                         |

Ph.D. and M.D. postdoctoral candidates interested in pursuing a career in academic urology should send a cover letter and C.V. to the attention of Marty Davis-Merritts, 1500 E. Medical Center Drive, Room 7303 CCGC, Ann Arbor, MI 48109-0946. Positions available immediately.



# TEXAS A&M UNIVERSITY CARDIOVASCULAR RESEARCH INSTITUTE

### Faculty Positions in Cell Signaling and Regulatory Biology.

The Division of Molecular Cardiology at the College of Medicine, Texas A&M University System Health Science Center, has multiple tenure track faculty positions in the newly established Cardiovascular Research Institute. Appointments may be at the Assistant Professor level for candidates completing a postdoctoral fellowship or at the Associate Professor level for candidates with independent, funded programs. Applicants with a Ph.D. and/or M.D., with research experience in molecular and cellular biology, developmental biology, and/or human or mouse genetics will be given preference, though a broad spectrum of research interests will be considered. Attractive startup packages and competitive salaries and benefits will be provided. Applicants should submit a curriculum vitae, description of research accomplishments and future plan and at least three letters of reference to:

Kenneth M. Baker, M.D., Molecular Cardiology Search Committee, College of Medicine, Texas A&M University System Health Science Center, 1901 South First Street, Building 162, Temple, Texas 76504.

### Postdoctoral Positions in Cell Signaling and Gene Expression.

The Division of Molecular Cardiology at the College of Medicine, Texas A&M University System Health Science Center, has multiple postdoctoral positions to work in the areas of gene expression and cellular signaling, in the newly established Cardiovascular Research Institute. The position will provide the opportunity to learn appropriate techniques and other skills, needed to develop an independent research career. Applicants with a Ph.D. and/or M.D., with research experience in molecular and cellular biology, developmental biology, and/or human or mouse genetics will be given preference, though a broad spectrum of research interests will be considered. Competitive salaries and benefits will be provided. Applicants should submit a curriculum vitae, description of research interests, and three letters of reference to:

Kenneth M. Baker, M.D., Molecular Cardiology Search Committee, College of Medicine, Texas A&M University System Health Science Center, 1901 South First Street, Building 162, Temple, Texas 76504.

Texas A&M University is an Equal Opportunity/Affirmative Action Employer.



# Faculty Position Cellular and Molecular Biology

Applications are invited for a position at the Assistant Professor level (Tenure-Track) in the Department of Cellular and Molecular Medicine in association with the Department of Pathology at UCSD School of Medicine. Salary commensurate with experience and based upon UC pay scales.

Applicants should have a Ph.D., M.D. or combined M.D./Ph.D. degree and demonstrated ability to conduct a state-of-the-art research program using modern techniques in molecular cell biology, bioinformatics and/or genomics to investigate an area of science relevant to human disease. The applicant is also expected to teach and do research training of medical and graduate students.

Submit curriculum vitae, statement of professional goals, and research interests and names and addresses of 5 to 7 references by November 15, 1999, to:

Search Committee
c/o Marilyn G. Farquhar, Ph.D., Chair
Department of Cellular and Molecular Medicine
University of California San Diego
9500 Gilman Drive
La Jolla, CA 92093-0651
mfarquhar@ucsd.edu

University of California is an Affirmative Action/ Equal Opportunity Employer

### POSTDOCTORAL POSITIONS BIOMOLECULE MASS SPECTROMETRY National Science Foundation National High-Field FT-ICR Facility

NSF National High-Field FT-ICR MS Facility Postdoctoral positions (\$35,000 per year) are available now for biological applications of high-performance Fourier transform mass spectrometry. State-ofthe-art equipment includes electrospray and MALDI ion sources for 9.4 T and 11 T widebore supercon magnets. The candidate will participate in one or more projects, e.g., identification and structural analysis of proteins, noncovalent adduct stability, isotopic amplification, solution vs. gas-phase conformation, H/D exchange as a probe of surface accessibility, and mapping of contact surfaces between macromolecules. Applications include proteomics, cell cycle regulation, cytokines in biological fluids, and DNA and RNA base-pairing. Prior experience in structural biology and/or biological mass spectrometry is essential. Send a graduate transcript, updated curriculum vitae including publications and presentations, a page on prior research accomplishments, and a short description of proposed research area(s), and have three reference letters sent to: Prof. Alan G. Marshall, Director, ICR Program, National High Magnetic Field Laboratory, Florida State University, 1800 East Paul Dirac Drive, Tallashassee, FL 32310. E-mail: marshall@magnet.fsu.edu. FSU is an Affirmative Action/Equal Opportunity Employer.

A POSTDOCTORAL POSITION is available immediately on a NIH-funded project to study the molecular pathogenesis of the hepatitis E virus (HEV) by using swine HEV and pigs as an animal model system (see: PNAS 94:9860–9865, 1997; J. Virol. 72:9714-9721, 1998). Preference will be given to candidates with experience in full-length cloning of viral genome and viral gene expression and manipulation. Individuals with a Doctoral degree (preferably Ph.D.) and a strong background in molecular biology and virology are encouraged to apply. Send your curriculum vitae and names of three references to: Dr. X.-J. Meng, Department of Biomedical Sciences and Pathobiology, Center for Molecular Medicine and Infectious Diseases, Virgina Tech, 1410 Price's Fork Road, Blacksburg, VA 24061-0342. E-mail: xjmeng@vt.edu. Virginia Tech has a strong commitment to the principle of diversity and, in that spirit, seeks a broad spectrum of candidates including women, minorities, and people with disability. Individuals with disability desiring accommodations in the application process should notify: Dr. Meng, as noted above, or TTY: 1-800-828-1120.

### POSTDOCTORAL OPPORTUNITIES CITY OF HOPE

The Beckman Research Institute of the City of Hope has two immediate opportunities in the laboratory of Dr. Jling-Kaun Yee, Division of Immunology. Will study treatment for HIV infection using lentivira vector-mediated delivery of anti-HIV genes into human hematopoietic stem cells. Requires expertise in molecular biology, gene cloning, and handling mammalian cell culture. Experience in handling viruses, especially lentiviruses (HIV or FIV) is desirable, but not required. Please send cover letter, a curriculum vitae, and names of three references to: Attn: Ileana Abich, Helford Building, Room 1013, City of Hope, 1500 South Duarte Road, Duarte, CA 91010-3000. FAX: 626-256-8620. Equal Opportunity Employer.

POSTDOCTORAL POSITION in neuropharmacology to study the effect of substance abuse on brain serotonin levels and turnover. Must have strong background in HPLC-ECD techniques as evidenced by significant publications in this area. Experience with in vivo microdialysis would be an advantage. Send curriculum vitae, three references, and description of previous research experience to: N. A. Darmani, Ph.D., Department of Pharmacology, KCOM, 800 West Jefferson, Kirksville, MO 63501. FAX: 660-626-2728; e-mail: ndarmani@kcom.edu. Equal Opportunity/Affirmative Action Employer.

### POSITIONS OPEN

USDA, Agricultural Research Service, Beltsville Human Nutrition Research Center is seeking a two-year, full-time (extendable) **POSTDOCTORAL RESEARCH ASSOCIATE**. The successful candidate will participate as a member of a multidisciplinary team of scientists conducting research into the development of a mathematical model of whole-body fuel management in humans. The work involves studying both human and animal subjects, under a variety of nutritional and physiological conditions. The incumbent will be expected to design and conduct experiments with the intent of providing quantitative data on rate constants and mass movement of substrates from digestion through oxidation. Whole-body as well as tracer and tissue methodologies are among the approaches considered for the investigations. A Ph.D. in nutrition, biochemistry, physiology, or related field is required. Knowledge of mathematical modeling not a prerequisite. However, knowledge of the methods and application of whole-body tracer methodologies will be a consideration. Salary from approximately \$40,714 per year (GS-11) with full fringe benefits. U.S. citizenship or citizenship of a country that the U.S. Congress has specifically exempted from restriction legislation is required. Submit applications (a curriculum vitae including the names, addresses, and telephone numbers of three professional references) to:

Dr. William V. Rumpler USDA/ARS Beltsville Human Nutrition Research Center Room 206, Building 308 BARC-East Beltsville, MD 20705 Telephone: 301-504-8360 FAX: 301-504-8161 E-mail: rumpler@bhnrc.arsusda.gov

### DUKE UNIVERSITY MEDICAL CENTER PROGRAM IN IMMUNOLOGY AND

### CANCER IMMUNOBIOLOGY

POSTDOCTORAL and GRADUATE POSI-TIONS are available for conducting tumor-related research in laboratories studying molecular and cellular immunology, lymphocyte development, activation and memory generation, immunogenetics, and immunopathology.

For more information, send for a brochure or see website: http://www.mc.duke.edu/.

Interested candidates should send a curriculum vi-

Dr. Frances Ward **Duke University Medical Center** Department of Immunology Box 3010 Durham, NC 27710

Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.

POSTDOCTORAL POSITIONS are available to study (1) interactions among angiogenic factors and (2) VEGF isoforms in tumor angiogenesis. Applicants should have a Ph.D. and strong backgrounds in molecular biology and/or protein biochemistry. Experience in cell culture and tumor animal model is preferred. Please send curriculum vitae, a summary of research experience, and the names of references to: Shi-Yuan Cheng, Ph.D., University of Pittsburgh Cancer Institute, W-946, BST, 200 Lothrop Street, Pittsburgh, PA 15216. FAX: 412-624-0259; e-mail: chengs@msx.upmc.edu. The University of Pittsburgh is an Equal Opportunity/Affirmative Action

POSTDOCTORAL POSITION available to study mechanisms of synaptic inhibition related to plasticity in the in vitro hippocampus. Experience with intracellular recordings required. Send curriculum vitae and names of three references to: Dr. A. Stelzer, Department of Physiology and Pharmacology, SUNY Brooklyn, Health Science Center, Box 29, Brooklyn, NY 11203. Telephone: 718-270-3873; FAX: 718-270-2241; e-mail: astelzer@netmail.hscbklyn.

Affirmative Action/Equal Opportunity Employer.

### **POSITIONS OPEN**

# TWO POSTDOCTORAL POSITIONS BACTERIAL GENETICS AND EVOLUTION

At least two Postdoctoral positions are available to study bacterial evolution. One will use molecular genetic techniques to identify and manipulate mutations selected during a long-term evolution experiment. Another will perform experiments comparing bacterial evolution on single and mixed resources. Succesful candidates will have excellent communication skills and solid training in one or more of these areas: molecular genetics, bacterial physiology, experimental ecology, and evolutionary biology. Exceptional candidates may be appointed as non-tenure-track research faculty. Review of applications begins 15 November 1999 and continues until positions are filled. Applicants should send curriculum vitae, reprints, statement of research interests and career goals, and have three letters of reference sent to: **Prof. Richard** Lenski, Center for Microbiol Ecology, Plant and Soil Science Building, Michigan State University, East Lansing, MI 48824. E-mail: lenski@msu.edu; website: http://www.msu.edu/user/ lenski. MSU is an Affirmative Action/Equal Opportunity Institution. Women and minority candidates are especially encouraged to apply.

### POSTDOCTORAL POSITIONS UNIVERSITY OF WISCONSIN-MADISON

The laboratories of Dr. Richard Amasino and Dr. Michael R. Sussman are seeking Research Associates to perform research in the area of plant molecular biology. Candidates will have at their disposal DNA chips and mass spectrometers, as well as a saturated collection of knockout *Arabidopsis* mutants. The overall goal of this work is to understand signaling molecules involved in the regulation of flowering and hormone perception at the plasma membrane. Candidates will have received their Ph.D's within the past three years. Please provide statement of interest and résumé along with three references to: Dr. Michael R. Sussman, University of Wisconsin Biotechnology Center, 425 Henry Mall, Madison, WI 53706. E-mail: msussman@facstaff.wisc.edu.

POSTDOCTORAL POSITIONS immediately available in the Cardiovascular Institute at Boston University School of Medicine. Research programs involve elucidation of genetic determinants of essential hypertension and its target organ complications, as well as molecular genetic mechanisms underlying the interaction of hypertension and other complex disorders like atherosclerosis and Alzheimer's disease. Applicants should be U.S. citizens or permanent residents of the United States. Experience in molecular genetics, neurobiology, and/or gene targeting is desirable. Please send curriculum vitae and three letters of recommendation to: Dr. Nelson Ruiz-Opazo, Whitaker Cardiovascular Institute, Section of Molecular Genetics W-609, Boston University School of Medicine, 700 Albany Street, Boston, MA 02118 USA. Email: nruizo@bu.edu; FAX: 617-638-4066.

POSTDOCTORAL POSITION is available immediately to hematology/oncology and molecular medicine at Boston Medical Cancer to study the role of protein kinase CK2 in oncogenesis and development (see: Nat. Gen. 23:118-121, 1999), and other serine-threonine kinase-dependent cascades in tumorigenesis, using in vitro and in vivo models. Trained Molecular Biologist with experience in transgenic and knockout mice preferred. Please send curriculum vitae including names of three references to: David C. Seldin, M.D.-Ph.D., Boston Medical Center, 88 East Newton Street, Boston, MA 02118. E-mail: dseldin@med-med1.bu.edu.

POSTDOCTORAL POSITION available to study Eph receptor tyrosine kinases. Areas of investigation include the roles of Eph receptors in embryonic development and cancer, and signal transduction pathways. Molecular biology, biochemistry, or neuroscience experience preferred. Send curriculum vitae and three letters of reference to: Elena B. Pasquale, The Burnham Institute, 10901 North Torrey Pines Road, La Jolla, CA 92037.

# **Exciting Careers** for Biologists at Tularik

Tularik Inc. is a privately-held biopharmaceutical company dedicated to the discovery and development of novel therapeutic agents that act through the regulation of gene expression. The continued growth of our research organization has created excellent opportunities for a select group of dedicated researchers to make significant contributions to our drug discovery programs. We are currently expanding our research efforts in the following areas:

- •Immune Disorders
- Orphan Nuclear Receptors
- •Hypercholesterolemia
- Obesity/Diabetes
- •Inflammation

These projects provide exciting opportunities for outstanding scientists and postdoctoral fellows to carry out leading-edge research and creative drug discovery. If you have a Ph.D. with relevant expertise and are interested in joining our research team, please submit your resume to the address below. Postdoctoral training is preferred for Scientist-level positions. Tularik offers productive and experienced leadership, employee stock options, a competitive salary and benefits package, and a collaborative and stimulating research environment that recognizes achievement.

### Tularik Inc.

Human Resources
Position Code SC100
Two Corporate Drive
South San Francisco, CA 94080
Fax: (650) 825-7554
Email: resume@tularik.com

Equal Opportunity Employer







### **Developmental Biology** Assistant/Associate/Full Professor

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

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

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

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

### Protogene Laboratories, Inc.

Protogene Laboratories, Inc. is a rapidly growing, privately-held DNA Micro-Array company dedicated to the advancement of Genomics. Its patented FlexChip™ technology enables a new business model seamlessly integrating gene analysis by expression profiling, and genotyping on a chip-based platform. We are currently searching for highly talented individuals to help us reach our aggressive goals and we have the following exciting opportunities within our

### VP of Biology

Protogene seeks to add an internationally recognized scientist in the field of molecular biology and genomics to lead the company's overall biological strategy. In this highly visible position the successful candidate will prioritize and direct the company's efforts for applications and commercialization for its proprietary FlexChip™ technology. The successful candidate will be a leader in the field of biology and genomics, will have an MD or Ph.D. and at least 15 years of proven scientific success and demonstration of leadership. JobCode: BMVPB81

### Senior Scientist - DNA Array Applications

We seek a highly motivated scientist with broad expertise in array-based assay development and optimization. The successful candidate will be responsible for technical and biol. applications of our proprietary DNA micro array technology to measure and analyze gene expression profiles. Requires a Ph.D. in Biochemistry, Molecular Biology or related field and 5+ years relevant experience. JobCode: MCAA11

### Research Associates - Molecular Biology

We have two immediate openings for scientists to work on the design of robust gene expression products and assays. Duties include primer processing nucleic acid extraction, amplification and labeling. Requires a BS/MS in Biology or related field with a minimum 2 years laboratory experience in an industrial setting. A strong background in PCR, amplification, nucleic acid purification/ analysis and hybridization technology is required. JobCode: MCMB22

### Staff Scientist - PCR Applications

We have an immediate opening for a Biochemist/PCR Specialist. The successful candidate will be the key investigator for developing PCR protocols for micro-array based analysis. This individual will participate in the development and implementation of integrated high-throughput systems for analysis of polymorphisms using our DNA array technology. The ideal candidate will have a Ph.D. in Biochemistry (or related) and 2-3 years of relevant experience in the field of PCR, primer design and fluorescent detection. JobCode: FCPCA31

### Research Associate - DNA Synthesis

The successful candidate will be an integral part of the High-Throughput Arrays-Synthesis-Lab. Duties and responsibilities include: preparation of synthesis substrates, DNA chip production using an automated oligonucleotide synthesizer, monitoring product quality using chemical and biological techniques. Applicants should have a BS degree in Chemistry or Biology, 1-2 years related experience. DNA chemistry, production experience preferred. JobCode: SKDNAS41

### Wafer Process Specialist - Chip Preparation

In this position the successful candidate will be developing and optimizing protocols for the manufacturing of Protogene's FlexChips™. Responsibilities will include the production of patterned glass chips for the DNA synthesis group. Applicants should possess a BS in Chemistry or equivalent and have 2-4 years of relevant experience in the semiconductor processing field. JobCode: JBWT51

### BioStatistician

In this position the successful candidate will join the array applications team to apply computational skills in a biological context. The candidate will develop tools to access and analyze internal/external sequence databases for micro array design and results interpretation. This position requires selfmotivation, strong leadership and creativity, as well as excellent project management and communication skills. The successful candidate will be experienced in statistical data analysis as well as database development and mining. Requires BS/MS+ in Computational Sciences (or related field) with knowledge of ODBC, Access (MS SQL), SPSS or SAS. JobCode: MCSTA61

### Director/VP of BioInformatics

We are seeking a senior professional to develop and manage a state-of-the-art bioinformatics capability within the company, and to integrate the company's bioinformatics capabilities with its industrial and academic partners. The successful candidate will have a Ph.D. or equivalent in Computational Sciences, Mathematics or related field and at least 5 years experience as a bioinformatics senior professional in an industrial/academic setting. JobCode: BMBI71

Protogene offers a highly competitive compensation and benefits package and incentive stock options for key employees. We offer a collaborative and stimulating environment that recognizes achievement. Protogene is an equal opportunity employer promoting diversity throughout its work force. To apply for any of the above positions please submit your CV with cover letter and job code to:

Protogene Laboratories, Inc./ HR Manager 454 Page Mill Road, Palo Alto, CA 94304 Fax: (650) 842-7110, www.protogene.com



### POSTDOCTORAL POSITIONS IN MOLECULAR, CELL, AND STRUCTURAL BIOLOGY OF HUMAN NERVOUS SYTEM DISEASE

Positions are available at the Nathan Kline Institute with dual appointment at New York University School of Medicine in a large program for molecular neuroscience and clinical research on the causes and treatment of Alzheimer's disease (AD) and related dementias. The program provides a rich environment for postdoctoral training and more advanced career development in fundamental neuroscience and its relation to neuropsychiatric disease. Current areas in which openings may exist include (1) cell biology of vesicular trafficking and protease regulation in Alzheimer's disease; (2) glial-axon signaling and axonal transport; (3) molecular control of neuronal cytoskeleton dynamics by phosphorylation; (4) molecular biology of striatal development; (5) pathobiology of neurodegeneration in transgenic and gene deletion models. Applicants should send curriculum vitae, a list of three references, and a statement of interests to: Ralph Nixon, Ph.D., M.D., Nathan Kline Institute, 140 Old Orangeburg Road, Orangeburg, NY 10962. FAX: 914-398-5422. Equal Opportunity Employer/Affirmative Action.

A Mayo Clinic POSTDOCTORAL POSITION with NIH Training Grant support is available for a Postdoctoral Fellow with an interest in the molecular mechanisms of liver cancer development. The project, which will be based in the laboratory of David I. Smith, Ph.D., is a collaborative effort between the Division of Gastroenterology and Hepatology and the Cancer Genetics Program of the Mayo Comprehensive Cancer Center to study the role of chromosomal fragile sites in liver carcinogenesis. Ongoing studies include fragile site cloning, identification of genetic abnormalities in liver cancer, and discovery of gene targets in liver carcinogenesis. Candidates must be a U.S. citizen or permanent resident and have an M.D. or Ph.D. degree. Please send curriculum vitae and the names of three references to: Lewis R. Roberts, M.D., Ph.D., Division of Gastroenterology and Hepatology, Mayo Clinic, 200 First Street S.W., Rochester, MN 55905. Telephone: 507-284-4823; e-mail: roberts.lewis@mayo.edu. Mayo Foundation is an Affirmative Action and Equal Opportunity Employer and Educator.

### POSTDOCTORAL FELLOW RESEARCH ASSOCIATE

Applications are invited for Postdoctoral/Research Associate positions to study the role of metabolic factors in the regulation of blood vessel growth at the whole animal, cellular, and molecular levels. Candidates must have a Ph.D. or an M.D. with an interest in physiological research and training in cellular and/or molecular biology of vessel growth regulation. Salary will be commensurate with experience and credentials. Interested applicants should send a curriculum vitae, a statement of research interests, and names of at least three references to: Dr. Tom Adair, Department of Physiology and Biophysics, University of Mississippi Medical Center, Jackson, MS 39216. The University of Mississippi Medical Center is an Equal Opportunity Employer/Minorities/Fenales/Disabled/Teterans.

### POSTDOCTORAL POSITION ENVIRONMENTAL MICROBIOLOGY

A Postdoctoral position is available to investigate the biochemistry of anaerobic dehalogenations. The research involves isolation and mechanistic characterization of a novel dehalogenating enzyme and requires previous experience in protein purification. Further experience in molecular biology is a plus. The position is available in October or November 1999. Send curriculum vitae and names of references to: Dr. Alfred M. Spormann, Environmental Engineering and Science, Department of Civil and Environmental Engineering, Stanford, CA 94305-4020. FAX: 650-725-3164; e-mail: spormann@stanford.edu.

### POSITIONS OPEN

### POSTDOCTORAL FELLOWSHIPS

Albert Einstein College of Medicine. The "Mechanisms of Cardiovascular Disease" Training Grant offers NIH-funded Postdoctoral positions to candidates with Ph.D's and or M.D's desiring two or three years of laboratory-based training. Participating laboratories have programs in molecular regulators of angiogenesis (J. A. Ware); cardiomyocyte growth and cell death (R. N. Kitsis); gap junctions in cardiovascular tissues (D. Spray); transcription factors in cardiac development (T. R. Evans, H. Nguyen); TGF-B in vascular growth (E. Bottinger); diabetic cardiomyopathy (M. Charron); mechanisms of cell migration (J. Condeelis); antimyosin antibodies in myocarditis (B. Diamond); cholesterol in membrane transport (M. Klellan); genetics of cardiovascular abnormalities (B. Morrow, R. Kucherlapati, A. Skoutchi); caveolae in cardiovascular tissues (M. Lisanti); ion channel regulation (T. McDonald); monocyte-endothelial interaction (J. Berman); prostaglandin transport (V. Schuster); adhesion molecules (P. Stanley); T. cruzi myocarditis (H. Tanowitz); and cell cycle control (R. Pestell, L. Zhu). Candidates must be U.S. citizens or permanent residents. To apply, please send a curriculum vitae, names of three references, and a statement of research interests to: I. Anthony Ware, M.D., Chief, Cardiovascular Division, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461. FAX: 718-430-8989. Equal Opportunity Employer.

# POSTDOCTORAL POSITIONS MAMMALIAN CELL CYCLE REGULATION Fred Hutchinson Cancer Research Center

Two Postdoctoral positions are immediately available to study molecular mechanisms of cell cycle control in normal and neoplastic cells. Current studies include the regulation of G1 cyclins and CDK inhibitors by proteolysis and subcellular localization. Candidates should have a Ph.D. or M.D. degree and a strong background in molecular/cellular biology. Please send curriculum vitae, a statement of research experience/interests, and the names of three reference-

Bruce E. Clurman, M.D., Ph.D. Fred Hutchinson Cancer Research Center 1100 Fairview Avenue North D1-100 Seattle, WA 98109-1024 E-mail: belurman@thcrc.org FAX: 206-667-6124

POSTDOCTORAL POSITION. Two Postdoctoral positions are available immediately to study the mechanisms of protein translocation during signal transduction pathways. Work involves structure-function analysis, membrane-protein, and protein-protein binding studies using surface plasmon resonance, and cell studies by multi-photon microscopic imaging. The laboratory is equipped with state-of-the-art facilities and provides a highly challenging and supportive environment. Energetic candidates with a strong background in cell biology or biophysics are encouraged to apply. Please send curriculum vitae and names of three references to: Dr. Wonhaw Cho, Department of Chemistry (M/C 111), University of Illinois at Chicago, 845 West Taylor Street, Chicago, IL 60607. E-mail: wcho@uic.edu; website: http://brahms.chem.uic.edu.

POSTDOCTORAL POSITION available in area of tyrosine phosphorylation and focal adhesion signaling. Recent Ph.D. graduare wanted to study protein tyrosine phosphatases and the regulation of dephosphorylation of focal adhesion-associated proteins. Experience in molecular biology, biochemistry, and tissue culture an asset. Send curriculum vitae and three letters of recommendation to: Dr. Michael Schaller, Department of Cell Biology and Anatomy, University of North Carolina at Chapel Hill, CB# 7090, 108 Taylor Hall, Chapel Hill, NC 27599. E-mail: crispy4@med.unc.edu. Equal Opportunity/ Affirmative Action Employer.

### POSITIONS OPEN

# POSTDOCTORAL POSITIONS IN (1) INFLAMMATION AND FIBROSIS (2) MOLECULAR HEMATOPOIESIS

The first position is a newly funded interdisciplinary project to study inflammatory cell-fibroblast interactions at the level of intracellular signaling. Experience in molecular biology, tissue culture, transcription factor research, and/or signal transduction preferred. The second position, in signaling and transcriptional regulation of blood cell development, is to implement cDNA array screening strategies to identify new signaling proteins and transcriptional regulators of myeloid-specific gene expression, and to study their roles in myeloid progenitor cell development. Experience in molecular biology, subtraction cloning differential display, yeast 1 and 2 hybrid systems, and/or gene arrays preferred. Mail/FAX/e-mail curriculum vitae and names of three references to: Dr. Steven Ackerman and Dr. John Varga, Departments of Bio-chemistry and Molecular Biology, and Medicine, (MC536), A-312 College of Medicine West, University of Illinois at Chicago, 1819 West Polk Street, Chicago, IL 60612. FAX: 312-996-5623; e-mail: sackerma@uic.edu.

UIC is an Affirmative Action/Equal Opportunity Employer.

### POSTDOCTORAL POSITION IN BEHAVIORAL NEUROSCIENCE

A Postdoctoral position is available immediately in an interdisciplinary project investigating central processes and neuronal circuits (including the basal forebrain cholinergic system) underlying anxiety and autonomic control in the rat (Principal Investigators: Gary G. Berntson, Martin Sarter). The research involves a combination of neuropharmacological, physiological, and behavioral approaches. Experience in at least two of these areas is desirable. Consideration of candidates is ongoing. Send curriculum vitae, selected reprints, and three letters of recommendation to: Dr. Gary G. Berntson, The Ohio State University, 1885 Neil Avenue, Columbus, OH 43210. FAX: 614-292-4537; e-mail: berntson.2@osu. edu. The Ohio State University is an Affirmative Action/ Equal Opportunity Employer.

### POSTDOCTORAL POSITIONS Vertebrate Homeobox Genes in Development and Oncogenesis

Projects include roles of homeobox genes in cellular proliferation, differentiation, and cell cycle control (Development 1999, in press), neuronal development (J. Neuroscience 18:8322, 1998) and prostate development and cancer (Genes Dev. 13:966, 1999). Qualified individuals should have prior experience in molecular and/or developmental biology. Please send curriculum vitae and three letters of reference to: Cory Abate-Shen, Ph.D., Center for Advanced Biotechnology and Medicine, University of Medicine and Dentistry of New Jersey, Robert Wood Johnson Medical School, 679 Hoes Lane, Piscataway, NJ 08854. FAX: 732-235-4850; e-mail: marshall@cabm.rutgers.edu.

### POSTDOCTORAL POSITIONS IN CELL BIOLOGY OF HUMAN DISEASE

Two Postdoctoral positions available to study protein trafficking and protein interactions of the human hereditary hemochromatosis protein, HFE, and to study mechanisms of endocytosis. Experience in molecular biology and/or protein chemistry required for each project. Please send curriculum vitae and references to: Dr. C. A. Enns, Department of Cell Biology, L215, Oregon Health Sciences University, Portland, OR 97201. E-mail: ennsca@ohsu.edu.

POSTDOCTORAL POSITION is immediately available to study the mechanisms of linage-specific gene activation in the hematopoietic system by chromatin remodeling proteins or signaling associated with thrombopoietin-induced platelet biogenesis. Please send curriculum vitae to: Dr. Katya Ravid, Department of Biochemistry, K225, Boston University School of Medicine, 715 Albaney Street, Boston, MA 02218. E-mail: ravid@med-biochem.bu.edu. Funding is available for U.S. permanent residents or citizens only.

# TENURE-TRACK POSITION IN CELLULAR AND MOLECULAR BIOPHYSICS NICHD, NIH

The Laboratory of Cellular and Molecular Biophysics (LCMB), National Institute of Child Health and Human Development, National Institutes of Health, seeks applicants for a tenure-track position in biophotonics or a related area. The successful candidate will be expected to establish an independent research program, utilizing combined biophysical, molecular and physiological approaches to biological problems consistent with the overall mission of LCMB. Candidates must show evidence of strong mathematical and computational skills and must have received substantial training in the physical and biological sciences. Qualified candidates must have a doctoral degree, a minimum of five years of postdoctoral experience, and should be able to demonstrate research success as evidenced by a strong publication record. Preference will be given to qualified candidates with significant experience in the area of biophotonics including wide-field, confocal and two-photon fluorescence microscopy, static and dynamic light scattering, optical properties of biological tissues, and applications of biophotonics to the study of exocytosis and/ or membrane biology. The willingness and demonstrated ability to collaborate with other research scientists and to participate in the mentoring of postdoctoral fellows also will be a significant factor in the selection process. Proposed research programs should be designed, in part, to interface with ongoing studies in LCMB. Candidates should submit curriculum vitae, two-page statement of research plans, and three letters of recommendation by 1 November, 1999 to: Chair, Laboratory of Cellular and Molecular Biophysics Search Committee, c/o Dr. Joshua Zimmerberg, Chief, LCMB NICHD NIH, Bldg. 10, Rm 10D14, Bethesda MD 20892-1855. EqualOpportunityEmployer.

# HEALTH SCIENTIST ADMINISTRATOR NATIONAL INSTITUTE ON AGING NATIONAL INSTITUTES OF HEALTH

The Neuroscience and Neuropsychology of Aging Program is seeking a Health Scientist Administrator (HSA), GS-601/602-13/14; salary track-PhD (\$58,027 to \$89,142), salary track-MD (\$66,344 to \$93,233 plus up to \$19,000 per annum as Physicians Comparability Allowance). Non-Federal candidates with PhD or MD may be eligible for a recruitment bonus of up to 25% of base pay. The HSA will serve in two roles in the Dementias Branch, as the Program Director for Diagnosis in the Clinical Studies program and as Assistant to the Program Director, Alzheimer's Disease Centers program. The incumbent will aid in developing the programs, defining their long-range goals, and contacting and encouraging scientists with appropriate expertise and interest to develop and submit research proposals. Practical experience in clinical diagnosis of dementias of aging and related research is required. Research experience in Alzheimer's disease is preferred. U.S. citizenship is required. For copy of application requirements- by FAX, call 1-800-728-5627, ID# 1213; by e-mail, use http://careerhere.nih.gov/. Refer to announcement # NIA-99-890. Contact Marian Patten, NIA Personnel Office, (301) 496-5347, with questions. Applications must be postmarked by December 31, 1999.

NIH is an Equal Opportunity Employer

# Scientific & Marketing Opportunities

At Bayer Diagnostics, one of the world's premier diagnostic companies, we make a positive difference in human health every day. If you want to make a difference, come join us at our Tarrytown, NY Global Headquarters, as we design health care systems of the future. Due to our tremendous growth, we have immediate opportunities at all levels for scientists with exceptional talent in medical diagnostics or related disciplines.



# PRODUCT DEVELOPMENT SCIENTISTS

Junior - Senior Levels, BS to Ph.D

- Immunochemistry and Metabolic Disease State
- Infectious-Disease Assay Development
- Cardiovascular Homocysteine Immunoassay Development
- Hematology, Clinical Chemistry Reagent Development

### DIAGNOSTIC ONCOLOGY

• Manager, Clinical Research

### ENGINEERS

• Product and New Systems-Support

### MARKETING MANAGERS

- Clinical Chemistry
- Hematology
- Immune and Controls
- Urine Analysis Automation

Attractive salaries. Excellent benefits that include health, dental, pension, 401(k) programs, tuition reimbursement, and a comprehensive relocation program. A progressive environment that's conducive to professional development. You'll find them all at Bayer Please SEND/FAX/E-MAIL your resume, indicating position of interest, to: Bayer Corporation, Human Resources, Dept., 511 Benedict Avenue, Tarrytown, NY 10591-5097. FAX (914) 524-3046. E-Mail william.soltesz.b@bayer.com Vist our website at www.bayerdiag.com for additional information and opportunities. Equal opportunity employer M/F. We appreciate your interest in our company. Unfortunately, we will only be able to respond to those individuals chosen for interviews or additional follow-up.



Business Group Diagnostics

Two POSTDOCTORAL POSITIONS available immediately within the Molecular Physiology and Genetics Section of the National Institute on Aging (NIH) to work as part of an interdisciplinary team investigating basic mechanisms of aging. One position will focus on the role of insulin signal transduction in aging and retardation of aging and age-related disease by caloric restriction. Applicants must possess relevant molecular biology, nutrition, and animal model experience. Experience in aging or diabetesrelated research is highly desired. A second position will involve investigation of the effects of caloric restriction and sodium intake cardiovascular risk factors in nonhuman primates. Applicants with relevant experience investigating cardiovascular risk in animal model systems are preferred. Both positions require that applicants have less than five years of postdoctoral experience. Contact: Dr. Mark A. Lane, Intramural Research Program, GRC, National Institute on Aging, NIH, P.O. Box 56, 5600 Nathan Shock Drive, Baltimore, MD 21224. Telephone: 301-594-1210; FAX: 301-480-0504; e-mail: mlane@ vms.grc.nia.nih.gov. NIH is an Equal Opportunity Employer.

### MOLECULAR BIOLOGY OF ARTERIOSCLEROSIS Boston Heart Foundation/ MIT Arteriosclerosis Center

A POSTDOCTORAL FELLOWSHIP in mammalian molecular biology will be available at the Boston Heart Foundation (BHF) on January 1, 2000. Research involves arterial matrix proteins and atherogenesis, and includes sequencing and knocking out arterial wall genes. The Boston Heart Foundation is a nonprofit research and clinical center adjacent to MIT. Research will be conducted at BHF and MIT facilities. To apply, send curriculum vitae and three letters of reference to: Dr. Robert S. Lees, Professor, Harvard/MIT Division of Health Sciences and Technology, Boston Heart Foundation, 139 Main Street, Cambridge, MA 02142.

### POSTDOCTORAL FELLOW ALBERT EINSTEIN COLLEGE OF MEDICINE

Postdoctoral position immediately available to study mechanisms of retroviral cell killing. The work will focus on the role of envelope-receptor interactions in avian leukosis virus-induced cell death (*Cell* 87:845; *PNAS* 94:11617). A background in molecular biology and an interest in cell biology is preferred. Send curriculum vitae and references to: Jurgen Brojatsch, Ph.D., Albert Einstein College of Medicine, Department of Microbiology and Immunology, 1300 Morris Park Avenue, 404 Golding Building, Bronx, NY 10461. E-mail: brojatsc@accom.vu.edu. *Equal Opportunity Employer.* 

### POSTDOCTORAL POSITIONS

Regulation of cell proliferation and differentiation in hematopoiesis and cancer development. Background in one of the following areas: molecular biology, protein chemistry, cell cycle regulation, hematology, and transgenic mice. Qualified candidates must be U.S. citizens or permanent residents and have received a Ph.D. or M.D. degree. Send curriculum vitae including names of three references to: Dr. Dong-Er Zhang, The Scripps Research Institute, MEM-L51, 10550 North Torrey Pines Road, La Jolla, CA 92037. E-mail: dzhang@scripps.edu.

POSTDOCTORAL POSITION (one-year, renewable) available November 1, 1999, to conduct research on nitrogen cycling and gas production in temperate forest ecosystems. Ph.D. in soils, ecology, or related field required. Competence in analytical biogeochemistry and experience with gas flux techniques highly desirable. Send application letter, curriculum vitae, and three letters of reference by October 15, 1999, to: Dr. Peter Groffman, Institute of Ecosystem Studies, Box AB, Millbrook, NY 12545-0129. E-mail: groffmanp@ecostudies.org. An Equal Opportunity/Assimuative Action Employer.

### POSITIONS OPEN

# THE UNIVERSITY OF MICHIGAN MEDICAL SCHOOL DEPARTMENT OF PATHOLOGY

The University of Michigan Department of Pathology has openings for two POSTDOCTORAL POSITIONS in our research programs studying mech anisms of chromosomal rearrangement in cancer with an emphais on molecular mechanisms of DNA double-strand break repair. One Fellow will lead a project using biochemical methods and in vitro reconstitution. the other a project using genetic models of repair and translocation. Both will start with yeast as a model and expand into mammalian systems, patient specimens, and microarrays as interested. See website: http:// tewlab.path.med.umich.edu for more information. Candidates should have a Ph.D. or M.D., international peer-reviewed publications. A strong background in applied biochemistry and/or molecular biology is required, with a background in genetics preferred. Funding is available for U.S. citizens or permanent residents. Please forward your curriculum vitae, cover letter, and three references to:

Thomas E. Wilson, M.D., Ph.D.
Department of Pathology
University of Michigan Medical School
Medical Science 1 M4214/0602
1301 Catherine Road
Ann Arbor, MI 48109-0602
E-mail: wilsonte@umich.edu
FAX: 734-763-6476

The University of Michigan is an Equal Opportunity Employer and welcomes applications from women and minorities.

### POSTDOCTORAL/RESEARCH ASSOCIATE

position in experimental therapy. Areas of interest include (1) dendritic cell immunology/biology; (2) marrow microenvironment; (3) chronobiology; (4) immunodetection/therapy of tumor and nontumor pathophysiological conditions; (5) vascular biology of cancer and reproductive biology. Ph.D. with zero to four years of experience and knowledge in several of the following areas: immunology, physiology, cell/ molecular biology, histochemistry/pathology. Very good verbal and written English skills required. Starting salary is \$23,000 to \$31,000. You will be given approximately 25 percent time to work on your own independent projects and funding opportunities with the possibility of future faculty opportunity. Position available immediately. Send curriculum vitae and three references to: Dr. Rosalyn Blumenthal, Director, Tumor Biology, Garden State Cancer Center, 520 Belleville Avenue, Belleville, NJ 07109. FAX: 973-844-7020. Equal Opportunity Employer.

### NITRIC OXIDE

POSTDOCTORAL POSITION in Departments of Surgery and Physiology to examine role of NO in acute cardiac allograft rejection. Functional, biochemical, and molecular biologic parameters measured in addition to electrophysiologic parameters measured from rejecting rat allograft cell and iNOSdeficient mouse preparations. Special interest and expertise in cellular electrophysiology and electrophysiological techniques. Complete Axon system interfaced to state-of-the-art microscope and cellular perfusion system. Send curriculum vitae to: T. Bruce Ferguson, Jr., M.D., Departments of Surgery and Physiology, Louisiana State University School of Medicine, 1901 Perdido Street, New Orleans, LA 70112. LSUHSC is an Equal Employment Opportunity Affirmative Action Employer.

POSTDOCTORAL POSITION available to study (1) the role of glycation in long-term diabetic complications and (2) alpha-crystallins as molecular chaperones. Recent Ph.D. or M.D. with training in protein biochemistry and molecular biology is desirable. Applicants should send a curriculum vitae and names, addresses, and e-mails of three references to: Dr. E. C. Abraham, Professor, Department of Biochemistry and Molecular Biology, Medical College of Georgia, Augusta, GA 30912-2100. E-mail: eabraham@mail.mcg.edu. Medical College of Georgia is an Equal Opportunity/Affirmative Action Employer.

### POSITIONS OPEN

# POSTDOCTORAL POSITIONS IN IMMUNOLOGY BAYLOR COLLEGE OF MEDICINE

Postdoctoral positions are immediately available in the Department of Microbiology and Immunology to study the molecular and cellular mechanisms of B cell development and differentiation and the role of germinal center reaction in immune responses. Applicants should have a Ph.D. and/or M.D. degree and experience in molecular biology and cell biology. Please send curriculum vitae, names and addresses of three references to: Shuhua Han, M.D., Department of Microbiology and Immunology, BCMM-M929 DeBakey Center, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030-3498. E-mail: shan@bcm.tmc.edu. Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.

### **FELLOWSHIPS**

# BASIC RESEARCH AND CLINICAL GASTROENTEROLOGY FELLOWSHIP AT UCLA

Subspecialty Training and Advanced Research (STAR) is a flexible program, based in the Department of Medicine, UCLA School of Medicine, designed to promote academic careers for Physicians with or without a Ph.D. Basic research is combined with Clinical Fellowship training leading to a Ph.D. degree and subspecialty certification. Physicians who already obtained a Ph.D. degree perform postdoctoral research and receive clinical training leading to subspecialty certification. Clinical Fellowship will be at the Division of Digestive Diseases of the Department of Medicine and will be supervised by Dr. John H. Walsh and Dr. Rudolph Bedford. Basic research is also at this Division in the Unit of Signal Transduction and GI Cancer established by Dr. Enrique Rozengurt. A major aim of this laboratory is to identify the signaling pathways that stimulate the proliferation of normal and cancer cells (e.g., *JBC* **273**:410, 1998; *JBC* **273**:14626, 1998; *JBC* **273**:27662, 1998; *JBC* 274:9224, 1999; Cancer Res. 59:572, 1999). Interested candidates (U.S. citizens or permanent residents) should send a curriculum vitae, an introductory letter containing a brief description of research and clinical experience, and contact information for three references to: E. Rozengurt and J. H. Walsh, 900 Veteran Avenue, Warren Hall, Room 11-124, Los Angeles, CA 90095-1786. FAX: 310-267-2399.

### HARVARD UNIVERSITY BULLARD FELLOWSHIPS IN FOREST RESEARCH

Each year Harvard University awards a limited number of Bullard Fellowships to individuals in biological, social, physical, and political sciences to promote advanced study, research, or integration of subjects pertaining to forested ecosystems. The Fellowships, which include stipends up to \$30,000, are intended to provide individuals in mid-career with an opportunity to utilize the resources and to interact with personnel in any department within Harvard University in order to develop their own scientific and professional growth. In recent years Bullard Fellows have been associated with the Harvard Forest, Department of Organismic and Evolutionary Biology, and the J. F. Kennedy School of Government and have worked in areas of ecology, forest management, policy, and conservation. Fellowships are available for periods ranging from four months to one year and can begin at any time in the year. Fellowships are not intended for graduate students or recent postdoctoral candidates. Further information may be obtained from: Committee on the Charles Bullard Fund for Forest Research, Harvard University, Harvard Forest, P.O. Box 68, Petersham, MA 01366 USA. E-mail: drecos@fas.harvard.edu. Annual deadline for applications is February. Applications from international scientists, women, and minorities are encouraged.

### University of California— Santa Barbara Dean of the Donald Bren School of Environmental Science and Management

The University of California at Santa Barbara invites nominations and applications for the position of Dean of the Donald Bren School of Environmental Science and Management. We seek an individual with an outstanding record of scholarly achievement that is appropriate for appointment as a full Professor. We also seek an individual with vision and creative leadership abilities, demonstrated credentials in administration, and an established national and international reputation within the broader environmental science and management community. The Donald Bren School of Environmental Science and Management at UCSB is growing rapidly, both in the size and stature of our academic programs, and the successful applicant will be expected to provide the direction. inspiration and administrative ability to continue and expand upon these developments. In addition to the attributes mentioned above, important qualifications should include: a broad appreciation and perspective for the science, policy and management aspects of environmental issues; and a demonstrated ability to interface effectively with educational, governmental and industrial institutions, including philanthropic foundations

The Bren School's mission is to lead research in environmental issues, train research scientists and professionals, and identify and solve environmental problems. The School's mission requires its scholars to build the natural and social science knowledge base underlying current environmental issues; it also requires its public policy, legal, and business scholars to evaluate and design environmental policies at the local, state, national, and international levels. The Bren School's mission also includes fostering multi-disciplinary approaches to the study of the environment and humankind's impact on natural resources. The School features both a Ph.D. program, which embodies the broad research efforts of the School, as well as a Master's program, which provides a professional degree and trains students to work in the private and public employment sectors. The gift from the Bren Foundation enables a cooperative program involving law and business schools throughout the UC system, with classes at UCSB taught by systemwide faculty and enrolling students from other campuses. The School currently has 15 faculty, 22 Ph.D. students and 87 Master's students. Faculty honors include membership in the National Academy of Sciences; fellowship in the American Geophysical Union, American Association for the Advancement of Science, and American Academy of Arts and Sciences; prestigious prizes and lectureships; and editorial roles for leading scholarly journals.

All inquiries, nominations and applications will be held in strictest confidence. Applications and nominations will be received until the position has been filled. However, the screening process will begin immediately, and applications are encouraged prior to November 1, 1999.

Nominations and expressions of interest should be submitted to:

Prof. G. E. Lucas
Chair, Search Committee for the Dean of
the Donald Bren School of Environmental Science and Management
Office of Academic Personnel,
Cheadle Hall 5109
University of California, Santa Barbara
Santa Barbara, CA 93106

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The Department of Biochemistry and Molecular Biology expects to fill several faculty positions in the next three to four years in areas that interface biology and chemistry. We now invite applications for a tenured position at the ASSO-CIATE/FULL PROFESSOR level to begin September 2000, with a particular preference for individuals with research programs that complement our existing strength in plant molecular biology and biochemistry. Exceptionally qualified junior candidates will also be considered. Individuals working on fundamental questions in areas such as cell-cell communication, signal transduction, organellar biogenesis, nucleic acid and protein structure-function relationships are particularly encouraged to apply

We seek individuals with an established record of significant accomplishment in research and creative scholarship. The successful candidate will have access to graduate students from several interdisciplinary graduate programs and will be expected to participate in teaching at the undergraduate and graduate levels.

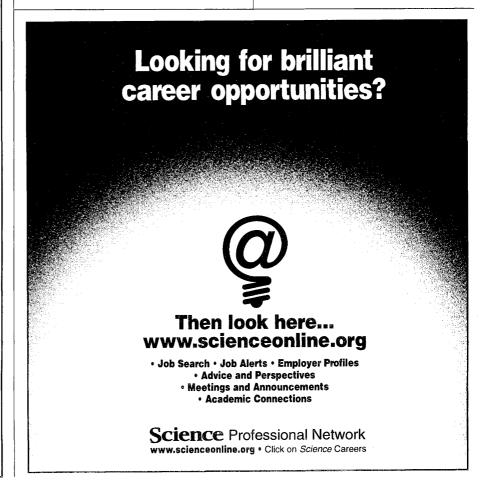
Applicants should send a curriculum vitae, a description of research interests, and three letters of recommendation to Professor Lila M. Gierasch, Head, Department of Biochemistry and Molecular Biology, LGRC 913, University of Massachusetts, Amherst, MA 01003-4505. Review of applications will begin November 1, 1999 and continue until the position is filled

Women and members of minority groups are encouraged to apply. AA/EOE

### Post-Doctoral Research Fellowship Positions The Pulmonary -Critical Care Medicine Branch (PCCMB), NHLBI

Post-doctoral research fellowship positions are available for individuals interested in basic cell molecular biology, as well as bench to beside translational research. Opportunities for post-doctoral research fellowships exist within intramural PCCMB laboratories investigating signal transduction, nitric oxide, G proteins, protein modification, vesicular trafficking and cyclic nucleotide phosphodiesterases. Translational research opportunities include asthma, bacterial virulence factors, cystic fibrosis, emphysema, intersititial lung disease, lymphangioleiomyomatosis, oxidative lung injury, sarcoidosis, and susceptibility genes in pulmonary disease. Positions are available for a minimum of 2 years and may be extended for additional training. Candidates should possess a PhD or MD degree or equivalent. Position are available immediately. Interested individuals should submit a letter of interest, curriculum vitae. and three letters of recommendation to: Joel Moss, MD, PhD, Chief, Pulmonary Critical Care Medicine Branch, NHLBI, NIH, Bldg 10, Bldg 6D03, MSC 1590, Bethesda, MD, 20892-1590.

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**POSTDOCTORAL POSITION**. Two Postdoctoral positions will be available in the winter and spring of 1999–2000 to participate in studies of the molecular bases of bacterial cell division and the bacterial cell cycle.

(1) Biochemical studies of proteins involved in bacterial division site placement. The work will involve studies of the in vitro and in vivo interactions of proteins involved in division site placement (Rothfield and Zhao, Cell 84:183-186, 1996), using molecular biological and biochemical approaches, combined with cellular localization by fluorescence microscopy. (2) Interactions of the E. coli chromosomal origin of replication with the cytoplasmic membrane. The work will involve a combination of molecular biology, membrane fractionation, and in vitro DNA-binding studies, with emphasis on proteins involved in chromosome sequestration and in replication initiation. Send curriculum vitae, brief description of prior research experience, and the names of several references to: Dr. L. Rothfield, University of Connecticut Health Center, Farmington, CT 06032.

POSTDOCTORAL POSITION at Yale School of Medicine. A NIH-funded liver Training Grant position is available immediately to work as a liaison between the laboratories of Dr. Roberto Groszmann and Dr. William C. Sessa. A Ph.D. or M.D.-Ph.D. with strong experience in the techniques of cellular and molecular biology of liver disease or with relevant background in vivo models of liver and /os vascular disease are sought. Applicants must be Us. residents (pennanent) or citizens. Please send curriculum vitae and names of three references to: William C. Sessa, Ph.D., Yale University School of Medicine, Boyer Center for Molecular Medicine, 295 Congress Avenue, New Haven, CT 06536. FAX: 203-737-2290; e-mail: william.sessa@yale.edu.

### **GLOBAL OPPORTUNITIES**

# POSTDOCTORAL RESEARCH ASSOCIATE POSITION IN COSTA RICA

A multidisciplinary team of Tropical Forest Ecologists, the CARBONO project (website: www.fiu. edu/~obrienj/carbono.htm), is seeking a Postdoctoral Associate with expertise in micrometeorological measurement of trace gas fluxes, plant ecophysiology, or isotope analysis. The position is funded for one year with possible funding up to three years, and will focus on eddy correlation measurements of CO<sub>2</sub> and H<sub>2</sub>O exchange of old growth tropical forest, and partitioning sources of fluxes. The successful applicant must be capable of working independently, of guiding Costa Rican Technicians, and have experience with electronic instrumentation. Spanish skills are desirable. The position is based at the OTS La Selva Biological Station in Costa Rica. Salary starts at \$32,000 with room and board provided. The home institution is Florida International University, the State University of Florida at Miami. Applications and inquiries should be sent to: Steve Oberbauer, Biology, Florida International University, Miami, FL 33199. E-mail: oberbaue@fiu.edu. Applications should include a curriculum vitae, statement of research interests, names, addresses, telephone numbers, and e-mails of three references. Application deadline is 7 October . The approximants will be considered until the position is filled. Preferred starting date is 21 October 1999.

ACADEMIC STAFF in chemistry. Focus on organic and biological chemistry. Macquarie University. Sydney, Australia. The Department of Chemistry wishes to appoint two academic staff to enhance its research and teaching focus on organic and biological chemistry. For information and method of application is available on website: http://www.chem.mq.edu.au/opportunity or telephone: Mrs. Maria Hyland, Telephone: 61-2-9850-8275; FAX: 61-2-9850-8313; e-mail: hod@chem.mq.edu.au. Closing date: 1 November 1999. Australia's Innovative University. Women are particularly encouraged to apply. Equal Employment Opportunity and no snoking in the workplace are University policies.

### **POSITIONS OPEN**

POSTDOCTORAL POSITIONS in genetics and molecular biology of aging. Studies include longevity genes in yeast, homologs in humans, and their molecular mechanisms. (Genetics 152:179; Trends Microbiol. 7:247; Mol. Biol. Cell in press) Applicants with experience in genetics and/or molecular biology send curriculum vitae and names of three references to: Dr. S. M. Jazwinski, Department of Biochemistry, Louisiana State University Medical Center, 1901 Perdido Street, New Orleans, LA 70112. E-mail: sjazwi@lsumc.edu. LSUMC is an Affirmative Action/Equal Opportunity Employer.

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### **EUROPEAN OPPORTUNITIES**

### THREE POSTDOCTORAL RESEARCH FELLOWSHIPS IN EVOLUTIONARY ECOLOGY UNIT AT IYVÄSKYLÄ, FINLAND

We have the status as Centre-of-Excellence in Research from the Academy of Finland, and we seek candidates for two- to three-year Postdoctoral positions in evolutionary biology. Our dynamic group has broad research interests: signal evolution, evolution of reproductive strategies, population ecology, and soil food webs (website: http://www.jyu.fi/bio/EvolutionaryEcology.html). Applicants should be experienced Postdoctoral scientists in empirical/theoretical research on evolutionary ecology or population genetics. Successful candidates will develop their own research interests and collaborative research with other scientists in the well-funded group. Please send three references, a curriculum vitae, and a summary of research experience to: Prof. Rauno Alatalo, Department of Biological Environmental Science, P.O. Box 35, 40351 Jyväskylä, Finland. E-mail: alatalo@dodo.jyu.fi.

### LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN

The group for theoretical biophysics at the faculty of physics invites applications for a POSTDOCTORAL POSITION and several PH.D. STUDENTSHIPS in the fields of functional dynamics of biomolecular machines, self-organizing neural networks, and combinations thereof. For details see the website: http://www.imo.physik.uni-muenchen.de/imo/stellen/stellen.html#th

Funding periods of three years are envisaged; salaries are subject to the German civil service tariff-regulations (BATHa for the Postdoctoral, BATHa/2 for the Ph.D. students). Applications should be sent to: Prof. Dr. Paul Tavan, IMO, Ludwig-Maximilians-Universität München, Oettingenstrasse 67, München D-80538 Germany not later than October 18, 1999.

### **EUROPEAN OPPORTUNITIES**

### INSTITUTE FOR APPLIED CHEMISTRY BERLIN-ADLERSHOF (ACA)

ACA is jointly financed by the German Federal Government as well as the State of Berlin and additionally by industrial contract research. ACA is located in the Science and Technology Park Berlin-Adlershof together with other non-university research institutes and with science departments of the Humboldt University of Berlin.

 $\overrightarrow{ACA}$  invites applications effective January 1, 2000 for

(1) **PROJECT GROUP LEADER**, "Inorganic Materials for Heterogeneous Catalysis." The applicant is expected to have comprehensive experience in the preparation of inorganic solid-state materials for the use of heterogeneous catalysts. A close cooperation with the research groups of the institute working in the field of catalysis is required.

in the field of catalysis is required.

(2) GROUP LEADER. "Solid-State Analysis." The applicant will be in charge of the service group "Chemical Analysis and Characterisation of Catalytically Active Solid Materials." The methods comprise high-resolution and solid-state NMR, GC, and HPLC, chemical analysis, surface analysis (ESCA), transmission electron microscopy and XRD. The applicant is expected to have experience in the analysis of solid materials by synchrotron radiation methods. The task requires a close cooperation with project groups working in the field of catalysis, especially with the project group "in situ characterisation of heterogeneous catalysts."

Both positions will be paid according to German BAT tariff.

Interested applicants can check our website: http://www.aca-berlin.de.

Applications including a curriculum vitae, list of publications, the five most important publications as reprints, and three references should be sent until October 10, 1999, to the:

Institute for Applied Chemistry Berlin-Adlershof Attn: Prof. Dr. M. Baerns, Scientific Director Richard-Willstätter-Straße 12 Berlin D-12489 Germany

POSTDOCTORAL RESEARCH FELLOW-**SHIP** in biochemistry. A Postdoctoral position for non-French citizen is available at the Institut Curie, Paris (website: www.curie.fr/curie/cdrom), for a Biochemist to work on proteins required for motility induced by actin polymerization. The aim of this work is to mimic the motility of the bacteria Listeria, for both biological (model system for studying the molecular mechanism) and physical (force created by actin polymerization) applications. Solid knowledge in preparation of recombinant proteins, purification, fluorescent labeling is necessary. The candidate will work closely with Physicists, therefore an understanding and/or interest in physical science would constitute an advantage for an applicant. The net amount of the Fellowship (approximately US\$1,700 to \$2,300) is similar to European Union's Awards, depending upon age and quality of the applicant. Benefits for living expenses (approximately US\$400 per month) and travel expenses (one round trip from home country to Paris) will be added. Curriculum vitae and contact details should be sent to: Dr. C. Sykes, UMR 168, Institut Curie, 11, rue Pierre et Marie Curie, 75231, Paris Cedex 05 France. E-mail: sykes@ curie.fr.

A POSTDOCTORAL POSITION is available at Laboratoire D'Enzymologie et Biochemie Structurales (Centre National de la Recherche Scientifique, Gif-sur-Yvette, France) to study structures and functions of *E. coli* RNA helicases. The candidate should have experience in molecular biology and interest in biochemistry or structural biology. The position is funded for two years for European Union nationals only. Send curriculum vitae and names of two references to: Dr. Thierry Bizebard, Laboratoire D'Enzymologie et Biochemie Structurales, Centre National de la Recherche Scientifique, Bat.34-91198 Gif-sur-Yvette Cedex, France. Telephone: 33-1-69-82-42-36; FAX: 33-1-69-82-31-29; e-mail: bizebard@lebs.cnrs-gif.fr.

### **EUROPEAN OPPORTUNITIES**

### POSTDOCTORAL POSITIONS IN MOLECULAR VIROLOGY AND GENE THERAPY University of Geneva

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Candidates should have a Doctoral degree in mo-

lecular or cellular biology, hematology, or immunology. Salary: CHF 60,000-plus per year depending on experience, plus benefits. Send curriculum vitae and three references to: Didier Trono, M.D., Department of Genetics and Microbiology CMU, 1 rue Michel-Servet CH-1211 Geneva 4, Switzerland. FAX: 41-22-702-5721; e-mail: didier.trono@ medecine.unige.ch.

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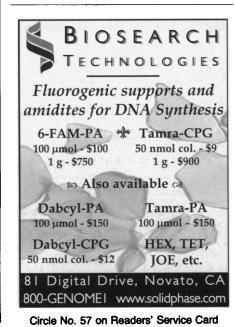
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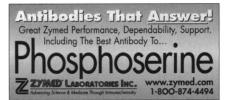
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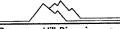
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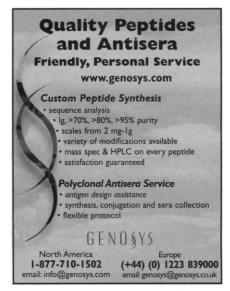


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Obtaining a license to perform automated PCR for your own research is easy. You can obtain the license automatically by using a licensed DNA polymerase (available from over 20 manufacturers) with an Authorized thermal cycler (available from a number of thermal cycler suppliers). Alternatively, if you choose not to use products from PE Biosystems or other licensed manufacturers, you need to purchase the appropriate PCR research

rights directly from PE Biosystems.\*

PE Biosystems also offers licenses for other uses of PCR (for example, for providing services) in a variety of fields, either directly through license agreements or through products from PE Biosystems and licensed competitors which convey these rights. In addition to research, these fields include agricultural testing, animal identity testing, environmental testing, food testing, forensics and human identity testing, and quality control testing.

For more detailed information on how to obtain a license to practice the PCR process, please visit our website at www.pebio.com/ab/pcr licensefaq. Or contact us at PE Biosystems, Licensing Department, 850 Lincoln Centre Drive, Foster City, CA 94404 USA, fax (650) 638-6071, phone (650) 638-5845.

Our goal is to continue developing PCR and maximizing its availability to users around the world.



<sup>\*</sup> Please note that, in addition to the PCR process rights, you may need other patent rights associated either with instruments or reagents.