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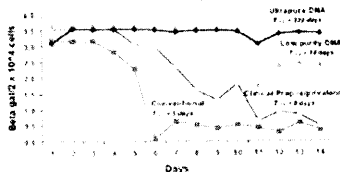
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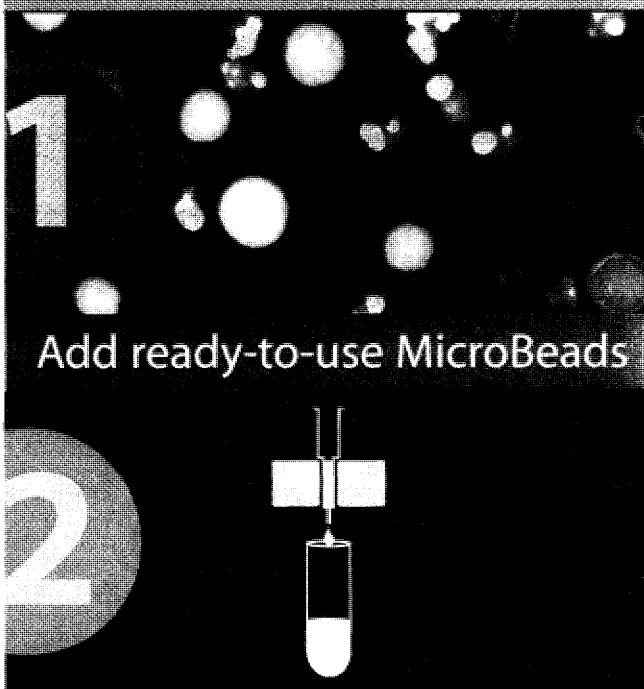
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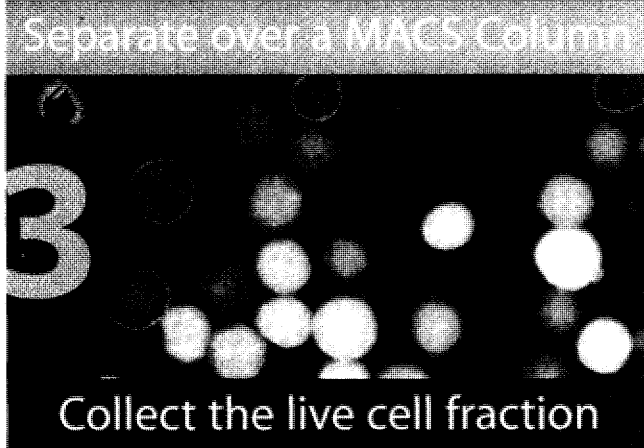
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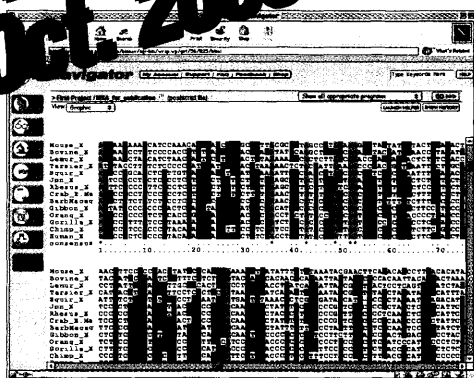
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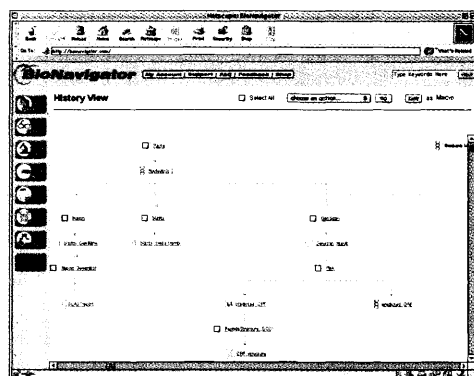
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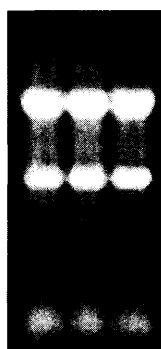
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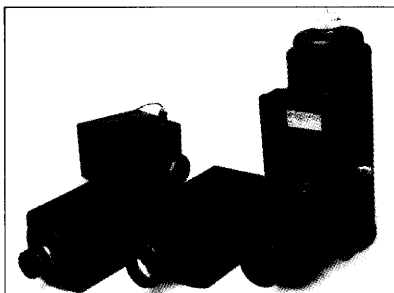
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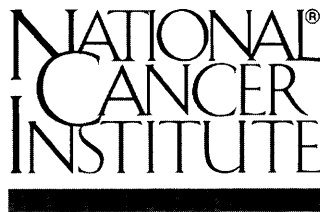
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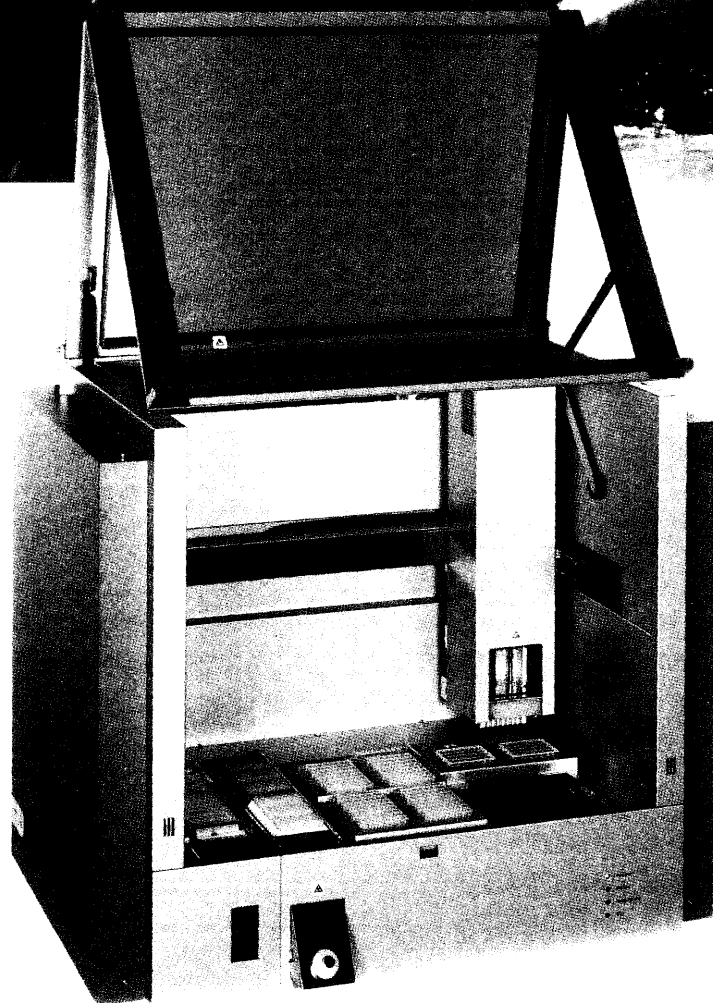
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LABORATORY TECHNOLOGY TRENDS: Assays, Antibodies, and Cell Separation

Antibodies and Beyond

New methods of assaying proteins and separating cells, mostly based on antibodies, are helping to increase the productivity of research in life science. Here's an outline of the latest techniques. by Peter Gwynne and Gary Heebner

As research in life science advances at an increasing pace, researchers expect vendors to maintain the flow of products that permit them to concentrate on performing their science rather than taking the time to produce do-it-yourself methodologies. Thus, ease of use and user-friendliness have emerged as the key themes for assay systems and cell separation techniques. Researchers and manufacturers also want techniques and products that will yield more quantitative results. And as research in life science moves from laboratories to clinical trials, the need grows for higher grade products.

What are the subjects of these demands? Assay methods such as the Enzyme-Linked Immunosorbent Assay (ELISA) are used for protein identification with blood groups, cell surface markers, drugs, and toxins. Cell separation, based on intrinsic differences between cells, is becoming increasingly commonplace for researchers who study single cells or homogeneous cell populations to understand how the cells function in different situations.

At the heart of many of these methods is the antibody, a marvelous product of the humoral immune system. Antibodies are naturally produced by mature B-lymphocytes in response to a foreign substance, or antigen. Those produced during an immune response recognize and bind only to the antigen or antigens that elicit the response. Once coated with antibodies, antigens are destined for destruction and elimination from an organism by other immune cells.

To play their role in this defense mechanism, antibodies must be extremely diverse and yet highly specific. They need the diversity to defend against a large number of unexpected and unknown possibilities. Through a sophisticated process of gene splicing, B-cells are thought to produce upwards of one billion different IgG antibodies that differ in the makeup of their binding sites. This capacity to produce an extraordinary number of unique binding motifs makes antibodies a formidable line of defense. To discriminate between themselves and among a multitude of foreign invaders, meanwhile, antibodies need a highly effective method of recognition at the molecular level. They achieve this specificity through the complementary nature of antibody binding, often referred to as a "lock and key" interaction between the antigen and the antibody. "Having an antibody to a particular cell type allows you to pull it out of the entire population," says Steven Dowdy a Howard Hughes investigator at Washington University St. Louis. "The specificity of the antibody is of tremendous utility."

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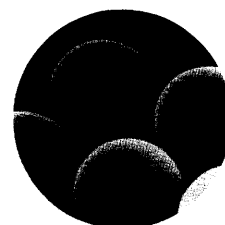
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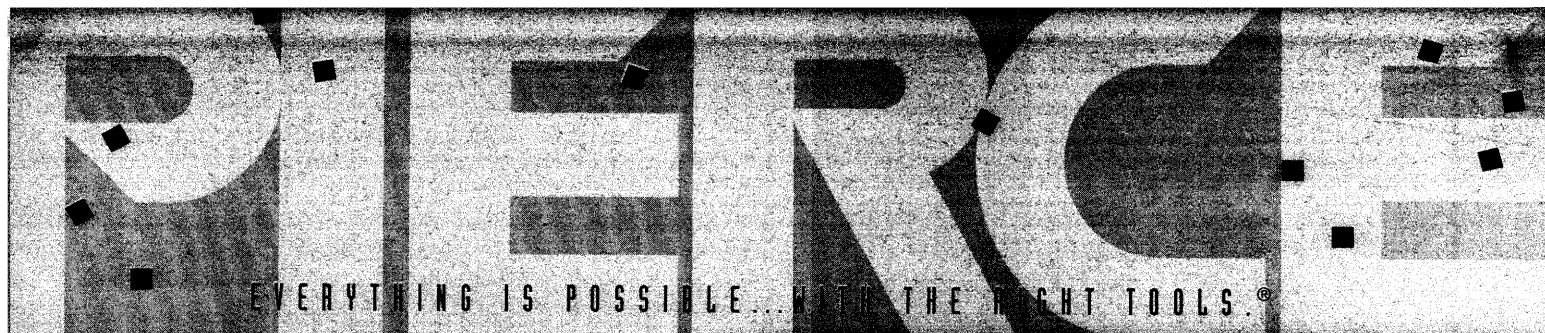
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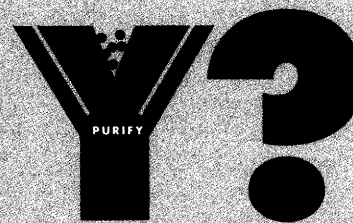


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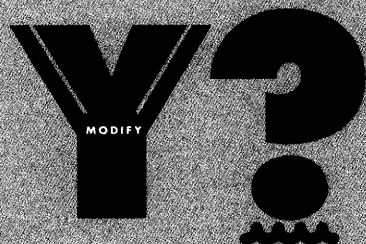


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Two Types of Antibody

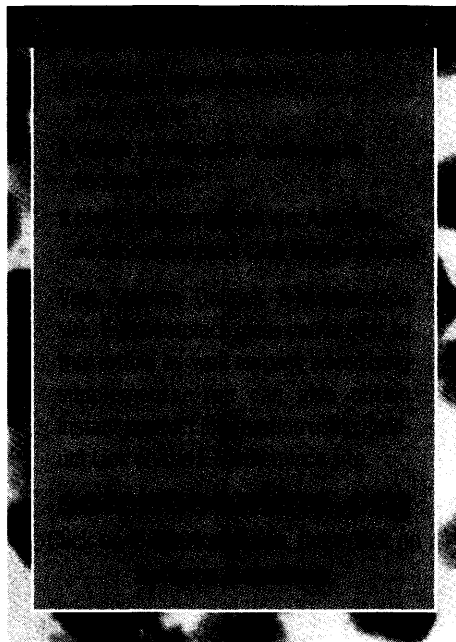
Producing antibodies in the laboratory is a relatively simple and inexpensive procedure. You inject an animal with antigenic material, allow for an immune response to develop, and then harvest the circulating antibodies present in the animal's blood. These "polyclonal antibodies" arise from a variety of B-cells that produce different antibodies as a result of encountering the antigen from different points of view. They are specific for the antigen with which the animal was immunized. Polyclonal antibodies offer realistic examples of the immune response since they represent the entire antigen-specific antibody population in an animal. However, they are limited to being harvested from the animal used in the immunization.

Monoclonal antibodies stem from a more complicated process. Once the immune response develops in an animal immunized with an antigen, the animal's spleen is removed. The cells in the spleen ultimately develop into mature B-cells. To allow those cells to replicate, the spleen cells are fused with myeloma cells, which can replicate in culture for an extended period of time. The resulting fused cells, called hybridoma cells, are then typically screened with an ELISA assay to identify the cells producing the antibody of interest. This antibody-secreting cell is then isolated and cloned; it will produce large amounts of a single (monoclonal) antibody directed against the original antigen for virtually an indefinite period of time. This hybridoma cell line can be frozen and stored for long periods, providing researchers with a constant supply of a specific antibody.

Several companies offer polyclonal and monoclonal antibodies. They include ALEXIS Corporation, BD Biosciences-PharMingen, Calbiochem-Novabiochem, Chemicon International, Santa Cruz Biotechnology, Sigma-Aldrich and Zymed Laboratories.

What do these unique molecular tools do for researchers? Antibodies tagged with labels such as fluorescein that make them visible find wide use in identifying and locating specific proteins in or on a cell. Antibody-based probes are also ideal for identifying specific cell populations, based on differences in their cell surface proteins or markers. Antibodies can also be used in histochemical applications, in which sections of a cell fixed in paraffin are stained with an antibody for a specific molecule. Scientists can identify these tagged cells using microscopy, fluorescent readers, or flow cytometers. Molecular Probes provides many of the fluorescent labels used with antibodies. And Sigma-Aldrich is a primary manufacturer of the stains and dyes used in these detection systems.

The fact that antibodies are such ideal tools for identifying and isolating proteins gives them a central role in functional genomics and proteomics. Once the human genome is completely sequenced, the next challenge is to figure out the proteins for which all the genes code.



ELISA's Benefits

Antibodies generated to a specific protein can be used to find that unique protein in a cellular extract. Traditionally scientists used chromatography media to secure the antibodies to a solid support. However, a chromatography column prevented researchers from handling many samples. Low-pressure columns could only be run so fast. So the research community sought a technique that could process more samples. ELISA, with its microtiter plate format, not only offered the solution to this dilemma; it also provided several important benefits. Notably it takes smaller volumes and hence lesser amounts of reagents. So it has become a common technique for basic research and high throughput screening in drug discovery programs, as it is easily adapted to 96-well microtiter plates and can be used with many different detection systems.

To detect or visualize the antigen-antibody complex, the antibody must be labeled. In the past, researchers had to conjugate their own antibodies and labels. Now, though, they can routinely buy antibodies conjugated to many different labels. The labels include radioisotopes; horseradish peroxidase, alkaline phosphatase, and other enzymes; fluorescent tags such as fluorescein; and biotin. Scientists are shifting away from radioisotope to nonradioisotope tags, because the former are considered more hazardous and require special — and relatively expensive — disposal. "We'll see more of a move to fluorescent labels," predicts Mike Sully, product manager for cell biology assays at Amersham Pharmacia Biotech.

While individual researchers can buy the antibodies, conjugates, blocking reagents, substrates, and solid-phase supports needed for an ELISA, getting the various components in such a system to work well together is not always a simple task. So several companies now offer ready-to-use ELISA kits for

virtually any assay of interest. "Kits have the controls and consistency that home-brewers don't have the time or money to do," explains Marty Kissil, director of market development for R&D Systems, Inc. A cyclic AMP kit from Amersham Pharmacia Biotech saves researchers' time. "With our lysis technology extraction takes about five minutes rather than all day, and with much improved recovery," says Ray Duffin, the company's marketing director for radiochemicals, applications, and cell biology assays.

In addition to Amersham Pharmacia Biotech and R&D Systems, BioSource International, New England Biolabs, and Zymed sell kits for cell adhesion molecules, apoptosis, cell surface markers, cytokines, growth factors, protein kinases, and toxins. "Vendors are moving toward kits for HTS and different kinds of instrumentation," says Kissil. Applied Biosystems, Clontech, NEN, Pierce Chemical, and Promega offer ELISA kits specifically designed for HTS. R&D Systems, among others, has expanded its line of ELISA kits to different animal models, such as rats, dogs, and — soon — pigs, in response to the demands of scientists in such fields as neuroscience and xenotransplantation. PharMingen has its own twist. "We have devised a mechanism to use antibodies bound to fluorescent beads in a multiplexed format called a cytometric bead array or CBA, allowing for simultaneous detection of multiple soluble analytes by flow cytometry. The CBA allows researchers to obtain quantitative results from small sample volumes with the sensitivity afforded by fluorescence based analysis," explain Jonathan Rosenberg and Bob Balderas, vice presidents of marketing and development. "It puts ELISA on a bead."

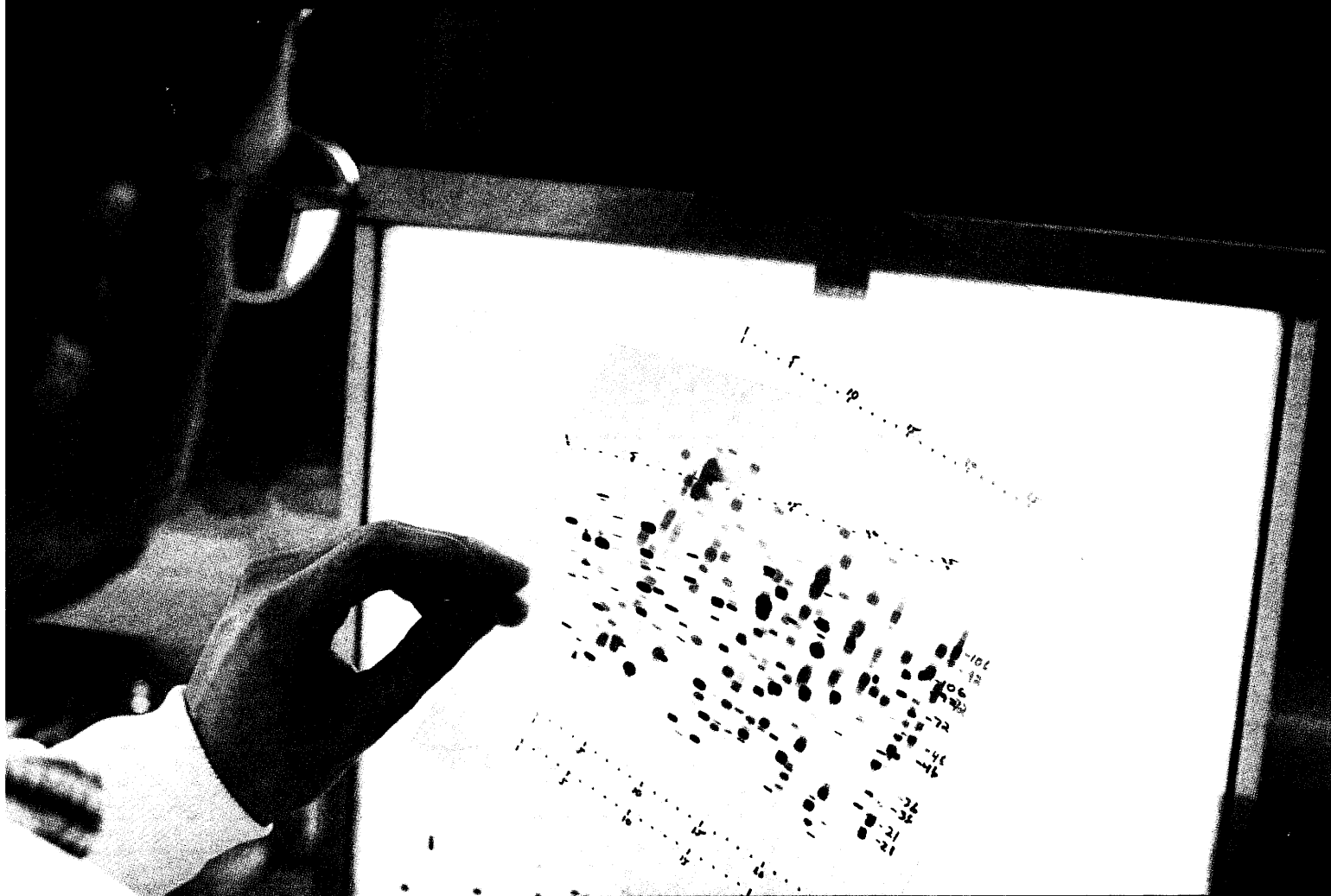
Vendors are also increasing their emphasis on information content. "You generally need a more quantitative answer than yes or no," explains Duffin. Amersham Pharmacia Biotech's matrix metalloproteinase (MMP) activity kits, for example, allow researchers to measure quantitatively the active MMP in question as well as the latex form of the MMP.

Washing Wells

A major component in ELISA is the solid matrix that holds the antibody in much the same way that a fishing lure is attached to a fishing line. The industry standard has long been the 96-well microtiter plate. Precoated plates, designed specifically for ELISAs, quickly affix the antibody to the surface of a microtiter plate well without any pretreatment or blocking step. Coatings range from streptavidin for protein detection to collagen for cell culture. Several companies offer custom plate coating services for immunology applications, including BD Biosciences, Corning, Nalge Nunc, Pierce Chemical, and others.

To permit scientists to screen more samples, microtiter plates have expanded beyond the 96-well format to 384-well for HTS, and even 1,536-well formats for ultrahigh throughput screening (UHTS). Companies offering 384-well and 1,536-well plates include BD Biosciences, Corning Science Products,

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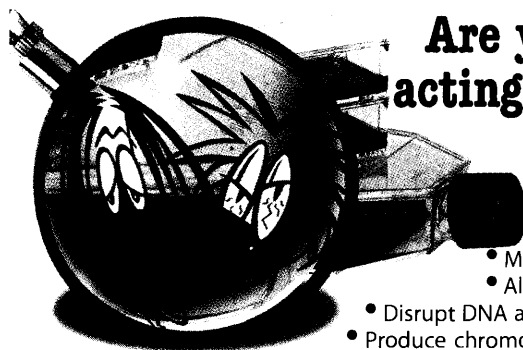
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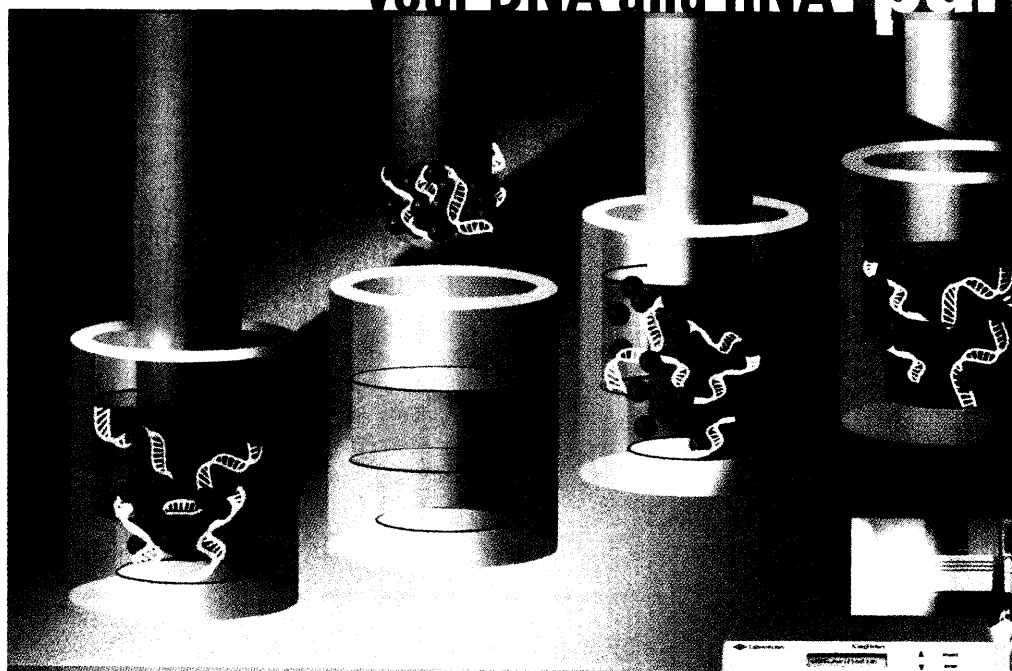
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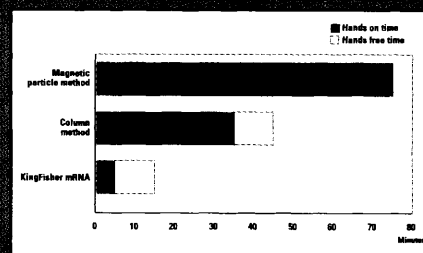
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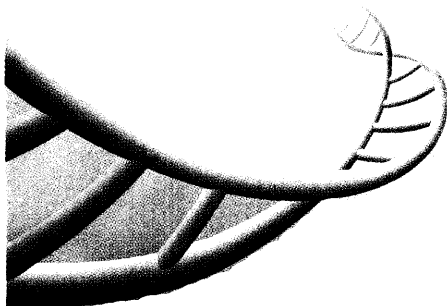


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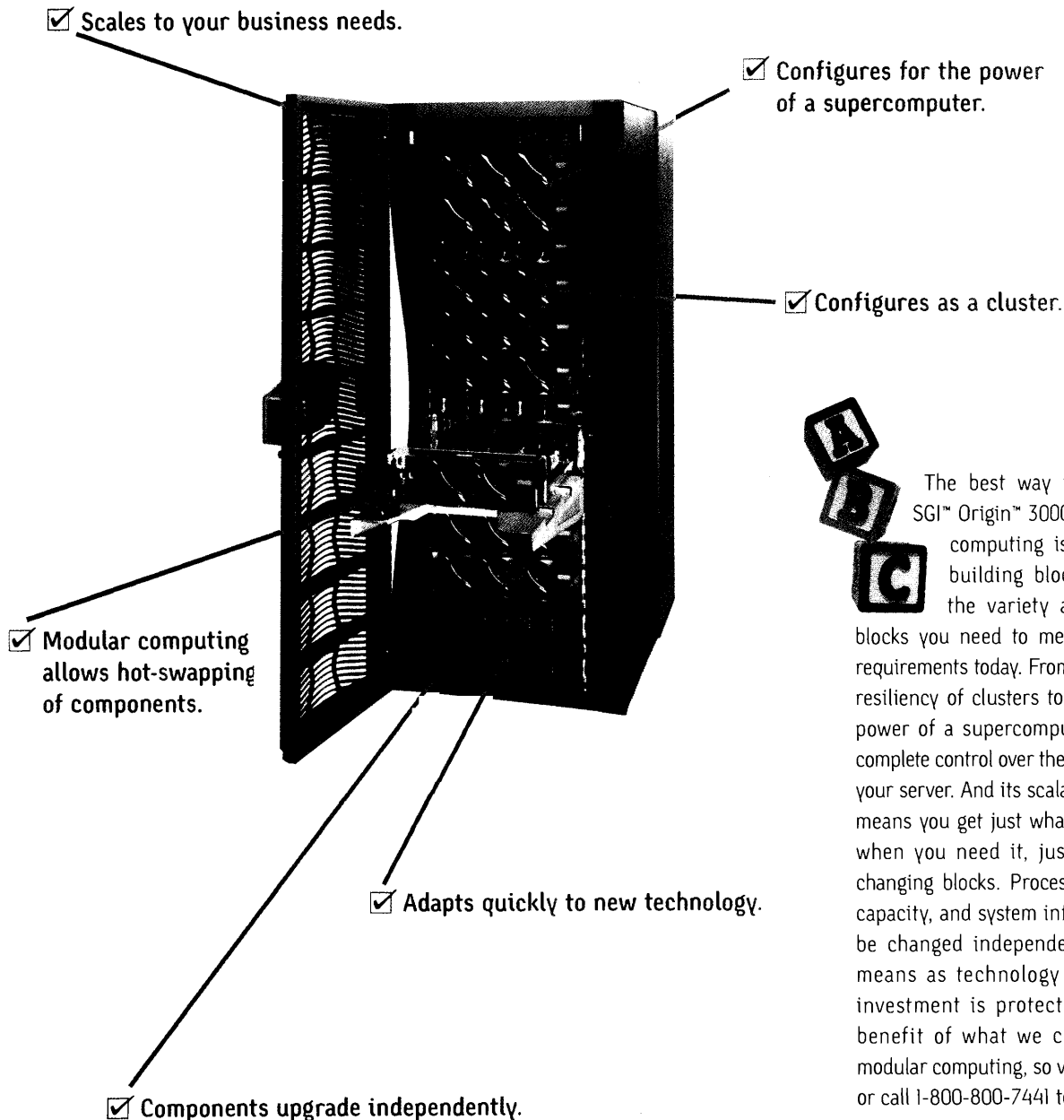
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Dynex Technologies, Eppendorf, Nalge Nunc, and others. While the 1,536-well format is relatively new, it is gaining ground, especially for pharmaceutical drug discovery, where large compound libraries are screened for drug leads.

ELISA has one major disadvantage. It requires washing and incubations between additions of reagents. That can substantially increase the hands-on time required to run this type of assay. "In general, washing is the most crucial part of the ELISA process," says Tuula Jernstrom, business manager of Labsystems, a Finnish division of Thermo Electron. "It needs to be performed with a large enough volume and repeated several times to avoid false positive results and increases in background, which are both reasons for poor assay sensitivity."

Labsystems and other companies have developed semiautomated and automated microtiter plate washers. Costing as little as a few thousand dollars, these can increase productivity tremendously. Bio-Rad, Dynex Technologies, Packard Instrument, and Tecan offer washers with a wide range of capabilities.

Another way around the washing bottleneck is to move away from ELISAs entirely. Applied Biosystems, for example, has developed a novel homogeneous assay system for HTS. Fluorometric Microvolume Assay Technology needs less antibody than traditional ELISAs, does not require any wash steps, and uses only one incubation step. It can also be multiplexed for measurement of several variables simultaneously. Amersham Pharmacia Biotech provides its Scintillation Proximity Assay format as an enabling technology for homogeneous high throughput screening applications.

Robotics can increase productivity to the next level by fully automating HTS with ELISA. Thus Beckman Coulter has designed a robotic system called Biomek FX System. Tecan has developed the GENESIS Workstation, a robotic system that can perform HTS assays, including pipetting, plate washing, incubation, and plate reading. Tropix, a division of PE Biosystems, offers several HTS systems for both live-cell and biochemical assays. All these systems give increased sensitivity. They use lower reaction volumes, which mean smaller amounts of reagents. They also require less handling by lab technicians, a factor that increases laboratory productivity.

Separation Technology

Separation of cells requires the removal of one cell type from another by physical means. Antibodies suit this application well owing to their great diversity and specificity. Antibodies can be attached to chromatography columns and used to bind a cell that possesses an antigen recognized by the specific antibody. T-cells are often selected for and enriched using these columns. "Antigen-specific T-cells are very

important in clinical studies of cancer," says Nicola Bramwell, marketing manager for immunosystems at Norwegian company Dynal Biotech, which manufactures magnetic beads for cell separation. Pierce Chemical, R&D Systems, and others offer several products for cell separation.

The needs of separation technology are changing as the market changes. "In the market in cell separation applied to immunology we see a real shift away from basic immunology toward more clinical work and applied immunology," says Bramwell. That leads to a demand for new grades of products. "We're looking at clinical grade products manufactured under aseptic conditions," Bramwell continues.

Magnetic particles present one intriguing way of sorting cells. Scientists covalently bond antibodies specific for a particular cell of interest to magnetic particles. They then incubate a mixture of cells in a solution with the magnetic antibodies. The entire reaction mixture is exposed to a magnetic field, which retains the cells of interest. Removing the magnet frees the cells again. "When you talk about cell separation the important thing is to focus on specificity," says Dynal Biotech's chief scientist Erik Ruud. "Using magnetic separation you are able to get a lot of separate populations. That means you get the type of purity that people want." Dynal's products include magnetic beads for manipulating and stimulating T cells. Miltenyi Biotech, Polysciences, and other companies also have developed cell separation products based on magnetic particles. Some of these particles are even composed of materials that naturally degrade without adversely affecting cell function.

As alternatives in cell separation, flow cytometers can measure differences in fluorescence with much greater accuracy than the human eye. In the past the approach was limited by the fact that it is difficult to sort and collect enough cells to do subsequent biochemical analysis. But the advent of the polymerase chain reaction has meant that a very small number or even a single cell can be used as the starting material to amplify its DNA for biochemical analysis. Flow cytometers can measure up to 500,000 cells per minute.

Using several antibodies tagged with different fluorescent labels, scientists can measure several variables in a cell population simultaneously. Research teams can identify cells and then use a flow cytometer to sort them into different aliquots. This multiparametric method eliminates several separate runs to measure more than one parameter.

Companies such as BD Biosciences and PharMingen offer complete lines of antibodies for use with flow cytometry.

The future holds great promise as researchers start to study protein and cellular functions in greater detail than ever before. As they develop greater numbers of possible drugs and other compounds for research and clinical use, companies continue to meet the challenge of increasing researchers' productivity and ultimately their understanding of how proteins act and interact in their natural environments.

Peter Gwynne is a freelance science writer based on Cape Cod, Massachusetts, U.S.A. Gary Heebner is president of Cell Associates, a scientific marketing firm in Chesterfield, Missouri, U.S.A.

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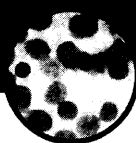
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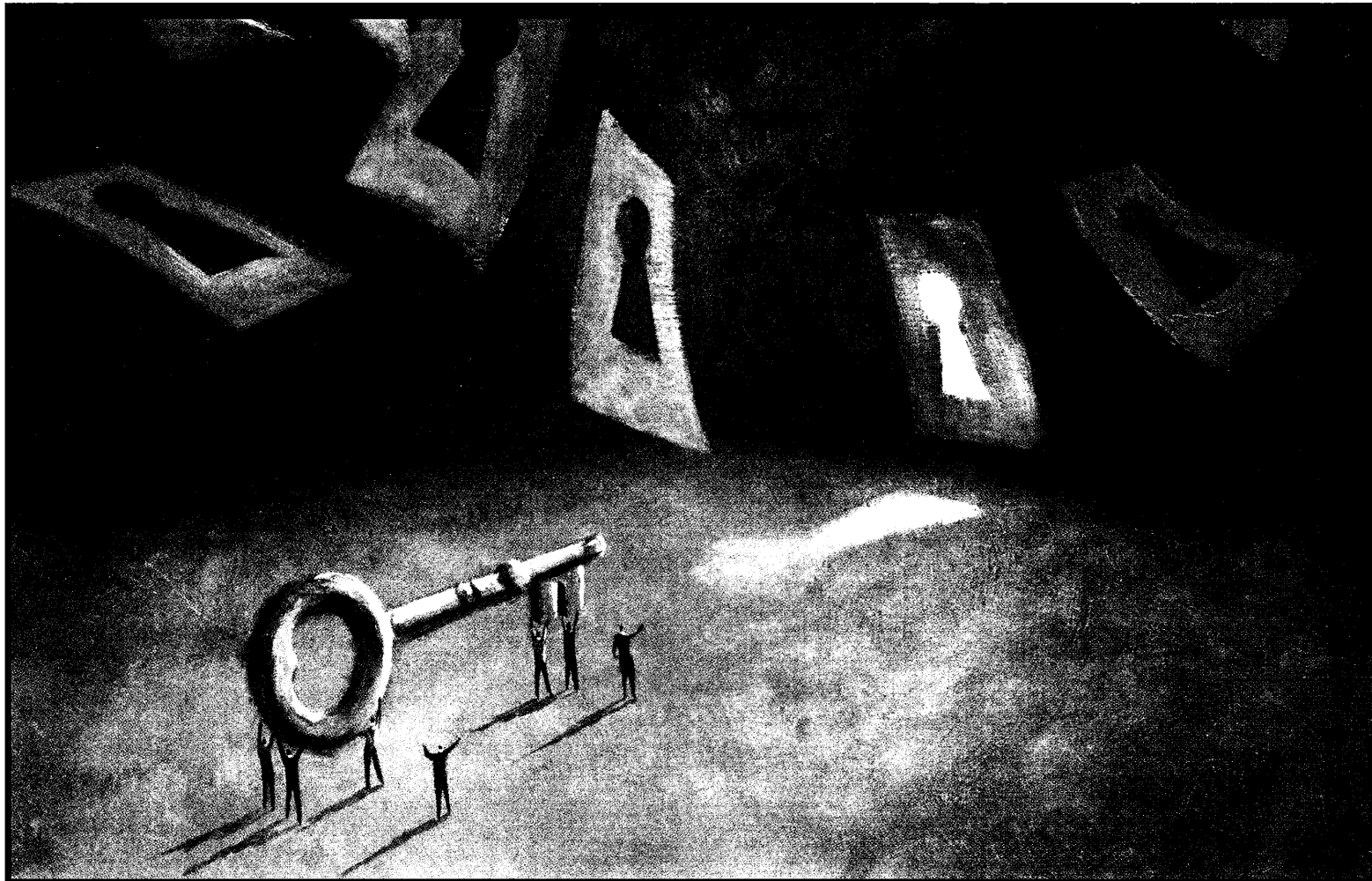


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POSITIONS OPEN



FACULTY POSITION, PARASITOLOGY UNIVERSITY OF MIAMI SCHOOL OF MEDICINE

The Department of Microbiology and Immunology at the University of Miami School of Medicine invites applications for a tenure-track faculty position at the ASSISTANT PROFESSOR level. An individual utilizing a molecular approach to study any aspect of parasitology is sought. All applicants should have five years of postdoctoral experience and a commitment to establishing an externally funded independent research program. Quality research facilities, start-up funds, and salary will be provided to the appointee. Applicants should have a Ph.D., M.D., or equivalent degree. The appointee will be expected to participate in graduate and undergraduate training programs. Interested applicants should send curriculum vitae, a statement describing research achievements and future research goals, relevant reprints, and the names of three references to:

Carleen Collins, Ph.D., Chair
Parasitology Search
Department of Microbiology and Immunology
University of Miami School of Medicine
P.O. Box 016960 (R-138)
Miami, FL 33136
E-mail: ccollins@med.miami.edu

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FACULTY POSITIONS BIOMEDICAL ENGINEERING

The University of Texas at Austin is seeking highly qualified **TENURE-TRACK FACULTY** at both junior and senior levels to be appointed in the new Department of Biomedical Engineering. The vision of the new BME Department is to integrate molecular and cellular biology with biomedical engineering. A minimum of 12 new faculty positions will be added over the next five years. Outstanding faculty will be recruited in the areas of cellular and biomolecular engineering, cell and molecular imaging, and computational biomedical engineering and bioinformatics. Areas of expertise desired include molecular engineering of novel diagnostic molecules, genetic and developmental guided tissue engineering, nanopores and nanostructures, biomolecular and biomedical optics, computational cell biology, and database development and analysis applied to efficacy of therapies. Qualified candidates working in complementary areas are also encouraged to apply. Required qualifications include a Doctorate in engineering or a related field. Applicants must have an outstanding record of research accomplishments, a strong interest in undergraduate and graduate teaching in biomedical engineering, and a commitment to professional service. In addition to establishing an aggressive program of research, the successful candidate will be expected to develop innovative research and teaching collaborations with the University of Texas System Medical Schools as well as with centers of research excellence at UT Austin, including the Institute for Cellular and Molecular Biology, the Center for Nano- and Molecular Science and Technology, the Texas Materials Institute, the Texas Institute for Computational and Applied Mathematics, and the Microelectronics Research Center. Interested persons should submit detailed curriculum vitae including academic and professional experience; a list of peer-reviewed publications and other technical papers; a summary of research and teaching goals; and the names, addresses, and telephone numbers of three or more references to: **Biomedical Engineering Faculty Search Committee**, The University of Texas, Austin, TX 78712-1084. Website: <http://www.bme.utexas.edu>. *The University of Texas at Austin is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FACULTY POSITION BIOINFORMATICS NORTHEASTERN UNIVERSITY

The Department of Biology of the College of Arts and Sciences in conjunction with the Bouve College of Health Sciences and the College of Computer Science invites applications for a tenure-track **ASSISTANT PROFESSORSHIP** available September 2001. Qualifications include a Ph.D. in bioinformatics or a related discipline and postdoctoral experience. The successful candidate will be expected to develop an externally funded research program in bioinformatics and to participate enthusiastically in undergraduate and graduate teaching. In addition, the individual will serve as the Department's Faculty Program Director for the joint Northeastern University/Boston University Professional Masters program in bioinformatics. Our website: www.dac.neu.edu/biology provides information about the Department. The websites of Bouve College of Health Sciences (website: www.bouve.neu.edu) and the College of Computer Science (website: www.ccs.neu.edu) provide additional background on bioinformatics-related research at Northeastern.

Applicants should send curriculum vitae, a statement of research interests and plans, and a statement of teaching experience and interests to: **Bioinformatics Faculty Search Committee**, 414 Mugar Hall, Northeastern University, Boston, MA 02115. The applicant should also arrange to have at least three letters of reference sent independently to the Search Committee. Review of applications will begin on January 10, 2001. The position is contingent on funding. *Northeastern is an Equal Opportunity/Affirmative Action/Title IX University. Women and minority candidates are especially encouraged to apply.*

BIOLOGY. Full-time **ASSISTANT PROFESSOR** of Biology (tenure track) starting in fall 2001. Salary commensurate with professional experience and qualifications. Ph.D. with emphasis in animal physiology. Teach a variety of undergraduate courses including general zoology and general biology. Develop and teach courses in advanced vertebrate physiology, comparative physiology, comparative endocrinology, or behavioral physiology. Excellent oral and written communication skills and good computer skills required. Experience teaching and directing research at the undergraduate level preferred. Send (1) letter of application, (2) résumé, (3) undergraduate and graduate transcripts, (4) names of three references, and (5) philosophy of teaching statement to: **Dr. Shiv R. Tandon, Department of Biology, University of Wisconsin-Platteville**, 1 University Plaza, Platteville, WI 53818-3099. Telephone: 608-342-1611; FAX: 608-342-1427; e-mail: tdansr@uwplatt.edu. Applications must be postmarked by January 29, 2001. The position begins August 24, 2001. More information available at website: <http://www.uwplatt.edu>. *The University of Wisconsin-Platteville, an Equal Opportunity/Affirmative Action Employer, seeks to build a diverse faculty and staff and encourages application from women, persons of color, and other minority groups. The names of nominees and applicants who have not requested in writing that their identity be kept confidential and all finalists will be released upon request.*

MOLECULAR IMAGING Massachusetts General Hospital (MGH) Harvard Medical School

The Center for Molecular Imaging Research at MGH develops novel *in vivo* imaging techniques to detect different molecular targets and pathways. Major research interests include molecular probe design, gene arraying, bioinformatics, *in vivo* imaging, and computation. Several **POSTDOCTORAL POSITIONS** are available in (1) molecular biology, (2) synthetic chemistry, (3) enzymology, (4) biomedical engineering, (5) mouse models, or (6) *in vivo* imaging. *The positions are restricted to U.S. citizens and/or green card holders.* Applications, including curriculum vitae and names of three references, should be mailed to: **Ralph Weissleder, M.D., Ph.D.**; e-mail: weissleder@helix.mgh.harvard.edu; website: <http://www.mgh.harvard.edu/depts/CMIR/CMIR.HTML>.

turning genomics into breakthrough drugs



ARRAY BIOPHARMA

Array BioPharma is a well-funded drug discovery company focused on turning genomics information into breakthrough therapeutics. With the recent success of our collaboration driven business model, we need to double the size of our current biology team with core expertise in molecular biology, protein chemistry, x-ray crystallography and high throughput screening. We seek to recruit highly motivated, creative individuals who combine superior technical ability with excellent problem-solving and communication skills. Array provides state-of-the-art resources and facilities as well as opportunities for career growth and development.

DIRECTOR OF BIOCHEMICAL DRUG DISCOVERY

Management of a multidisciplinary biochemistry team utilizing high throughput screening, cytotoxicity and drug metabolism assays, molecular biology, protein chemistry, and x-ray crystallography to support collaborative research and internal intellectual property drug discovery programs. The ideal candidate for this management position will be closely involved in the day-to-day operations of the group. 10+ years relevant experience in the pharmaceutical drug discovery industry is desired. The ability to motivate and lead a team is required.

SCIENTISTS (Ph.D., M.S. & B.S.) PROTEIN CHEMISTRY

Protein chemist to be a member of the x-ray crystallography and high throughput screening teams. The ideal candidate will have 5+ years experience purifying proteins expressed recombinantly in *E.coli* and/or insect cells. Extensive experience in refolding proteins and purifying non-tagged proteins is required.

SCIENTISTS (Ph.D., M.S. & B.S.) HTS/ASSAY DEVELOPMENT

The ideal candidate will have 5+ years of relevant experience in a pharmaceutical drug discovery environment. Extensive experience in developing assays applicable to the areas of *in vitro* drug metabolism, cytotoxicity and enzymology is highly desirable. Experience in the use of automated screening systems and biological database software packages is desired.

COMPUTATIONAL CHEMISTS

We are seeking individuals with a background in computational chemistry to work with the drug discovery team. This person should have a B.S./M.S. or Ph.D. degree in a relevant field. The ideal candidates will have several years of experience in structure based design, ligand based design and virtual library design. Familiarity with techniques relevant to pharmaceutical systems, such as Sybyl, SPL scripts or docking programs is essential.

We offer an excellent compensation package including competitive salary, stock options, comprehensive benefits, and the opportunity to be a part of a growing team of experienced scientists who want to revolutionize drug discovery. For consideration, please send you resume to:

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SCIENTIFIC COMPUTING SERVICES:

Scientist/Sr. Scientist, Bioinformatics (2)

This individual will be responsible for providing centralized databases, software, and computational resources used in bioinformatics analysis to researchers in the Disease Groups, Biotechnology, and Bioinformatics, and will coordinate these activities with global IS. Provide training for new users of the core informatics resources. Provide value-added services by cleaning and integrating multiple data streams through automated processing systems. Candidate will also be responsible for coordinating, integrating, monitoring and quality assurance of software and database updates provided by external vendors and internal developers. Responsible for developing navigational tools/CGI interfaces for accessing databases. Will evaluate the external software tools on a regular basis and assist in software development and gene expression data management. Experience working with relational databases in a Unix environment, and programming skills in Perl, C/C++, and Java is required. This position requires a M.S. in Bioinformatics, Computer Science or related field. Experience using GCG and other relevant sequence analysis tools preferred. **Ad Code DIA1710**

TARGET INFORMATICS:

Sr. Research Scientist/Research Fellow, Bioinformatics

This individual will be responsible for the management of collaborative projects between Bioinformatics and Disease Groups to facilitate prioritization of targets within drug discovery project teams. Will supervise annotation specialists in development of comprehensive annotation around targets for Drug Discovery and interact extensively with scientists and bioanalysts to in support of genomics-based research. Experience with PERL, Unix, sequence analysis tools, and sequence databases is required. This position requires a Ph.D in Computer Science, Computational Biology, or Molecular Biology, or a related field, with 2-4 years experience. Strong communications skills are needed. **Ad Code DIA1705**

Sr. Research Scientist/Research Fellow, Bioinformatics

This individual will be responsible for the management of collaborative projects between Bioinformatics and Biotechnology for integrated analysis and presentation of data coming from genomic technologies. Will supervise annotation specialists in development of comprehensive annotation around targets for Drug Discovery and interact extensively with scientists in support of genomics-based research. Experience with PERL, Unix, sequence analysis tools, and sequence databases is required. This position requires a Ph.D in Computer Science, Computational Biology, or Molecular Biology, or a related field, with 2-4 years experience. Strong communications skills are needed. **Ad Code DIA1705**

Associate/Research Bioinformatics Analyst (2)

This individual will be responsible for gathering, analysis, and presentation of information for discovery of targets derived from genomic technologies to facilitate informed decisions about prioritization of targets and research in collaboration with Disease Group drug discovery project teams. Individuals within this team will take responsibility to develop comprehensive annotation through automated and manual tools, manually curate relevant targets, and will provide these data to Disease Groups and Biotechnology in an easily accessible format. Experience with PERL, Unix, sequence analysis tools, and sequence databases is required. This position requires a M.S. in Computer Science, Computational Biology, Molecular Biology, or a related field, with 2-4 years experience. Strong communications skills are required. **Ad Code DIA1705**



Our challenge is life.

PROTEOMICS:

Sr. Research Scientist/Research Fellow, Bioinformatics

This individual will be responsible for the management of Proteomics Bioinformatics projects and supervision of personnel in proteomics data analysis. This person will interact with researchers and the software development group on evaluation and deployment of new tools and methodologies for analysis of proteomic information. Support protein identification through the integration and analysis of 2-D gel image data, mass spectroscopy data, and protein sequence databases. This position requires a Ph.D. in Computer Science, Computational Biology, or Biochemistry, or a related field, with 2-4 years experience. Strong communications skills are required. **Ad Code DIA1709**

Research Bioinformatics Analyst/ Sr. Research Bioinformatics Analyst

This individual will be responsible for providing analytical support for protein identification through the integration and analysis of 2-D gel image data, mass spectroscopy data, and protein sequence databases. Support the identification of proteins, and collection and archive of data related to target identification and validation. These data can be used to generate protein phenotypes to be used in understanding drug mechanism of action, pathway elucidation, and target discovery. This position requires a M.S. in Computer Science, Computational Biology, or Biochemistry with 2-4 years experience. Strong communications skills are required. **Ad Code DIA1709**

PROJECT SUPPORT AND TRAINING:

Sr. Research Scientist/Research Fellow, Bioinformatics

This individual will be responsible for the analytical support of genomics projects within the the Biotechnology group based in Cambridge, Mass. This individual will provide project-based support for the Cambridge Genomic Center, primarily focused on analysis of EST and transcriptional profiling data. This individual will also be responsible for user education and training in the utilization of bioinformatics tools and methodologies to the scientific community, and will collaborate closely with the software development group also based at the Cambridge Genomic Center. Experience with PERL, Unix, sequence analysis tools, and sequence databases is required. This position requires a Ph.D. in Computer Science, Computational Biology, or Molecular Biology, or a related field, with 2-4 years experience. Strong communications skills are required. The ideal candidate will have additional experience in the analysis of expression data. Strong communications skills are required. **Ad Code DIA1708**

Sr. Research Scientist/Research Fellow, Bioinformatics

This individual will be responsible for the management of genomics projects in collaboration with Disease Groups and Biotechnology. This individual will interact closely with colleagues within Bioinformatics as well as scientists and bioanalysts within the project teams. This individual will also be responsible for user education and training in the utilization of bioinformatics tools and methodologies to the scientific community. Experience with PERL, Unix, sequence analysis tools, and sequence databases is required. This position requires a Ph.D. in Computer Science, Computational Biology, or Molecular Biology, or a related field, with 2-4 years experience. Strong communications skills are required. **Ad Code DIA1708**

EXPRESSION TECHNOLOGIES:

Sr. Research Scientist/Research Fellow, Bioinformatics

This individual will be responsible for project support to the Disease Groups and Biotechnology for analysis of transcriptional profiling data, including design of custom microarrays based on proprietary information about therapeutically relevant candidate targets. Interface with project teams in the Disease groups for analysis and presentation of results. Work with the software development group on evaluation and deployment of new tools and methodologies for analysis of expression information. Experience with PERL, Unix, NT, and standard statistical analysis software required. This position requires a Ph.D. in Statistics, Computer Science, or Computational Biology, or a related field, with 2-4 years experience. Strong communications skills are needed. **Ad Code DIA1706**

Sr. Research Bioinformatics Analyst

This individual will be responsible for statistical and analytical support to the Disease Groups and Biotechnology for analysis of transcriptional profiling data. Analysis of large datasets using statistical methodologies, as well as existing commercially available software. Implement novel statistical methodologies, and work with the software development group on evaluation and deployment of new tools for analysis of expression information. Experience with standard statistical analysis software required. An M.S. degree in Statistics or related field, with 1-3 years is required. The ideal candidate will also have demonstrated experience in the analysis of expression data. Strong communications skills are needed. **Ad Code DIA1706**

Bioanalyst, Respiratory/RA

This individual will be responsible for the analysis of information from gene expression profiling, high-throughput sequencing, and public/proprietary databases for discovery of targets relevant to research in Respiratory Disease. This candidate will work closely with Immunology Biologists, Core Biotechnology, and Bioinformatics groups within the organization to provide bioinformatics support to the Inflammation Department. Experience with PERL, Unix, sequence analysis tools, and sequence databases is required. This position requires a Ph.D. in Computer Science, Computational Biology, or Molecular Biology, or a related field, with 2-4 years experience. Strong communications skills are needed. **Ad Code DIA1811**

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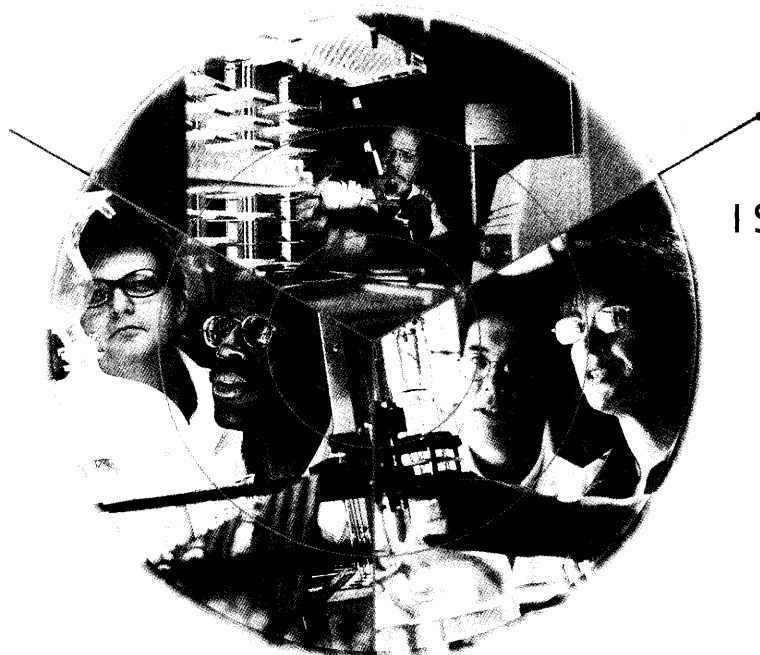
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Spring House, PA, Research Facility:

SR. SCIENTIST/PRINCIPAL SCIENTIST Biochem/Cell (Oncology) #00-0003301

This individual will be responsible for proposing and validating new targets in the area of cancer therapeutics. A PhD in biochemistry or cellular biology is preferred. The candidate must have a strong background in endothelial biology, mechanisms of cell adhesion and migration, cell signaling and cell cycle regulators.

SR. SCIENTIST/PRINCIPAL SCIENTIST Electrophysiologist (Enterology) #00-0003303

The primary responsibilities of this individual will be to contribute to the discovery and assessment of novel GI therapeutics. A PhD in cellular biology or electrophysiology is preferred, as well as a strong background in ion fluxes assay technology, including smooth muscle preparation, GI motility assays and clamp technology.

SR. SCIENTIST/PRINCIPAL SCIENTIST Pharm In-vivo (Enterology) #00-0003294

This individual will be responsible for development of relevant GI efficacy models predictive of GI transport and inflammatory disorders. A PhD in pharmacology or related discipline is preferred. The candidate must have a strong background in animal physiology, pharmacokinetics, and peripheral tissue inflammation.

SR. SCIENTIST/PRINCIPAL SCIENTIST Molecular Biology (Enterology) #00-0003296

This candidate will be responsible for proposing and validating new targets in the area of GI inflammatory disorders. A PhD in molecular biology is preferred. The ideal candidate must have a strong background in molecular biology techniques with experience in GPCRs and ion channel regulation. A background in neurobiology with experience in neurogenic inflammations is preferred.

TEAM LEADER-ENTEROLOGY/ONCOLOGY #00-0003215 (Biology) & #00-0003210, 3212 (Chemistry)

This candidate's main responsibilities are leading a group of scientists and managing all aspects of projects. **Biology**—A PhD in life sciences with 10 or more years experience is required. The ideal candidate must have expertise in cancer biology, including knowledge of the mechanisms of cancer development and progression. **Chemistry**—PhD in chemistry or organic chemistry with 10 or more years experience. The ideal candidate must have expertise in either medicinal or organic chemistry. Project management experience is a must.

Raritan, NJ, Research Facility:

RESEARCH FELLOW/TEAM LEADER #00-0002927

The candidate will be responsible for planning and executing research projects in the areas of reproductive medicine, urology and nuclear receptors. The candidate will assume a leadership position for all activities from target identification and justification to sourcing compounds and characterizing chemical leads for recommendation as NCEs to POP. A Ph.D. plus 10 years of post-doctoral experience in biochemistry, cell biology, pharmacology, molecular biology, or animal pharmacology is required.

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You should have a MS or PhD in molecular biology, genetics or bioinformatics with emphasis in molecular genetics. 2 - 5 years of industry experience is a plus. Knowledge of the public databases such as GenBank, SwissProt, PDB, OMIM and/or private sequence databases is required.

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**Tenure Track Faculty Position in Biomaterials
Biomedical Materials Engineering Science Program
New York State College of Ceramics at Alfred University**

Nominations and applications are invited for a faculty position in the Biomedical Materials Engineering Science (BMES) Program. The BMES Program, in the School of Ceramic Engineering and Materials Science, focuses on the interactions between living and nonliving materials and the development and testing of new biomaterials for a wide range of applications. Scientific interests of current participating BMES faculty include basic or applied aspects of biomaterials (especially bioactive glasses), tissue engineering, biomimetics, and interfacial phenomena.

The program is being instituted, in part, by a Special Opportunity Grant from the Whitaker foundation (for more information see <http://nyscc.alfred.edu/external/bmes/biomed.htm>).

The rank of the position is open. The successful candidate will hold a Ph.D. in Bioengineering, Biomaterials, or a closely related field. Senior applicants should have a distinguished record in research and scholarship, and a strong commitment to engineering education on the graduate and undergraduate level.

The School of Ceramic Engineering and Materials Science also offers B.S. Programs in Ceramic Engineering, Materials Science and Engineering, Glass Engineering Science. Graduate programs (M.S. and Ph.D. degrees) are offered in Ceramic Engineering, Ceramics, Biomedical Materials Engineering Science, Materials Science and Engineering and Glass Science.

The NSF Industry/University Center for Biosurfaces, together with the NSF Center for Glass Research, the NYS Center for Advanced Ceramic Technology, and the Whiteware Research Center provide a wide range of opportunities for collaborative research in biomaterials. A number of specialized laboratories and instrumentation dedicated to materials surface characterization are available. Salary and benefits are competitive. The position comes with substantial start-up funding, and dedicated modern laboratory space in the newly renovated Binns-Merrill Hall. The position will remain open until a suitable candidate is hired. A curriculum vitae, description of research interests, and at least three letters of reference are required. Application materials should be submitted to: Professor Ronald S. Gordon, Dean, School of Ceramic Engineering and Materials Science, New York State College of Ceramics, Alfred University, Alfred, NY 14802 (gordon@alfred.edu). *Alfred is an Affirmative Action/Equal Opportunity Employer.*

VIRxSYS

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VIRxSYS Corporation is a dynamic early stage biotechnology company located at our state-of-the-art facilities in the northern Washington D.C. suburb of Gaithersburg, Maryland. The company has three issued patents encompassing novel lentiviral vectors to combat HIV, cancer and hematological diseases. The following position is currently open for a capable and highly motivated scientist. VIRxSYS offers a very competitive salary, benefits and stock option plan.

Senior Scientist: Ph.D. level cellular immunologist with experience in one or more of the following areas: T-cell or dendritic cell immunotherapy, preferably with experience in HIV biology. Experience with humanized animal models is desired. Intellectual independence and good technical skills are required.

Interested applicants should send their CV and the names of three references to:

**Ms. Kim Kalaska
VIRxSYS Corporation
200 Perry Parkway
Gaithersburg, MD 20877
Phone: (301) 987 0480
Fax: (301) 987 0489
E-mail: kim@virxsys.com**

THE SCHOOL OF THE ART INSTITUTE OF CHICAGO

LIBERAL ARTS POSITION

We are seeking a scientist with PH.D or an A. BD. in physics, astronomy or related field to fill a full-time, tenure-track, assistant professor position in the Liberal Arts Department, to begin in Fall of 2001. SAIC is a college offering undergraduate and graduate degrees in the fine arts. The successful candidate will join a science faculty of 14 in teaching introductory and interdisciplinary courses in her/his field to undergraduate art students. He/she will also assist in coordinating the math/science program, science faculty and curriculum. This position is for someone who enjoys an interdisciplinary approach, stimulating colleagues well outside her/his field, and creative students. The successful applicant must demonstrate outstanding communications skills and a talent for teaching the non-scientist.

SAIC is located in the lakefront area of downtown Chicago adjoining the Loop. It is affiliated (and physically connected) with the world-renowned Art Institute of Chicago, and is in close proximity to other Chicago museums like the Shedd Aquarium, the Field Museum of Natural History, and the Adler Planetarium. The area boasts three world-class research universities, two national laboratories, and a large number of smaller universities and colleges. Current science faculty maintain research and teaching affiliations with a number of area universities, labs and museums.

The School of the Art Institute of Chicago, a leading professional school of art and design, operates with the museum of the Art Institute of Chicago at the center of one of the country's most exciting and diverse cultural communities. The School is comprised of 16 studio departments, 7 academic and 3 certificate programs and offers the Bachelor of Fine Arts and Bachelor of Interior Architecture Degrees, Master of Fine Arts degrees in studio and writing, and Master of Art degrees in arts administration, art education, art history/theory and criticism, art therapy and historic preservation, as well as post-baccalaureate certificates and continuing studies programs. The School of the Art Institute of Chicago is an Equal Opportunity/Affirmative Action employer/educator. Women, minorities and international applicants are encouraged to apply. The School currently enrolls 1,948 FTE student and employs 100 full-time and 350 part-time faculty, and 297 full and part-time staff.

Application:

Send CV, statement of teaching interests, and three letters of references to:
Liberal Arts Search Committee/SCI
Dean's Office
School of the Art Institute of Chicago
37 S. Wabash, Chicago, IL 60603.

**Applications will be accepted until the position is filled.
Review of applications will begin January 15, 2001.**

FACULTY POSITION

**Department of Biochemistry and Molecular Biology
University of Medicine and Dentistry of New Jersey
New Jersey Medical School**

Applications are invited for **TWO TENURE-TRACK POSITION** at the level of Assistant Professor. More senior appointments may be made in the case of exceptionally qualified individuals. Successful candidates will be expected to pursue an active program of biomedical research in the areas of **eukaryotic growth control, viruses or cancer**, and to participate in graduate and medical teaching.

Located in the University Heights section of Newark, a few minutes from New York City and pleasant New Jersey suburbs, UMDNJ-New Jersey Medical School provides a stimulating and collegial environment with substantial resources.

Send a complete curriculum vitae and brief outline of your research plans to:

**Dr. Michael B. Mathews, Chairman,
Department of Biochemistry and Molecular Biology (S)
UMDNJ-New Jersey Medical School
185 South Orange Ave., MSB/E609 • University Heights
Newark, NJ 07103-2714**

In addition, please have three letters of recommendation forwarded directly to the above address.



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Visit our website at: <http://www.umdj.edu>

NINDS - at the Cutting Edge of Neuroscience

This is an extraordinary time in the field of neuroscience when fundamental discoveries are being made at a breathtaking pace and their application to neurological disorders is proceeding at an accelerating rate. To meet the challenge of new findings and to further enhance the pace of discovery and translation of fundamental discoveries to useful therapies, the National Institute of Neurological Disorders and Stroke (NINDS) has embarked on an ambitious planning and recruitment process. We seek excellent scientists and physicians to serve as program directors in the planning, administration, and evaluation of the research supported by our institute.

The mission of the NINDS is to reduce the burden of neurological disorders by conducting and supporting research on the normal and diseased nervous system. To achieve this mission, we seek critical, resourceful and imaginative scientists, especially those who offer expertise in one or more of the following areas: **Channel and/or synaptic research (preferably at the molecular and/or signal transduction level); Neural circuit research at the system level; Neural Imaging; Cognitive Neuroscience; Human Neurogenetics; Genomics; Developmental Genetics; Immunology; Virology; Glia and Endothelial Cells; Basic Processes of Neural Development; Clinical Trial Design, Methodology, or Management; Parkinson's Disease, ALS, and other Neurodegenerative Disorders.**

Successful candidates will join a highly interactive group of scientists and clinicians directing research programs in all areas of modern neuroscience and neurological disorders. Program directors will be at the cutting edge of neuroscience as they plan and implement research programs through active communication with the extramural professional and lay communities, as well as with program directors in other institutes and agencies.

Applicants should have a Ph.D. and/or M.D. in a relevant field of biomedical or behavioral science. For more information, the full announcements can be obtained by fax (Tel. 1-800-728-5627 and request the document number listed below) or from the NINDS web site <http://www.ninds.nih.gov/hrb/Jobsandtraining/>. U.S. citizenship is required for these positions as part of the General Schedule permanent appointment mechanism. Permanent U.S. residents may apply for consideration under temporary appointments.

Submit a letter of career interests with your curriculum vitae, bibliography, and response to our Selective Factors and KSAs (knowledge, skills, and abilities as described in the full announcement) to: Mr. Luis Arvelo, National Institutes of Health, NINDS Human Resources Branch, Building 31, Room 8A23, 31 Center Drive, MSC 2540, Bethesda, MD 20892-2540, or you may fax your application to (301) 480-0383.

Applicants are strongly encouraged to obtain information concerning application content and procedures by contacting Mr. Arvelo at (301) 435-6033. For information on qualification requirements and clarification of duties, contact Dr. Constance W. Atwell at (301) 496-9248 or e-mail her at ca23c@nih.gov

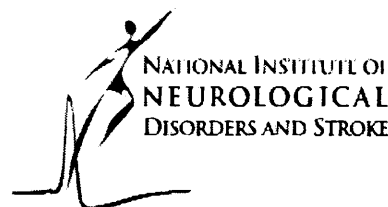
These positions may be filled with a career appointment or various temporary appointment mechanisms (minimum of 2 years). The normal salary range for these positions is \$51,204 to \$96,769; actual salary will be commensurate with experience. Recruitment bonus and relocation allowance may be paid. In addition, physicians may be eligible for a Physician's Comparability Allowance.

Applications must be postmarked by the receipt deadline shown below. Please refer to one or more applicable vacancy announcements from those listed below:

Specialty	Announcement #	Document #	Receipt Deadline #
Channel and/or synaptic research (preferably at the molecular and/or signal transduction level)	NINDS-00-0313	5017	12-04-00
Neural circuit research at the system level	NINDS-00-0314	5018	12-18-00
Neural Imaging; Cognitive Neuroscience	NINDS-00-0272A	5020	12-17-00
Human Neurogenetics; Genomics; Developmental Genetics	NINDS-00-0315	5015	01-15-01
Immunology; Virology; Glia; Endothelial Cells	NINDS-00-0303	5008	12-17-00
Basic Processes of Neural Development	NINDS-00-0307	5011	01-08-01
Clinical Trial Design, Methodology, or Management	NINDS-00-0305	5010	12-01-00
Adult neurodegenerative disease, with special emphasis on Parkinson's Disease, ALS, or other neurodegenerative disorders	NINDS-00-0309	5012	01-08-01

The Institute has a strong commitment to the diversity of its workforce and a biomedical research environment that reflects the diversity of the American population (www.ninds.nih.gov/eeo/). Therefore, the Institute is keenly interested in receiving applications from women, minorities, and individuals with disabilities.

NIH is an Equal Opportunity Employer

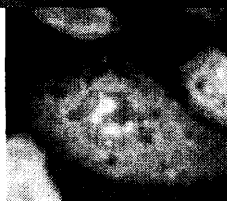


Aventis Gencell



Sr. Research Scientist, Molecular Histology

Aventis Gencell is a division of Aventis Pharmaceuticals, the result of a merger between Hoechst Marion Roussel and Rhone Poulenc Rorer. In the tradition of these pharmaceutical leaders, Aventis Pharmaceuticals is dedicated to extending & enhancing human life through the discovery, development, manufacture & sale of pharmaceutical products. We currently have an immediate opening for an experienced Molecular Histologist to oversee the establishment & day-to-day operations of a new state of the art histology lab. This small biotech group leads the Aventis Pharma scientific research and development on gene therapy approaches to treating cancer.



This new position will be responsible for defining the strategic direction of the function & supporting the data collection for preclinical & vector development oncology projects. A high degree of leadership along with a proven record of managing scientific projects is a must. Will be responsible for histologically evaluating animal models; detecting protein & vector viability in animal tissues; identifying bioactivity markers; integrating project teams & external collaborators; & overseeing subcontract lab services.

Ph.D. in Molecular Histology; minimum of 5 yrs. exp. in a histology laboratory setting within the field of gene therapy, including exp. in managing conventional histology, histochemistry techniques, in situ hybridization, biological activity markers & managing matrixed technical project teams required.

Excellent benefits, salary & relocation, if applicable. Forward C.V. with references & job code PD1 to: **Human Resources, 3825 Bay Center Place, Hayward CA 94545; fax: 510-266-5019; e-mail: rhodora.cruz@aventis.com**

An equal opportunity employer M/F/D/V

DEAN CASE SCHOOL OF ENGINEERING

Nominations and applications are invited for the position of Dean of the Case School of Engineering. The Dean is the School's chief academic and administrative officer, with responsibility for leading the efforts of more than 110 full-time faculty in programs of undergraduate and graduate education and a research enterprise which last year attracted external awards of \$29.6 million. The School collaborates with industry, government, and other units of the University in a wide range of activities, and the Dean serves as its principal representative in all such ventures.

Qualifications include demonstrated leadership abilities and management skill, with a record of achievement in teaching and research appropriate for a senior faculty appointment in one of the School's departments. The Dean should have strengths in fund-raising, developing large-scale research efforts, and in guiding faculty participation in technology transfer and cooperative research projects.

Review of candidates will begin immediately and will continue until an appointment is made. Send nominations and applications to:



**Search Advisory Committee for
Dean of the Case School of
Engineering
c/o Office of the President
CASE WESTERN RESERVE
UNIVERSITY
10900 Euclid Avenue
Cleveland, OH 44106-7001**

*In employment as in education, CWRU is committed to
equal opportunity and affirmative action.*

DEAN Division of Physical Science College of Letters and Science UCLA

Applications and nominations are invited for the position of Dean of the Physical Science division in the College of Letters and Science at UCLA, effective July 1, 2001. The Dean has responsibility for setting academic priorities, the allocation of resources, the academic personnel process, the recruitment and retention of faculty, the development and enhancement of educational and research programs, and the implementation of the development programs.

The Dean reports to the Provost of the College of Letters and Science and has responsibility for three Organized Research Units (ORU) and one Interdepartmental Degree Program (IDP). The Physical Science division has approximately 226 ladder faculty, 1,880 undergraduates, and 695 graduate students.

Candidates should have qualifications appropriate to the rank of full professor. Salary will be commensurate with background and experience.

For additional information, please go to: <http://www.apo.ucla.edu/apoweb/dean-phy-sci/>. Please view the Position Description.

To be ensured full consideration, nominations and applications should be sent by **December 1, 2000** to:

**Physical Science Dean Search Committee
c/o Ms. Rene Dennis
Office of the Chancellor
University of California
3109 Murphy Hall
Los Angeles, CA 90095-1407
Facsimile: (310) 206-9643
E-mail: rdennis@conet.ucla.edu**

UCLA is an Equal Opportunity Employer

The Endowment for SCHOLARS in Biomedical Research at

The University of Texas Southwestern Medical Center

UT Southwestern is pleased to announce the continuation of the Endowed Program for Scholars in Biomedical Research. The Program, which is fully funded from private endowment, will provide \$600,000 over four years to support the research activities of each new **Assistant Professor** (tenure track) appointed to the Program; five will be appointed annually. In addition, regular funding for salary, as well as research space, will be provided by the medical school department or research center offering the appointment. Positions in both **basic science** and **clinical departments** are available. The goal of the program is to assure a successful beginning of the research careers of an ever-growing cadre of outstanding young investigators at UT Southwestern.

For detailed information about currently available faculty positions, please access our web page: <http://www.swmed.edu>.

**SOUTHWESTERN
The University of Texas
Southwestern Medical Center
At Dallas**

UT Southwestern is an equal opportunity institution.

UNIVERSITY OF ALASKA
ANCHORAGE

DEPT OF BIOLOGICAL SCIENCES

THREE TENURE-TRACK ASSISTANT
PROFESSORS and ONE
INSTRUCTOR TO BEGIN AUGUST
2001

The entry level assistant professor positions require Ph.D., first authorship of one peer-reviewed publication, willingness to teach undergraduate and graduate courses, and potential to develop extramurally funded research relevant to our northern location. Research interests compatible with existing departmental strengths preferred. Opportunities for collaboration exist within the University and externally.

Molecular Physiologist, pcn 301439. Teaching will be upper level/graduate courses in area of expertise and human anatomy and physiology. Extramurally funded research in animal physiology should utilize molecular approaches to study adaptations of animals to high latitude environments.

Bryologist, Mycologist, or Lichenologist, pcn 301251. Primary teaching will be upper level/graduate courses in the area of expertise and introductory courses. Extramurally funded research is expected, preferably in an ecosystem context.

Population Geneticist or Evolutionary Biologist, pcn 300320. Teaching will be population genetics, biometry, and/or evolution, and upper level/graduate courses in area of expertise. Extramurally funded research is expected in population genetics or evolutionary biology.

Anatomy & Physiology Laboratory Coordinator Instructor, pcn 301417, Non tenure-track position. Requires an M.S. and strong communication, management, and teamwork skills. Anatomy and physiology teaching includes laboratory preparation, curriculum development, and coordination / supervision of A&P laboratory instructors. Also teach upper level laboratories as assigned.

Submit a letter of interest, statements of teaching and research goals and philosophy, vita, names and addresses (including phone numbers and e-mail addresses) of three references qualified to comment upon your teaching and research potential to Univ. of Alaska Anchorage, Human Resource Services Biol Search, 3211 Providence Dr., Anchorage, AK 99508. Finalists will be required to provide official transcripts.

Visit uaa.alaska.edu/humanres/current.html#faculty or uaa.alaska.edu/biohome/biology.html for more information. Review of applicants begins Jan. 1, 2001, and will remain open until filled. Women and minorities especially are encouraged to apply. UAA is an AA/EO Employer and Educational Institution. Applicants must be eligible for employment under the Immigration Reform and Control Act of 1986. Your application with the University of Alaska is subject to public disclosure.

SHARE THE VISION

"In looking at the next several years, Wyeth-Ayerst's pipeline of products ranks among the best in the pharmaceutical industry."

— Joe Ricordo • Senior Managing Director • Bear Stearns

It's a vision of hope and of bettering the world. At each of our facilities, we're working to make this vision a reality. And, as part of Wyeth-Ayerst, one of the world's leading research-based pharmaceutical companies, we deliver. If you're interested in a career using your pharmaceutical and scientific knowledge to help us help the world, join us in our **Cambridge, MA facility.**

Scientist - Biological Chemistry

We are looking for a highly motivated scientist to join a multidisciplinary effort in developing new drugs through structure-based design. Specifically, you'll help purify and characterize recombinant proteins to determine their structure using X-ray crystallography and multi-dimensional NMR. Requirements include a Ph.D. in Biochemistry or a related discipline and 1-3 years' postdoctoral experience. Experience with protein refolding is desired. **Job Code: 00880543**

Scientist - Enzymology

Capitalize on your scientific acumen by sharing it with our newly formed enzymology group. This team is responsible for developing novel therapeutic agents through a collaborative effort between crystallographers, NMR spectroscopists, computational chemists, protein biochemists, and medicinal chemists. To qualify, you should have a Ph.D. and up to 5 years' postdoctoral training. Critical to your success is an extensive knowledge of biophysical methods such as spectroscopy, calorimetry, ultra-centrifugation, surface plasmon resonance, and others to investigate protein-protein and protein-ligand interactions. Solid written and oral communication skills and the capacity to thrive as part of a team are key. Definite plusses include expertise in characterizing enzyme mechanisms as well as a background in fluorescence, spectroscopy, and enzyme kinetics. **Job Code: 00880544**

Scientist - Enzymology

Our newly formed enzymology group seeks a scientist to join its highly collaborative team of crystallographers, NMR spectroscopists, computational and medicinal chemists, and protein biochemists. Qualifications consist of a Ph.D. and up to 5 years' postdoctoral experience. We'll rely on your expertise in using steady state and pre-steady state kinetics to investigate enzyme mechanisms and to characterize substrate/inhibitor interactions. Only team players with superior written and verbal communication skills need express interest. Of special use is a proven record in characterizing protein-protein and protein-ligand interactions. **Job Code: 00880545**

Research Associate II - Core Technologies

A highly motivated Research Associate is sought to join a group dedicated to purifying and characterizing recombinant proteins for structure determination by X-ray crystallography and multi-dimensional NMR. This group is part of a team which is developing new drugs through structure-based design. Responsibilities include protein purification using various HPLC instruments and conventional chromatographic methods, characterization using fluorimetry, UV/Vis spectrometry, gel electrophoresis and other biophysical and biochemical methods. Candidates must have a BS/MS in biochemistry or a related discipline with 0-2 years of experience. Protein purification experience is a plus but not required. **Job Code: 00880844**

Genetics Institute, a unit of Wyeth-Ayerst, the Pharmaceutical Division of American Home Products, offers competitive salaries and benefits, including comprehensive health care, dental and life insurance, matching 401(k), pension plan, relocation assistance, tuition assistance, dependent care subsidy, and an on-site exercise facility. Genetics Institute is proud to be an equal opportunity employer, dedicated to building strength through diversity. Please forward your resume with salary requirements to: **Genetics Institute, Reference OPSCI, P.O. Box 7886, Philadelphia, PA 19101-7886. Fax to: (610) 989-4854. Email: jobs@RAMAIL1.wyeth.com**

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

For more information, please visit our websites at: www.genetics.com or www.wyethjobs.com

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GENETICS INSTITUTE®

Important Work.

Life. We're Working On It.

Genzyme Corporation is doing important work in biotechnology, life science and healthcare products.

The following position is located at our Framingham, Massachusetts facility:

Staff Scientist – Cell Biologist

As part of Genzyme's ongoing research programs to develop effective therapies for lysosomal storage disorders, we are seeking qualified candidates at the Staff Scientist level to perform research in lysosome biology. You will focus on the uptake, transportation and degradation of lysosomal proteins. In addition, you will be expected to design and evaluate novel second-generation enzyme and gene therapeutics for *in vivo* applications. Requirements include a PhD with at least 3 years of postdoctoral training in cell biology or biochemistry as well as experience with receptor-mediated uptake studies, cellular binding and targeting of genes and proteins. In-depth knowledge of cellular processes leading to uptake of proteins and gene transfer vector and lysosomal storage disorders a plus.

Genzyme rewards success with an excellent compensation and benefits package, including 3 weeks paid vacation, a 401(k) plan with company match, extensive insurance benefits, and an Employee Stock Purchase Plan.

Interested candidates should forward resume, indicating Job Code 00-1537, to: Human Resources Department, Genzyme Corporation, One Kendall Square, Cambridge, MA 02139, Email: biojobs@genzyme.com.

www.genzyme.com

genzyme

An equal opportunity employer committed to a culturally diverse work force.

COLUMBIA UNIVERSITY DEPARTMENT OF BIOLOGICAL SCIENCES

Columbia University invites applications for a beginning assistant professor in the Department of Biological Sciences. Preference will be given to applicants whose research addresses important problems in modern biology and involves Bioinformatics and/or Genomics. An outstanding research record is expected. Address any inquiries by e-mail to the Faculty Search Committee (e-mail address jc837@columbia.edu). Send CV, a statement of research goals, and 3 letters of reference by February 28, 2001, to:

**Michael P. Sheetz, Ph.D., Chair
Faculty Search Committee
Department of Biological Sciences
Columbia University
600 Fairchild
(MC 2402)
1212 Amsterdam Avenue
New York, NY 10027**

Columbia University is an affirmative action/equal opportunity employer.

DEPARTMENT OF ECOLOGY AND EVOLUTIONARY BIOLOGY PLANT PHYSIOLOGICAL ECOLOGY

Applications are sought for a tenure-track position in plant physiological ecology, beginning Fall 2001.

We are especially interested in candidates who link physiological mechanisms to processes at the ecosystem level.

The successful candidate will be expected to establish outstanding teaching and research programs. Primary teaching responsibilities will involve participation in an introductory ecology course and the teaching of an advanced undergraduate course in alternate years. The candidate also will be encouraged to offer a graduate-level course or seminar in the area of specialization. It is expected that the position will be filled at the rank of assistant professor, though a candidate with appropriate experience may be considered for appointment at a higher level.

Applicants should send curriculum vitae, copies of representative publications, a statement of teaching interests and experience and a description of research plans. They should also make arrangements to have three letters of recommendation sent to:

**Search Committee, Department of Ecology and
Evolutionary Biology, Corson Hall
Cornell University, Ithaca, NY 14853-2701**

Please include names, telephone numbers, and e-mail addresses of referees with application materials. We will begin reviewing applications on January 5, 2001, and will continue until a suitable candidate is found.

Inquiries about the position should be directed to Patricia Jordan, Search Committee Assistant, at pj17@cornell.edu. Information about the department can be found at <http://www.eeb.cornell.edu>.

**CORNELL
UNIVERSITY**

Cornell University is an Affirmative Action/Equal Opportunity Employer/Educator. Applications from Women and Minorities are encouraged.

<http://www.cornell.edu>

Manager Biotechnology

Givaudan is a world leader in the creation of fragrances, flavors and specialty ingredients. With a combined total of over 800 years of experience, Givaudan is one of the oldest and largest flavor and fragrance houses in the world with annual sales over one billion dollars and approximately 5,000 employees in 45 countries.

We are seeking a highly qualified scientist to lead our Biotechnology group in Flavor Science and Technology Department. The successful applicant will be expected to manage the research program, related outside collaborations and commercial development activities of the Biotechnology group. Our Biotechnology group aims to use modern microbial and biochemical techniques to develop useful flavor ingredients. In addition, this group is actively involved in studying the molecular biology of taste and smell perception. This very rapidly advancing field of research is expected to provide understanding of the mechanism of taste and smell perception within the near future.

Candidates for the position must have a Ph. D. in biochemistry, molecular biology or microbiology. Post-doctoral experience is highly desirable. Knowledge and/or experience in related disciplines, such as organic chemistry or food science is not essential but would be desirable. A minimum of five years of research experience in an industrial environment is required. Experience in flavor related research is preferable. Must have a minimum of three years of supervisory experience. Extensive knowledge and hands-on experience with modern biochemical and molecular biological techniques including enzyme isolation and utilization, genetic engineering, fermentation and cell free biotransformations as well as the related analytical and chromatographic techniques is essential. A strong record of scientific accomplishments including publications and patents is highly desirable. Strong computer and communication skills (oral and written) are essential.

The Flavor Science and Technology Department for Givaudan Flavors occupies a new research building fully equipped with state of the art equipment at our global headquarters in Cincinnati. We offer an excellent salary and comprehensive benefits program as well as opportunities for professional growth.

Please submit your resume and cover letter to:

**1199 Edison Dr.
Cincinnati, OH 45216
ATTN: Justin Ford, Director,
Human Resources
E-mail justin.ford@givaudan.com
Fax-513-948-5607**

Equal Opportunity Employer M/F/D/V

FACULTY POSITIONS IN THE DEPARTMENT OF PLANT BIOLOGY UNIVERSITY OF MINNESOTA, TWIN CITIES

The Department of Plant Biology is participating in the University of Minnesota's major new initiatives in Molecular and Cellular Biology and Evolutionary Biology. This initiative included the hiring of four faculty in 2000 and will involve the addition of 13 new faculty to the Department during a four-year span. In addition, a new building, housing scientists working in plant and microbial genomics, is planned for completion in 2002.

Positions in Plant Developmental Biology/Genomics

We are seeking exceptional scientists working in the areas of molecular aspects of plant development (3 positions) and experimental or computational plant genomics (2 positions), including proteomics. The Department is accepting applications for tenure-track positions at the level of Assistant Professor. Applications will also be considered from outstanding senior scientists at the Associate/Full Professor level.

Successful candidates will be expected to develop a strong, externally funded research program, contribute to the teaching programs of the Department, and participate in professional service. All candidates must have a Ph.D. or international equivalent and a demonstrated research emphasis in plant developmental biology or genomics. Required background includes postdoctoral training, a strong publication record, and teaching experience. Successful candidates will receive a substantial start-up package and a salary commensurate with their experience. Please send a curriculum vitae, statement of research and teaching interests, and three letters of recommendation to:

**Plant Development/Genomics Search Committee
Department of Plant Biology
University of Minnesota
220 BioScience Center
1445 Gortner Avenue
St. Paul, MN 55108**

Review of applications will begin on December 1, 2000 and will continue until these positions are filled. For more information concerning the department and these positions, please consult: <http://biosci.cbs.umn.edu/plantbio/pbio>.

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.

PLANT EVOLUTIONARY BIOLOGIST UNIVERSITY OF MINNESOTA, TWIN CITIES

The Department of Plant Biology is participating in the University of Minnesota's **major new initiatives in Evolutionary Biology and Molecular and Cellular Biology**. These initiatives will involve the addition of as many as 13 new faculty to the Department during a four-year span, including four faculty members added in the past year. In addition, a new Microbial and Plant Genomics building will be completed in 2002. As part of these initiatives, the Department of Plant Biology now invites applications for **one or two tenure-track positions in Evolutionary Biology** at the Assistant Professor level. Applications also will be considered from outstanding senior scientists at the Associate/Full Professor level. All candidates must have a Ph.D. or international equivalent and two years relevant postdoctoral experience. Desired experience includes a strong publication record, evidence of effective teaching, demonstrated research emphasis in plant biology, and success in obtaining extramural research funding.

Successful candidates will be expected to develop a strong, externally funded research program in plant evolutionary biology. Research areas may include, but are not limited to: genome evolution, evolution of higher taxa, molecular evolution, and evolutionary aspects of plant development. Responsibilities also include contributing to the undergraduate and graduate teaching mission of the Department of Plant Biology; advising undergraduate, graduate, and postdoctoral students; and participation in professional service. Please send a curriculum vitae, statement of research and teaching interests, five reprints, and three letters of recommendation to:

**Plant Evolutionary Biology Search Committee
Department of Plant Biology
University of Minnesota
220 BioScience Center
1445 Gortner Avenue
St. Paul, MN 55108**

Review of applications will begin December 1, 2000, with applications accepted until these positions have been filled. For more information visit <http://biosci.cbs.umn.edu/plantbio/pbio>.

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.



The University of South Florida College of Marine Science invites nominations and applications for the position of:

Founding Dean

Created in 1956, USF is a comprehensive metropolitan state university serving over 36,000 students in ten colleges on four campuses in Tampa, Lakeland, St. Petersburg, and Sarasota. It was classified a Research I institution in 1999 by the Florida Board of Regents in recognition of the school's outstanding graduate education and research programs and was awarded the Carnegie Foundation classification of Doctoral/Research University - Extensive in 2000. With a faculty of more than 2,000 members, USF offers degree programs in 79 undergraduate disciplines, 89 master's and specialist programs, and 26 doctoral programs, including the MD.

The College of Marine Science offers M.S. and Ph.D. degrees in Marine Science and is intimately involved in developing new technology for ocean study. Marine Science students may emphasize biological, chemical, geological, or physical oceanography, or develop an interdisciplinary program in oceanography through course work and thesis or dissertation research. More than 100 students are currently pursuing degrees under the direction of 26 full-time faculty. The College has an endowed chair, a lecture series, and numerous graduate fellowships that assist in attracting visiting scholars and outstanding students. Study areas range from estuarine and near-shore systems to remote areas of the oceans and polar seas. Additionally, the College operates two satellite-receiving stations that furnish and share data with national and state agencies.

The College's location on St. Petersburg's Bayboro Campus allows immediate access to Tampa Bay and the Gulf of Mexico. Bayboro Harbor is homeport to the R/V Bellows and the R/V Suncoaster operated by the Florida Institute of Oceanography (FIO) for the State University System. The College's principle building is shared with FIO and is adjacent to the Florida Marine Research Institute. With the Center for Coastal Geology and Regional Studies of the U.S. Geological Survey and the office of the Tampa Bay Estuary Program also at Bayboro, the Campus has one of the largest concentrations of marine scientists in the southeastern United States.

For more information on the College of Marine Science and the University of South Florida please visit the following websites: <http://www.marine.usf.edu/> and <http://usfweb.usf.edu/>

POSITION AND QUALIFICATIONS

The Dean of the College of Marine Science will report to the Provost and Executive Vice President. As the chief academic officer of the College, the Dean will be directly responsible for overseeing all academic, administrative and fiscal operations. **MINIMUM QUALIFICATIONS** for this position include: an earned doctorate in a relevant discipline in the College; an outstanding record of research and teaching meriting the rank of professor with tenure in the College; significant experience in a high-level administrative post; academic administrative experience with demonstrated expertise in budget management, faculty recruitment and development, and effectiveness with accrediting bodies. In addition, all candidates will be evaluated on the following **PREFERRED QUALIFICATIONS**: current involvement in teaching and research; demonstrated knowledge and appreciation of new technologies in marine research; evidence of success in developing external funding and fundraising; demonstrated commitment to enhancing graduate education and research; attained distinction and evidence of knowledge in the field of Marine Science; outstanding leadership and management ability; a strong sense of vision; demonstrated commitment to diversity; strong commitment to community outreach; and the strong communication skills needed to develop both internal and external relationships.

APPLICATION PROCESS

Send letters of application or nomination to: Dr. Ken Carder, Chair, College of Marine Science Dean's Search Committee, Office of the Provost and Executive Vice President, University of South Florida, 4202 E. Fowler Avenue, ADM 226, Tampa, FL 33620, E-Mail: Lnguyen@acad.usf.edu

Letters of application should be accompanied by a complete curriculum vitae and the names and addresses of five references. References will not be contacted until advanced stages of screening, and candidates will receive prior notification. Applications must be received no later than 5:00 p.m. EST on December 20, 2000.

The State of Florida has a Public Meetings Law and a Public Records Law and all university searches are conducted under the terms thereof. All meetings of the Search Committee are publicly announced and conducted. All documents submitted to the Committee are treated as open material with the exception of evaluative documents specific to the performance of the faculty of the State University System of Florida.

The University of South Florida is an equal opportunity, affirmative action, equal access institution. For disability accommodations contact Ms. Ly Nguyen at (813) 974-8394 or TDD (813) 974-1510 at least five working days in advance of need.

www.usf.edu • 4202 E. Fowler Ave,
Tampa, FL 33620

Postdoctoral Positions Developmental Biology

Available in the following labs studying cell signaling pathways controlling growth and differentiation, especially in relation to developmental mechanisms underlying birth defects: **Kavita Arora** (949) 824-1087 karora@uci.edu: TGF- β signaling in Drosophila. **Lee Bardwell** (949) 824-6902 bardwell@uci.edu: Specificity of signal transduction pathways in yeast and mammalian cells. **Bruce Blumberg** (949) 824-8573 blumberg@uci.edu: Nuclear receptor function in development and physiology. **Hans R. Bode** (949) 824-5959 hrobode@uci.edu: Pattern formation and cell fate decisions in hydra. **Peter J. Bryant** (949) 824-4714 pjbryant@uci.edu: Role of growth factors and tumor suppressors in cell proliferation control in Drosophila. **Susan V. Bryant** (949) 824-7402 svbryant@uci.edu: Growth and patterning in developing and regenerating limbs. **Anne L. Calof** (949) 824-4616 alcalof@uci.edu: Molecular regulation of neural development and regeneration. **Ken W.-Y. Cho** (949) 824-4067 kwcho@uci.edu: Growth-factor signaling during early vertebrate embryogenesis. **Xing Dai** (949) 824-3101 xdai@uci.edu: Role of the zinc-finger protein Ovo in germ-cell and epidermal differentiation in mice. **Steven Gross** (949) 824-3159 sgross@uci.edu: Analysis of molecular motors combining genetics and optical tweezers. **Christopher Hughes** (949) 824-8771 cchughes@uci.edu: Endothelial cell development and angiogenesis. **Arthur D. Lander** (949) 824-1008 adlander@uci.edu: Co-receptors and growth-factor signaling, developmental functions of proteoglycans, molecular mechanism of axon guidance. **J. Lawrence Marsh** (949) 824-6677 jmarsh@uci.edu: Control of patterning and growth by Dpp and Wingless in Drosophila. **Ronald L. Meyer** (949) 824-6959 rlmeyer@uci.edu: Factors limiting regrowth of injured axons in mammals, neuronal degeneration in spina bifida. **Diane O'Dowd** (949) 824-4562 dkodowd@uci.edu: Cellular and molecular mechanisms underlying plasticity at central cholinergic and GABAergic synapses in Drosophila. **Thomas Schilling** (949) 824-2479 tschilli@e4e.oac.uci.edu: Genetic basis of craniofacial development and congenital syndromes in zebrafish. **Robert E. Steele** (949) 824-7341 resteele@uci.edu: Genetic basis of pattern formation in hydra; tyrosine kinases in Caenorhabditis. **Ji Ying Sze** (949) 824-4548 jsze@uci.edu: Serotonin and signaling pathways regulating dauer formation in Caenorhabditis. **Oswald Steward** (949) 824-8908 osteward@uci.edu: mRNA trafficking in neurons and its relation to inherited mental retardation. **Marian L. Waterman** (949) 824-2885 mlwaterm@uci.edu: Role of Lymphoid Enhancer Factor/T Cell Factor-1 transcription factors in Wnt/Wingless signaling in Drosophila. To apply, correspond with individual investigators or with **Peter J. Bryant, Director, Developmental Biology Center, University of California, Irvine, CA 92697**, (949) 824-5957; Fax (949) 824-3571, <http://mamba.bio.uci.edu/~pjbryant/dbc/index.htm>.

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University of Idaho

Vice President For Research and Graduate Studies

The University of Idaho invites nominations or applications from researchers and scholars of exceptional ability to lead the University of Idaho in the position of Vice President for Research and Graduate Studies. The successful candidate will assume leadership in research and graduate education at a growing, dynamic, research-oriented university, which is committed to an ethnically and culturally diverse community in a stimulating educational environment. The University of Idaho is a public land grant institution with primary responsibility within the State of Idaho for performing research and granting the Doctor of Philosophy Degree. It is a Carnegie Doctoral/Research-Extensive institution with an enrollment that exceeds 11,400 students, of which 10,000 are served on the main campus at Moscow, Idaho; the annual research budget is nearly \$70,000,000. The University of Idaho is a robust and dynamic institution of higher education with clear, stated goals, and a strategic vision for its future as the residential campus of choice in the Northwest, with globally competitive research and graduate education programs as a central part of that vision.

The Vice President reports jointly to the President and Provost, and works closely with members of the President's staff, college deans, research institute directors and individuals throughout the institution to fulfill the research mission and to strengthen the support services for a globally competitive research and graduate education enterprise.

Minimum qualifications include an earned doctorate and a record of scholarly accomplishment that would merit the rank of tenured full professor in an academic department at the University. The successful candidate will have significant leadership experience demonstrating progressively increasing responsibility in one or more areas related to sponsored research, technology transfer, and strategic planning for research. A full position description and list of qualifications may be obtained by contacting the Search Committee Chair or at the UI Research Office website: <http://www.uroidaho.edu>.

Nominations and applications, including a resume with the names, addresses and phone numbers of three references, are requested. Screening of candidates will begin January 19, 2001 and will continue until the position is filled. Letters and application materials may be sent to:

Michael B. Laskowski, Ph.D.
Chair, Search Committee
Vice President for Research and
Graduate Studies
University of Idaho
PO Box 444207
Moscow, ID 83844-4207
Email: mlaskow@uidaho.edu

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The National Eye Institute Laboratory Chief

(NEI), National Institutes of Health, Department of Health and Human Services, is recruiting for the Chief of its Laboratory of Retinal Cell and Molecular Biology.

The NEI is seeking a Laboratory Chief who is an internationally recognized expert in areas relevant to the degenerative and hereditary diseases of the posterior segment of the eye. The candidate will plan, organize, execute and direct the overall research program of the Laboratory. The candidate will conduct research and supervise staff investigating the structure, function, and processes of the visual system in such areas as gene expression, cell biology, biochemistry, physiology, molecular biology, metabolism, and pharmacology of the posterior segment, particularly as they relate to degenerative and inherited retinal diseases. It is expected that the findings and methods developed from experimental in vitro and animal studies will be applied to disease problems in humans. The candidate will support an active clinical research group within the Laboratory engaged in ongoing clinical studies. The candidate will be able to recruit additional staff. The applicant must be a U.S. citizen or permanent residence, have a Ph.D. and/or M.D., or equivalent degree.

Starting salary ranges commensurate with experience. Benefits could include moving expenses, relocation bonus and retention bonus. A curriculum vitae, bibliography, five letters of recommendation, and detailed statement of research interests and a copy of five most significant publications should be submitted to Ms. Regina Reiter at NEI, Building 31, Room 6A18, 31 Center Drive MSC 2510, Bethesda, MD 20892-2510; telephone number: (301) 496-4274; fax number: (301) 496-3958; email address: rareiter@nei.nih.gov

The deadline for applications is January 2, 2001

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University of California, Santa Cruz Center for Biomolecular Science & Engineering <http://www.cse.ucsc.edu/centers/cbe/>

The Center for Biomolecular Science and Engineering (CBSE) at the University of California, Santa Cruz invites applications for 8 faculty positions for Fall 2001. The CBSE is an interdisciplinary research and academic organization spanning the Baskin School of Engineering and the Division of Natural Sciences. Directed by Hughes Investigator and Computer Science Professor David Haussler, current research areas include bioinformatics, computational biology and chemistry, microarray and nanotechnology, and functional genomics. Candidates should have outstanding research records demonstrating interdisciplinary approaches to important problems in biology, and a willingness to participate in our academic programs in Bioinformatics.

- **Bioinformatics, Computational Molecular Biology (#551 or 551T)**, biological databases and/or data mining.
- **Database Systems (#464 or #452)**, preferably with interests in heterogeneous databases, information systems, data mining, and bioinformatics databases.
- **Microarray Technology (#550 or 550T)**, electrohydrodynamic circuitry, bioelectronic chips and/or microfluidics applied to biological problems at the genomic or proteomic level.
- **Robotics (#454 or 454T)** applied to microarray technology, proteomics, high-throughput screening and/or other types of laboratory automation.
- **Statistics (#446 and #443Z)**, especially in the area(s) of Bayesian inference, prediction, and/or decision-making.
- **Vertebrate Molecular Development (#553)**, vertebrate genomics techniques to address nervous system function and development; other complex development processes will be carefully considered.
- **Bioorganic Chemistry (#552)**, innovative research at the interface of chemistry and biology, including combinatorial chemistry, de novo design of biomolecules, computational modeling, and other areas.

For complete descriptions and application instructions, see details at http://www.cse.ucsc.edu/centers/cbe/fac_openings.html.

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POSITION ANNOUNCEMENT

TITLE: Vice President for Research and Sponsored Programs

DUTIES AND RESPONSIBILITIES:

The University of North Carolina comprises 16 public constituent institutions and is one of the leading university systems in the nation. The Vice President for Research and Sponsored Programs reports to the President of the University of North Carolina through the Senior Vice President. This position provides an exciting opportunity for a creative thinker to shape the future direction of research, scholarship, and sponsored programs across the University and to provide leadership for both on-campus programs and innovative collaborations among institutions and with other constituencies, including those located in the Research Triangle Park. The constituent institutions of the UNC system received over \$600 million total in external funds in 1999 and reported nearly \$400 million in federally supported expenditures that same year.

The Vice President for Research and Sponsored Programs has primary responsibility for promoting research and sponsored programs across the complete spectrum of academic disciplines and interdisciplinary activities and for securing increased levels of external support from federal, state, and private sources. This position interfaces with the UNC Board of Governors and represents the University of North Carolina on research, scholarship, and creative activity with appropriate state and federal offices through the Public Affairs Office. This person is also responsible for providing leadership in nurturing the centers and institutes at all sixteen campuses. The successful candidate must demonstrate an appreciation of and sensitivity to the diversity of forms and circumstances in which research and scholarship can be manifested in a university system that is itself diverse in its institutional missions.

The Vice President will be expected to promote research and sponsored programs as well as to advocate on the State and Federal levels for funding support in concert with the President, the Senior Vice President, and the Vice President for Public Affairs. In addition, the Vice President will be expected to forge partnerships with corporations and funding sources. The Vice President works closely with the campuses to develop research and sponsored program activity and policies in support of the mission of The University of North Carolina and its constituent institutions.

QUALIFICATIONS:

Qualified candidates should possess the following:

- Earned doctorate or terminal degree
- A productive research record
- Service on federal research review committees, advisory boards, or policy and planning committees
- A demonstrated record of effective leadership in increasingly responsible positions in higher education, corporate or non-profit organizational environments
- Working knowledge of major functional areas, especially federal funding agencies, technology transfer, intellectual property issues, and compliance requirements
- Working knowledge of automated systems and the ability to effectively utilize information technology to develop reports
- Understanding of national trends affecting academic research and the ability to develop a strategic research plan
- An understanding of higher education and the academic environment, both at the undergraduate and graduate levels
- Excellent written and oral communication skills
- A demonstrated commitment to diversity and ability to work with diverse constituencies
- Demonstrated ability to interact with government agencies, business, and industry
- Proven experience in budgeting, budget preparation, and in meeting budgets
- A leadership style that emphasizes collaboration and facilitation

APPLICATION AND NOMINATION PROCEDURE:

Interested applicants should submit a resume, a letter of application that highlights qualifications for the position, and the names, addresses, and telephone numbers of five professional references. Review of applications will begin November 15, 2000, and will continue until the position is filled. Nominations and applications should be directed to: Jeff Davies, Vice President for Finance, Office of the President, 910 Raleigh Road, Chapel Hill, NC 27514; Phone: 919-962-1591; FAX: 919-962-0008; E-mail: jrd@ga.unc.edu. References will be contacted only after permission from the applicant is obtained. For information on the University of North Carolina system, please consult the web site at www.ga.unc.edu.

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Celltech Chiroscience, Inc., which is a leading biotech company located near Seattle that uses its diverse, state-of-the-art genomics and target validation technologies to discover, develop and bring to market novel medicines for improved healthcare, has an immediate opportunity.

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Working in an interdisciplinary environment, this individual will play a key role in the characterization of products from our gene discovery program. This individual will be responsible for gene expression, the cell biology of novel gene products along with screening assay design and implementation for post-validation efforts.

The successful candidate will have a Ph.D. in biochemistry, molecular biology or cell biology with 2-4 years of post-doctoral training and 2-5 years of experience in the drug discovery sector (pharmaceutical or biotech) with a specific focus on *in vitro* and cell-based assay techniques. Practical knowledge in signal transduction is also essential. Experience in protein chemistry, gene inactivation methodology and/or immunology, and familiarity in high-throughput molecular techniques is preferred. The ideal candidate will have excellent written and oral communication skills, will be computationally literate and will thrive in a team-oriented environment.

For information on other open positions, please see our job postings at celltechgroup.com/celltech_chiroscience/index.html, under **Recruitment**.

Celltech Chiroscience, Inc. offers competitive compensation & benefits & the chance to join one of science's most exciting fields - gene discovery! For consideration, please fax, mail, or email your resume to: Human Resources, Job Code GFScience1000, Celltech Chiroscience, Inc., 1631 220th St. SE, Bothell, WA 98021. Fax: 425-489-8018. Email: careers@chiroscience.com.

National Program Leader Oilseeds/Bioscience

The USDA Agricultural Research Service, Beltsville, MD, has a GS-14/15 opening for a National Program Leader for Oilseeds/Bioscience. Salary commensurate with experience (\$71,954-\$110,028 per year). Appointment is permanent full-time and requires U.S. citizenship. Incumbent guides and coordinates oilseeds (soybeans, peanuts, sunflower, new crops) production, improvement and utilization research, and research in the plant sciences such as biotechnology. Works with managers nationwide to assure that the national operating plans reflect national priorities and policies. Serves as agency technical expert working with nongovernmental customers in developing research plans. Works to implement national programs, evaluates ongoing research activities and participates in budget development and presentation. Applicants must have a degree (Ph.D. is desirable) in the biological sciences, genetics, agriculture, chemistry or related disciplines appropriate to the position. For application instructions/package call 301-504-1484 or download from the internet at www.ars.usda.gov/afm/hrd/hrdhomepage/empopp.htm. Applications must be marked ARS-XOE-1035 and postmarked by January 16, 2001. For program information, contact Judy St. John at 301-504-6252. USDA-ARS is an equal opportunity employer and provider.

Science's next wave

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Are you a first-class, Web-savvy writer with a strong interest in the academic career track? If so, the Career Development Center of *Science* magazine's Next Wave (www.nextwave.org) is the place for you! You'll research, write, and commission articles on all aspects of academic training and research careers; you'll work with an international team of dedicated professionals; and you'll have a lot of fun doing it! The American Association for the Advancement of Science (AAAS), which publishes Next Wave and *Science* magazine, offers excellent benefits, a comprehensive retirement plan, and—among other things—a non-smoking work environment in its Washington, D.C. offices.

Ph.D. and postdoctoral experience are required; previous experience with non-technical scientific writing and familiarity with the workings of the U.S. academic research enterprise are strongly preferred.

If this sounds like you, then—before November 27—please send your cover letter, salary requirements, and previous writing samples to: AAAS, Human Resources Department, 1200 New York Ave., N.W. Suite #100, Washington, D.C. 20005. Fax 202-682-1630.

This is a full-time regular position that is anticipated to extend for one year.

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ASSISTANT/ ASSOCIATE PROFESSORS BIOLOGY

Yeshiva University's top-tier undergraduate liberal arts college invites applications for two tenure track faculty positions at the assistant/associate professor level in the Department of Biology. One will be in the area of Cell/Molecular Biology and the other in Neurobiology/Developmental Biology.

The successful candidates will demonstrate an ability to conduct an active research program involving undergraduates and will work well in a small department. Commitment to excellence in teaching is required. Must have a Ph.D. and postdoctoral experience.

Please send a letter of interest, CV and three letters of reference to **Dean's Office, YESHIVA COLLEGE, 500 West 185th Street, New York, NY 10033, attention: Biology Search Committee. EOE.**

YESHIVA UNIVERSITY
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Biotechnology

The Novartis Institute for Functional Genomics (also known as Genomics Institute of the Novartis Research Foundation - GNF) is located in the Torrey Pines area of San Diego, CA. We are developing and applying novel technologies for genomewide functional characterization.

Staff Scientist - Immunology

This staff scientist position requires 3 or more years' post-doctoral experience and a strong record of accomplishments in the field of immunology or cancer biology. Individuals with experience in the application of current genomics techniques including RNA expression profiling, cell based screens, and the use of *in vivo* models (induced mutations, transgenics/knockouts) to solve critical problems in immunology or cancer biology are especially encouraged to apply.

Applications including a curriculum vita including salary requirements, summary of past accomplishments and the names of references should be sent to: **Genomics Institute of the Novartis Research Foundation (GNF), Human Resources; Job code - MPC; 3115 Merryfield Row, San Diego, CA 92121; Fax: 858.812.1584**



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Postdoctoral Fellow – Molecular Toxicology

We are seeking a motivated individual interested in joining a highly interactive environment that is using gene transcriptional profiling for toxicity evaluation (see Burczynski et al., Toxicological Sciences, December, 2000). This will involve participating in the use of DNA microarray technology including experimental design, sample preparation, data collection and bioinformatics. There will be opportunities for collaborating both internally, as well as with outside consultants. Publication of results is encouraged.

The effective communicator we seek must have a Ph.D. in Molecular Biology, Biochemistry, Cell Biology or a related discipline. Expertise in molecular biology, as evidenced by a record of publication and experience with cell culture, monitoring gene expression, detection of mRNA by hybridization, and strong computer skills are required.

As a valued team member, you'll receive a competitive salary and great benefits including medical/dental, a 401(k), a pension plan and a comprehensive wellness program. Please apply directly on-line at our web site www.jnj.com or forward a scannable resume, noting operating company as **The R. W. Johnson Pharmaceutical Research Institute and Reg. Code 003234SCI**, to: **Johnson & Johnson Recruiting, P.O. Box 16597, New Brunswick, NJ 08906-6597**. Please note, resumes received electronically via jnj.com are reviewed within 24 hours. Mailed resumes are reviewed within 3 business days after receipt. We are an equal opportunity employer totally committed to diversity.

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SCIENTIST – LAB SYSTEMS #450144

Minimum position requirements include BS in Biological Sciences along with experience in cell culture, immunochemistry training in ELISA, immunofluorescence. Must be familiar with microbiological procedures. This position participates in training of R & D Assay personnel for Antibody Research operations, and is responsible for day to day operation of the Lab in support of antibody research for producing monoclonal antibodies for DAT & TDM products. Supports maintenance of all equipment in the Antibody Research Lab, as well as documentation and receipt of materials from Germany. Prepares reports for and works under direct supervision of Principal Scientist.

DIRECTOR, RESEARCH AND DEVELOPMENT #451600

Minimum position requirements include a Ph.D. in Physical or Biological Science and at least 10 years in developing immunoassays preferably in Drug Monitoring. A demonstrated record of achievement in the field of Diagnostics and experience in leading interdisciplinary group efforts are necessary. The position will report to the Vice President of US Research and Development. The successful person will lead a group of 35 scientists in the Research and Development of immunologically based reagents for laboratory testing in the Drug Monitoring area. Other expectations include Product Support, Strategic Planning, the ability to manage several complex projects at one time and a strong sense of the Market and customer needs.

RESEARCH SCIENTIST – LAB SYSTEMS #451573

Minimum position requirements include a BS, MS, or Ph.D. in a chemistry discipline, BS with 2-5 years IVD assay development experience, MS or Ph.D. with 0-5 years IVD assay development experience. Hands-on experience with Hitachi Analyzers, Excel and other MS Software are required. The ideal candidate must have specific experience with enzyme assays, immunoassays, and recombinant protein purification. Some knowledge of molecular biology would be a plus. Flexibility, the ability to work toward deadlines and team-working skills are also required. This position develops IVD products, with supervision, according to DCC guidelines for the Global Lab Systems organization, that meet or exceed technical specifications and customer requirements. Participates in product evaluation/application and manufacturing transfer activities. Provides technical expertise to the company's product and customer support groups.

Who to contact

We offer an excellent compensation and benefit program including 401(k). Qualified candidates should send a resume, including salary requirements, to: **Roche Diagnostics, job title and references, 9115 Hague Road, Indianapolis, IN 46250**, or e-mail to Roche@rpe.webhire.com. Principals only please. Roche is committed to providing equal opportunity to a diverse workforce.



Roche is a world leading research-based health care organization with principal businesses in pharmaceuticals, diagnostics, vitamins, fragrances and flavors. Roche products and services address prevention, diagnosis and treatment of diseases, thus helping people live better lives.

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POSITIONS OPEN

PLANT ECOPHYSIOLOGIST

The Department of Botany, University of Wyoming, seeks to fill a full-time, nine-month tenure-track **ASSISTANT** or **ASSOCIATE PROFESSOR** position in plant ecophysiology. Minimum requirements for the successful candidate include a Ph.D. at the time of appointment, an ability to develop and maintain a strong extramurally funded research program, and a commitment to high-quality education at both the undergraduate and graduate levels. Preference will be given to candidates with postdoctoral experience and/or those engaged in interdisciplinary research. Seventy-five percent of the appointment is in the Botany Department; the remaining 25% is in the School of Environmental and Natural Resources (SENR). Duties within the Botany Department will include (1) directing an extramurally funded and productive research program; (2) teaching a course in plant ecophysiology, developing a graduate course in the specialty, and occasional lecture rotation in the general biology program, and (3) participating in student advising and the usual service activities. Where appropriate, outreach education may be used to meet instructional obligations. The role within SENR will include assisting the SENR Director with program development, student advising, and periodic participation in the SENR teaching program. Beginning date of employment is August 28, 2001. Submit letter of application, curriculum vitae, selected publications, statements of research and teaching interests, and arrange for three letters of recommendation to be sent to: **Dr. Stephen T. Jackson, Chair, Plant Ecophysiology Search Committee, Department of Botany, University of Wyoming, Laramie, WY 82071-3165.** The Search Committee will begin reviewing applicant files on December 15, 2000, and the search will continue until the position is filled. *The University of Wyoming is an Equal Opportunity/Affirmative Action Employer.*

MOLECULAR EPIDEMIOLOGY IN INFECTIOUS DISEASES

The Border Biomedical Research Center (BBRC) and Department of Biological Sciences at The University of Texas at El Paso seek a tenure-track **ASSISTANT PROFESSOR** with a research focus in molecular epidemiology. This position is associated with the Infectious Diseases Unit of the BBRC, which offers state-of-the-art core facilities in molecular biology, biochemistry, cell culture, ultrastructure, and biostatistics. Candidates may also participate in current initiatives in bioinformatics and in structural biology as part of the Doctoral programs in pathobiology and in environmental sciences and engineering. Successful candidates will be expected to develop a research program with a focus on infectious diseases prevalent in the binational border community and to participate in the teaching and research training of undergraduate and graduate students. Research start-up funds and equipment are negotiable. Candidates should have a Ph.D. or equivalent in a relevant area of research plus postdoctoral experience. Send curriculum vitae, a statement of research goals, a brief statement of teaching philosophy, and contact information for three references to: **Chair, Molecular Epidemiology Search Committee, Department of Biological Sciences, The University of Texas at El Paso, TX 79968-0519.** *The University does not discriminate on the basis of race, color, national origin, sex, religion, age, disability, or sexual orientation in employment or the provision of services.*

ANIMAL GENOMICS SITTLINGTON ENDOWED PROFESSORSHIP Department of Animal Science Oklahoma State University Stillwater, Oklahoma 74078

For complete position announcement or information:

Telephone: 405-744-6070
FAX: 405-744-7390

E-mail: David Buchanan (buck353@okstate.edu)
Website: <http://www.ansi.okstate.edu/positions>

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR POSITIONS Department of Pharmacology University of Illinois, Chicago

The Department of Pharmacology at the University of Illinois (Chicago) invites applications for tenure-track positions at the level of Assistant Professor and tenured positions at the Associate Professor and **FULL PROFESSOR** levels. This recruitment will complement ongoing areas of research and is part of the significant expansion that includes the new Basic Medical Science Building to be completed in 2003. Current areas of research in the Department comprise signal transduction and receptor biology, vascular and lung biology, neuroscience, thrombosis, and inflammatory pathways. We are seeking highly motivated and dynamic faculty in the areas of neuroscience, signal transduction, cardiovascular biology, cancer biology, and genomics/proteomics. Our start-up packages are highly competitive. The University of Illinois provides an outstanding intellectual environment as well as state-of-the-art research facilities including DNA/protein synthesis and sequencing, confocal microscopy, NMR, and transgenic/knockout facilities. Applicants should possess a Ph.D. or M.D. For fullest consideration, submit curriculum vitae, description of research interests and goals, grant support, and the names of three references by January 1, 2001, to: **Dr. Oscar Colamonic (SC001), Search Committee, Department of Pharmacology, University of Illinois, 835 South Wolcott Avenue (M/C 868), Room E403, Chicago, IL 60612.** Website: www.uic.edu/depts.mcph/. *The University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer.*

The Department of Biological Sciences at Northern Illinois University seeks to hire a tenure-track **ASSISTANT/ASSOCIATE PROFESSOR** in the field of bioinformatics/biotechnology. A Ph.D. in biology and postdoctoral research experience are required. The successful candidate will be expected to establish a strong, externally funded research program using both laboratory and computational methods; supervise M.S. and Ph.D. students; and contribute to the Department's graduate program in bioinformatics and to other Department teaching at the undergraduate and graduate levels. Preference will be given to individuals using a prokaryotic system. Send letter of interest, curriculum vitae, brief statement of research and teaching goals, and three letters of reference to: **Dr. Michael Parrish, Chair, Department of Biological Sciences, Northern Illinois University, DeKalb, IL 60115-2861.** Website: <http://www.bios.niu.edu>; Telephone: 815-753-1753; FAX: 815-753-0461; e-mail: biosjobs@niu.edu. Deadline: Complete applications must be received by December 15, 2000. *Northern Illinois University is an Affirmative Action/Equal Employment Opportunity Institution.*

The Biology Department of Rutgers University, Camden, seeks a broadly trained **BIOLOGIST** with research interests in signaling and information processing in biological systems for a tenure-track **ASSISTANT PROFESSOR** position beginning fall 2001. Ph.D. required and postdoctoral experience expected. The successful candidate is expected to teach undergraduate and/or graduate courses in the area of his/her expertise, to participate in introductory biology courses, and to maintain an active research program. Please send curriculum vitae, statement of research interests and teaching philosophy, and three letters of recommendation to: **Dr. P. J. McIlroy, Biology Department, Rutgers University, Camden, NJ 08102.** Review of completed applications will begin December 15, 2000, and continue until the position is filled. *Rutgers is an Equal Opportunity/Affirmative Action Employer and strongly encourages applications from women and minorities.*

POSITIONS OPEN

FACULTY POSITION IN BIOPHYSICS INDIANA UNIVERSITY

The Department of Physics at Indiana University invites applications for a **TENURE-TRACK FACULTY POSITION** in the area of biophysics beginning in the fall of 2001. Applications to lead an innovative program in any area of interdisciplinary research at the interface of physics and biology are encouraged. The successful candidate should also have demonstrated ability and desire to teach physics at the undergraduate and graduate levels. Current areas of emphasis in the biophysics program at Indiana University include protein biophysics and biomaterial studies. This opening is part of an expansion of the Biophysics program that is expected to include additional tenure-track positions during the next few years. Related programs on the IU campus include The Indiana Molecular Biology Institute, which offers extensive facilities and a membership whose research interests span a wide range of topics in molecular biology, biophysics, and biochemistry. An appointment at a senior level, including an Endowed Chair, could be considered for a truly exceptional candidate with an established record of leadership in forefront instrumentation development. Review of applications will begin after December 31, 2000. Further information can be found at website: <http://www.physics.indiana.edu>. Applications consisting of curriculum vitae, list of publications, a brief research plan, and at least three letters of reference should be sent to: **Faculty Search Committee, c/o Professor Steve Vigdor, Chairman, Department of Physics, Swain Hall West 117, Indiana University, Bloomington, IN 47405 U.S.A.**

Indiana University is an Equal Opportunity/Affirmative Action Employer.

TENURED POSITION IN BIOCHEMISTRY UNIVERSITY OF WISCONSIN-MADISON

The Department of Biochemistry at the University of Wisconsin-Madison invites applications for a position at the **ASSOCIATE** or **FULL PROFESSOR** (tenured) level or nominations of individuals to fill this position. Applications in all research areas are invited. The University and Department provide an excellent environment for the development of an outstanding research program. The laboratory of the appointed candidate will be housed in a new facility, and the position will be partially supported by a substantial endowment. The successful candidate will be expected to continue a vigorous independent research program and participate in the undergraduate and graduate teaching programs of the Department. Applications, including curriculum vitae, list of publications, and a brief summary of accomplishments and direction of future research, should be sent to: **Professor H. F. DeLuca, Chair, Department of Biochemistry, University of Wisconsin-Madison, 433 Babcock Drive, Madison, WI 53706-1544.** Applications should be received by February 1, 2001, but the search will continue until a suitable applicant is identified. *The University of Wisconsin is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and minorities. Under Wisconsin statutes, names, titles, and addresses of applicants may be subject to public release upon request.*

Doane College invites applications for a biology **TENURE-TRACK** position beginning August 2001. Ph.D. (or A.B.D.) with broad biology background to teach cell/molecular biology, genetics, anatomy/physiology, and general biology and to be involved in student research in the new \$10.2 million Lied Science Building. The successful candidate will have a strong commitment to undergraduate liberal arts education, preferably with teaching experience and/or an undergraduate education at a smaller college. Send letter of application, résumé, and the names and telephone numbers of three references to: **Maureen Franklin, VPAA, Doane College, Crete, NE 68333.** Review of applications will begin immediately and will continue until the position is filled. *Doane College is an Equal Opportunity Employer.*

**POSTDOCTORAL POSITIONS AVAILABLE
DEPARTMENT OF NEUROSCIENCE
UNIVERSITY OF MINNESOTA**

The Department of Neuroscience at the University of Minnesota invites applications for postdoctoral positions. The neuroscience faculty have a wide range of interests and expertise, studying the structure, function and development of the nervous system, with particular emphasis on motor control, pain, cognitive and behavioral neuroscience, vision, drug abuse, developmental neurobiology, ion channels, and synaptic neurotransmission and plasticity. The current faculty include:

Bagrat Amirikian
James Ashe
Linda Boland
W. Dale Branton
Janet Dubinsky
Timothy Ebner
Robert Elde
Martha Flanders

Apostolos Georgopoulos
Glenn Giesler, Jr.
Christopher Honda
Paulo Kofuji
Paul Letourneau
Dezhi Liao
Steven McLoon
Paul Mermelstein
Robert Miller

Eric Newman
Giuseppe Pellizzer
Richard Poppele
A. David Redish
Virginia Seybold
John Soechting
Martin Wessendorf
George Wilcox

Opportunities exist to participate in versatile and productive laboratories, with access to state-of-the-art facilities that include multi-photon imaging, DNA microarray technologies, and functional brain imaging. The faculty receive over \$8,000,000 in external funding annually, as well as several NIH and NSF training grants which can also provide support to postdoctoral fellows. Training opportunities include neuroscience seminars and colloquia, journal clubs, annual symposia, and career development classes. Competitive salaries are offered. Interested applicants should send their CV and a brief statement indicating their research interests to the **Postdoctoral Studies Coordinator and to the faculty of interest at the Department of Neuroscience, 6-145 Jackson Hall, 321 Church St. S.E., Minneapolis, MN 55455**. For more information on our individual faculty, please visit our web page at <http://www.neurosci.umn.edu/>.

The University of Minnesota is an equal opportunity employer.

ANGIOGENESIS RESOURCE CENTER

The Developmental Therapeutics Program (DTP, DCTD, NCI) has recently put into operation its Angiogenesis Resource Center. This effort was recommended by the Advisory Committee to the Director, NCI to facilitate research into the mechanisms of tumor angiogenesis and the development of drugs that target the essential tumor vasculature.

The Center currently serves qualified investigators in the scientific community by providing human umbilical endothelial cells (HUVEC) and the reference agent TNP470. Additionally, anti-angiogenesis testing is available without charge for pure natural products or synthetic compounds submitted by suppliers in universities, research institutes, government agencies, and pharmaceutical or biotechnology companies.

For additional information on receiving any of these supplies and services, please visit our website at <http://dtp.nci.nih.gov>

or contact the following individuals:

Mr. Richard F. Camalier
Biological Testing Branch
DTP, DCTD, NCI
Fairview Center, Suite 205
1003 West 7th Street
Frederick, MD 21701-8527
Tel: (301) 846-5607
Fax: (301) 846-6183
email: camalier@mail.nih.gov

Dr. Ravi K. Varma
Drug Synthesis and Chemistry Branch
DTP, DCTD, NCI
EPN Room 831
6130 Executive Blvd.
Rockville, MD 20892
Tel: (301) 435-9159
Fax: (301) 480-4817
email: varmar@dtpepn.nci.nih.gov

**NATIONAL
CANCER
INSTITUTE**

- Developmental Therapeutics Program -

**NATIONAL INSTITUTES OF HEALTH
NATIONAL INSTITUTE ON
ALCOHOL ABUSE & ALCOHOLISM**

The Division of Intramural Clinical and Biological Research of the National Institute on Alcohol Abuse and Alcoholism, NIH, is recruiting an individual into a tenure-track position to develop and direct an independent research program focused on the role of DNA damage and repair in function and in relation to human disease. This includes carcinogenesis, teratogenesis and/or degenerative diseases in response to genotoxic agents such as ethanol. Candidates should have an outstanding publication record and, when applicable, a history of independent research funding. The successful candidate will be provided with sufficient resources in the form of personnel and funds to conduct original basic research in DNA modification and repair.

Applicants must have a Ph.D. and/or M.D. degree and should submit a curriculum vitae, bibliography, the names and addresses of three individuals who can be contacted for a reference, and a statement of research goals to:

Ms. Kathleen Hanratty
NIAAA, NIH
Bldg. 31, Room 1B58
31 Center Drive MSC 2088
Bethesda, MD 20892-2088
Telephone: 301/402-2997
FAX: 301/402-0016
E-mail: kh54d@nih.gov

Applications should be received by December 15, 2000. Candidates rated highly qualified will be invited to present a seminar.

NIH is an equal opportunity employer.

POSITIONS OPEN

FACULTY POSITION IN NEUROSCIENCE

The Department of Cell and Molecular Biology of Tulane University (website: <http://www.tulane.edu/~cellmol>) anticipates filling a tenure-track position beginning July 1, 2001, at the level of **ASSISTANT PROFESSOR**. Targeted are individuals whose research interests focus on mammalian neuroscience, although other qualified applicants will be considered. The Department has targeted neuroscience and developmental biology as areas for future growth. Applicants must have a Ph.D., at least two years of postdoctoral experience, a strong publication record, and show potential for obtaining external funding. The successful applicant will be expected to establish a vigorous, independent research program and to participate in graduate and undergraduate teaching. Opportunities exist for research collaborations and participation in the Tulane Neuroscience Program, the Tulane Primate Center, the Tulane Cancer Center, the Tulane/Xavier Center for Bioenvironmental Research, and the Interdisciplinary Graduate Program in Molecular and Cellular Biology. Applicants should send curriculum vitae, a brief statement of research interests, and three letters of recommendation to:

Dr. Jeff Tasker, Search Committee Chair
Department of Cell and Molecular Biology
Tulane University
New Orleans, LA 70118

Tulane University is an Equal Opportunity/Affirmative Action Employer and encourages minority and female applicants to apply.

TENURE-TRACK SENIOR POSITION (PENDING LEGISLATIVE AUTHORIZATION)

Dalton Endowed Chair
Environmental Sciences and
Environmental Studies

The College of Arts and Sciences, Winthrop University, invites applications for the Dalton Endowed Chair in Environmental Sciences and Environmental Studies. Applicants should hold the Ph.D. degree in a field having a strong relationship to environmental sciences/studies; experience in an interdisciplinary environmental program desirable. Responsibilities include teaching courses in the environmental sciences and environmental studies degree programs and directing the programs. Applicants should provide a letter of application; curriculum vitae; a statement of the candidate's vision of teaching, administration, and research for an interdisciplinary undergraduate program; and three confidential letters of reference by January 15, 2001. Requests for the vacancy announcement and your application materials should be addressed to: **Dr. Ralph A. Gustafson, Chair, Dalton Endowed Chair Search Committee, 202 Life Sciences Building, Winthrop University, Rock Hill, SC 29733.** *Winthrop University is an Equal Opportunity/Affirmative Action Employer.*

ANATOMY/PHYSIOLOGY SAINT MARY'S UNIVERSITY OF MINNESOTA

ASSISTANT PROFESSOR, biology (tenure track). Teaching of anatomy, physiology, and some introductory biology with associated laboratories. Another biological specialty would be desirable. The position includes advising undergraduate research. Ph.D. is required with a major in anatomy or physiology. Teaching effectiveness will be considered important. Salary is comparable at entry level. Starting date is August 22, 2001. Review of applications will begin on January 15, 2001, and will remain open until the position is filled. Applications should include curriculum vitae, official transcripts, and at least three letters of recommendation. Contact: **Dr. Richard Kowles, Biology Search Committee Chair, Saint Mary's University of Minnesota, 700 Terrace Heights, Winona, MN 55987.** *Saint Mary's University of Minnesota is an Equal Opportunity/Affirmative Action Employer. Members of the protected classes as defined by federal, state, and municipal law are encouraged to apply.*

POSITIONS OPEN



BOTANY/PLANT BIOLOGY OAKLAND UNIVERSITY BIOLOGICAL SCIENCES

Applications are invited for a tenure-track position in botany/plant biology at the **ASSISTANT PROFESSOR** level starting August 1, 2001.

Candidates must have a demonstrated record of excellence in research using molecular biology or other state-of-the-art techniques applied to areas such as molecular ecology, population biology, plant-animal interactions, genetics, etc. Start-up funds and laboratory space are available for establishing a vigorous research program. A Ph.D. and postdoctoral experience are required.

Oakland University is a state-supported institution of 15,000 students situated on a largely natural 1,400-acre campus 25 miles north of Detroit. The Department of Biological Sciences is a modern, well-equipped, and research-oriented department. The successful applicant will be expected to develop and maintain an independent research program. Teaching responsibilities will entail a course in botany with laboratory followed by an introductory course in alternate semesters. The selected candidate is expected to participate in the newly initiated Ph.D. program in biological communications and may participate in the Center for Biomedical Research.

Review of applications will begin on January 10, 2001, and continue until the position is filled. Applicants should submit curriculum vitae, statement of research plans and teaching philosophy, key reprints, and names of at least three references to:

Search Committee
Department of Biological Sciences
Oakland University
Rochester, MI 48309-4401

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

ASSISTANT PROFESSOR OF MEDICINE Massachusetts General Hospital Cancer Center Harvard Medical School

The Division of Hematology-Oncology and the Cancer Center of Massachusetts General Hospital seek to recruit a **PHYSICIAN-SCIENTIST** at the level of Assistant Professor of Medicine at Harvard Medical School. The candidate should have completed training in clinical oncology and established a record of laboratory investigation in cancer research in a topic including but not restricted to cancer genetics, cellular signaling, model organisms, hematopoiesis, immunology, molecular diagnostics, and molecular therapeutics. The successful applicant will be provided with generous start-up funds and newly renovated state-of-the-art laboratory facilities at the main MGH campus. The position involves intensive interactions with both the basic research unit at the MGH Cancer Center-Charlestown campus and the MGH Hematology-Oncology Unit, as well as active participation in cooperative research efforts of the Dana Farber-Harvard Comprehensive Cancer Center.

Please send curriculum vitae; a brief summary of laboratory and clinical interests; and four letters of recommendation by January 15, 2001, to: **Dr. Daniel Haber, Chair, Search Committee, MGH Cancer Center, CNY7, Building 149, 13th Street, Charlestown, MA 02129.**

MGH is an Equal Opportunity Employer encouraging women and minorities to apply.

POSITIONS OPEN

BIOLOGY. Full-time LECTURER (academic staff) starting in fall 2001. Salary commensurate with professional experience and qualifications. Ph.D. with emphasis in vertebrate field biology or related area. Teach a variety of undergraduate courses including general zoology, general biology, vertebrate zoology, field zoology, ecology, and possibly ornithology or mammalogy. Participate in national and international field trips. Excellent oral and written communication skills and good computer skills required. Experience teaching and directing research at the undergraduate level preferred. Send (1) letter of application, (2) résumé, (3) undergraduate and graduate transcripts, (4) names of three references, and (5) philosophy of teaching statement to: **Dr. Shiv R. Tandon, Department of Biology, University of Wisconsin-Platteville, 1 University Plaza, Platteville, WI 53818-3099. Telephone: 608-342-1611; FAX: 608-342-1427; e-mail: tandonsr@uwplatt.edu.** Applications must be postmarked by January 29, 2001. The position begins August 24, 2001. More information available at website: <http://www.uwplatt.edu>. *The University of Wisconsin-Platteville, an Equal Opportunity/Affirmative Action Employer, seeks to build a diverse faculty and staff and encourages application from women, persons of color, and other minority groups. The names of nominees and applicants who have not requested in writing that their identity be kept confidential and all finalists will be released upon request.*

ASSISTANT PROFESSOR OF PHARMACEUTICAL ANALYSIS Mylan School of Pharmacy Graduate School of Pharmaceutical Sciences Duquesne University Pittsburgh, PA 15282

The Pharmaceutical Sciences Division seeks to fill a tenure-track position in pharmaceutical analysis/pharmaceutical chemistry beginning July 1, 2001. Applicants should possess a Ph.D. degree in pharmaceutical chemistry or a suitably related field. Postdoctoral experience is required. Successful candidates will be expected to teach in the entry-level Doctor of Pharmacy program and M.S./Ph.D. graduate programs and to develop vigorous, creative, and extramurally funded research programs. Applicants should submit a letter of intent accompanied by curriculum vitae, a summary of research interests, and at least three letters of reference to: **Dr. James K. Drennen III, Head Pharmaceutical Sciences Division, Graduate School of Pharmaceutical Sciences, Duquesne University, Pittsburgh, PA 15282. Telephone: 412-396-6315; FAX: 412-396-4660; E-mail: drennen@duq.edu.** For more information about the Mylan School of Pharmacy, the Graduate School of Pharmaceutical Sciences, and Duquesne University, visit the University's website: <http://www.duq.edu/index.html>. Applications will be accepted until the position is filled.

FACULTY POSITION DEVELOPMENTAL BIOLOGIST

Assumption College invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** rank starting August 2001. Duties include teaching developmental biology (integrated molecular, morphological, and evolutionary approaches) as well as another upper-division course (e.g., histology, immunology, or vertebrate biology). The candidate would share responsibilities for introductory courses and expand the undergraduate research program. Ph.D. and a commitment to undergraduate teaching and research required. Postdoctoral experience preferred. Candidates must understand and support the Catholic liberal arts mission of the college. Please send application, including statement of teaching philosophy and research interests; résumé; graduate and undergraduate transcripts; and three letters of reference to: **Dr. Thomas Slavkovsky, Department of Natural Science, Assumption College, 500 Salisbury Street, Worcester, MA 01609-1296** by December 15, 2000. *Assumption College encourages applications from candidates of diverse cultural background. Equal Opportunity Employer.*

Around the world, major pharmaceutical and biotechnology companies such as Merck, Genentech, and Pfizer depend on Aurora Biosciences to make the process for discovering new medicines smarter and faster than ever before. Behind every one of our solutions—which are based on innovative combinations of biology, chemistry, automation, software and high technologies—is a close-knit group of talented, knowledgeable professionals committed to improving human health. Add your considerable expertise, skills and insights to our team, and help us shape the future of medicine.

SCREENING SCIENTIST (2 POSITIONS)

You will be responsible for adapting enzymatic and cell-based assays to Aurora's Ultra High Throughput Screening System (UHTSS™) or High Throughput Screening System. Working with assay developers, automated instrumentation and the informatics team, you will develop robust methods for obtaining large quantities of data on the interaction of chemical libraries with biological targets. Duties will include analysis and QC of data, interpretation of results, design of validation experiments, troubleshooting problems and making necessary changes to optimize utilization of automated instrumentation. Requires a PhD in Biology, Biochemistry, Chemistry or related and 1-3+ years of postdoctoral or industry experience. Excellent communication and teaming skills and a customer orientation are vital to success.

In addition to competitive salary and benefits, we offer equity participation via an ISO and Stock Purchase Program. For more background on our company, visit our website at www.aurorabiosciences.com. Then email your resume and letter, referencing Job# 0008AG, to hr@aurorabio.com. Or fax to (858) 404-6720. If unable to email or fax, please mail to Aurora Biosciences Corporation, Human Resources, 11010 Torreyana Rd., San Diego, CA 92121. EOE.

Aurora™
Biosciences Corporation

The University of Medicine and Dentistry ROBERT WOOD JOHNSON MEDICAL SCHOOL Department of Physiology and Biophysics

Three Assistant Professor Positions

The Department of Physiology and Biophysics is actively recruiting outstanding candidates for three tenure-track positions to start July 1, 2001 or later. Preference will be given to applicants in the broad general areas of endocrinology and cell physiology, although applicants from other areas of modern physiology will also be considered. Applicants must possess a Ph.D. and/or M.D. and appropriate research experience and publication record. Ample resources will be available, in a dynamic research environment. Successful candidates will be expected to teach Medical Physiology and to participate in Graduate School courses.

Please send c.v. including an outline describing proposed program of research and three (3) letters of recommendation to: Nicola C. Partridge, Ph.D., Professor and Chair, UMDNJ-Robert Wood Johnson Medical School, Department of Physiology & Biophysics, 675 Hoes Lane, Piscataway, NJ 08854. Review of applications will begin December 1, 2000 and continue until the positions are filled. UMDNJ is an Affirmative Action/Equal Opportunity Employer, m/f/d/v, and a member of the University Health System of New Jersey.

Visit our website at: <http://www.umdj.edu>.



UMDNJ
UNIVERSITY OF MEDICINE &
DENTISTRY OF NEW JERSEY

THE UNIVERSITY OF BRITISH COLUMBIA

DEPARTMENT OF PSYCHIATRY DIVISION OF NEUROSCIENCE & THE BRAIN RESEARCH CENTRE, FACULTY POSITIONS

The University of British Columbia invites applications for two tenure track positions in the Division of Neuroscience, Department of Psychiatry & The Brain Research Centre.

The **Jack Brown and Family Professorship** in Alzheimer's Research will provide support for an Associate Professor specializing in the genetics of Alzheimer's disease. Investigators of international stature with an outstanding record of accomplishment in this field are encouraged to apply. The incumbent will be expected to develop a vigorous internationally competitive research program, and to interact with a strong core of clinicians and basic scientists.

A **second position** at the Assistant or Associate level is also available and outstanding candidates from all areas of Neuroscience are encouraged to apply, particularly individuals with expertise in the cellular or molecular basis of neurodegenerative disorders.

Candidates must hold a Ph.D. and/or an M.D. degree and show clear evidence of independent, original research. The Division of Neuroscience and the Brain Research Centre offer excellent research facilities. Generous start-up funds are available. Salary will be commensurate with qualifications and experience. These positions are subject to final budgetary approval.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. UBC hires on the basis of merit and is committed to employment equity. We encourage all qualified persons to apply.

Anticipated start date is July 1, 2001. Applicants should send a curriculum vitae, list of publications, a statement of research interests and the names and addresses of three referees by **December 31, 2000**, to:

Dr. S.R. Vincent,
Head Division of Neuroscience
Department of Psychiatry
University of British Columbia
2255 Wesbrook Mall
Vancouver, B.C.,
V6T1Z3 Canada



BRAIN
Research Centre

POSITIONS OPEN

HORTICULTURIST FACULTY POSITION

Christopher Newport University invites applications to fill a position in horticulture/botany in the Department of Biology, Chemistry, and Environmental Science. Tenure-track position starting in August 2001. Requirements for the position include a Ph.D., demonstrated abilities in teaching and research, and effective communication skills. The successful applicant must be able to teach undergraduate courses in plant materials for landscape use, landscape design, plant physiology, general biology, and other complementary horticulture/botany courses. CNU is a liberal arts university of 5,000 students located in beautiful metropolitan southeastern Virginia near the Norfolk Botanical Garden, Colonial Williamsburg, the Hampton Roads Agricultural Research and Extension Center, and other cultural and research opportunities. See our website: www.cnu.edu for more details.

Send a letter of application, curriculum vitae, statement of teaching philosophy, statement of research interests, undergraduate and graduate transcripts (photocopies acceptable), and three letters of recommendation to: **Director of Equal Employment and Faculty Recruitment, Horticulturist Faculty Search, Search Number 8058, Christopher Newport University, 1 University Place, Newport News, VA 23606-2998.** Only complete applications will be considered. Evaluation of applications begins December 20, 2000. *Christopher Newport University, an Equal Opportunity Employer, is fully committed to Access and Opportunity for all persons.*

FACULTY POSITIONS CENTER FOR CARDIOVASCULAR DEVELOPMENT

The Center for Cardiovascular Development at Baylor College of Medicine seeks two tenure-track faculty members at the **ASSISTANT PROFESSOR** level. Outstanding senior candidates will also be considered. Faculty appointments will be made through the Department of Medicine and the Department of Molecular and Cellular Biology. We seek candidates applying genetic or genomic methods to development of the heart or vasculature. Applicants with expertise in the molecular biology of angiogenesis are encouraged. A Ph.D. or M.D. degree and postdoctoral experience are required.

Candidates should forward curriculum vitae and summary of research plans and arrange for three letters of recommendation to be sent by January 15, 2001, to: **Search Committee, Center for Cardiovascular Development, Baylor College of Medicine, One Baylor Plaza, Room 506C, Houston, TX 77030.** For further information, contact: **Dr. Michael D. Schneider; Telephone: 713-798-6683; e-mail: michaels@bcm.tmc.edu or Dr. Robert J. Schwartz; Telephone: 713-798-6649; e-mail: schwartz@bcm.tmc.edu.** *Baylor College of Medicine is an Equal Opportunity/Affirmative Action Employer.*

MOLECULAR GENETICIST SEARCH EXTENDED

University of Wisconsin-Eau Claire, a selective, primarily undergraduate comprehensive university seeks tenure-track **ASSISTANT PROFESSOR** beginning August 2001 to serve in a highly collegial, modern biology department. Teach molecular biology courses and a course in their specialty. Candidates must enjoy teaching both majors and nonmajors. The Department strives for excellence in teaching and encourages student/faculty development through support of research. The successful candidate will have newly renovated teaching and research facilities and substantial start-up funds. The University supports ongoing research through internal programs and assistance in extramural grant development. Ph.D. required. Priority deadline: December 11, 2000. Send application to: **Chair, Department of Biology, University of Wisconsin-Eau Claire, Eau Claire, WI 54702-4004. E-mail: GLENNALE@UWEC.EDU; Telephone: 715-836-4166; FAX: 715-836-5089; website: www.uwec.edu/Academic/Biology/biology.html.** *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

PLANT BIOLOGY ASSISTANT PROFESSORSHIPS

The Department of Organismic and Evolutionary Biology of Harvard University invites applications for two faculty positions at the **ASSISTANT PROFESSORIAL** level to begin July 1, 2001. Initial appointment is for a term of five years, with possibility of promotion (including to tenure). We seek to make appointments of individuals who will develop innovative research programs as well as contribute to teaching at the graduate and undergraduate levels. The search is cast broadly across the subdisciplines of plant biology, including but not limited to population level processes, morphological and/or developmental evolution, the interface of functional and morphological evolution with genetic mechanisms, and plant diversity. For further information about the Department, see website: <http://www.oeb.harvard.edu>; for the Harvard University Herbaria, see website: <http://www.herbaria.harvard.edu>.

Applicants should submit curriculum vitae and request three supporting letters to be received by December 15, 2000, to:

**Professor Farish A. Jenkins, Jr.
Department of Organismic and
Evolutionary Biology
Harvard University
26 Oxford Street
Cambridge, MA 02138**

Harvard University is an Affirmative Action/Equal Opportunity Employer.

TENURE-TRACK FACULTY POSITION MOLECULAR PROTEOMICS

The Department of Chemistry at Texas A&M University, in association with the University's Life Sciences Initiative, is undertaking a strategic move towards the establishment of a new research program in molecular proteomics. We seek to add junior faculty members having research interests in one or more of the following areas: (1) protein structure elucidation by X-ray crystallography or NMR, (2) high-throughput expression and purification of proteins, (3) protein-protein interactions, or (4) evolution of functional diversity. The preferred starting date for the positions is September 1, 2001. The successful candidates will be expected to maintain vigorous independent research programs and to teach at the undergraduate and graduate levels. Candidates should submit curriculum vitae, a brief description of research plans (not to exceed five pages), and arrange for three letters of recommendation to be sent to: **Dr. Emile A. Schweikert, Head, Department of Chemistry, Texas A&M University, P.O. Box 30012, College Station, TX 77843-3012.** Applications must be received by February 1, 2001, to ensure review but will continue to be considered until the positions are filled. *Texas A&M University is an Equal Opportunity/Affirmative Action Employer, and applications from underrepresented groups are especially encouraged.*

FACULTY POSITION, genetic variation and cancer: The Tulane Cancer Center and the Department of Environmental Health Sciences are seeking candidates for a tenure-track appointment at the **ASSISTANT or ASSOCIATE PROFESSOR** level. Candidates with research interests in molecular genetics or molecular biology, particularly as they may apply to cancer in human populations or relevant model systems, will be preferred. Modern laboratory space in the newly constructed floor dedicated to basic cancer research will provide a strong and interactive research environment. The successful candidate will be expected to participate in graduate student teaching within the Department. Submit applications, including curriculum vitae and summary of research interests, and arrange for three letters of recommendation to: **Dr. Prescott Deininger, Tulane Cancer Center, SL-66, Tulane University Medical Center, 1430 Tulane Avenue, New Orleans, LA 70112.** The position will remain open until filled. *Tulane University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

JUNIOR FACULTY POSITION UNIVERSITY OF CALIFORNIA, IRVINE

As a part of the expansion of medical genomics at the University of California, Irvine, the Department of Biological Chemistry in the College of Medicine invites applications for a state-funded faculty position at the **ASSISTANT PROFESSOR** level. Applicants should hold the Ph.D. or Ph.D./M.D. degree and have an outstanding record in biomedical research. Preference will be given to candidates using innovative approaches in vertebrate model or human systems to address fundamental molecular problems in the areas of development and disease. The individual is expected to establish and maintain an independent research program of high caliber and participate in the training of graduate and medical students. Curriculum vitae, brief research description, representative publications, statement of teaching interests, and three letters of reference should be submitted prior to December 15, 2000, to: **Department of Biological Chemistry Search Committee, Department of Biological Chemistry, College of Medicine, D240 Medical Science I, University of California, Irvine, CA 92697-1700.** E-mail applications will not be accepted. *The University of California, Irvine, is an Equal Opportunity Employer.*

Due to concurrent retirements, the Biology Department invites applicants for four tenure-track **ASSISTANT PROFESSOR** positions to begin 1 August 2001. Candidates must have a Ph.D. (or equivalent degree) related to one or more of the instructional areas listed and a strong commitment to undergraduate teaching and research: genetics, endocrinology, developmental biology, biology of aging, animal physiology, neuroscience/neurobiology, gross anatomy, human nutrition, human anatomy/physiology, evolution, and organismal biology (vertebrate, invertebrate, entomology).

Located near the Adirondacks in New York State, Utica College's Biology Department teaches undergraduate biology majors and undergraduate and graduate allied health science students. Postdoctoral and/or teaching experience is preferred but recent Ph.D.s are encouraged to apply, and successful candidates will have the opportunity to help mold the future of this dynamic department. Send letter of application, curriculum vitae, and names of three references by 15 December 2000 to: **Dr. David L. Moore, Utica College of Syracuse University, 1600 Burrstone Road, Drawer 148S, Utica, NY 13502-4892. E-mail: dmoore@utica.ucsu.edu.**

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

SPECIALIST

A **RESEARCH SPECIALIST** in biochemistry/molecular biology will be hired for one year to study various protein-protein and protein-nucleic acid interactions involved in the control of mammalian gene expression. Qualifications: B.S. in biochemistry or molecular biology. Demonstrated knowledge in biochemistry of transcriptional regulation and viral gene expression. Salary commensurate with experience. Send résumé; description of research experience; and bibliography by December 11, 2000, to: **Dr. Qiang Zhou, Department of Molecular and Cell Biology, University of California, 229 Stanley Hall, Number 3206, Berkeley, CA 94720-3206.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

VIRTUAL SUPERCOMPUTING for Bioinformatics and Other Scientific Applications

Publicly traded technology company seeks **TECHNICAL, TECHNICAL MARKETING, and SENIOR MANAGEMENT** personnel for new business unit applying virtual supercomputing at unprecedented scale to computationally intensive bioinformatics, computational chemistry, and other scientific applications. Résumé to: **Jennifer Mayer, 120 West 45th Street, 23rd Floor, New York, NY 10018. E-mail: mayer@staff.juno.com.**



ASSOCIATE DIRECTOR NANOBIOTECHNOLOGY CENTER

The Nanobiotechnology Center (NBTC), a Science & Technology Center funded by the National Science Foundation, is accepting applications for the position of Associate Director. The NBTC is a dynamic center of research and education that unites activities of biologists, engineers and physical scientists. The Associate Director will play a key roll in guiding the activity and developments in this exciting new area.

The Associate Director will hold an academic appointment reporting to the Center Director. The position will help to manage the operations of the NBTC, a large, multi-disciplinary and multi-institutional research center. Functional areas include research and outreach activities as well as financial, human resource, facilities and information systems. The Associate Director will assist the Director in interacting with the faculty in directing the research programs and in generating new thrusts in education and knowledge transfer. Responsibilities of this position will also include overseeing scientific, technical and budgetary reporting by member educational and industrial institutions.

Qualifications include: a PhD in Science or Engineering with at least 5 years of academic or industrial experience related to research and development. Experience in grant writing helpful. Candidate must be enthusiastic, self-motivated, and committed to working effectively in a team based environment, have excellent verbal and written communication skills, and strong general administrative skills.

To apply: Please submit a cover letter, curriculum vitae and the names of at least three references to: **Lorraine Capogrossi, Nanobiotechnology Center, 101 Biotechnology Building, Cornell University, Ithaca, NY 14853. Fax: 607-254-5375, E-mail: lnh5@cornell.edu.** For more information about the Center, our website can be accessed at <http://www.nbtc.cornell.edu>.

CORNELL
UNIVERSITY

Cornell University is an Affirmative Action/Equal Opportunity Employer and Educator and Welcomes Nominations of, and Applications from, Women and Minorities.

<http://www.cornell.edu>

nature Structural biology

COPY EDITOR

Nature Publishing Group seeks a copy editor for its prestigious monthly journal *Nature Structural Biology*. This challenging job involves substantially editing research articles to make these complex technical manuscripts clear, concise and consistent with our style.

Applicants should have a degree and/or laboratory experience in molecular biology, biochemistry, or structural biology, excellent literary abilities and a keen interest in the communication of scientific ideas. Other requirements include routine computer skills, precise attention to detail and the ability to work closely with editors and authors to meet regular deadlines. Copy-editing experience is helpful, but a talent for working with words is more important. This full-time position in our Manhattan office offers a competitive salary and benefits, a lively work environment, and the opportunity to have a substantial influence on a major scientific journal.

Please send a cover letter and CV to the Editor, *Nature Structural Biology*, 345 Park Avenue South, New York, NY 10010-1707 (fax 212 679 0735; email nsb@natureny.com) to arrive as soon as possible and no later than December 8.



St. Jude Children's Research Hospital

ALSAC • Danny Thomas, Founder

POSTDOCTORAL POSITION DNA Topoisomerase I

A postdoctoral position is available to study cellular responses to DNA damage induced by DNA topoisomerase I-targeted antitumor agents, such as camptothecin. These NIH supported studies focus on genetic and biochemical analyses of alterations in DNA topoisomerase I function and the role of DNA damage checkpoints and repair in regulating cell sensitivity to DNA lesions induced by this enzyme. Candidates with a recent Ph.D. or M.D. degree interested in using yeast genetics or in developing transgenic mouse models to understand the cytotoxic mechanism of antineoplastic drugs that poison DNA topoisomerase I are encouraged to apply.

St. Jude Children's Research Hospital, Danny Thomas-Founder, is an outstanding biomedical research center and provides an exceptional training environment for scientific endeavors and career development. Stipends and benefits are highly competitive.

Qualified candidates should send a letter of interest, curriculum vitae and names of three references to:

Mary-Ann Bjornsti, Ph.D.
Department of Molecular Pharmacology
St. Jude Children's Research Hospital
332 N. Lauderdale Street
Memphis, TN 38105-2794
E-mail: Mary-Ann.Bjornsti@stjude.org

www.stjude.org
equal opportunity/affirmative action employer



Molecular Evolution Faculty Position

The Department of Biological Sciences at the University of Iowa invites applications for a faculty position in the area of molecular evolution at the Assistant Professor level. This search supplements a previously advertised search at the Associate professor level. The successful candidate will be expected to develop an internationally visible research program that uses molecular approaches to study problems in evolution. These problems include, but are not limited to, evolution of developmental processes, genome evolution, evolution of regulatory circuits, evolution at the population level and evolution of host-pathogen interactions in animals and plants. Under the leadership of a new head, the Department is committed to building an internationally recognized program in evolutionary biology and successful candidates will participate in filling additional positions in evolutionary biology in subsequent years.

Candidates are expected to have had postdoctoral experience and a record of publication in leading scientific journals. Completely renovated research facilities and a substantial start-up package will be provided. Applicants should send a curriculum vitae, statement of future research objectives, description of teaching interests, names of three references and selected reprints or preprints to:

Evolution Search Committee
Department of Biological Sciences
University of Iowa
138 Biology Bldg.
Iowa City, Iowa 52242-1324

Applications will be reviewed as soon as they are received until suitable candidates are identified. *The University of Iowa is an affirmative action/equal opportunity employer. Women and minority candidates are especially encouraged to apply.*

POSITIONS OPEN

FACULTY POSITION IN CHEMISTRY UNIVERSITY OF ALASKA SOUTHEAST

The University of Alaska Southeast is seeking a qualified Chemist for a position at the **ASSISTANT PROFESSOR** level. This is a nine-month tenure-track appointment and is a support position for undergraduate programs in biology and environmental science. The successful candidate will be responsible for teaching general chemistry and upper-division courses in water chemistry and establishing a research program involving undergraduates. All applicants must have a Ph.D. in chemistry or related discipline. It is expected that the new faculty member will develop a productive career in teaching, research, and service. Position will begin fall semester 2001. A letter of interest, University of Alaska application, a short statement of teaching and research interests, a curriculum vitae, copies of undergraduate and graduate transcripts, and names and contact numbers of three professional references should be sent to: **University of Alaska Southeast, Personnel Services, 11120 Glacier Highway, Juneau, AK 99801-8675**. A complete job description and a formal application are available at [website: www.uas.alaska.edu](http://www.uas.alaska.edu) or by **Telephone: Personnel Services; 907-465-6263**. Complete application material must be received by December 1, 2000. *University of Alaska Southeast is an Affirmative Action/Equal Opportunity Employer and Educational Institution.*

BIOLOGY. Full-time **ASSISTANT PROFESSOR** (tenure track) starting in fall 2001. Salary commensurate with professional experience and qualifications. Ph.D. with emphasis in fresh water biology or related field. Teach a variety of undergraduate courses including general zoology, general biology, invertebrate zoology, and develop courses in fresh water biology and aquaculture. Coordinate national and international field trips. Excellent oral and written communication skills and good computer skills required. Experience teaching and directing research at the undergraduate level preferred. Send (1) letter of application, (2) résumé, (3) undergraduate and graduate transcripts, (4) names of three references, and (5) philosophy of teaching statement to: **Dr. Shiv R. Tandon, Department of Biology, University of Wisconsin-Platteville, 1 University Plaza, Platteville, WI 53818-3099. Telephone: 608-342-1611; FAX: 608-342-1427; e-mail: tandonsr@uwplatt.edu**. Applications must be postmarked by January 29, 2001. The position begins August 24, 2001. More information available at [website: http://www.uwplatt.edu](http://www.uwplatt.edu). *The University of Wisconsin-Platteville, an Equal Opportunity/Affirmative Action Employer, seeks to build a diverse faculty and staff and encourages application from women, persons of color, and other minority groups. The names of nominees and applicants who have not requested in writing that their identity be kept confidential and all finalists will be released upon request.*

BIOLOGY TENURE-TRACK POSITION. Berry College has an opening starting August 2001 for a tenure-track **ASSISTANT PROFESSOR** of biology. Priority will be given to candidates with interests in teaching introductory biology courses and an upper-level course in their area of specialty and in developing a strong undergraduate research program. The ideal candidate will be broadly trained in the biological sciences. Plant Physiologists, Molecular Systematists, and Neurobiologists as well as candidates whose capabilities transcend several subdisciplines are especially encouraged to apply. Send cover letter, curriculum vitae, statement of teaching and research interests, and three letters of reference to: **Dean, School of Mathematical and Natural Sciences, Berry College, Mount Berry, GA 30149-5036**. Application deadline 15 December 2000. Please visit our [website: http://www.berry.edu/academic/mans/](http://www.berry.edu/academic/mans/). Berry College, located on 28,000 acres near Rome, Georgia, is an independent coeducational college with approximately 2,000 undergraduate and graduate students. The college's comprehensive curriculum stresses academic excellence, practical work experience, and an interdenominational religion-in-life program. *Equal Opportunity Employer.*

POSITIONS OPEN

DIRECTOR, ANIMAL CARE QUALITY ASSURANCE OFFICE, University of Missouri. Professional needed to supervise all research compliance activities related to animal care and use in facilities located in Medicine, Veterinary Medicine, Agriculture, Biological Sciences, Dalton Cardiovascular Research Center, and four local farms. The incumbent will develop/implement MU institutional policies and procedures to assure continuous compliance with animal care and use regulations, oversee standard-of-care aspects of MU animal use, develop and monitor standard operating procedures, develop and deliver training programs, and administer and assist MU's Institutional Animal Care and Use committee. Will supervise the IACUC coordinator, ensure appropriate record-keeping practices for animal compliance, assist with the OHSP for animal researchers, coordinate animal compliance activities for the campus, interact with the D.V.M. postdoctoral training program, interact with the public on animal care issues, and provide institutional officials with advice on animal compliance matters. Minimum of Master's degree in related field and two years of experience in animal research and/or compliance (D.V.M. or Ph.D. in related field and experience in managing regulatory compliance matters for a complex institution desirable). Experience with large animals advantageous; excellent writing and communication skills required; university experience desirable. Send curriculum vitae, letter of professional goals, and a list of five potential references to: **Robert D. Hall, Associate Vice Provost, Office of Research, 205 Jesse Hall, University of Missouri, Columbia, MO 65211**. Review of applications will begin November 15, 2000, but applications will be accepted until the position is filled. *The University of Missouri is an Equal Opportunity/Americans With Disabilities Act Institution. To request ADA accommodations, please contact our ADA Coordinator at Telephone: 573-884-7278 or e-mail: adawww@showme.missouri.edu.*

GEORGETOWN UNIVERSITY

Georgetown University seeks nominations and applications for the position of **DEAN OF THE GRADUATE SCHOOL OF ARTS AND SCIENCES**.

The Graduate School offers advanced degrees in 33 programs, including Doctorates in 18 disciplines, and enrolls approximately 3,000 students. Further information about the Graduate School is available via its [website: http://georgetown.edu/grad/](http://georgetown.edu/grad/).

The core responsibilities of the position include the administration and promotion of graduate education and research in the arts and sciences on the Main Campus and at the Medical Center. The Dean of the Graduate School reports to the Provost and supervises three Associate Deans and a staff of 14. The successful candidate will have a strong background in academic administration and a distinguished record in research and teaching.

The appointment will begin July 1, 2001. Review of candidates will begin November 30, 2000. Full applications should include a letter of application; current curriculum vitae; and the names, addresses (e-mail addresses are acceptable), and telephone numbers of four references. Nominations and applications will be held in strict confidence. They should be sent to: **Professor J.R. McNeill, Chair, Graduate Dean Search Committee, c/o Office of the Provost, Intercultural Center Suite 650, Georgetown University, Washington, DC 20057-1014**.

Georgetown University is an Affirmative Action/Equal Opportunity Employer.

Director of Environmental Science and Policy program/**ASSISTANT OR ASSOCIATE PROFESSOR:** Pending final budget approval, Drake University seeks a teacher/scholar to direct an undergraduate Environmental Science and Policy program. A background in life sciences is preferable but not essential, with an interdisciplinary orientation that lends itself to creating courses appropriate to environmental policy as well as science. This is a tenure-track position. For information on applying, see [website: http://www.env.drake.edu/directors_positiondescription/](http://www.env.drake.edu/directors_positiondescription/). *Drake University is an Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSORS DEPARTMENT OF ANATOMY Virginia Commonwealth University Campus of the Medical College of Virginia

The Department of Anatomy at Virginia Commonwealth University School of Medicine invites applications for one tenure-track Assistant/Associate Professor position and one collateral Assistant Professor position with potential conversion to tenure-track status in two years. We seek exceptional candidates pursuing imaginative cellular or molecular approaches in areas related to the Department's research strengths: neural injury and repair, the visual and motor systems, neural development and plasticity, and cardiovascular cell biology. Please visit our [website: http://views.vcu.edu/ana](http://views.vcu.edu/ana) for more detailed information regarding departmental areas of research.

The successful candidates must have a Ph.D., M.D., or D.D.S. and two or more years of productive postdoctoral research experience. Candidates for Associate Professor must have an outstanding record of research accomplishments, an independent research program, and active extramural funding. Candidates for Assistant Professor must have the potential to establish an independent, nationally funded research program. The candidates are expected to participate in teaching activities in the Department of Anatomy. Attractive salary and start-up packages commensurate with the candidate's qualifications and experience are available for each of these positions.

Candidates should submit a letter of application; curriculum vitae; brief summary of current research; statement of future research directions; and the names, addresses, telephone numbers, and e-mail addresses of three references. Reviews of files will begin on December 1, 2000. Send materials to:

**Ary S. Ramoa, M.D., Ph.D.
Chair, Search Committee
Department of Anatomy
P.O. Box 980709
Richmond, VA 23298-0709**

Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer. Women, minorities, and persons with disabilities are encouraged to apply.

RESEARCH PARTICIPATION PROGRAM U.S. Environmental Protection Agency and Food and Drug Administration Project Number EPA/FDA 2000-01

Applications are invited for a **POSTGRADUATE POSITION** located in Rockville, Maryland, to participate in a cooperative effort to evaluate the predictability of animal data for human development toxicity. The successful candidate will work cooperatively with both Environmental Protection Agency (EPA) and Food and Drug Administration (FDA) to extract specific data from animal studies, enter data into databases, critically evaluate data, and write reports.

Applicants should have M.S. degree in biomedical sciences and Master's-level training in reproductive and developmental toxicology. Preferred skills include proficiency in word processing and database software; experience in reproductive and developmental toxicity testing, including neurobehavioral testing of chemical agents and/or drugs; critical review of such studies (under EPA or FDA guidelines); general knowledge of pharmacology, biochemistry, toxicology, animal toxicology testing protocols, good laboratory practices, risk assessment; and understanding of pharmacokinetics and pharmacodynamics. Annual stipend depends on background and experience. Degree should be received within past three years. *U.S. citizenship or permanent resident alien status is preferred.* Appointment is for one year and available immediately.

Interested candidates should send curriculum vitae and cover letter with the Project Number EPA/FDA 2000-01 to: **Pat Pressley, MS 36, Oak Ridge Institute for Science and Education, P.O. Box 117, Oak Ridge, TN 37831-0117. E-mail: presslep@ornl.gov; Telephone: 865-576-5654; FAX: 865-241-5219.**



The United States Pharmacopeia (USP) establishes and disseminates officially recognized standards of quality and authoritative information for the manufacture and use of medicines and other healthcare technologies.

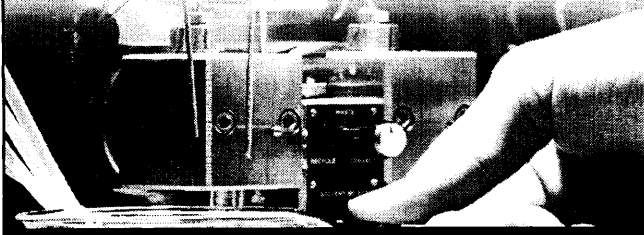
U.S. Pharmacopeia
The Standard of Quality™

CHEMIST III

Responsibilities: Will work independently in a team environment in analytical development, stability studies, investigation and troubleshooting, including assay validation of active components and excipients in formulations, dietary supplements, reference standards and biological products with particular emphasis on proteins. Position will also include evaluation of project requirements, developing project plans and generating reports and presenting results to both internal and external scientific communities.

Requirements: Ph.D. in Chemistry, Biochemistry or related field with 3-5 years post-doctoral hands-on experience in protein analysis and characterization, troubleshooting and structure-function studies using state-of-the-art equipment including HPLC, spectrophotometric methods, amino acid analysis peptide mapping, electrophoresis, immunological techniques, etc. Experience in analytical development of pharmaceutical drug candidates and experience in a cGMP environment preferred. Working knowledge of MS Word, Excel and Access required.

USP provides an excellent compensation and benefits package including medical/dental/life insurance, flexible spending accounts and retirement plan. For consideration, please forward resume with salary history and requirements to: **US Pharmacopeia, Attn: HR Department, 12601 Twinbrook Parkway, Rockville, MD 20852. Fax: (301) 816-8332.**



Visit our Web Site at www.usp.org

EOE



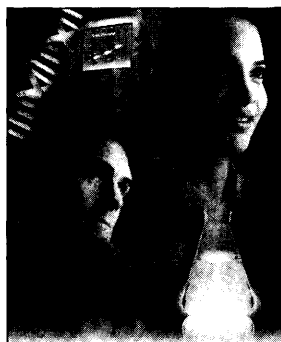
CHAIR, DEPARTMENT OF PATHOLOGY

The Henry Ford Health System is seeking a new Chair to head the Department of Pathology.

Candidates must be board certified in anatomic pathology, demonstrate ability to manage all aspects of lab operations and have strong academic credentials. A collaborative style, commitment to service, support of faculty development and the ability to promote research and academic growth are required.

This position reports directly to the Chief Medical Officer of the Henry Ford Medical Group and is responsible for 31 faculty and 11 residents. Annual volume includes 4 million billable tests (50,000 surgical and 105,000 cytology).

Send CV to: David Nathanson, M.D., Chair, Search Committee, c/o Staff Services, 1 Ford Place, 4E-F, Detroit, MI 48202. Fax: (313) 874-4677. Email: akorine1@hfhs.org AA/EEO.



The Face of Pfizer

At Pfizer, we just made the best even better. Pfizer Global Research and Development draws on the expertise of Pfizer and Warner-Lambert/Parke-Davis to create a vast R&D enterprise with an annual budget of more than \$4.7 billion. If you're intrigued by working with exceptional people on exceptional challenges,

maybe yours could be the new face of Pfizer. Explore this opportunity at our facility in Ann Arbor, Michigan.

Biochemist

Working in our Infectious Disease department, you will join a high performing team dedicated to conducting research aimed at the discovery and development of new antibacterial compounds. You will be a key member of our research team and your responsibilities will include the design and execution of discovery strategies aimed at identifying new targets and their mechanisms and the function of novel proteins. Additionally, you will participate on project teams, supervise colleagues and become an integral member of our therapeutic area leadership. This position requires a PhD in Biochemistry or related field, a minimum of 2 years postdoctoral training with an emphasis in Biochemistry and 3-5 years experience in academic or industrial research.

Recently ranked among *Fortune's* 100 Best Companies to Work For, Pfizer offers an exceptional work environment complete with training opportunities to develop your professional talents. To apply, please submit your resume, indicating Ad Code 00008985C1, to PGSD Strategic Staffing, 2800 Plymouth Road, Ann Arbor, MI 48105; fax to 734.622.7617. An equal opportunity employer, Pfizer offers a workplace rich with diversity and potential.

www.pfizer.com



Life is our life's work.

Executive Director

Northeastern Regional Aquaculture Center University of Massachusetts Dartmouth

The Northeastern Regional Aquaculture Center (NRAC) at the University of Massachusetts Dartmouth invites nominations and applications for the position of Executive Director. NRAC is one of five regional aquaculture centers established by the U.S. Congress and is funded annually by the U.S. Department of Agriculture at an annual level of approximately \$750,000. The northeastern region includes 12 states and the District of Columbia. NRAC develops and sponsors cooperative regional research and extension education projects on behalf of the aquaculture industry in the northeastern U.S. NRAC is governed by a Board of Directors which relies heavily on technical and industry advisory committees.

Candidates must have a Ph.D. or a minimum of 3 years' experience in science/research administration and management experience in either public or private sector; successful experience in aquaculture-related research or industry activities; the ability to communicate well with industry, academic and government representatives in aquaculture; outstanding technical knowledge; ability to assess and evaluate the needs of industry; administrative skills, including but not limited to general grants; and demonstrated strong leadership in a team-building approach to project development and management.

Salary is competitive and will be based on qualifications and experience. Benefits will include health and dental plans, a retirement plan, vacation, and sick leave. The Executive Director will be employed by UMass Dartmouth and will report jointly to NRAC's Board of Directors and the UMass Dartmouth Provost and Vice Chancellor for Academic Affairs.

Applications should contain a letter of interest, resume, and names, titles, addresses, and phone numbers of three references. Position will be available early in 2001. Review of applications will begin on December 29, 2000, and continue until the position is filled. All communications regarding this position should be addressed to: **NRAC Executive Director Search, Office of Human Resources, University of Massachusetts Dartmouth, 285 Old Westport Road, North Dartmouth, MA 02747-2300.**

The University of Massachusetts Dartmouth is an AA/EEO Employer.

POSITIONS OPEN

TENURE-TRACK FACULTY POSITIONS AND DIRECTOR OF INFORMATION SCIENCE

The University of Arkansas at Little Rock invites applications for faculty positions in information science at all ranks. In addition, it seeks applications for a **DIRECTOR** of its newly established B.S. program in information science in the Donaghey College of Information Science and Systems Engineering.

The metropolitan campus of the University of Arkansas at Little Rock established an information science program with an entering freshman class in the fall of 1999. The curriculum has been created in concert with the knowledge-based companies in Arkansas. The program will have long-term interactions with Arkansas' knowledge-based companies including Axiom, Alltel, Arksys, Lucent Technologies, BEI Sensors, and the EIS group.

Faculty in the new program will be able to participate in Master's and Doctoral programs in applied computational science or engineering science through joint appointment with the graduate department of applied science. There is also the potential for start-up funds and an opportunity to develop cooperative research programs with a locally headquartered, international knowledge-based company.

The Director of Information Science will be expected to provide leadership in shaping and defining the discipline of information science at UALR. Particular emphasis will be on database technology and applications and Internet technologies. The Director will report to the Dean of the College.

The administration of the University of Arkansas Systems and the University of Arkansas at Little Rock are committed to creating a nationally competitive academic environment for both faculty and students. Little Rock and the central Arkansas regions represent areas with an outstanding quality of life and excellent recreational opportunities. UALR is a metropolitan university of over 10,000 students that is the hub of a growing technology concentration in central Arkansas.

Qualifications: Ph.D. in information science, computer engineering, or closely related areas. Specific areas of interest include knowledge-based systems, Internet technologies, object-oriented technologies, and client/server technologies. Industry experience and/or close working relationship in industry partners is a plus.

A letter of application or nomination; complete curriculum vitae; and the names, addresses, telephone numbers, and e-mail addresses of four references are required. The screening for the faculty positions and Director of the Information Science Program will begin immediately and will continue until all open positions are filled. Positions are open as of January 1, 2001, but start dates can be accommodated for July 1, 2001, August 2001, or late in 2001.

Applications and nominations should be sent to: **Dr. Mary L. Good, Dean, Donaghey College of Information Science and Systems Engineering, University of Arkansas at Little Rock, 2801 South University Avenue, ETAS 202H, Little Rock, AR 72204-1099. E-mail: mlgood@ualr.edu.**

The University of Arkansas at Little Rock is an Affirmative Action/Equal Opportunity Employer and actively seeks candidacy of qualified minorities, women, and persons with disabilities. Under Arkansas law, all applications are subject to disclosure. Persons hired must have proof of legal authority to work in the United States.

COMMISSIONING EDITOR

Expanding international STM publisher seeks two chemistry/life science Commissioning Editors for its United States and United Kingdom offices. The ideal candidates would have a graduate/postgraduate degree in chemistry or a life science discipline and be interested in publishing. Responsibilities include conferring with authors, keeping abreast of current research, and reporting directly to the editor-in-chief. Send résumé and salary requirement to: **World Scientific Publishing Company, 1060 Main Street, River Edge, NJ 07661 U.S.A. FAX: 1-201-487-9656.**

POSITIONS OPEN



CENTER FOR DISCOVERY OF DRUGS AND DIAGNOSTICS (CD³)

CD³ is dedicated to becoming a national leader in genomic/proteomic research and its application in the development of new drugs and diagnostics. It is seeking tenure-track candidates at **ASSISTANT** or **ASSOCIATE PROFESSOR** levels involved in imaginative genome or proteome-driven investigations relevant to drug discovery. These could include protein structure/function studies such as the characterization and inhibition of protein/protein or protein/nucleic acid interactions. Candidates should have a Ph.D. and over two years of postdoctoral experience in an appropriate subject. They will be expected to establish a vigorous, independent research program with external funding and to participate in collaborative and multidisciplinary projects. Candidates for the Associate Professor level should already have extramural funding. Appointees will teach in a new interdisciplinary Ph.D. program in biomolecular science. Review of applications will begin January 2, 2001, and starting date is negotiable. Candidates should submit curriculum vitae, a research plan including a summary of past accomplishments, and arrange for three letters of reference to: **Dr. John Goodchild, Director, Center for Discovery of Drugs and Diagnostics, University of Central Florida, 12722 Research Parkway, Orlando, FL 32826-3227.**

UCF is an Equal Opportunity Employer/Affirmative Action Employer. As an agency of the State of Florida, UCF makes all application materials, including transcripts used in final screening, available to the public upon request.

ASSISTANT PROFESSOR CARDIOVASCULAR PHYSIOLOGY

Individuals employing modern cellular and molecular approaches to investigate the physiology of organs and organ systems are invited to apply for a 12-month tenure-track position at the Assistant Professor level. Candidates must possess a Ph.D., M.D., or equivalent degree and at least two years of postdoctoral experience. Preference will be given to candidates with anticipated/current research funding from national sources and expertise in cardiovascular physiology or developmental cardiovascular physiology. The successful candidate will be expected to pursue an active, independent research program and participate in medical and graduate teaching. Oklahoma University Health Sciences Center offers excellent opportunities for collaboration with multidisciplinary groups of Cardiac/Vascular Scientists as well as Fetal/Neonatal Physiologists. Applicants should submit curriculum vitae, a brief description of current and future research interests, and have three letters of reference sent to: **Dr. Sinya Benyajati, Department of Physiology, College of Medicine, The University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, OK 73190. FAX: 405-271-3181; e-mail: siribhinya-benyajati@ouhsc.edu; website: http://w3.ouhsc.edu/physiology.** Completed applications will be accepted until January 31, 2001. Anticipated starting date: fall 2001. *OUHSC is an Equal Opportunity Institution.*

NEUROSCIENTIST faculty at **ASSISTANT** or **ASSOCIATE PROFESSOR** (tenured) level with a research program that complements existing research programs in the neurobiology of the spinal cord, peripheral nervous system, or neurotransmitter release mechanisms. Application review will begin January 15, 2001, and continue until the position is filled. Send letter of application, curriculum vitae, description of research program and interests, and the names of three references to: **Dr. Tim Cope, Neuroscience Search Committee, Department of Physiology, Emory University School of Medicine, 1648 Pierce Drive, Atlanta, GA 30322. Emory University is an Equal Opportunity/Affirmative Action Employer. Members of underserved groups are especially urged to apply.**

POSITIONS OPEN

TWO TENURE-TRACK ASSISTANT PROFESSOR POSITIONS, FALL 2001 Department of Biological Sciences St. Cloud State University

AQUATIC BIOLOGY: Shared teaching of non-majors field course, introductory biology for majors, ecology, limnology, phycology, freshwater ecology, and a graduate course in limnology. Demonstrated ability to teach effectively, perform scholarly achievement or research, continued preparation and study, contribution to student growth and development, and service to the university and community. Ph.D. in aquatic biology or related areas. Training and experience in limnology and phycology at the community/ecosystem level with an understanding and interest in the study of land-water interactions. Postdoctoral experience required.

ANATOMY AND PHYSIOLOGY: Shared teaching responsibilities in human anatomy and physiology (two-semester sequence for prenursing), human biology (nonmajors), human anatomy (biomedical sciences), and shared teaching of graduate courses. Participation in introductory biology courses will be expected. Demonstrated ability to teach effectively, perform scholarly achievement or research, continued preparation and study, contribution to student growth and development, and service to the university and community. Ph.D. in biology or related areas. Experience in human anatomy/dissection to meet position responsibilities with greater consideration given to candidates having experience/training in neuroscience. Postdoctoral experience or equivalent required.

For each of these positions, a strong commitment to teaching and research programs involving undergraduate and Master's level students, advising, and committee participation are expected. Preference to candidates with postsecondary teaching experience. The successful candidate will have demonstrated ability to teach and work with persons from culturally diverse backgrounds. Send letter of application including statements of research plans and teaching philosophy; curriculum vitae; transcripts (copies acceptable for initial screening); and the names, telephone numbers, postal, and e-mail addresses of three references. All materials must be postmarked by December 11, 2000. Submit materials to: **Chair, Department of Biological Sciences, St. Cloud State University, 720 Fourth Avenue South, MS-262, St. Cloud, MN 56301-4498. Telephone: 320-255-4736; FAX: 320-255-4166; e-mail: Biology@StCloudState.edu; website: www.StCloudState.edu/~biol.** Materials received after the postmark date are not guaranteed consideration.

SCSU is committed to excellence and actively supports cultural diversity. To promote this endeavor, we invite individuals who contribute to such diversity to apply including minorities, women, GLBT, persons with disabilities, and veterans.

GENE REGULATION COMPARATIVE ENDOCRINOLOGY

The Department of Biological Sciences at Florida International University, the Florida State University at Miami, seeks two **TENURE-TRACK FACULTY** in (1) gene regulation and (2) comparative endocrinology who will develop grant-funded research, supervise Ph.D. and M.S. students, and display a strong commitment to teaching at all levels. Teaching duties include courses in biochemistry and (1) molecular/cellular biology and (2) endocrinology. A Ph.D. and postdoctoral experience are required. Florida State University is a Carnegie Research I university enrolling 32,000 students. The growing Department has 38 congenial faculty in ecology and in marine, integrative, and cell and molecular biology (**website: www.fiu.edu/~biology**). A view biology research building is under construction. Send curriculum vitae, research goals and teaching experience, three relevant reprints, and names of three references postmarked by 30 November 2000 to: (1) **James Allen, Gene Regulation Search, (2) Philip Stoddard, Endocrinologist Search, Department of Biological Science, FIU, Miami, FL 33199. FAX: 305-348-1986. FIU is an Equal Access and Opportunity/Affirmative Action Employer.**

**Assistant Professor - Environmental Toxicology
Molecular/Genetic Toxicologist
UC Santa Cruz**

The new graduate program in Environmental Toxicology at the University of California, Santa Cruz invites applications for a tenure track position at the Assistant Professor level. We are interested in candidates with a strong, extramurally fundable research program that stresses fundamental science and its application to existing or emerging problems in environmental toxicology. A research emphasis on the interactions between environmental agents and basic biological processes that underlie molecular and/or genetic toxicological outcomes in sensitive populations of organisms is preferred. The candidate will be expected to teach both graduate and undergraduate classes in Environmental Toxicology, and to actively participate in the ongoing development of the new department and graduate program in Environmental Toxicology. Postdoctoral experience is preferred. The campus is especially interested in candidates who can contribute to the diversity and excellence of the academic community through their research, teaching and/or service.

Rank: Assistant Professor

Salary: \$44,300 - \$49,400

Minimum Qualifications: Ph.D. or equivalent in Biology, Biochemistry, Chemistry, and/or Toxicology, or a related field completed or expected by effective date, and achievements in or demonstrated potential for university research and teaching.

Position Available: July 1, 2001

Apply to: Applicants should submit a curriculum vitae, a brief description of research and teaching interests, copies of reprints, and three confidential letters of recommendation to: Chair, Environmental Toxicology Search Committee, Department of Environmental Toxicology, 269 Jack Baskin Engineering Bldg. University of California, Santa Cruz, CA 95064. **Visit the Environmental Toxicology website at:** <http://natsci.ucsc.edu/acad/etox/>. **Please refer to Position # 260 in all correspondence. Closing Date: December 15, 2000**

UCSC IS AN AFFIRMATIVE ACTION/EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER. WOMEN AND MINORITIES ARE ENCOURAGED TO APPLY.

nature immunology

seeks an ASSISTANT EDITOR

Nature Immunology is an international monthly journal covering all aspects of immunology. This exciting new *Nature* monthly seeks an additional Assistant Editor to help with all aspects of the journal. The Assistant Editor will work with the *Nature Immunology* team to select manuscripts; commission Reviews, Commentaries and News & Views; edit and write. Maintaining close ties with the immunology community is essential to the position, providing opportunities for travel to universities and international meetings and conferences. Applicants should have a Ph.D. and a strong research background in immunology, a broad understanding and interest in the field, excellent literary skills and an enthusiasm for and commitment to the communication of science.

Based in our established central New York City office, the *Nature Immunology* team is part of a dynamic editorial and publishing environment that includes *Nature Genetics*, *Nature Structural Biology*, *Nature Medicine*, *Nature Biotechnology* and *Nature Neuroscience*. The successful applicant will also enjoy a close working relationship with the London-based *Nature* and *Nature Cell Biology* teams.

To apply, please submit a CV, a short (700-900 words) News & Views-style article on an exciting and newsworthy recent development in any area of immunology and a short cover letter explaining your interest in the post to **Dr. Linda J. Miller, Editor, *Nature Immunology*, Nature America, 345 Park Avenue South, New York, NY 10010 (fax 212.696.9594; email admin@natureny.com)** to arrive as soon as possible and not later than 1 December 2000.



Director

Division of Intramural Research (DIR)

National Institute of Environmental Health Sciences
Research Triangle Park, North Carolina
National Institutes of Health
Department of Health and Human Services

The National Institute of Environmental Health Sciences in the National Institutes of Health is seeking exceptional candidates to fill the position of Director, Division of Intramural Research. The incumbent of this position will direct laboratory and clinical research through 18 laboratories and branches with approximately 550 employees and 250 non-ceiling personnel. The Director, DIR, will serve as a principal advisor to the Institute Director on scientific affairs involving multidisciplinary biomedical research programs; develops and recommends policies for the execution of research programs; determines effectiveness of current programs and recommends policies for new programs; and develops new and revised programs to meet national environmental health needs. The Division is organized into three scientific programs and the Office of Clinical Research which highlight the areas of research excellence of NIEHS. These programs are highly interrelated, interactive, and synergistic. Using the multidisciplinary biomedical research approach, the mission of the DIR is to contribute to the basic understanding of biological and chemical processes, understanding of the contributions of environmental agents to human disease and dysfunction, and to the underlying mechanisms of environmentally associated diseases.

Candidates must have either a M.D. or Ph.D. or equivalent degree in an environmental health science discipline. 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.

Interested persons should send a curriculum vitae to: HRMB-(HN00-25), NIEHS, PO Box 12233, (MD-EC-11), RTP, NC 27709 by January 5, 2001. You may call Carolyn London at 919-541-7513 for more information.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER



**University of Virginia
HEALTH SYSTEM**

**CHAIR, DEPARTMENT OF CELL BIOLOGY
SCHOOL OF MEDICINE
UNIVERSITY OF VIRGINIA HEALTH SYSTEM**

The University of Virginia School of Medicine seeks a distinguished scientist to serve as Professor and Chair of the DEPARTMENT OF CELL BIOLOGY. Applicants should have a Ph.D. or M.D. and an outstanding record of research accomplishments related to cell biology. The Chair is expected to provide dynamic leadership for academic and administrative direction of the Department, including recruitment of several new faculty, development of research initiatives in cooperation with other departments, centers and schools within the University, and graduate and medical student teaching.

The Department of Cell Biology currently is comprised of faculty members with research excellence in the fields of cell adhesion, embryonic development, mammalian fertility, membrane trafficking, and cell motility. The Department has dedicated research space in a modern building with the other basic science departments. The School of Medicine provides outstanding core facilities for molecular and cellular investigations. The Department benefits from a collaborative environment at UVA with numerous interdisciplinary training programs and multidisciplinary research centers.

Applicants should send a letter describing their interests and a curriculum vitae to: **CELL BIOLOGY CHAIR SEARCH COMMITTEE; ATTENTION LYNN MCCUTCHEON, DEPARTMENT OF MICROBIOLOGY; UNIVERSITY OF VIRGINIA HEALTH SYSTEM; BOX 800734; CHARLOTTESVILLE, VA 22908**. Review of applications will begin immediately, and for full consideration materials should be received by December 15, 2000. If requested, inquiries will be kept in confidence.

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

POSITIONS OPEN

BIOMATERIALS, TISSUE ENGINEERING, DRUG DELIVERY, AND GENE THERAPY The University of Connecticut Health Center

The University of Connecticut Health Center is seeking to fill a tenure-track faculty position in The Center for Biomaterials. The Center for Biomaterials' primary research focus is material-tissue interfacial behavior, which includes tissue response at the cellular and molecular level; modification and characterization of both cell and material surfaces; nanofabrication and biomimetics; development of bioinspired biomaterials; and tissue and cellular engineering. Research in the Center comprises basic and applied biological and material science projects, which are intended to elucidate mechanisms and result in new biomedical technologies. Applicants with expertise in polymer synthesis, structural biology, drug delivery, gene therapy, or the biology of cell receptors are encouraged to apply.

The Center for Biomaterials facilitates multidisciplinary opportunities to collaborate with existing strong research groups in the Institute of Materials Science and the Schools of Medicine, Dental Medicine, Engineering, and Pharmacy. Significant support is available for research and laboratory space and start-up. The new faculty member will also participate in the development and teaching of a new graduate program in biomedical materials. All Center faculty are encouraged to interact with the significant biomaterials industry located in Connecticut and neighboring states.

A Ph.D., MD., D.M.D., or equivalent in bioengineering, chemical engineering, or related field is required. Academic rank is open and will be commensurate with accomplishments. The search will remain open until the vacancy is filled. Candidates are sought who have demonstrated outstanding research achievement and the ability to attract external research support.

Applicants should send curriculum vitae, copies of recent significant publications and brief descriptions of current research, future plans, and funding experience to: **Dr. James D. Bryers, The Center for Biomaterials, MC 1615, University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030-1615.** For any additional information, interested persons should contact **Dr. Bryers** at e-mail: JBryers@nso2.uhc.edu.

An Affirmative Action/Equal Opportunity Employer; Minorities/Females/Persons With Disabilities/Veterans.

ECOSYSTEM ECOLOGIST. Towson University seeks applicants for a tenure-track position at the **ASSISTANT PROFESSOR** rank in biological sciences. Position also supports the interdisciplinary program in Environmental Science and Studies. Ph.D. in an appropriate area required; postdoctoral experience desirable. Candidates with interests in urbanized ecosystems, biogeochemical movement of materials, or applied ecology in the Chesapeake Bay region are encouraged to apply. The successful candidate is expected to develop an active research program that will compete for extramural funding; involve graduate and undergraduate students in their research; and to develop a graduate course in ecosystem ecology, a non-major undergraduate course in environmental biology, and additional courses in environmental biology and/or science. Position starts August 2001. Salary and benefits are competitive. Send a letter of interest, descriptions of teaching philosophy and research plans, detailed curriculum vitae, copies of transcripts of undergraduate and graduate education, and names of a minimum of three references to: **Dr. James C. Hull, Chair, Ecosystem Ecologist Search Committee, Department of Biological Sciences, Towson University, 8000 York Road, Towson, MD 21252-0001 U.S.A.** Applications must be postmarked by January 10, 2001. Additional information is available at [website: http://www.towson.edu/~biology/positions.htm](http://www.towson.edu/~biology/positions.htm). Towson University is an Equal Opportunity/Affirmative Action Employer and has a strong institutional commitment to diversity. Women, minorities, persons with disabilities, and veterans are encouraged to apply.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR PHYSICAL OCEANOGRAPHY/ INTEGRATIVE MODELING

The Department of Environmental, Coastal, and Ocean Sciences (ECOS) at the University of Massachusetts Boston (UMB) seeks a tenure-track Assistant or Associate Professor in physical oceanography. To enhance our capabilities in physical oceanography, modeling, and coastal dynamics, we seek an individual with interests in estuarine/coastal/shelf dynamics who can bring expertise in interdisciplinary modeling to (1) enhance our ability to teach and conduct research in the development of quantitative descriptors of coastal processes; (2) support linked physical-biochemical models (i.e., ecological dynamics, chemical fluxes, or sediment transport); and (3) assist in our current effort to sustain and further develop the Massachusetts Bay hydrodynamic and water quality model in the form of a long-term contract from the MWRA. Resources for the latter responsibility will include support for a senior Research Associate for at least a four-year period to assist the successful candidate. ECOS is an interdisciplinary graduate (M.S., Ph.D.) department, which integrates the natural and social sciences to better understand and more effectively address coastal environmental issues (see [website: www.es.umb.edu](http://www.es.umb.edu)). ECOS is continuing a multiyear expansion with new faculty to contribute to research on biogeochemical processes, ecological dynamics, and human interactions in coastal (linked watershed and marine) environments. Applicants should have a well-conceived research program capable of supporting graduate research through external funding. Preference will be given to candidates whose research complements that of other faculty at UMass Boston and the Inter-campus Graduate School in Marine Sciences and Technologies. Teaching responsibilities include supervising graduate students and teaching graduate courses in the faculty member's discipline. A desire to contribute to undergraduate teaching efforts will be viewed positively. Ph.D. and postdoctoral experience in a field relevant to physical oceanography/hydrodynamic modeling are needed. Send cover letter that includes statements of interest and goals in research and teaching, curriculum vitae, and three letters of reference to: **Search Committee (Box 620), Department of Environmental, Coastal, and Ocean Sciences, University of Massachusetts Boston, 100 Morrissey Boulevard, Boston, MA 02125-3393.** For information regarding this position, please e-mail: Gordon.Wallace@umb.edu. Application review will begin January 1, 2001, and continue until position is filled. *An Affirmative Action/Equal Opportunity/Title IX Employer. Minorities and women are encouraged to apply.*

ASSISTANT PROFESSOR POSITIONS BIOLOGICAL SCIENCES UNIVERSITY OF NORTH TEXAS Animal Physiology and Eukaryotic Genetics

The Department of Biological Sciences ([website: www.Biologyunt.edu](http://www.Biologyunt.edu)) invites applications for two tenure-track appointments: (1) animal physiology and (2) eukaryotic genetics (any model system). Candidates will be expected to develop extramurally funded research programs in their areas of expertise and to participate in undergraduate and graduate teaching. Excellent research facilities, competitive salary, and start-up funds are available. Located in the Dallas-Ft. Worth metropolitan area, the University of North Texas has over 27,000 students. The Department offers undergraduate and graduate (M.S./Ph.D.) degree programs in biochemistry, biology, environmental science, and molecular biology. Send applications to respective **Search Committee Chairs** at: **Department of Biological Sciences, University of North Texas, Denton, TX 76203-5220** by January 5, 2001. Applications should include curriculum vitae, three letters of reference, and statement of research goals. UNT is an Equal Opportunity/Affirmative Action Employer committed to diversity in its educational programs. Women, minorities, and persons with disabilities are encouraged to apply.

POSITIONS OPEN

ASSISTANT PROFESSOR OF NEUROBIOLOGY University of Texas-Pan American

The Department of Biology at the University of Texas-Pan American invites applications from outstanding candidates for a tenure-track faculty position in neurobiology. Candidates with expertise in neuroanatomy or aspects of behavior are especially encouraged to apply. The University offers new facilities and a supportive collegial environment to foster development of academic careers. A start-up package for equipment and other resources will be requested. Salary will be negotiable based on background and experience.

The successful candidate will be expected to develop an externally funded research program and to display a commitment to teaching excellence. The candidate is expected to assist in teaching the Department's general biology courses and develop a course or courses in candidate's specialty in neurobiology. Visit our department [website: www.panam.edu/dept/biology](http://www.panam.edu/dept/biology) and the University of Texas-Pan American Personnel Department [website: http://w3.panam.edu/www/personnel](http://w3.panam.edu/www/personnel) for more information.

Evaluation of applications will begin on January 26, 2001, and all material must be received by this date. Applicants must hold a Ph.D. or equivalent degree. A letter of application, curriculum vitae, copies of representative publications, a one-page description of future research, a statement of your teaching philosophy plus three letters of recommendation (sent under separate cover) should be addressed to: **Dr. Luis Materon, Chair, Search Committee, Department of Biology, University of Texas-Pan American, 1201 West University Drive, Edinburg, TX 78539-2999.** E-mail: lmateron@panam.edu; FAX: 956-381-3657.

The University of Texas-Pan American is an Equal Opportunity Employer.

ASSISTANT PROFESSOR EVOLUTIONARY QUANTITATIVE GENETICS Department Of Biology Utah State University

The Department of Biology invites applications for a tenure-track Assistant Professor position in evolutionary quantitative genetics. A Ph.D. is required and the successful applicant will be expected to develop an externally funded research program. Teaching responsibilities will include an advanced course in evolutionary biology. The assignment is approximately 50% teaching and 50% research and evidence of proficiency in both will be used as selection criteria. Preference will be given to applicants whose research interests complement existing departmental research. Information about the Department and the University can be found at [website: www.biology.usu.edu](http://www.biology.usu.edu).

Applicants should submit curriculum vitae, a statement of research and teaching interests, representative reprints, and should have three letters of recommendation sent to: **Dr. Frank J. Messina, Search Committee Chair, Department of Biology, 5305 Old Main Hill, Utah State University, Logan, UT 84322-5305.** E-mail: messina@biology.usu.edu; Telephone: 435-797-2528; FAX: 435-797-1575. Review of applications will begin 15 December 2000 and will continue until the position is filled. *Affirmative Action/Equal Opportunity Employer.*

PH.D. SCIENTIST

Gemini Technologies, Inc., a Cleveland-based start-up biotechnology company, is seeking a highly motivated individual to conduct research in developing antisense-based therapeutics. Interested candidates should have experience in cell culture and molecular biology techniques.

To apply, send a résumé along with salary history to: **Gemini Technologies, Inc., 11,000 Cedar Avenue, Suite 140, Cleveland, OH 44106-3052.** FAX: 216-231-2931; e-mail: hagen@geminitech.com. Visit Atlantic's website for further information on Gemini at: www.atlan.com.



PICTURE THIS IN SAN DIEGO. ★ ENGINEERING AND PHYSICAL SCIENCE LABORATORY ★ THE MISSION OF THE GROUP IS TO ACQUIRE AND DISSEMINATE QUANTITATIVE COMPUTER SYSTEMS KNOWLEDGE THROUGH EXPERIMENTAL AND ANALYTICAL PHYSICAL SCIENCE AND ENGINEERING METHODS. THIS NEWLY FORMED GROUP WILL ESTABLISH A STATE-OF-THE-ART PHYSICS AND ENGINEERING LAB IN SAN DIEGO, CA AND IS CURRENTLY SEEKING CANDIDATES FOR THE FOLLOWING POSITIONS: ★ **CHIEF SCIENTIST** ★ **LEAD ENGINEER** ★ **LAB MANAGER** ★ **SIGNAL INTEGRITY ENGINEER** ★ **INSTRUMENTATION DEVELOPMENT** ★ **SEMICONDUCTOR DEVICE EXPERIMENTATION** ★

FOR IMMEDIATE CONSIDERATION, PLEASE FORWARD YOUR RESUME, WITH SUBJECT HEADING ASM1027AB/DD, TO: SUN MICROSYSTEMS, INC., 9540 TOWNE CTR. DRIVE, SAN DIEGO, CA 92121; EMAIL TO RESUME15@SUN.COM (PLAIN TEXT ONLY, NO ATTACHMENTS); OR FAX TO 858-625-0650. SUN IS PROUD TO ENSURE THAT EQUAL TALENT WILL ALWAYS GET EQUAL OPPORTUNITY. THE BEST WAY TO BE CONSIDERED BY SUN IS TO BUILD YOUR RESUME ONLINE AT:

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Faculty positions in the Department of Cellular and Structural Biology

The University of Texas Health
Science Center at San Antonio



The Department of Cellular and Structural Biology is recruiting faculty for tenure track positions at the Assistant, Associate and Full Professor level. The Department is particularly interested in recruiting qualified applicants with interests in cell and molecular biology, aging, cancer, immunology or neurobiology, and who utilize optical imaging approaches as a major research tool. The ability/willingness to teach in one of the Department's professional and/or graduate courses is also required.

Interested individuals should submit their curriculum vitae, a statement of research and teaching interests and experience, and three letters of recommendation to: **Dr. Ellen Kraig, Chair, Cellular & Structural Biology Faculty Search Committee, The University of Texas Health Science Center, 7703 Floyd Curl Drive, Mail Code 7762, San Antonio, Texas 78229-3900.** Applications received prior to December 31, 2000 will be considered.

Further information about the Department and its optical imaging facility can be found at:

<http://www.uthscsa.edu/csb/csbhome.html>

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

CANCER GENOMICS GROUP LEADER

The Genome Sequence Centre, BC Cancer Agency, Vancouver, B.C., Canada, seeks applications for the position of **Group Leader, Cancer Genomics**.

.....to oversee the functions of the Cancer Genomics Program. Reporting to the Co-Director (Scientific), the appointee will be responsible for developing a cancer genomics program integrating clinical programs with advanced genomics. Typical duties will include: • establishing and leading a team of scientists and clinicians towards a collaborative cancer genomics program • monitoring collaborations and experiments • participating in setting scientific policies • providing guidance to staff through supervision and • participating as a member of a team in the recruitment and selection of team members.

Candidates should have experience in cancer genetics and cancer genomics and completed 5-7 years of post-doctoral or independent research. Excellent organizational, leadership and interpersonal skills are required, plus the ability to work collaboratively with scientists and clinicians from different disciplines.



BC Cancer Agency

Applicants should send their curriculum vitae, a statement of research or interest, and four references to: Jill Vardy, Genome Sequence Centre, BC Cancer Agency, 600 West 10th Avenue, Vancouver, B.C., Canada, V5Z 4E6.

Research Chemist (Spectroscopy/Material Science)

Temporary post-doctoral position (18 months with possible extension) with the USDA, Agricultural Research Service, Albany, CA: GS11/12, \$45,059-\$70,202/pa, plus benefits, depending on experience. The area of work will be part of a funded project to develop a real-time peanut aflatoxin sorter (Cf. SPIE Proc. 4206-33). The position will involve close interaction with other Ph.D. level or candidate scientists with the research group. The specific assignment is to establish features of aflatoxin contaminated peanuts which may serve to distinguish such nuts from non-contaminated ones. Furthermore, an algorithm based on such features is needed for the implementation of the recognition of contaminated nuts in real time (ms). It is expected that interaction of the solid nut matrix with transmitted radiation will be important, although other attributes can be expected to contribute as well. The successful candidate will need to have a thorough understanding of spectroscopy, including the interaction of electromagnetic and other energy with matter, specifically that comprising the structure of nuts. Candidates must have a PhD in chemistry, physics, agricultural engineering, material science or a related field. A thorough understanding of sensor technology and implementation will be a plus as will knowledge of pattern recognition and statistics. For information, contact Dr. Thomas F. Schatzki, Western Regional Research Center, ARS, U.S. Department of Agriculture, tom@pw.usda.gov. Application information and laboratory staff background are available at <http://www.ars.usda.gov>. There are employment restrictions for some non-U.S. citizens. *Minorities are encouraged to apply. USDA is an equal opportunity provider and employer.*

MICROBIAL DIVERSITY JUNE 10 - JULY 27, 2001

MARINE BIOLOGICAL LABORATORY



An intensive six-and-a-half-week course for graduate or post-doctoral students, as well as established investigators, who want to become competent in microbiological techniques for working with a broad range of microbes, and in approaches for recognizing both possible affinities of as yet uncultivated bacteria, and for understanding putative phylogenetic relationships. Limited to 20 students.

The course emphasizes that the great strength of microbiology lies in the diversity of microbial types that can be exploited for basic research in a wide range of scientific disciplines. Students will isolate and cultivate characteristic microbial types from various marine, fresh water, animal, and plant habitats and initiate research projects with selected isolates.

This course is supported in part by grants from the Office of Naval Research, the U.S. Department of Energy, and the Foundation for Microbiology.

Directors: Caroline Harwood, University of Iowa, and Alfred Spormann, Stanford University

Application Deadline: **February 1, 2001**

Tuition: \$3,900 *Scholarship assistance available*

Contact: Carol Hamel, Admissions Coordinator
Marine Biological Laboratory
7 MBL Street / Woods Hole, MA 02543
(508) 289-7401 / admissions@mbi.edu

VISIT COURSES.MBL.EDU

The MBL is an EEO/Affirmative Action Institution

POSITIONS OPEN

TENURE-TRACK ASSISTANT PROFESSOR BIOLOGICAL PHYSICS Department of Physics and Astronomy Vanderbilt University

Applications and nominations are invited for a tenure-track Assistant Professor position in any subfield of biological physics or in areas that bridge condensed matter and biological physics. An exceptionally qualified person at a more senior level will be considered. The successful candidate will be expected to establish a leading, independent research group and to be highly effective in teaching at the undergraduate and graduate levels. Biophysical research areas within the Department include bioelectric and biomagnetic phenomena; nonlinear dynamics of molecular and cellular systems; fluctuation dynamics of biopolymers and proteins; molecular motors and micromanipulation; interactions of IR, visible, and UV lasers with biological systems; bioinformatics; and applications of tunable, monochromatic X-rays to medical imaging and biological physics. Candidates can take advantage of the unique opportunities for interdisciplinary research at the W.M. Keck Free Electron Laser Center and collaborations with the Schools of Engineering and Medicine, as well as other projects in the Trans-University Initiative in Biomedical Science and Technology.

Applications, including a résumé and the names and addresses of three references, should be sent to:

Thomas W. Kephart
Chair, Biological Physics Search Committee
Vanderbilt University
VU Station B351807
Nashville, TN 37235-1807
FAX: 615-343-7263
E-mail: kephart@ctrvax.vanderbilt.edu

Review of applications will begin immediately and will continue until the position is filled. The starting date may be as early as 1 January 2001.

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

The Department of Pharmacology, Physiology, and Therapeutics is seeking three tenure-track Pharmacologists with active research programs in neurosciences at the level of **ASSISTANT/ASSOCIATE PROFESSOR**. Applicants must have a Ph.D. or M.D. degree. In addition to offering nationally competitive salary, ample space, and start-up funds, the Department contains 18 faculty, numerous common equipment rooms, and core facilities. Teaching at the graduate, undergraduate, and medical school levels will be expected. Submit curriculum vitae, a comprehensive research statement outlining past accomplishments, future goals, and three letters of recommendation to:

Manuchair Ebadi, Ph.D.
Professor and Chairman
Department of Pharmacology, Physiology,
and Therapeutics
Professor of Neuroscience
Associate Dean for Research and
Program Development
Director, Center for Excellence in Neurosciences
University of North Dakota School of Medicine
and Health Sciences
501 North Columbia Road
Grand Forks, ND 58203

University of North Dakota is an Equal Opportunity/Affirmative Action Employer.

Tenure-track **ASSISTANT** or **ASSOCIATE** position anticipated to begin September 2001. Seeking Invertebrate Biologist working at population or community level. Details at website: <http://phoenix.liu.edu/~xwang/deptancm.htm>. Research start-up funds available. Small liberal arts college in a suburban setting on 300-acre campus approximately 30 miles from New York City. Review cycle begins December 15, 2000. Please send curriculum vitae, names of at least three references, and any supporting material to: Search Committee, Department of Biology, Long Island University, C. W. Post Campus, Brookville, NY 11548-1300. Equal Opportunity Employer.

POSITIONS OPEN

BIOLOGIST. Rose-Hulman Institute of Technology, Department of Applied Biology and Biomedical Engineering, invites applications from broadly trained biologists specializing in plant biology or ecology for a tenure-track appointment to begin August 2001. A Ph.D. with a strong commitment to undergraduate teaching and research is required. Primary teaching responsibilities could include courses and laboratories in ecology, plant biology, or evolutionary biology. Regular participation in the introductory biology course sequence and the development of upper-level courses in the area of expertise will be encouraged. Rose-Hulman's program in applied biology is new and evolving. Therefore, a unique opportunity exists for applicants desiring experience in curriculum planning and course development. Candidates will be considered at the **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** rank.

Rose-Hulman is one of the premier independent colleges of engineering and science in the United States. Our goal is to provide the highest quality undergraduate education for Scientists and Engineers. RHIT is ranked by *U.S. News and World Report* as the best undergraduate engineering program among colleges that do not offer the Ph.D. degree. Located on 200 rolling acres east of Terre Haute, Indiana, in a suburban/residential setting, Rose-Hulman emphasizes a liberal education in science and engineering.

Interested persons should send a letter of application, curriculum vitae, statement of teaching and research philosophies, and three current letters of recommendation to: Dr. Lee Waite, Chairman, Department of Applied Biology and Biomedical Engineering, Rose-Hulman Institute of Technology, 5500 Wabash Avenue, Terre Haute, IN 47803. Review of applications will begin immediately and will continue until the position is filled.

Rose-Hulman is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

FACULTY POSITION NEUROBIOLOGY

The Department of Biology and Biochemistry at the University of Houston invites applications for a **TENURE-TRACK POSITION** at any rank for an individual working in the broadly defined areas of neural development or plasticity. The position requires an earned Doctorate and postdoctoral experience. The successful candidate will join a large and interactive group of cellular, molecular, and developmental Neurobiologists and is expected to develop a nationally competitive, externally funded research program and participate in graduate and undergraduate teaching. The Department has spacious laboratories and offers competitive start-up packages. Please submit curriculum vitae and statement of research interests and have three letters of recommendation sent to: Neurobiology Search Committee, Department of Biology and Biochemistry, University of Houston, Houston, TX 777204-5513. University of Houston is an Equal Opportunity/Affirmative Action Employer. Minorities, women, veterans, and persons with disabilities are encouraged to apply.

GENETICIST. Southern Oregon University seeks applicants for a tenure-track **ASSISTANT PROFESSOR** to teach upper-division genetics and molecular biology. Other duties include participation in introductory biology and interdisciplinary general education. Publication and research involving undergraduates expected. Starts September 2001. Ph.D. in biology with advanced training in genetics and molecular biology required. Details at website: <http://www.sou.edu/biology/index.htm>. Send letter of application, curriculum vitae, statement of teaching experience and approach to teaching genetics, research plans, list of pertinent courses taken or transcripts, and three letters of reference to: Genetics Search, Department of Biology, Southern Oregon University, Ashland, OR 97520. Preference given to complete applications received before January 1, 2001. Position will remain open until filled. Southern Oregon University is an Affirmative Action/Equal Employment Opportunity Employer committed to the development of an inclusive, multicultural community.

POSITIONS OPEN

FACULTY POSITION IN SCIENCE EDUCATION University of Arizona College of Science

The University of Arizona has initiated a program to prepare secondary-school science teachers within the College of Science. The College has a **TENURE-TRACK FACULTY OPENING** for an individual to join the group developing this new program and to take a continuing leadership role in science-education scholarship. The appointment will be in one of the Science departments, with active participation in the University's Science and Mathematics Education Center. Initial rank and tenure status will be dependent on the qualifications and experience of the appointed individual.

The college seeks candidates with scholarly expertise pertinent to the preparation of science teachers. We are especially interested in attracting those who have a demonstrated interest in studying the way students learn science. We expect the candidate to have practical experience teaching science at the secondary school level (high school and/or middle school) and to be able to model good teaching at that level. The successful candidate will have a Ph.D. in science or a related field or a Ph.D. in science education with a strong science background.

Applications must be submitted to: Professor Richard Greenberg, Chair of the Teacher Preparation Search Committee, Lunar and Planetary Laboratory, 1629 East University Boulevard, The University of Arizona, Tucson, AZ 85721. Application must include full curriculum vitae along with a summary of scholarly and educational interests and a description of how the applicant's background qualifies him/her for this program. Applicants must also arrange to have three letters of reference sent directly to the same address. Requests for further information may be sent to: Ms. Selina Johnson; Telephone: 520-621-2234; e-mail: selina@lpl.arizona.edu. Review of applications will begin January 10, 2001, and will continue until the position is filled.

The University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer; Minorities/Women/Disabled/Veterans.

ASSISTANT PROFESSOR faculty position. The University of Texas M.D. Anderson Cancer Center, Science Park, Research Division, is entering a new recruitment phase and expanding into new laboratories. Applications are being accepted for a tenure-track position at the Assistant Professor level from individuals with three to five years of postdoctoral or independent research experience and strong publication records. Research at Science Park focuses on cellular and molecular mechanisms involved in carcinogenesis and mechanism-driven cancer prevention. We seek applicants working in the general areas of molecular, developmental, and genetic mechanisms underlying cancer. Candidates with expertise in advanced gene targeting (knockout, knock-in, and transgenic) approaches in these areas are especially encouraged to apply; however, outstanding candidates using other types of approaches will also be considered. The successful applicant will be expected to establish a high-quality, independent research program that complements our ongoing research activities and to participate in our graduate training program. The Science Park is located in a rural park-like setting in Smithville, Texas, just outside the state capital of Austin in the beautiful Texas hill country. Ongoing research activities of the faculty are described in our website: <http://sciencepark.mdanderson.org/>. Excellent start-up funds, salary, and benefits package will be provided as well as access to state-of-the-art equipment, communications, and research and service facilities. Submit curriculum vitae; three representative publications; a brief outline of current and future research plans; and three letters of reference by January 15, 2001, to: Dr. Rodney S. Nairn, Chair, Search Committee, c/o Mrs. Mary Lou Fendley, University of Texas M.D. Anderson Cancer Center, Science Park, Research Division, P.O. Box 389, Park Road 1C, Smithville, TX 78957. Equal Opportunity/Affirmative Action Employer.



HARVARD UNIVERSITY

DEPARTMENT OF EARTH & PLANETARY SCIENCES

The Department of Earth & Planetary Sciences at Harvard University seeks to fill two or more faculty positions at the Assistant or Associate Professor level (untenured). Candidates from all fields of earth sciences including atmospheric sciences, oceanography, geobiology, geochemistry, geophysics, geology, and planetary sciences are encouraged to apply.

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

Professor Jeremy Bloxham, Chair
Department of Earth & Planetary Sciences
Harvard University
20 Oxford Street
Cambridge, MA 02138 USA

We will begin reviewing applications on December 1st. We particularly encourage applications from women and minorities. Harvard University is an Affirmative Action/Equal Opportunity Employer. For more information about the department, you may visit our web site at www.eps.harvard.edu.

The University of Akron

The UNIVERSITY of AKRON is expanding and enhancing its world-class research and training programs in polymer science and polymer engineering through the recruitment of 13 **new faculty** with demonstrated and productive research in **polymer science** and **polymer engineering**, **materials science**, **nanotechnology**, or related areas of **computer** and **computational science**. Given our strong desire to build through interdisciplinary research and instructional collaborations, the 13 tenured or tenure-track faculty positions are distributed across the colleges of **Arts & Sciences**, **Engineering**, and **Polymer Science & Polymer Engineering**.

In-depth information about these positions, which range from endowed professors to department chairs to tenure-track assistant professors, is available at:

<http://www.uakron.edu/gradsch/newfaculty.html>

Successful candidates will be supported in their efforts to build individual research programs and be provided opportunities to create synergies with many ongoing interdisciplinary research projects. Positions are scheduled to start Fall Semester 2001. Minorities and women are strongly encouraged to apply.

The University of Akron is an Equal Education and Employment Institution

SURROMED

SurroMed is a Pre-IPO, biotechnology company developing comprehensive, state-of-the-art phenotyping technologies for cells, proteins and low molecular weight organic compounds in biological samples. This work involves significant expertise in many of the frontier areas of bioanalytical chemistry, including assay multiplexing, assay miniaturization, high-throughput mass spectrometry, and novel approaches to separation of complex mixtures. To spearhead these efforts, we seek highly motivated and talented individuals.

Director - Bioanalytical Chemistry

Qualified applicants will have the following five attributes: (i) A Ph.D. and broad training in chemistry, with specialization in some aspect of bioanalysis. Previous experience in nanotechnology, separations, mass spectrometry, microfluidics, surface chemistry or assay development is highly desirable. (ii) Demonstrated managerial capacity and leadership potential in a fast-paced, multidisciplinary environment. (iii) An ability to aggressively expand technology portfolios via internal IP generation and/or external licensing. (iv) A track record of moving technology from the research stage to the development stage. (v) Excellent writing, presentation, and interpersonal skills.

Manager - Cellular Assays

This key technical manager will be responsible for development of new assays for monitoring cell populations and cell function from blood samples that relate to various diseases. In collaboration with engineering, he/she will develop and evaluate new cytometry platforms, including one supported by a NIST-ATP grant. He/she will manage the activities of several scientists and contribute to the overall cellular assay strategy.

Ph.D. in biophysics, cell biology, or related field and experience managing small technical teams. Established position in the fields of cytometry or cell biology as evidenced by primary scientific publications, patents and/or products developed. Experience in development of novel cell-based assays on cytometry or imaging systems. Strong quantitative, communication and organizational skills.

Clinical Research Specialist

This Specialist will design and write clinical research protocols with input from project teams, clinical specialists, Manager, Medical Affairs, and Chief Medical Officer regarding proposed question/hypothesis. Uses knowledge of disease prevalence, statistics capability, and awareness of clinical collaborator resources available, to design protocols which will be expected to yield significant findings in a timely and cost-effective manner. BS/BA required, MPH strongly preferred. MD degree not required but an added benefit. One-two years in clinical research-related or clinical epidemiology/biostatistics-related work; previous pharmaceutical experience highly desirable. Experience in working in the fields of asthma, arthritis, diabetes, or multiple sclerosis desirable.

Scientist, Clinical Studies

This Scientist will participate in select clinical studies. He/she will be responsible for data acquisition and analysis of clinical samples. This includes cytometry and soluble factor data plus medical history information. He/she will maintain an expert knowledge of the scientific literature and contribute to the clinical study strategy. This scientist should have the potential to serve as project leader on select clinical studies.

Ph.D. in physiology, cell biology, or related field, postdoc preferred. Established position in a relevant biological field as evidenced by primary scientific publications. Lab experience should include animal or human studies involving the implementation of immunoassays and cell-based assays. Candidate should have experience with scientific software and excellent communication and organizational skills.

Assistant Scientists - Biology and Chemistry

We are looking for bright, motivated, energetic individuals to participate in several areas: reagent and cellular assay development; immunoassay development, proteomics, mouse phenotyping, and the processing and analysis of clinical samples. You will receive training and work with a supervisor in a multi-disciplinary clinical research setting.

BA/BS degree in chemistry, cell biology or related field, 0 to 3 years of lab experience. Experience in the following is helpful for the various positions: cell-based assays, mammalian tissue culture, handling of blood, immunoassays, flow cytometry, chromatographic and electrophoretic methods development, mass spectrometry and fluorescence based detection systems. Good written and oral communication skills and ability to execute experiments with care.

For more information on our company and our current opportunities please visit www.surromed.com.

Contact Information: e-mail: resume@surromed.com; fax: 650-855-9079; mail: 1060 East Meadow Circle, Palo Alto, CA 94303. EOE

POSITIONS OPEN

FACULTY POSITION IN NMR/PROTEIN STRUCTURE

The Department of Chemistry/Biochemistry of the University of Arkansas-Fayetteville is seeking an outstanding Scientist for a tenure-track position in the area of NMR determination of protein structure and dynamics. Exceptional candidates with established research programs will be considered at the **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** rank. This position is associated with the Center for Protein Structure and Function funded by the NIH. The Center will acquire a new 700 MHz NMR spectrometer to complement existing high-field NMR spectrometers. The successful candidate will be responsible for directing the NMR component of the Center and establishing an outstanding research program in protein NMR. Protein X-ray crystallography and mass spectrometry groups are associated with the Center, and there are ample opportunities for collaboration with other faculty on protein structure, function, and dynamics. Review of applications will begin on December 1, 2000, and will continue until the position is filled. Curriculum vitae, description of research plans, and three letters of recommendation should be sent to: **Professor Frank Millett, Chair, NMR Search Committee, Department of Chemistry/Biochemistry, University of Arkansas, Fayetteville, AR 72701. Website: <http://www.uark.edu/chemistry>; e-mail: Millett@comp.uark.edu.** *The University of Arkansas is an Equal Employment Opportunity/Affirmative Action Institution.*

PLANT MOLECULAR SYSTEMATICS

The School of Biological Sciences invites applications for a tenure-track position in plant systematics at the **ASSISTANT PROFESSOR** level to start fall 2001. We seek applications from Systematists who use molecular phylogenetic approaches to address fundamental problems in plant systematics. Candidates whose research interests include analytical methods, biosystematics, molecular or developmental genetic evolution, monographic approaches, phylogeography, or other core areas of concern in plant systematics are encouraged to apply. The successful candidate will be expected to develop a vigorous, externally funded research program and teach undergraduate and graduate students. Undergraduate teaching may include introductory biology or botany. A Ph.D. is required by the start date. Postdoctoral and teaching experience and success in securing grant support are desired. Letter of application, curriculum vitae, statements of research and teaching interests, examples of publications, and three letters of reference should be sent to: **Larry Hufford, Chair, Plant Molecular Systematics Search Committee, School of Biological Sciences, Washington State University, Pullman, WA 99164-4236.** Review of applications will begin December 22, 2000. For more information, visit the School of Biological Sciences website: www.sci.wsu.edu/sbs/ or contact: **Larry Hufford; e-mail: hufford@mail.wsu.edu.** *WSU is an Equal Opportunity/Affirmative Action Educator and Employer. Members of protected groups are encouraged to apply.*

ASSISTANT PROFESSOR DEVELOPMENTAL BIOLOGY

The Department of Cellular Biology at the University of Georgia invites applications for a tenure-track Assistant Professor in the area of developmental biology. The successful candidate must have postdoctoral experience and will be expected to develop a strong, extramurally funded research program and contribute to graduate and undergraduate teaching. The position is available fall semester 2001. To apply, send curriculum vitae, statements of research interest and teaching philosophy, and three letters of recommendation to: **Developmental Biology Search Committee, Department of Cellular Biology, University of Georgia, Athens, GA 30607-2607.** Applications received by December 15, 2000, are assured of consideration. *The University of Georgia is an Equal Opportunity/Affirmative Action Employer. We encourage applications from minorities and women.*

POSITIONS OPEN

ASSISTANT PROFESSOR VERTEBRATE PHYSIOLOGY PACIFIC LUTHERAN UNIVERSITY

The Department of Biology at Pacific Lutheran University invites applications from Vertebrate Physiologists for a tenure-track Assistant Professor position to begin 1 September 2001. Ph.D. required. Teaching responsibilities include upper-division vertebrate physiology, lower-division human anatomy and physiology, and opportunities related to the applicant's interests (including cross-disciplinary). The person is expected to maintain a research program that provides regular opportunities for undergraduate participation.

Please submit (by 15 December 2000) your curriculum vitae, undergraduate and graduate transcripts, a statement of teaching philosophy, a summary of current research interests, and a general research plan appropriate for an undergraduate institution; also arrange to have three letters of recommendation sent on your behalf. Send all materials to: **Tom Carlson, Chair, Department of Biology, Pacific Lutheran University, Tacoma, WA 98447.**

The Biology Department has 13 faculty. Pacific Lutheran University is a comprehensive institution (with a college of liberal arts and sciences, as well as five professional schools) that enrolls 3,600 students. The University's mission is to educate students for lives of thoughtful inquiry, service, leadership, and care. *PLU enjoys a healthy and progressive relationship with the Evangelical Lutheran Church in America, serves a diverse clientele, and embraces the goals of Equal Opportunity and Affirmative Action.*

DERMATOLOGY FACULTY Indiana University School of Medicine

The Department of Dermatology is seeking applicants for a basic science research faculty position. Candidates should have expertise in cell biology, molecular biology, or genetic research related to skin disease and/or wound healing. Prefer candidates with a current or past record of grant funding. M.D., Ph.D., or Ph.D. or M.D. required. This is a full-time faculty position at Indiana University with rank, tenure status, and salary commensurate with credentials, training, and experience. Interested applicants should send their curriculum vitae to:

**Evan R. Farmer, M.D.
Kampen-Norins Professor and Chairman
Department of Dermatology
Indiana University School of Medicine
550 North University Boulevard, Suite 3240
Indianapolis, IN 46202-5267**

Indiana University is an Equal Opportunity/Affirmative Action Employer; Minorities/Females/Disabled.

TWO RESEARCH FACULTY POSITIONS KAOHSIUNG, TAIWAN

The Department of Medical Research, Chang Gung Memorial Hospital at Kaohsiung, and Chang Gung University are inviting applications for faculty positions at the rank of **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** in biomechanics of sport medicine as well as stem cell research and transplantation. The newly recruited faculties can have a start-up fund, a Research Assistant, and an independent office. Candidates with M.D., Ph.D., or Ph.D. with postdoctoral training please send curriculum vitae, statement of research interests, and names of two references to:

**Kuender D. Yang, M.D., Ph.D.
Vice Superintendent, CGMH-Kaohsiung
123 Ta-Pei Road, Kaohsiung 833, Taiwan
E-mail: yangkd@adm.cgmh.com.tw
FAX: 886-7-7312867**

POSITIONS OPEN

DIRECTOR OF THE UNDERGRADUATE PROGRAM

The Environmental Studies Program at the University of Massachusetts Boston seeks a Director for its newly established and growing Undergraduate Environmental Studies program, which reports directly to the Dean of Science Faculty in the College of Arts and Sciences. Students in the program of study are required to complete a major in the natural or social sciences, take core environmental courses, and perform an environmental internship. Participating departments include Biology; Chemistry; Earth and Geographic Sciences; Mathematics; Environmental, Coastal, and Ocean Sciences; Economics; Anthropology; Political Sciences; and Philosophy. The Director will hold a tenure-track position in a department appropriate to his/her field. The successful candidate is expected to manage the program, spearhead its teaching activities, secure significant external funding for environmental undergraduate education, and develop the program further as an integrated effort between the faculties and students of participating departments. We seek an energetic, innovative individual who is devoted to undergraduate education and research and who has a strong record of accomplishment in some area of environmental studies. Send cover letter that includes statements of interests and goals in research and teaching, curriculum vitae, and three letters of reference to: **Environmental Studies Search Committee (Box 625), Dean's Office, College of Arts and Sciences, University of Massachusetts Boston, 100 Morrissey Boulevard, Boston, MA 02125-3393.** Application review will begin immediately and continue until position is filled. *An Affirmative Action/Equal Opportunity/Title IX Employer. Minorities and women are encouraged to apply.*

PLANT MOLECULAR BIOLOGIST OHIO STATE UNIVERSITY

As part of a continuing expansion of the Department of Plant Biology at The Ohio State University, a tenure-track position is available for a Plant Molecular Biologist at the **ASSISTANT PROFESSOR** level. Applicants addressing fundamental questions in plant physiology, signal transduction, development, biochemistry, and genomics are especially encouraged, but applications in other areas will be seriously considered as well. Postdoctoral experience and a record of excellence in research are required. The successful candidate is expected to establish a strong and creative research program and to excel in undergraduate and graduate teaching. Faculty have the opportunity to participate in the campuswide program in plant molecular biology and biotechnology. Please submit curriculum vitae, a concise statement of research plans, a description of teaching experience and interests, and three reference letters to: **Dr. Fred Sack, Search Committee Chair, Plant Biology, Ohio State University, 1735 Neil Avenue, Columbus, OH 43210-1293.** Review of applications will begin December 10, 2000. For more information, visit website: <http://www.biosci.ohio-state.edu/~plantbio/plantbio.html>. *The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Qualified women, minorities, veterans, and individuals with disabilities are encouraged to apply.*

Mesa State College invites applications for tenure-track **ASSISTANT PROFESSOR** position available August 2001. Ph.D. required. Teaching 12 credit hours per semester upper-division and introductory courses. Candidates should have significant coursework and/or research experience in (1) quantitative ecology and (2) entomology with interest in plant/animal interactions. Preference will be given to candidates with interests in tropical ecology. Send curriculum vitae, statement of teaching and research interests, all college transcripts, and three letters of reference to: **Dr. Steven D. Werman, Chair, Department of Biological Sciences, Mesa State College, 1100 North Avenue, Grand Junction, CO 81501.** Website: www.mesastate.edu/biology/. Deadline: January 15, 2001. *Affirmative Action/Equal Opportunity Employer.*

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For the above positions, experience working within a 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, P.O. Box 549, Tarrytown, NY 10591. Fax: 914-789-2863. E-mail: hr@progenics.com

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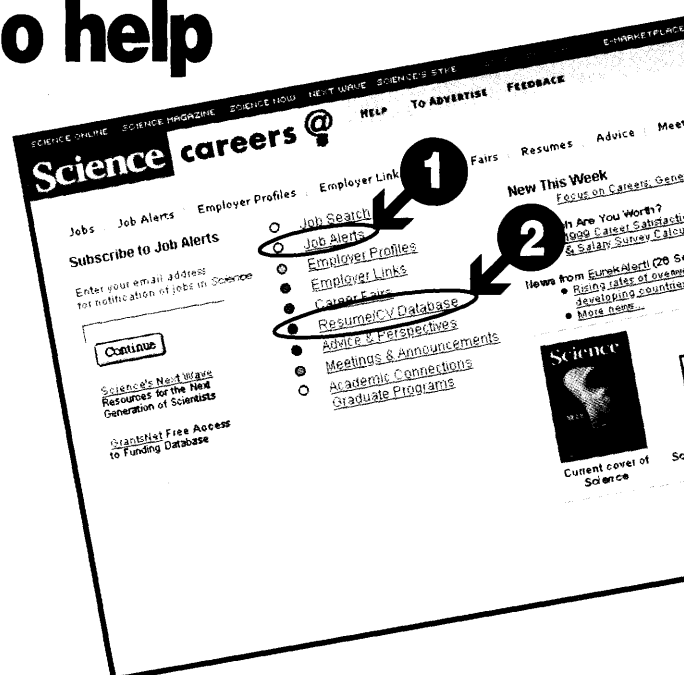
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POSITIONS OPEN

TENURE-TRACK FACULTY POSITION PHARMACOLOGY AND TOXICOLOGY

The Department of Pharmacology and Toxicology on the Medical College of Virginia campus of Virginia Commonwealth University invites applications for a tenure-track faculty position, the rank of which is open and will be determined by applicant experience, potential, and extramural support. We are in a growth phase and expect to fill several tenure-track faculty positions over the next one to two years. Applicant must have an M.D. or Ph.D. in pharmacology or relevant discipline with at least three years of related postdoctoral experience and will be expected to establish and maintain a state-of-the-art, nationally funded research program, as well as contribute to the teaching and mentoring of graduate and professional students. The Department has consistently ranked in the top 10 NIH-funded pharmacology departments and is composed of over 40 faculty and a graduate program of 27 Ph.D. and 18 M.S. students. Current departmental strengths include neuropharmacology of substance abuse, signal transduction, immunotoxicology, carcinogenesis, and pharmacology of antineoplastic drugs. Submit curriculum vitae; names and e-mail addresses of three references; and a summary of research interests and goals by December 31, 2000, although the search will remain open until the position is filled. Submit materials to: **Search Committee (F5271), P.O. Box 980613, Virginia Commonwealth University, Richmond, VA 23298-0613.** Website: <http://www.vcu.edu>. *Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer and encourages women, minorities, and persons with disabilities to apply.*

UNIVERSITY OF WISCONSIN-MADISON DEPARTMENT OF ZOOLOGY ETHOLOGY/ANIMAL BEHAVIOR

The Department of Zoology invites applications for a tenure-track position as **ASSISTANT PROFESSOR** beginning August 2001. Applicants must have a Ph.D. degree and a history of publication in the area of experimental ethology/animal behavior. Candidates testing hypotheses within an evolutionary framework are encouraged. Teaching will include courses at the undergraduate and graduate level. Information about the Department may be found at website: <http://www.wisc.edu/zoology>. Please send curriculum vitae, statement of research and teaching interests, copies of three publications, and three letters of recommendation via post to: **Chair, Ethology Search Committee, Department of Zoology, 430 Lincoln Drive, University of Wisconsin-Madison, Madison, WI 53706.** Telephone: 608-262-2648 or 608-262-1051; FAX: 608-265-6320; e-mail: maharri@facstaff.wisc.edu or zoology@macc.wisc.edu. Only applications submitted by U.S. mail will be accepted. Deadline: 20 January 2001. *An Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply. Unless confidentiality is requested in writing, information regarding applicants must be released upon request. Finalists cannot be guaranteed confidentiality.*

ANIMAL PHYSIOLOGIST

The Biology and Microbiology Department at the University of Wisconsin Oshkosh invites applications for a tenure-track **ASSISTANT PROFESSOR** with specialty in vertebrate physiology beginning 1 September 2001. Ph.D. required; teaching experience desirable. Responsibilities: teach animal physiology, human physiology, and introductory biology; develop a research program in animal physiology; pursue extramural funding; supervise M.S. theses. Letter of application, brief statements of teaching philosophy and research interests, curriculum vitae, reprints, three letters of recommendation, and transcripts to: **Chair, Department of Biology and Microbiology, University of Wisconsin Oshkosh, Oshkosh, WI 54901** by 8 January 2001. For additional information, see website: <http://www.uwosh.edu/departments/biology>. *The University of Wisconsin Oshkosh is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

FACULTY POSITION CANCER CELL BIOLOGY CANCER RESEARCH CENTER OF HAWAII University of Hawaii

The Cancer Research Center of Hawaii, an organized research unit of the University of Hawaii at Manoa, invites applications for a tenurable position at the **ASSISTANT or ASSOCIATE PROFESSOR (RESEARCHER)** level. An individual with research interests in cancer cell biology is sought to establish an independent research program related to fundamental biological mechanisms of cellular growth and novel molecular targets such as apoptosis, angiogenesis, or signal transduction, which will complement ongoing molecular research efforts in the Center. The successful applicant will be expected to collaborate with researchers in the Natural Products Program, a multidisciplinary drug discovery group aimed at the identification and characterization of new anticancer agents through the use of mechanism-based assays. Minimum requirements: M.D. or Ph.D. degree and a strong record of published research. Desirable: demonstrated interest in the identification and use of novel anticancer agents in the elucidation of key cellular processes involved in tumor biology. Salary commensurate with qualifications and experience. To apply, send letter of application, curriculum vitae, statement of current and future research interests, and the names and addresses of three references to: **Robert V. Cooney, Ph.D., Assistant Director, Cancer Research Center of Hawaii, 1236 Lauhala Street, Honolulu, HI 96813.** Telephone: 808-586-2968; e-mail: personnel@crch.hawaii.edu. Closing date: Position will remain open until filled; however, first review of applications will begin December 15, 2000. *Equal Employment Opportunity/Affirmative Action Employer.*

FACULTY POSITIONS WEILL MEDICAL COLLEGE OF CORNELL UNIVERSITY

Department of Pharmacology

Candidates are sought for tenure-track positions at the level of **ASSISTANT PROFESSOR**. Candidates with interests in a wide range of areas related to the disciplines of pharmacology and clinical pharmacology will be considered. The responsibilities of this position include development of an active, independent research program and participation in both medical and graduate student teaching programs in the Department. Applicants should send curriculum vitae, a summary of proposed research, and should arrange to have letters sent from at least three Scientists who can evaluate the candidate's accomplishments. Weill Medical College of Cornell University is a part of the New York Presbyterian-Weill Cornell Medical Center and is adjacent to Memorial Sloan-Kettering Cancer Center and Rockefeller University. Applications should be sent to: **Chair, Pharmacology Search Committee, Box 70, Pharmacology Department, Weill Medical College, 1300 York Avenue, New York, NY 10021.** FAX: 212-746-8858. *Equal Employment Opportunity/Affirmative Action/Minorities/Females/Disabled/Veterans.*

TENURE-TRACK POSITIONS BIOCHEMISTRY AND PHYSICAL CHEMISTRY

Applications are invited for two tenure-track positions in the Department of Chemistry at Florida International University (FIU) in the areas of biochemistry and physical chemistry with appointments starting in fall 2001. A Ph.D. and postdoctoral experience are required. Candidates will be expected to establish an active, externally funded research program directing Ph.D., M.S., and undergraduate students. FIU is the fourth largest university in the 10-member State University System of Florida with over 31,000 students and is located in west suburban Miami. Please see website: www.fiu.edu/orgs/chemistry for more details. Send curriculum vitae, transcripts, research plans, and three letters of reference to: **Search Committee (specify Biochemistry or Physical Chemistry), Department of Chemistry, FIU, Miami, FL 33199.** Selection process will begin December 15, 2000. *FIU is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

VERTEBRATE ECTOTHERM ZOOLOGIST

Tenure-track **ASSISTANT PROFESSOR**. Ph.D. in zoology, fisheries, or a closely related discipline in biology completed by 20 August 2001. Advanced training in vertebrate zoology (including ichthyology and fisheries biology) required. Research experience in ichthyology or fisheries biology also required. Preference will be given to applicants with experience in freshwater fisheries and broad experience in biological sciences. A strong commitment to college teaching, prior teaching experience at the college level, and experience working with diverse groups are desired. Duties: teaching upper-division and graduate courses in ichthyology, freshwater fisheries biology, and vertebrate zoology; teaching introductory biology and zoology courses; engaging in scholarly activities; supervising undergraduate and graduate research; advising; serving on committees; and engaging in community service. Duties may also include course development and participation in programs designed to recruit and retain students in the sciences. Submit curriculum vitae, all transcripts, names and telephone numbers of three references, statements of teaching and scholarly interests, and arrange to have three letters of recommendation sent to: **Laurel Heffernan, Chair, Biological Sciences, California State University, Sacramento, CA 95819-6077.** CSUS Employment website: <http://www.csus.edu/fas/nsmvac.htm>. Applications must be postmarked by January 12, 2001. *Affirmative Action/Equal Employment Opportunity.*

ASSISTANT PROFESSOR MACROEVOLUTIONARY BIOLOGY University of California, Santa Barbara

We seek an Evolutionary Biologist for a tenure-track position for research and teaching in the area of macroevolution. The search is broadly defined to include all areas of research that focus on fundamental questions concerning long-term evolution or other evolutionary processes operating above the species level and that complement our established program in microevolution. Examples include new theoretical and analytical approaches to molecular evolution, biogeography, systematics, and the evolution of ecosystems; linkages among molecular, developmental, and ecological genetics; origin of innovation and higher taxa; evolutionary and ecological consequences of mass extinctions; and the generation of biodiversity. Undergraduate and graduate teaching responsibilities will include courses in macroevolution and the candidate's area of research specialization. Submit curriculum vitae, selected reprints, a brief description of previous and anticipated research, and arrange to have at least three letters of reference sent to: **Macroevolution Search Committee, Department of Ecology, Evolution, and Marine Biology, University of California, Santa Barbara, CA 93106.** Review of applicants will begin January 15, 2001, and will continue until the position is filled. *UCSB is an Equal Opportunity/Affirmative Action Employer.*

THREE TENURE-TRACK ASSISTANT/ ASSOCIATE PROFESSORSHIPS

The Department of Bioscience and Biotechnology is in a growth mode and is searching for three tenure-track faculty. We are seeking individuals who approach cellular, physiological, or nutritional processes using molecular and/or biochemical/biophysical methods and have a strong commitment to undergraduate teaching. Preference will be given to candidates with research interests that complement those of the current faculty (described at website: www.sciences.drexel.edu/biology/dept/biopage.htm). Consideration of applications begins immediately and will continue until the positions are filled. Applicants should submit curriculum vitae, statements of research and teaching interests, and three letters of reference to: **Faculty Search, Department of Bioscience and Biotechnology, Drexel University, 3141 Chestnut Street, Philadelphia, PA 19104.** Telephone: 215-895-2623; FAX: 215-895-1273; e-mail: bioscience@drexel.edu. *Drexel is an Equal Opportunity Employer.*



POST-DOCTORAL POSITIONS AT MASSACHUSETTS GENERAL HOSPITAL, HARVARD MEDICAL SCHOOL

(1) We are recruiting a post-doctoral scientist to investigate the molecular basis of a novel form of adrenoleukodystrophy (ALD). This individual will assist in developing an animal model of this disorder and will use the model, and an in vitro model, to investigate the molecular pathogenesis of this type of ALD. Both types of investigation will be central to the development of new therapeutic strategies for ALD.

(2) A position is open immediately for a scientist to study stem cell therapy in muscular dystrophy. This individual will investigate the potential for various types of stem cell to integrate into normal and dystrophic muscle and thereby replace missing proteins and enhance muscle repair and function. Of particular importance is the development of manipulations that encourage successful myogenic differentiation of stem cells, and that optimize migration potential of the stem cells. This project will delineate important processes in stem cell differentiation, particularly along a myogenic lineage, and will simultaneously test feasibility of a significant new line of therapy in human muscle diseases.

Funding is available for a minimum of two years. Scientists in this position will be fellows both at the Massachusetts General Hospital and at Harvard Medical School. The Day Laboratory is situated in the research campus of the Massachusetts General Hospital and provides outstanding opportunities for scientific education as well as collaboration with scientists at many outstanding institutions in Boston. Boston is an exciting academic city close to excellent recreational areas (e.g. Cape Cod, the White Mountains). Please send a curriculum vitae, a short statement of research interests and the names of three referees to: **Dr. Robert H. Brown, Jr., and Dr. Gilmore O'Neill, Day Neuromuscular Research Laboratory, Rm 6627, Bldg 149, 13th Street, Navy Yard, Charlestown, MA 02129.** Telephone: 617-726-5750; FAX: 617-726-8543; Email: brown@helix.mgh.harvard.edu, oneillg@helix.mgh.harvard.edu.

The Massachusetts General Hospital is an equal opportunity employer: women and minorities are encouraged to apply.

National Institutes of Health National Heart, Lung, & Blood Institute

Tenure or Tenure-Track Position Cardiovascular Developmental Biology

The Laboratory Research Program (LRP) of the National Heart Lung and Blood Institute is seeking a scientist to direct an independent research program in cardiovascular developmental biology. This represents a new initiative in the LRP and is associated with several supporting core facilities including mouse transgenics, confocal and electron microscopy, multi-modality small animal non-invasive imaging, iRNA resources and proteomics. The candidate may have a Ph.D., M.D. degree or both and have achieved independent research status as evidenced by publication in major peer reviewed journals. Research experience in cardiovascular development is desirable, however a broad scope of interests is encouraged including molecular biology, genetics, cell biology, and biophysics. Position (tenure or tenure-track), salary and research support will be commensurate with experience. Tenure-track candidates are supported for up to 6 years before consideration for tenure.

Applications must be received by **January 12, 2001**. Please submit a curriculum vitae and brief statement of research interests along with three letters of reference to:

**Ms. Kim Westervelt
Personnel Office**

**National Heart, Lung and Blood Institute
31 Center Drive MSC 2484
Building 31A, Room 5A28
Bethesda MD, 20892-2484**

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We require a BS or MS in biological sciences with 1 or more years of experience. Experience with cell culture and ELISA is highly desirable, as is a background in rodent handling/non-survival surgery (hepatocyte isolation), mammalian mutation assay systems, and knowledge of a GLP environment. Well-developed computer skills are a definite plus.

We offer a comprehensive salary and benefits package, including tuition reimbursement and one of the best 401(k) plans in the nation, as well as opportunities for professional growth. To be considered, please submit your resume and cover letter, indicating salary requirements and PAF Code, to: **Merck Positions, PAF Code: XHXMRSNKH11010, PO Box 92164, Los Angeles, CA 90009-2164.** E-mail: merck@resume.isearch.com. Fax: (310) 337-3393. Candidates selected for interviews will be contacted. We are an Equal Opportunity Employer, M/F/D/V.



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National Institute of Allergy and Infectious Diseases

National Institutes of Health Rocky Mountain Laboratories

Postdoctoral positions are available to study the interaction of human bacterial pathogens with phagocytic leukocytes. Studies will include genomics and proteomics strategies to identify target bacterial genes/proteins of interest or those up-regulated in phagocytes. Phagocyte-pathogen interactions will be examined using fluorescence-based real-time assays, video microscopy, confocal and electron microscopy in combination with enzymatic assays for ROS production, routine biochemistry, immunology and cell biology. The facility supports multiple laboratories and investigators with expertise in a wide variety of human pathogens. The Rocky Mountain Laboratories' research campus includes an excellent electron microscopy facility, a Biosafety Level 3 facility and a non-human primate facility. Laboratories have been recently upgraded and equipped with state-of-the-art instrumentation, including that for DNA microarray analyses, proteomics, and high-throughput DNA sequencing. Starting salaries range from \$29,000 - \$40,000 commensurate with experience. The research facility is located in a very scenic mountainous area, which supports skiing, climbing, hiking, cycling, and trout fishing. A Ph.D. or M.D. in an appropriate discipline is required. Interested individuals should send *curriculum vitae*, a 1-2-page career summary including research interests, and 3 letters of reference to **Frank R. DeLeo, Laboratory of Human Bacterial Pathogenesis, Rocky Mountain Laboratories, NIAID, NIH, 903 South 4th Street, Hamilton, MT 59840** or E-mail materials to fdeleo@niaid.nih.gov.

POSITIONS OPEN

EMBRYOLOGIST/DEVELOPMENTAL BIOLOGIST

Tenure-track **ASSISTANT PROFESSOR**. Ph.D. in embryology, developmental biology, or a closely related discipline in biology completed by 20 August 2001. Advanced training in human embryology or comparative vertebrate embryology required. Research experience in embryology/developmental biology also required. Preference given to applicants with a strong background in biological sciences and whose background and experience complements the curricular needs of the Department. A strong commitment to college teaching, prior teaching experience at the college level, and experience working with diverse groups desired. Duties: teaching upper-division courses in human or comparative vertebrate embryology; teaching lower-division biology courses; engaging in scholarly activities; supervising undergraduate and Master's research; developing new courses; advising; serving on committees; and engaging in community service. Submit curriculum vitae, all transcripts, names and telephone numbers of three references, statements of teaching and scholarly interests, and arrange to have three letters of recommendation sent to: **Laurel Heffernan, Chair, Biological Sciences, California State University, Sacramento, CA 95819-6077**. CSUS Employment website: <http://www.csus.edu/fas/nsmvac.htm>. Applications must be postmarked by January 10, 2001. *Affirmative Action/Equal Employment Opportunity.*

The University of Southern Indiana invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level in biology to begin August 2001. We are seeking a Developmental Biologist whose teaching responsibilities will include developmental biology and a combination of courses appropriate for the successful candidate's area of expertise. An individual who can bridge the gap between classical embryology and molecular levels of development is highly desirable. Excellence in undergraduate teaching supported by involvement of students in the candidate's professional/research activities is expected. Modest set-up funds will be available. A Ph.D. is preferred, but candidates who are A.B.D. will be considered.

The University is committed to excellence in teaching, scholarship, and professional activity, and service to the University and community. Information about the Biology Department may be found at website: <http://deepcnet.usi.edu/biology>. Application deadline is December 15, 2000, but applications will be considered until the position is filled. Submit letter of application including statement of teaching philosophy; research goals; curriculum vitae; unofficial transcripts; and names, addresses, telephone numbers, and e-mail addresses of three professional references to: **Dr. Henri Roger Maurice, Chair, Department of Biology, University of Southern Indiana, 8600 University Boulevard, Evansville, IN 47712**.

USI is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION WAKSMAN INSTITUTE RUTGERS UNIVERSITY

Applications are invited for a position in plant developmental biology with focus on signal transduction or other cutting-edge areas of plant sciences. The appointment can be made at the academic rank of **ASSISTANT PROFESSOR** (tenure track) or above (tenured). The applicant is expected to maintain a successful, externally funded research program and to have an interest in teaching at the undergraduate and graduate levels. Applicants should send curriculum vitae, list of publications, a summary of research plans, and arrange that three confidential letters of reference be sent to: **Chair, Search Committee, Waksman Institute, Rutgers University, 190 Frelinghuysen Road, Piscataway, NJ 08854-8020**. The committee will begin its review of applications December 1, 2000, although applications will be accepted and reviewed until the position is filled. Starting date is September 1, 2001. *Rutgers University is an Equal Opportunity Employer.*

POSITIONS OPEN

CELL BIOLOGY UNIVERSITY OF MASSACHUSETTS AMHERST

Applicants are invited for a tenure-track **ASSISTANT PROFESSORSHIP** in the Department of Biology (website: www.bio.umass.edu/biology). We are particularly interested in creative researchers who focus on advanced imaging using light and/or electron microscopy and who will interact with the present cell biology community. Candidates are expected to develop a vigorous, funded research program and be committed to undergraduate and graduate education. We have excellent research facilities for cell biology and encourage and support innovative teaching. Ph.D. required. To apply, send curriculum vitae, statement of research interests and teaching philosophy, and arrange for three letters of recommendation to be sent to: **Chair, Cell Biology Search Committee, Search Number 12506, Biology Department, Morrill Science Center, University of Massachusetts, Amherst, MA 01003-5810**. E-mail inquiries may be sent to e-mail: cellsearch@bio.umass.edu. Review of applications will begin December 15, 2000, and continue until position is filled.

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

Environmental science and policy (three positions): **ASSISTANT PROFESSOR** (biology), **ASSISTANT PROFESSOR** (chemistry), and **INSTRUCTOR/ASSISTANT PROFESSOR** (geology). Tenure-track positions for Assistant Professors; nine-month appointments with summer employment possible. College of Arts and Sciences, Department of Environmental Science and Policy. Salaries competitive. Qualifications: Ph.D. respectively in either biology or chemistry, Master's or Ph.D. in geology or an interdisciplinary environmental studies program at the time of appointment. Ability to teach respectively a variety of undergraduate biology, chemistry, or geology courses as well as undergraduate and graduate courses in environmental science and policy. Teaching experience and versatility are essential. Preferred qualifications: college or university teaching experience, active research agenda. Responsibilities: teaching, research, and service. Apply to: **Professor David R. Carr, Chair, Environmental Science and Policy Search Committee, University of South Florida, 140 Seventh Avenue South, St. Petersburg, FL 33701**. Submit letter describing research agenda and teaching interests, curriculum vitae, and three letters of reference. Application deadline for all positions: All applications must be received by December 15, 2000.

University of South Florida is an Affirmative Action/EA/Equal Opportunity Employer. According to Florida law, applications and meetings regarding them are open to the public.

EUKARYOTIC MOLECULAR GENETICIST University of Wisconsin-Milwaukee

The Department of Biological Sciences at the University of Wisconsin-Milwaukee solicits applications for a tenure-track position in eukaryotic molecular genetics. We seek an **ASSISTANT PROFESSOR** with postdoctoral experience that will complement the research interests of current faculty in molecular evolution, functional genomics, and/or development in aquatic vertebrates or invertebrate systems (e.g., zebrafish, *C. elegans*, or *Drosophila*). The successful candidate will establish an independent, extramurally funded research program and contribute to departmental teaching. Send curriculum vitae, a concise statement of research and teaching goals, and three letters of recommendation to:

**Chair, Eukaryotic Molecular Genetics Search Committee
Department of Biological Sciences, P.O. Box 413
University of Wisconsin-Milwaukee
Milwaukee, WI 53201**

Applications must be postmarked by February 1, 2001. *The University of Wisconsin-Milwaukee is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

PHYSIOLOGICAL ECOLOGIST California State University, Hayward

Applications are invited for a tenure-track **ASSISTANT PROFESSOR** position to begin September 2001. We seek a broadly trained Biologist with teaching and research interests in physiological ecology. Teaching responsibilities could include courses in human anatomy and physiology, general physiology, introductory biology for majors, physiological ecology and upper-division/graduate courses in the candidate's area of expertise. Applicants should be committed to high-quality teaching at an ethnically and culturally diverse campus. An externally funded research program that involves undergraduate and graduate (M.S.) students is expected. A Ph.D. is required at the time of hire, and postdoctoral and prior teaching experience is preferred. More information on the Department and the University may be found at website: www.csuhayward.edu. Send curriculum vitae, three letters of recommendation, statements of teaching and research interests, and copies of relevant publications to: **Physiological Ecology Search Committee, Department of Biological Sciences, California State University, Hayward, Hayward, CA 94542**. Application review will begin December 1, 2000, and will remain open until the position is filled. *CSUH is an Equal Opportunity Employer and does not discriminate on the basis of age, race, color, national origin, sex, sexual orientation, or disability.*

Neurodegenerative diseases: Applications are invited for a University tenure-track position at the **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** level. We are seeking an individual with a demonstrated commitment to research in degenerative neurological diseases including the trinucleotide repeat diseases, ALS, Parkinson's disease, or Alzheimer's disease. Expertise in clinical neurology is not required but is especially desirable as this will encourage the integration of clinical and scientific programs in neurodegenerative disease. The appointee will be expected to establish an outstanding research program. They will supervise medical students and Fellows in their own laboratory and are expected to participate in departmental teaching programs and to play a leadership role in the Stanford neuroscience community. Applications will be accepted from M.D.s and Ph.D.s. Interested individuals should send curriculum vitae; a description of research interests; and the names, addresses, and telephone numbers of three references to: **Professor William Mobley, Department of Neurology and Neurological Sciences, Stanford University Medical Center, MSLS Building, Room 204, Stanford, CA 94305-5489**. *Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.*

ASSISTANT OR ASSOCIATE PROFESSOR PLANT EVOLUTIONARY AND DEVELOPMENTAL BIOLOGY

The Department of Plant and Microbial Biology, University of California, Berkeley, is seeking an Assistant Professor (tenure track) or Associate Professor (tenured) for a nine-month position starting July 1, 2001. The appointee is expected to develop a vigorous, independent research and teaching program related to plant evolution and development. The appointee would be expected to teach courses in these areas. Candidates must have a Ph.D. degree and productive postdoctoral experience. For a more detailed description of this position, consult website: <http://plantbio.berkeley.edu/jobs>.

Please send curriculum vitae, reprints of three to five relevant publications, a one- to-three-page statement of future research plans, a brief description of teaching interests and philosophy, and the names of at least three references to: **Chair, Evolutionary and Developmental Biology Search Committee, Department of Plant and Microbial Biology, University of California, Berkeley, CA 94720**. Applications must be received by January 15, 2001, for consideration.

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

**NATIONAL INSTITUTES OF HEALTH
NATIONAL INSTITUTE ON ALCOHOL
ABUSE AND ALCOHOLISM
DIVISION OF INTRAMURAL CLINICAL
AND BIOLOGICAL RESEARCH**

Chief, Laboratory of Clinical Studies

An outstanding medical scientist to direct a clinical research program is sought by the National Institute on Alcohol Abuse and Alcoholism (NIAAA), National Institutes of Health (NIH). The research program is located in Building 10 on the NIH Campus in Bethesda, Maryland, and is going to move into new and larger facilities upon completion of the new Clinical Research Center on the NIH Campus in 2003. The Laboratory of Clinical Studies is a component of the NIAAA's Division of Intramural Clinical and Biological Research (DICBR).

The Laboratory Chief is responsible for establishing an independent research program focusing on the causes, consequences, and treatments of alcohol abuse and alcoholism. Successful candidates should have a broad perspective of clinical research and the neurobiological underpinnings of alcoholism. Research could range from basic cellular/molecular biological approaches that have translational potential to clinical science in areas relevant to alcoholism, with a combined basic/clinical approach being both feasible and desirable. The Laboratory has approximately 60 employees, fellows, and guest researchers and an eleven-bed inpatient ward, an outpatient clinic, laboratory space for basic research, and access to facilities for both structural and functional brain imaging. It has a budget of approximately \$8.5 million, which includes clinical support services.

The applicant must possess an M.D. and/or Ph.D. degree. Experience must include managing a senior-level research program that is recognized nationally. The total compensation will be commensurate with education and experience. Candidates may be eligible for relocation or other bonuses.

All applications should include the following: a current curriculum vitae and bibliography; a one page synopsis of research accomplishments and research plans; and the name, address, and telephone number for five professional references. A list of the requirements or additional information about the position may be obtained by contacting Ms. Hanratty at the address listed below. Applications should be sent to:

Ms. Kathleen Hanratty
NIH, Bldg. 31, Room 1B58
31 Center Drive MSC 2088
Bethesda, MD 20892-2088
Telephone: (301) 402-2997
FAX: (301) 402-0016
e-mail: kh54d@nih.gov

Applications should be received by **December 31, 2000**, although the search will continue until a suitable candidate is identified. The DICBR/NIAAA is a smoke-free environment. This advertisement supercedes previous announcements.

*NIH is an Equal Opportunity Employer.
Applications from women, minorities,
and persons with disabilities are strongly
encouraged.*

INTER-AMERICAN INSTITUTE FOR GLOBAL CHANGE RESEARCH

**IAI
DIRECTORATE**

c/o INPE
Ave. dos Astronautas, 1758
São José dos Campos, SP - 12227-010
Brazil

Tel.: +55 12 345-6855/56

Fax: +55 12 341-4410

**POSITION ANNOUNCEMENT
SCIENTIFIC OFFICER**

THE IAI

The Inter-American Institute for Global Change Research (IAI) is an intergovernmental organization composed of 18 countries of the Americas. It was established in 1992 as a regional network of cooperating research institutions and it pursues the principles of scientific excellence, international cooperation, and the full and open exchange of scientific information relevant to global change.

The Institute's research themes include: (1) Understanding Climate Variability in the Americas, (2) Comparative Studies of Ecosystems, Biodiversity, Land Use and Water Resources in the Americas, (3) Changes in the Composition of the Atmosphere, Oceans and Fresh Water, (4) Integrated Assessments, Human Dimensions and Applications. These research themes were selected because they are regionally relevant for policy-making and will foster cooperation among research entities (including extra regional ones), strengthen global change research capabilities and infrastructure of the region, and improve public awareness and information related to global environmental conditions, resource management and sustainable development. Currently, the IAI is supporting 65 projects involving 90 institutions and more than 300 scientists of its member countries.

The Institute's Directorate (IAI's administrative organ) is composed of a small international staff, which includes the Director, the Scientific Officer, the Administrative Officer, the Communication Officer, and the Manager of the Data and Information System (DIS). It is located at the main campus of Brazil's National Institute for Space Research (INPE) in São José dos Campos, São Paulo. Voluntary contributions from the member countries support the Directorate plus the operational expenses of the Scientific Advisory Committee (IAI's scientific advisory organ), and the Executive Council (IAI's executive organ). External contributions and grants complement these voluntary contributions to finance major research programs and projects as well as capacity building activities.

THE POSITION

1. Main Responsibilities

Reporting to the IAI Director, the Scientific Officer (SO) is chiefly responsible for proposing and implementing research-related policies and systems, for monitoring the scientific progress of the Institute, and for supporting the work of the Scientific Advisory Committee (SAC) so that the research priorities are clearly established, activities are performed effectively through decentralized and cooperative efforts, and the Institute is fully accountable to its member countries and donors.

In the monitoring role, the SO will be responsible for ensuring that end-products (quantifiable and measurable, to the extent possible) are in place for each research activity, and that the peer-review processes are utilized objectively and on a timely basis. The SO will also take responsibility for seeing that research activities and research end-products, in each instance, include appropriate interfaces with the policy communities of the Americas. Frequent travels to sites where research projects are being conducted will be required.

In his supporting role, the SO serves as the primary liaison with research institutions and with the IAI organs with respect to project design, implementation and monitoring and also to assist them in identifying sources of funding for the work that they propose. The SO will develop close and fruitful relationships with the donor community interested in global change.

In addition, the SO will be responsible for assisting and/or coordinating the preparation of scientific papers by the IAI's Directorate, particularly those aiming at synthesizing results emerging from research projects supported by the Institute. The SO will be the scientific spokesperson for the Institute and he/she will be responsible for permanently building close and productive relations with the several regional/international entities, conventions, and protocols involved in global change issues.

2. Qualifications

The SO should be a recognized scientist with a proven range of experience and knowledge of the technical and scientific aspects of global environmental change issues. High-level research accomplishments, as well as a demonstrable record of successfully linking research to policy formulation and decision-making should be present. Verbal and written communication skills in English and in another language of the region (Spanish/Portuguese/French) are required. Experience in project formulation, monitoring, and evaluation is highly desirable, as are experience in management of scientific data and information systems, and experience with multidisciplinary/multinational research environments. The SO must hold a Ph.D. degree in a relevant sub-discipline of the natural or social sciences.

3. Appointment Terms

The SO will be appointed for a 3 year-term, which can be renewed, but shorter appointment terms may be considered. An internationally competitive total compensation package, commensurate with experience and professional qualifications will be provided.

4. Application (Instructions)

Applications and nominations of interested candidates should include:

- a cover letter, which directly relates the main responsibilities and qualifications of the position to the candidate's qualifications;
- a current curriculum vitae; and
- the names/addresses/phone numbers/fax numbers/e-mails of three referees.

These materials should be sent to the following address: **Armando Rabuffetti, IAI Director, c/o INPE, Av. dos Astronautas, 1758 - Jd. da Granja, São José dos Campos, SP - Brasil 12227-010**

The deadline for submission of applications is January 31, 2001, but applications will be accepted until a suitable candidate is identified.

POSITIONS OPEN

CHAIRMAN DEPARTMENT OF GENETICS AND DEVELOPMENT College of Physicians and Surgeons Columbia University

Columbia University Health Sciences campus seeks a dynamic individual of international prominence to assume leadership of its Department of Genetics and Development. Columbia University has a long and distinguished history in genetics. The Department has trained outstanding researchers and scholars who uncover new knowledge about basic mechanisms in genetics, development, and human disease.

There are 20 full-time faculty and three adjunct faculty based elsewhere. A broad-based training program is in place. The faculty directs the affiliated Genome Center and the Institute for Cancer Genetics. Active collaborative research exists with both clinical and basic science departments. The faculty is also involved in the animal facility responsible for transgenic animals.

The successful candidate will be expected to maintain the outstanding programs of research and training and to lead the Department during this new era when rapid growth in all aspects of genetics and development is expected.

Forward applications and nominations to: **Genetics and Development Search Committee, c/o Richard Mayeux, M.D., M.Sc., Gertrude H. Sergievsky Center, Columbia University, 630 West 168th Street, New York, NY 10032.** We take Affirmative Action toward Equal Employment Opportunity. Applications from women and minority groups are encouraged.

FACULTY OF ARTS AND SCIENCES Faculty Positions Available Starting October 2001 Department of Chemistry

Applicants sought in the following fields: analytical chemistry and inorganic chemistry.

Ph.D. degree and teaching and research experience required. Positions are at the **ASSISTANT PROFESSOR** level but higher ranks may be considered depending on qualifications. Appointments are generally for an initial period of three years. Visiting positions at all levels may be considered for all vacancies. Sabbatical visitors are welcome in all fields. All interested applicants may send a letter of application and arrange for three letters of reference addressed to:

**Dean, Faculty of Arts and Sciences
American University of Beirut
c/o New York Office
850 Third Avenue, 18th Floor
New York, NY 10022-6297**

or

**Dean, Faculty of Arts and Sciences
American University of Beirut
Beirut, Lebanon**

Electronic submission may be sent to e-mail: **AS_Dean@aub.edu.lb**. All applications and letters of reference should be received by January 15, 2001. The American University of Beirut is an Equal Opportunity Employer.

FISHERY SCIENTIST/BRANCH CHIEF

NOAA, National Marine Fishery Service, seeks Fishery Scientist/Ecologist (\$75,887 to \$98,649) as Chief, Ecology Branch, Southwest Fishery Science Center, Santa Cruz Laboratory, to lead Fishery Biologists, Ecologists, and Geneticists engaged in research to conserve West Coast groundfish and threatened and endangered salmon in California. Duties include research; program planning, development, and coordination; and policy recommendation. See websites: **www.wasc.noaa.gov** or **www.usajobs.opm.gov** for more information or Telephone: 206-526-6407. Ph.D. or equivalent and must be a U.S. citizen. Apply to: **NOAA Human Resources, 7600 Sand Point Way N.E., Seattle, WA 98115, Attention: W/NMF/SWF000525A.RJ**, postmarked no later than December 7, 2000. Department of Commerce is an Equal Opportunity Employer.

POSITIONS OPEN

Des Moines University

Des Moines University - Osteopathic Medical Center

CHAIRPERSON PHYSIOLOGY-PHARMACOLOGY DEPARTMENT

Des Moines University Osteopathic Medical Center invites applications and nominations for a **DISCIPLINE HEAD** for the combined Physiology-Pharmacology Department. This department has responsibility for teaching a systems-based curriculum to students in the osteopathic medicine, podiatric medicine, physician assistant, and physical therapy programs. The Department seeks a dynamic leader who will continue the Department's excellence in medical education while developing the growth of scholarly activities. The successful candidate will have a Doctoral degree in a relevant discipline, have demonstrated accomplishments in research and department-level administration, and be a skillful communicator on behalf of the Department and the institution.

Des Moines University is 102-year-old institution that prepares Doctor's- and Master's-level practitioners. It is located on a quiet, 22-acre urban campus in a city of 350,000.

Interested candidates should send curriculum vitae; statements of research interests; history of extramural funding and teaching/educational philosophy; and names of three individuals capable of providing references regarding the candidate's abilities in teaching, research, and administration. Review of applications will begin immediately and continue until the position is filled.

Please reply to: **Dr. Bryan Larsen, Physiology-Pharmacology Search Committee, Office of University Research, Des Moines University Osteopathic Medical Center, Des Moines, IA 50312.**

DMU is an Equal Opportunity Employer.

ASSISTANT OR ASSOCIATE PROFESSOR MICROBIAL DIVERSITY

The Department of Plant and Microbial Biology at the University of California, Berkeley, has an opening for an Assistant Professor (tenure track) or Associate Professor (tenured) position (nine-month appointment) starting July 1, 2001. Applications are invited from outstanding individuals whose research focuses on study of the diversity and interactions of microorganisms. A variety of research approaches that address the ecology and evolution of microbes or the comparative analyses of physiological processes, particularly of bacteria and archaea, are appropriate. Teaching responsibilities will include a lecture course in microbial diversity. The successful candidate, who will hold a faculty position in the University of California as well as an appointment in the Agricultural Experiment Station, is expected to establish a strong and independent research program. Microbial biology is a growing program on the Berkeley campus; expertise in this department and elsewhere on campus offers unique collaborative potential in microbial physiology, genetics, genomics, pathology, ecology, and evolution. Applicants must have a Ph.D. degree and suitable postdoctoral or academic experience. Curriculum vitae; a statement of current and future research interests; a statement of teaching experience and/or goals; and names of three references should be sent by January 15, 2000, to: **Chair, Microbial Diversity Search Committee, Department of Plant and Microbial Biology, 111 Koshland Hall, University of California, Berkeley, CA 94720-3102.** Applications submitted after the deadline will not be accepted. The University of California is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION to study the molecular biology of lung morphogenesis. Basic cloning techniques, *in situ* hybridization, and/or immunohistochemistry are required. Excellent benefits with possibility of promotion. Contact: **Dr. Parviz Minoo, Director of Research, Department of Pediatrics, University of Southern California School of Medicine, 1801 East Marengo Street, Los Angeles, CA 90033.** E-mail: **minoo@hsc.usc.edu.**

POSITIONS OPEN

CHAIR, DEPARTMENT OF BIOLOGICAL STRUCTURE UNIVERSITY OF WASHINGTON

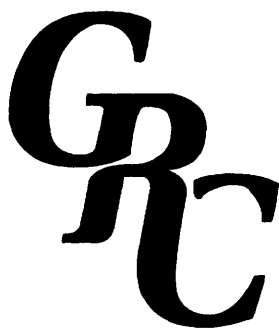
The University of Washington seeks a **PROFESSOR** and Chair of the Department of Biological Structure. Successful candidates will be established Investigators and have a commitment to independent and original research and to teaching. The UW Department of Biological Structure has 28 faculty members with strong research programs in developmental biology, neurobiology, cellular and molecular structure, and anatomical informatics. Candidates with established research programs in developmental biology or neurobiology are particularly encouraged to apply. The Department actively participates in medical student, allied health student, graduate, and undergraduate education. Please submit applications or nominations by December 22, 2000, to: **Richard C. Veith, M.D., Chair, Department of Psychiatry and Behavioral Sciences, University of Washington, Box 356560, Seattle, WA 98195-6560.** The University of Washington is an Affirmative Action/Equal Opportunity Employer. The UW is building a culturally diverse faculty and strongly encourages applications from women and minority candidates.

POSTDOCTORAL ASSOCIATE positions available for studying (1) nuclear receptors/coregulators in gene transcriptional control and vitamin A signaling pathways and (2) opioid receptor gene regulation. Experimental systems include cancer cell cultures, embryonic stem cells, neuron cultures, and transgenic mice. Strong interest and training in molecular biology/biochemistry/genetics in required. Send curriculum vitae and three names of references to:

**Dr. Li-Na Wei
Department of Pharmacology
University of Minnesota
6-120 Jackson Hall
321 Church Street S.E.
Minneapolis, MN 55455-0217
E-mail: **weixx009@umn.edu**
FAX: 612-625-8408**

Faculty position (open rank). The Medical University of South Carolina is soliciting applications for three **RESEARCH FACULTY**. We are particularly interested in the neurosciences, neuropsychology, gerontology, pediatric, and rehabilitation research. The most important asset is a demonstrated interest in pursuing a program of research and potential for the ability to secure extramural funding at the junior level and evidence of a track record to secure federal funding at the senior level. Applicants should have completed the Doctoral degree and have a strong commitment to scholarship. Information about the University may be accessed by visiting our website: **www.musc.edu**. Interested applicants may forward curriculum vitae, names of three references, sample publications, and a cover letter outlining plans for future research to: **Ronald T. Brown, Ph.D., College of Health Professions, 19 Hagood Avenue, P.O. Box 250822, Charleston, SC 29425.**

POSTDOCTORAL POSITIONS available to study the role of oxygen free radicals as second messengers, the promotion of cell growth by oxidants, and the oxidant-mediated signaling in response to ambient air particles in lung epithelial cells. The candidates should have a Ph.D. in biochemistry, cell biology, or a related discipline. Experience in cell culture and molecular biology is strongly preferred. Send curriculum vitae, names of three references, and a brief statement of research interests to: **Beatriz González-Flecha, Ph.D., Physiology Program, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115.** FAX: 617-432-0014; e-mail: **bgonzalez@hsph.harvard.edu.** NIH support is available for U.S. citizens and permanent residents. Minority applicants are encouraged to apply.



GORDON RESEARCH CONFERENCES

Conferences at the Frontiers of the Biological, Chemical and Physical Sciences

- The 2001 Winter and Spring GRC programs will appear in the October 6, 2000 issue of **SCIENCE**.
- The preliminary 2001 Summer GRC programs will appear in the November 24, 2000 issue of **SCIENCE**.

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WWW.GRC.URI.EDU

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GLOBAL OPPORTUNITIES



THE CHINESE UNIVERSITY OF HONG KONG

Applications are invited for:

Department of Biology

Lecturer (carrying the academic title of Assistant Professor)
(Ref. 00/100(665)/2) (closing date: 31 December 2000)

The post is funded by a Hong Kong Government Area of Excellence grant for 'Plant and Fungal Biotechnology'. Applicants should have a relevant PhD degree and postdoctoral experience. The appointee will conduct research in rice transformation and the improvement of photosynthetic capacity in rice, as well as teach relevant courses. Appointment will be made on a two-year contract to start as soon as practicable, renewable subject to funding and mutual agreement. Visiting appointment will also be considered.

Annual Salary and Fringe Benefits

Lecturer: HK\$554,280 - HK\$703,440 (approx. exchange rate in October 2000: £1 = HK\$11.46; US\$1 = HK\$7.78). Starting salary will be commensurate with qualifications and experience.

Benefits include leave with full pay, medical/dental care, hospitalization benefits, and where applicable housing benefit for eligible appointees (subject to the rules for the prevention of double housing benefits), and a contract-end gratuity and/or University contribution to retirement scheme (totalling up to 15% of basic salary).

Further information about the University and the general terms of service for teaching appointees is available on our homepage:
<http://www.cuhk.edu.hk>

Application Procedure

Please send full resume, copies of academic credentials, a publication list and/or abstracts of selected published papers, together with names and addresses (fax numbers/e-mail addresses as well, if available) of three referees to the Personnel Office, The Chinese University of Hong Kong, Shatin, New Territories, Hong Kong (Fax: (852) 2603 6852) on or before **31 December 2000**. Enquiries may be directed to Professor Hon-ming Lam at: honming@cuhk.edu.hk. Please quote the reference number and mark 'Application' on cover.



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POSITIONS OPEN

RESEARCH ENTOMOLOGIST

USDA, Research, Education, and Extension, Agricultural Research Service, Northern Plains, Agricultural Research Laboratory, Pest Management Research Unit in Sidney, Montana, is seeking a permanent, full-time **RESEARCH SCIENTIST** with demonstrated expertise in entomology. The incumbent has full responsibility for initiating, developing, and managing independent research projects addressing biological control of weeds and the biology and ecology of arthropod natural enemies for target weed species. Incumbent is expected to apply a combination of field and laboratory studies to aid in improving the biological control of significant weed pests through the use of insect natural enemies. *U.S. citizenship and a Ph.D. or equivalent is required.* Salary commensurate with experience (\$41,834 to \$77,507 per annum). Comprehensive benefits package includes paid sick and annual leave, life and health insurance, and a savings and investment plan (401[K] type) are available in addition to the federal retirement plan. For information on the research program and/or position, contact: **Dr. Thomas Shanower; Telephone: 406-433-9405** or via e-mail: tshanowe@sidney.ars.usda.gov. Additional information about the position and application procedures can be obtained via the REE website: www.ars.usda.gov/afm/hrd/resjobs. *USDA/ARS is an Equal Opportunity Provider and Employer.*

STAFF SCIENTIST

Will conduct independent research in the area of molecular biology and genetics, investigate molecular and biochemical aspects of polyketide and/or cyclic peptide biosynthesis, and development of genetic tools for transformation of microorganisms with large gene clusters. Identification and isolation of large gene clusters from bacteria and fungi; generation of genomic DNA libraries, screening, and isolation of clones of interest; and development of methods to generate novel and metabolite libraries. Metabolic engineering of key steps within natural product biosynthesis pathways. Must have general knowledge in plant pathology. Requires Ph.D. degree or U.S. equivalent in engineering/molecular biology or related field. Must have two years of experience in molecular biology, biochemistry, microbiology, or genetics. \$60,063 per year; 9 a.m. to 5 p.m.; 40-hour week. Résumés must be submitted with Social Security number to Job Order Number NC3015344/DOIT Code 041.061-030 to: nearest **Job Service, 1105 Briggs Avenue, Durham, NC 27703**. *An Equal Opportunity Employer.*

RESEARCH ASSOCIATE for hospital in Columbus, Ohio, area. Develop anti-HIV vectors for vaccine redosing; study living organisms and relationship with environment; research to advance knowledge of living organism; and study combinations and reactions in metabolism, reproduction, growth, and heredity. Master's in biochemistry with one year of experience as Research Associate or Research Assistant, Biochemist, or laboratory technician. Experience must be related to laboratory experiment or research position. Forty hours per week; 8:30 a.m. to 5:30 p.m. Monday through Friday. Salary: \$47,800 per year. Send two résumés and cover letters (no calls) to: **ES Sp. Prgms., Ref. Number 6741D, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216**.

BOTANIST: Lynchburg College invites applications for an **ASSISTANT/ASSOCIATE PROFESSOR**, Ph.D., tenure track. Teaching includes plant biology, ecology, freshman biology, and research with students. Teaching experience preferred. Good knowledge of eastern United States flora is expected, and some training in plant molecular/cellular processes is desirable. Opportunities exist to work in a region that is diverse in flora, geology, and topography and to participate in the development of a new 470-acre nature study center. Please visit: [website: http://www.lynchburg.edu/sciencepositions](http://www.lynchburg.edu/sciencepositions) for application instructions and additional information. *Equal Opportunity Employer.*

POSITIONS OPEN



University of Pennsylvania School of Dental Medicine ASSISTANT OR ASSOCIATE PROFESSOR OF PATHOLOGY

The Department of Pathology in the School of Dental Medicine, University of Pennsylvania, is seeking two outstanding Scientist(s) for tenure-track faculty positions at either the Assistant or Associate Professor level. The candidate(s) must have a Ph.D. or a combined D.M.D., M.D./Ph.D. degree or equivalent qualifications and postdoctoral training. The successful candidate is expected to develop or have previously established a high-quality, independent research program in cellular and molecular pathogenesis of disease. Areas of interest include infectious disease and diseases associated with connective tissue, growth and development, and neoplasia. Also of interest are individuals whose research focuses on the relationship between disease, cell cycle abnormalities, and molecular aspects of cell death. The School of Dental Medicine and the University offer opportunities for collaborative research in many areas. The successful candidate will participate in the teaching program of the Department of Pathology which includes teaching of general and oral pathology to dental students. Applicants should send a letter that includes a statement of research interests, curriculum vitae, and bibliography. The candidate should also include a list of three references. The completed application should be sent to:

**Dr. Bruce J. Shenker, Chair
Department of Pathology
University of Pennsylvania
School of Dental Medicine
4010 Locust Street
Philadelphia, PA 19104-6002**

PENN is an Equal Opportunity/Affirmative Action Employer. Applications are encouraged from qualified females and minorities.

DIRECTOR OF COMPUTATIONAL CHEMISTRY CEREP, INC.

We are currently seeking an individual to join our team as the Director of Computational Chemistry. The Director of Computational Chemistry will play a leadership role in computational chemistry for pharmaceutical drug properties from calculated molecular descriptors. The Company's informatics projects generate large, high-quality data sets specifically for model development. Modeling efforts focus on relationships between molecular features, *in vitro* biological activity, and *in vivo* biological efforts. The Director of Computational Chemistry's primary responsibilities will include directing research strategy (modeling and data gathering); developing predictive models from large *in vitro* and *in vivo* data sets; and managing statisticians, biologists, chemists, pharmacologists, and software developers as well as playing a key role in corporate collaborations.

Preference will be given to candidates with a Ph.D. in chemistry and a successful track record in computational chemistry and drug discovery. Special consideration will be given to candidates with in-depth understanding of the relationships between *in vitro* and *in vivo* models. Excellent management and communication skills as well as exceptional analytical skills, a high degree of self-motivation, and ability to work as a proactive team member are required.

Cerep, Inc., offers a competitive total compensation package as well as an environment conducive to personal and professional growth. Please send your confidential curriculum vitae with salary requirements to the following address: e-mail: n.legresley@cerep.com. To learn more about Cerep, Inc., please visit our website: <http://www.cerep.com>.

Cerep, Inc., is an Equal Opportunity Employer.

POSITIONS OPEN

Infectious disease faculty position: Memorial Sloan-Kettering Cancer Center. The Infectious Disease Service of Memorial Sloan-Kettering Cancer Center has an **ASSISTANT/ASSOCIATE MEMBER** position available for an independent, laboratory-based Investigator in the fields of infectious diseases, microbial pathogenesis, and/or immunity to infection. Individuals with experience and/or interest in the interface between the mammalian immune system and infectious pathogens are particularly encouraged to consider this position. Newly renovated laboratory space, start-up package, and protected research time will be provided. If you are interested, please send your curriculum vitae, a letter describing your research interests, and the names of three references to: **Eric G. Pamer, M.D., Infectious Disease Service, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021**. *Memorial Sloan-Kettering Cancer Center is an Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSISTANT PROFESSOR DEPARTMENT OF ENVIRONMENTAL MEDICINE Environmental Neurotoxicology University of Rochester Medical School

Available immediately to study the neurochemical mechanisms of lead-induced cognitive deficits and the role of pesticide exposures in Parkinson's disease. Ongoing studies span the scope of gene-environment interactions to human cohorts. Current approaches utilized in these studies include operant behavioral approaches, microinjections, *in vivo* voltammetry and *in vivo* microdialysis. A background in behavior (particularly operant conditioning) and/or in neuropharmacology is particularly desirable. Please submit curriculum vitae, letter outlining research interests, and names of three potential references to: **Dr. Deborah A. Cory-Slechta, Chair, Department of Environmental Medicine, Box EHSC, University of Rochester Medical School, Rochester, NY 14642**. *The University of Rochester is an Equal Opportunity Employer.*

CELL BIOLOGIST, ASSISTANT PROFESSOR, tenure-track position, fall 2001. Ph.D. required to teach undergraduate cell biology, advanced courses in cell biology and specialty area, and conduct research with undergraduate and graduate students. Strong commitment to teaching and college teaching experience desirable. Application review begins December 4, 2000. Submit statement of teaching interests and research plans, curriculum vitae, transcripts, and three letters of reference to: **Cell Biology Search Committee, Biology Program, HSB 223, University of Illinois at Springfield, P.O. Box 19243, Springfield, IL 62794-9243**. For further information on University of Illinois at Springfield and the biology program, visit website: <http://www.uis.edu/~biology> or contact: **Dr. Gary L. Butler; Telephone: 217-206-7340; e-mail: butler.gary@uis.edu**. *UIS is an Affirmative Action/Equal Opportunity Employer. Women, people with disabilities, minorities, and veterans are encouraged to apply.*

CELL BIOLOGIST

Tenure-track position in cell biology at the **ASSISTANT PROFESSOR** level beginning August 2001. Ph.D. required; postdoctoral experience strongly preferred. The successful candidate will be expected to establish an ongoing research program involving undergraduates and to teach introductory biology as well as upper-level courses in cell biology and related areas. Send current curriculum vitae and a description of research and teaching interests and arrange for three letters of recommendation to be sent directly to: **Dr. Peter Bushnell, Chair, Department of Biological Sciences, Indiana University South Bend, P.O. Box 7111, South Bend, IN 46634**. Deadline for receipt of completed application is January 1, 2001. *Indiana University South Bend is an Equal Opportunity Employer and encourages applications from all qualified candidates.*

*The Future
is our
Mission*

Forschungszentrum Jülich



*We are the largest interdisciplinary research centre in Germany:
the 4 200 members of staff are concerned with solutions to urgent problems
in the fields of "Matter", "Energy", "Information", "Life" and "Environment".*

*As a member of the Hermann von Helmholtz Association
of German Research Centres (HGF) we are basically
committed to issues of public concern.*

At our Central Department of Analytical Chemistry (ZCH) the position of

HEAD OF DEPARTMENT

has become vacant.

The main task of the Central Department of Analytical Chemistry is the performance of a wide range of methodologically sophisticated analytical services for the R&D work of our institutes which, due to the instrumental equipment required or the complexity of the analytical issues, cannot be performed in the corresponding scientific institutes. The Central Department advises our institutes in questions of analytical procedures. The ZCH has at its disposal a wide spectrum of modern analytical methods (including ICP-MS, ICP-OES, SIMS/SNMS, X-ray methods) for analysing inorganic substances and new materials. In keeping with the requirements of Research Centre Jülich's R&D programme, the spectrum of methods has to be continuously updated, in future especially also with respect to the analysis of organic substances (e.g. NMR, mass spectrometry).

Extensive practical and theoretical know-how in analytical chemistry and modern analytical methods is required for the advertised position. Wide-ranging experience gathered in industry or at universities in heading a working group devoted to modern analysis services and the organization of order processing are expected, as well as readiness for close cooperation with the scientific institutes of Research Centre Jülich and the ability to head a team of highly qualified staff.

Applicants must be university graduates with a PhD. *Habilitation* is desirable but is not a condition.

Further information can be found at our Internet site: <http://www.fz-juelich.de>.

Research Centre Jülich would like to increase the number of women in leading positions and therefore especially encourages qualified women to apply. Applications from disabled persons with the appropriate qualifications are welcomed.

The salary and social benefits will conform to the provisions of the Federal Collective Agreement for Public Employees (BAT).

Applications comprising a curriculum vitae, list of publications and a short summary of previous scientific activities should be sent by 15 December 2000 to

**Vorstand der Forschungszentrum Jülich GmbH
D - 52425 Jülich
Germany**

POSITIONS OPEN

RESEARCH ENTOMOLOGIST/ MICROBIOLOGIST

The U.S. Department of Agriculture, Research, Education, and Extension, Agricultural Research Service (ARS), Northern Plains Area, Bee Biology and Systematics Laboratory, is accepting applications for a permanent, full-time Research Entomologist/Microbiologist to provide expertise that will contribute directly to the USDA Alternatives to Methyl Bromide initiative and the USDA Small Farms initiative. Specific research objectives are to (1) develop novel approaches for the management of chalkbrood (*Ascosphaera* spp.) in commercial scale populations of the alfalfa leafcutting bee, blue orchard bee, other bee pollinator species; (2) develop chemical and/or biological and cultural (e.g., sanitation) control methods for commercial-scale bee pollinator species; and (3) research the etiology of bee diseases by using culture media and diagnostic kits for isolation, identification, and enumeration of specific microorganisms. *U.S. citizenship and a Ph.D. or equivalent is desired.* Salary commensurate with experience (\$50,139 to \$91,589). For information on the research program and/or position, contact: **Dr. W. P. Kemp; Telephone: 435-797-2525; e-mail: wkemp@biology.usu.edu.** A copy of the vacancy announcement will be available on the ARS website: www.ars.usda.gov/afm/hrd/resjobs. For information on application procedures, contact: **John Watterson; Telephone: 435-797-3071.** Applications in response to this advertisement should be marked **ARS-XOW-0342** and should be mailed to: **USDA, ARS, HRD, WOB, 5601 Sunnyside Avenue, Beltsville, MD 20705-5106.** Applications must be postmarked by the closing date of 31 December 2000. *USDA is an Equal Opportunity Provider and Employer.*

BOTANIST, ASSISTANT PROFESSOR: tenure-track position, fall 2001. Ph.D. required to teach undergraduate organismal botany, advanced courses in botany and specialty area, and conduct research with undergraduate and graduate students. Strong commitment to teaching and college teaching experience desirable. Application review begins December 4, 2000. Submit statement of teaching interests and research plans, curriculum vitae, transcripts, and three letters of reference to: **Botany Search Committee, Biology Program, HSB 223, University of Illinois at Springfield, P.O. Box 19243, Springfield, IL 62794-9243.** For further information on University of Illinois at Springfield and the biology program, visit website: <http://www.uis.edu/~biology> or contact: **Dr. Gary L. Butler; Telephone: 217-206-7340; e-mail: butler.gary@uis.edu.** *UIS is an Affirmative Action/Equal Opportunity Employer. Women, people with disabilities, minorities, and veterans are encouraged to apply.*

POSTDOCTORAL POSITION HARVARD MEDICAL SCHOOL

Field of vascular biology and/or metabolism. Study the role of leukocyte and endothelial adhesion receptors in thrombosis, inflammation, or liver function. Prefer candidates with experience in molecular biology and/or working with mice. Publications in international journals are a prerequisite. Curriculum vitae to: **Denisa D. Wagner, Ph.D., Professor of Pathology, Harvard Medical School, The Center for Blood Research, 800 Huntington Avenue, Boston, MA 02115. FAX: 617-278-3368; e-mail: dw1@cbr.med.harvard.edu.** *An Equal Opportunity Employer.*

A position is available for a **RESEARCH SCIENTIST** to analyze the mechanism of apoptosis and define how malignant cells evade apoptotic death. The project involves the cloning and expression of novel proteins to study their function in apoptotic signal transduction. A Ph.D. in molecular or cell biology, experience in gene cloning, and expression of recombinant proteins is required. Submit curriculum vitae to: **Dr. Susan C. Wright, Palo Alto Institute of Molecular Medicine, 2462 Wyandotte Street, Mountain View, CA 94043.**

POSITIONS OPEN



Maria Mitchell Association

DIRECTOR, MARIA MITCHELL NATURAL SCIENCES PROGRAM

The Maria Mitchell Association (MMA) invites applications by a self-motivated and goal-oriented person for the newly endowed position of Director of its Natural Sciences Program. The Director will be responsible for establishing and leading a research program in ecology on the island of Nantucket, Massachusetts.

We seek an imaginative individual who can work independently or as part of a small, multidisciplinary team to establish a tradition of high-quality research, collaborate effectively with peers at other institutions, and present the joys of the natural sciences to students and the public.

Candidates must have a Doctoral degree in an appropriate field of ecology, excellent interpersonal skills, relevant research experience, and computer skills. Experience in field research is highly desirable. It is important that the candidate be able to write fluently and communicate scientific material to peers and to the public. The contract is five years, renewable indefinitely. Salary is commensurate with qualifications and experience. Housing assistance is provided.

The MMA is a small, nonprofit, science-oriented association named after the first professional woman astronomer in the United States. It was founded in 1902 with a history of education and research in astronomy and the natural sciences. Facilities include a natural science museum; a seasonal aquarium; an important collection of Nantucket plant, animal, and insect specimens; an observatory doing world-class astronomical research and education; a science library; and Maria Mitchell's historic birthplace. The MMA is dedicated to furthering science education, encouraging women in science, and serving as a science resource for Nantucket Island. The MMA provides a collegial atmosphere with a minimum of bureaucracy.

To apply: Submit by 15 January 2001 a cover letter, curriculum vitae and publications list (maximum three pages), and a one-page statement of career goals and research interests. Also include three names and addresses of people who will provide letters of reference. Send all materials and direct inquiries to:

**Natural Sciences Search Committee
c/o Kathryn Pochman
Maria Mitchell Association
4 Vestal Street
Nantucket, MA 02554
E-mail: kpochman@mno.org
Website: <http://www.mno.org/>**

The Maria Mitchell Association is an Affirmative Action/Equal Opportunity Employer.

PROFESSOR. The Department of Otolaryngology Head and Neck Surgery, Kresge Hearing Research Laboratory of the South, is recruiting for a new **DIRECTOR**. Candidates should hold an M.D., Ph.D., or both; have outstanding scientific credentials; leadership experience; and broad interest in all aspects of auditory and otolaryngologic research. Excellent scientific collaboration with otolaryngologists interested in voice and head and neck cancer as well as cochlear implants. Many opportunities for collaboration in three centers of excellence: neuroscience, genetics, and cancer. Send information to: **Daniel W. Nuss, M.D., Professor and Chairman, 533 Bolivar Street, New Orleans, LA 70112. FAX: 504-568-4460.**

Louisiana State University Health Sciences Center is an Equal Employment Opportunity/Affirmative Action Employer.

Carnegie Mellon, Department of Engineering and Public Policy, has **FACULTY OPENINGS** for technically skilled candidates with policy research interests in biotechnology, information and communication technology, modern electric power, technology policy, and related issues. Joint positions possible with traditional departments. Details at website: www.epp.cmu.edu. Résumés, papers, and references to: **Granger Morgan, Engineering and Public Policy, Carnegie Mellon, Pittsburgh, PA 15213 U.S.A.**

POSITIONS OPEN

ACADEMIC FACILITIES COORDINATOR GENOMICS INSTITUTE

The Genomics Institute at the University of California, Riverside, invites applicants for an Academic Facilities Coordinator position with an academic career-track 11-month appointment. Salary for the position is commensurate with education and experience. The position will be available January 1, 2001. Under the general direction of the Director of the UCR Genomics Institute, the Academic Facilities Coordinator will be responsible for supervision, maintenance, and operation of the core instrumentation facility for the Institute. The successful applicant will be expected to plan and organize all functions of the instrumentation facility, including establishment of workflow and procedures, selection and supervision of facility staff, and ongoing collaborative research. The appointee will work closely with the Director and Associate Directors of the Institute to identify instrumentation needs and to seek funding for new equipment. He or she will assist and advise faculty, students, and others in appropriate use of facilities. Applicants must have a Ph.D. in chemistry, biochemistry, molecular biology, or a related science and extensive knowledge and experience in methodologies associated with instrumentation. Requirements include an awareness of the most recent advances in the field, including state-of-the-art professional and technical knowledge and innovation; an ability to supervise staff and to interact effectively with faculty, students, and others; and knowledge of equipment maintenance and repair. Letter of application, including curriculum vitae and three letters of reference, should be sent to: **Kim Lane, College of Natural and Agricultural Sciences Dean's Office, College Building North, University of California, Riverside, CA 92521-0127.** Additional information about the College of Natural and Agricultural Sciences can be found at website: <http://cnas.ucr.edu>. Review of the applications will begin January 8, 2000, and will continue until the position is filled. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

NIH-funded POSTDOCTORAL POSITIONS available immediately to study the mechanisms of epithelial Na⁺ channel regulation (ENaC). Excellent opportunity to combine biophysical techniques with biochemical and molecular ones to examine ENaC's regulation by kinases in native and heterologous expression systems. Strong communication and writing skills required. Additional possibilities for clinically related projects involving epithelial Na⁺ channels. Opportunities for an independent project by the end of the Fellowship. Submit curriculum vitae to: **Mouhamed Awayda, Ph.D., Department of Medicine SL 35, Tulane University Medical School, 1430 Tulane Avenue, New Orleans, LA 70112. E-mail: mawayda@tulane.edu.**

POSTDOCTORAL POSITION available September 2001 to develop animal models of von Hippel-Lindau disease and to identify and characterize human renal carcinoma genes. Experience in characterizing phenotypes in mouse models of human disease and/or molecular biology and biochemistry is desirable. Exposure to conditional gene inactivation, bioinformatics, and state-of-the-art positional cloning. Send curriculum vitae and names of three references to: **Dr. Berton Zbar, Laboratory of Immunobiology, Building 560, Room 12-89, National Cancer Institute-Frederick, Frederick, MD 21702. E-mail: zbar@mail.ncicrf.gov.**

POSTDOCTORAL POSITIONS available to study the structure and function of protein: DNA complexes, motor proteins, and enzyme superfamilies. Applicants trained in crystallography or individuals with experience in molecular biology but who have interest in a rigorous training in structural biology are preferred. Send curriculum vitae to: **Dr. Ivan Rayment or Hazel M. Holden, Department of Biochemistry, University of Wisconsin, 433 Babcock Drive, Madison, WI 53706. E-mail: ivan_rayment@biochem.wisc.edu or Hazel_Holden@biochem.wisc.edu.**

Excellent opportunities to become a part of the dynamic **Space Telescope Science Institute (ST ScI)** team, located on Johns Hopkins University Campus in Baltimore, Maryland! Operated by the Association of Universities for Research in Astronomy, ST ScI manages the science operations of the Hubble Space Telescope, which has brought us never-before-seen pictures and information about the universe, and has been identified to play a similar role in the Next Generation Space Telescope Program (NGST). You can join this world-renowned organization as we go forward in developing the world's knowledge of the universe.

We are currently accepting curriculum vitae for the following scientific job vacancies:

- Postdoctoral Researchers
- Graduate Student Research Assistantships
- Institute Postdoctoral Fellowship

Please visit our Employment Opportunities website at www.stsci.edu/admin/hres/ads/jobs.htm to view the job announcements. Visit our website at www.stsci.edu. Women and members of minority groups are strongly encouraged to apply.

EOE/AA/M/F/D/V

Microbiologist/Microbial Ecologist

The Department of Biology invites applications for a tenure-track Microbiologist/Microbial Ecologist at the Assistant Professor level. The successful candidate should be broadly trained in microbial biology and ecology and employ molecular techniques in their teaching and research. A Ph.D. is required. Candidates must have a strong commitment to undergraduate education and be able to teach an undergraduate class in Bacteriology. The ability to teach a graduate class in Microbial Ecology and/or Ecosystem Ecology is desirable. Additional responsibilities will be to develop a program of scholarship involving undergraduate and graduate research and seek extramural funding. Appalachian State University, with an enrollment of 12,500, is one of the top comprehensive universities in the Southeast. The Biology Department (website: www.biology.appstate.edu) has 23 faculty, 500 majors, and 30 graduate students and is committed to an extensive laboratory and field experience for our majors.

Submit a letter of application, curriculum vitae, description of teaching and research interests, statement of teaching philosophy, and names, addresses, and telephone numbers of three references by January 12, 2001 to:

Dr. Mary U. Connell
Department of Biology
Appalachian State University
572 Rivers Street
Boone, NC 28608-2027
E-mail: connellmu@appstate.edu

Appalachian State University is an Equal Opportunity Employer.

NFR Naturvetenskapliga forskningsrådet Swedish Natural Science Research Council invites applications for **Senior Research Positions in**

Basic Experimental Optical Physics with Focus on Spectroscopy, Laser Cooling and Quantum Optics (Ref: 611-979/00) Biological Physics (Ref: 611-977/00)

The research area comprises physical concepts and methods applied on biological systems and novel physics arising out of biological problems, particularly those related to soft matter physics, statistical physics or advanced experimental methods.

Coastal Zone Dynamics, especially in the Baltic Sea Region (Ref: 611-981/00) Enzymology (Ref: 611-978/00)

The holder of this position is expected to carry out experimental research on enzyme catalytic mechanisms. Applicants should have an internationally competitive research program within the field and should have documented experience in many of the techniques that are utilized within this research area.

Isotope Systems in Exogenic Geochemistry (Ref: 611-980/00)

The scope of this position is the application of radioactive and stable isotope systems in the study of exogenic processes in terrestrial and aquatic systems as well as in the atmosphere. Understanding of exchange processes between particles, colloidal and the dissolved phase is important.

Observational Astrophysics with VLT (Ref: 611-982/00) Plant Ecology (Ref: 611-987/00) Receptor Biology (Ref: 611-983/00) Signal Transduction in Plants (Ref: 611-984/00) Systematics (Ref: 611-986/00)

The Council's intention in creating these positions is to contribute to the recruitment of researchers and to the renewal of research in Sweden. The programme is aimed primarily at scientists with a doctorate who recently have established themselves as researchers and have started an active research career. The positions are held for three plus three years and are placed at appropriate university departments in Sweden to be chosen in consultation between the candidates, NFR and the universities. The applicant is kindly requested to state at which university he/she wants the position to be placed. The universities decide on tenure. Duties can commence from July 1, 2001. The salary range will correspond to that of an assistant/associate professor (SEK 320 000-400 000 per year, i. e. USD 34 000-42 000 per year).

A curriculum vitae including a list of publications, a short research plan plus a description (maximum six pages) of scientific achievements and pedagogical skills, and a maximum of ten reprints of scientific papers should be appended. Other documents which the applicant wants to refer to could also be included. Four copies of the application and all appendixes and reprints should be submitted.

**Applications, quoting Ref, should reach the Swedish Natural
 Science Research Council, Box 7142,
 S-103 87 Stockholm, Sweden,
 by December 15, 2000**

**Further information can be obtained from Ms Natalie Lunin at
 the Secretariat of NFR. E-mail: Natalie.Lunin@nfr.se.
 Phone: +46 8 454 42 32. Fax: +46 8 454 42 50.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS at Florida Atlantic University's Center for Complex Systems and Brain Sciences ([website: http://www.ccs.fau.edu/](http://www.ccs.fau.edu/)). (1) University MRI Postdoctoral Fellowship in cognitive neuroscience (**Dr. J. A. Scott Kelso**). The aim is to develop fMRI during cognitive and sensorimotor functions (basic and clinical). Interest in combining other modalities (large-scale MEG and EEG) with fMRI desirable. (2) Computational neuroscience. Physics Ph.D. with postdoctoral experience in multivariate statistics and neurobiology. Proficiency with Matlab, C, X11 Window desirable. Initial appointments are for one year, beginning immediately, with yearly extensions based on performance. Competitive salary and benefits based on NIH guidelines. Applicants should send curriculum vitae, statement of research interest, and three letters of recommendation to: **Dr. Tuller, Associate Director, CSBS, Florida Atlantic University, Boca Raton, FL 33431-0991. E-mail: tuller@walt.ccs.fau.edu.**

POSTDOCTORAL POSITIONS MOLECULAR ENDOCRINOLOGY/ DEVELOPMENTAL BIOLOGY

Postdoctoral positions are available to study molecular mechanisms controlling viviparity. Individuals will participate in the development and characterization of mutant mouse models engineered to investigate uteroplacental cytokine signaling in the establishment and maintenance of pregnancy. Please send curriculum vitae, a letter outlining research experience and career goals, and have three letters of recommendation sent to: **Dr. Michael J. Soares, Department of Molecular and Integrative Physiology, University of Kansas Medical Center, 3901 Rainbow Boulevard, Kansas City, KS 66160. E-mail: msoares@kumc.edu.** The University of Kansas Medical Center is an Equal Opportunity/Affirmative Action Employer.

SENIOR RESEARCH ASSOCIATE or POSTDOCTORAL FELLOW: developmental biology. An NIH-funded position to examine the role of Hox genes in genitourinary development. Applicants with considerable experience identifying and characterizing protein-protein interactions or target genes via microarray analysis will be given strong consideration. The candidate should have a Ph.D. degree or be able to show evidence of extensive training in the described areas of research. Salary is commensurate with experience. Please submit a letter of interest, curriculum vitae, and the names of three references to: **Dr. H. Scott Stadler, Shriners Hospital for Children, 3101 S.W. Sam Jackson Park Road, Portland, OR 97201. E-mail: hss@shcc.org.** The Shriners Hospital for Children is an Equal Opportunity Employer that maintains a drug-free workplace.

NIH-funded **POSTDOCTORAL POSITION** available immediately at the Beth Israel Deaconess Medical Center and Harvard Medical School for a recent graduate (M.D. or Ph.D.) interested in research related to extracellular matrix, angiogenesis, and organ fibrosis. Strong experience in biochemical purification of proteins and molecular and cellular biology techniques is required. Applicants must be U.S. citizens or green card holders to be eligible for funding. Please forward your curriculum vitae, a description of research experience, and at least three references to: **Raghu Kalluri, Beth Israel Deaconess Medical Center, Renal Division, Dana 563, 330 Brookline Avenue, Boston, MA 02215.**

POSTDOCTORAL POSITION available immediately to investigate the cell cycle function of the budding yeast and human Cdc14 protein phosphatases. This project involves identification of substrates and regulatory mechanisms for the human and yeast enzymes. Applicants should have a background in biochemistry and molecular biology. Experience with the yeast system is desirable but not necessary. Send or e-mail curriculum vitae and names of three references to: **Dr. Harry Charbonneau, Purdue University, Department of Biochemistry, West Lafayette, IN 47907. E-mail: charb@purdue.edu; FAX: 765-494-7897.** Purdue University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN



JOHNS HOPKINS MEDICINE POSTDOCTORAL POSITIONS THE JOHNS HOPKINS SCHOOL OF MEDICINE

Two Postdoctoral positions are available immediately to study the functions of cell surface glycoconjugates in cell-cell recognition. Projects will explore (1) the function of a brain lectin, myelin-associated glycoprotein and its axonal ganglioside ligands in nerve regeneration and (2) the structures of human leukocyte gangliosides and their functions in inflammation and asthma. See [website: www.med.jhu.edu/schnaar](http://www.med.jhu.edu/schnaar) for further details. Send curriculum vitae and three letters of recommendation to: **Dr. Ronald L. Schnaar, Department of Pharmacology, The Johns Hopkins School of Medicine, Baltimore, MD 21205. E-mail: schnaar@jhu.edu.**

BACTERIAL PATHOGENESIS

POSTDOCTORAL FELLOW position is available immediately to join a NIH-funded research group studying bacterial pathogenesis. Selected individual will be primarily responsible for conducting independent research on bacterial pathogens and publication of results. Research will emphasize the molecular and cell biological characterization of virulence determinants in mycobacteria and/or *Legionella*. Ph.D. required and a record of productive experience in bacterial pathogenesis preferred. Send curriculum vitae and names and addresses of three references by December 29, 2000, to: **Dr. Jeffrey D. Cirillo, Department of Veterinary and Biomedical Sciences, University of Nebraska-Lincoln, P.O. Box 830905, 120 VBS, Lincoln, NE 68583-0905. FAX: 402-472-9690; e-mail: jcirillo1@unl.edu.** Review of résumés will begin on December 29, 2000, and continue until a suitable candidate is found. The University of Nebraska is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity and is responsive to the needs of dual-career couples. We assure reasonable accommodation under the Americans With Disabilities Act. Contact: **Dr. Cirillo at Telephone: 402-472-8539** for additional information.

POSTDOCTORAL RESEARCH ASSOCIATE

Seeking a qualified Postdoctoral to study the molecular basis of integral membrane protein sorting through membrane-mediated pathways to target proteins to the nuclear envelope and to intranuclear membranes during viral infection. Candidate should have training and expertise in molecular virology or molecular biology or protein chemistry or in techniques to identify proteins in complexes and will be a member of a team exploring approaches to protein separation techniques and the use of ion spray mass spectroscopy for protein identification. Position could start immediately or within the next six to nine months. Salary negotiable commensurate with experience, starting at \$30,000 annually. Please send résumé and names of three references to: **Dr. Max D. Summers, Center for Advanced Invertebrate Molecular Sciences, Minnie Belle Heep Building, Room 324, Texas A&M University, College Station, TX 77843-2475.** Texas A&M University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION is currently available at the University of Kentucky Medical Center, Lexington, Kentucky, U.S.A., to study involvement of nicotinic receptors in neuroprotection against injury to spinal cord neurons in relationship to spinal cord trauma. Strong background in molecular and cellular biology is required. Please submit curriculum vitae and the names and telephone numbers of three references to: **Dr. Michal Toborek, University of Kentucky Medical Center, Department of Surgery/Neurosurgery, Lexington, KY 40536 U.S.A. FAX: 606-323-1093; e-mail: mjtobo00@pop.uky.edu.**

POSITIONS OPEN

The University of North Dakota's Center of Excellence in Neurosciences is seeking several **POSTDOCTORAL POSITIONS** in the following areas: Alzheimer's disease, Parkinson's disease, multiple sclerosis, and amyotrophic lateral sclerosis. Send curriculum vitae, a comprehensive letter stating past accomplishments in the neurosciences, and future aspirations in neurobiology to:

Manuchair Ebadi, Ph.D.
Professor and Chairman
Department of Pharmacology, Physiology,
and Therapeutics
Professor of Neuroscience
Associate Dean for Research and
Program Development
Director, Center for Excellence in Neurosciences
University of North Dakota School of Medicine
and Health Sciences
501 North Columbia Road
Grand Forks, ND 58203

University of North Dakota is an Equal Opportunity/Affirmative Action Employer.

CARDIAC SURGICAL RESEARCH FELLOWSHIP

Seeking a Fellow with experience in one or more of the following molecular biology techniques: molecular cloning, Southern hybridization, PCR analysis, tissue culture, or immunology for ongoing research on genetic modulation in vascular biology and mechanics or heart transplantation or gene therapy in small cell lung cancer. Applicants must have a Ph.D. or equivalent degree in life sciences with appropriate experiences. Ability to write local, regional, and national grants is necessary. Appointment one or two years; could be a permanent position for the right individual. Send research proposals, curriculum vitae, and reference letters to: **Charles C. Canver, M.D., Director, The Heart Institute, Albany Medical College, 47 New Scotland Avenue, Mail Code 55, Albany, NY 12208.**

POSTDOCTORAL POSITION to Investigate the Role of p53 Mutations in Oncogenesis

Applications are invited for a Postdoctoral position in a laboratory involved in understanding the molecular biology of the tumor suppressor p53. Individuals with expertise in recombinant DNA technology, particularly DNA sequencing, cDNA technology, and mammalian cell culture systems, are encouraged to apply. Salary is negotiable. Send complete curriculum vitae and names of three references to: **Sumitra Deb, Ph.D., Professor, Massey Cancer Center and Department of Biochemistry and Molecular Biophysics, Medical College of Virginia, Virginia Commonwealth University, Richmond, VA 23298. FAX: 804-827-1427; e-mail: SDEB@HSC.VCU.EDU.**

POSTDOCTORAL POSITIONS in viral pathogenesis in one of two ongoing projects, one investigating HIV neuropathogenesis and the other concerning the virus-receptor interactions of La Crosse bunyavirus. Require background in molecular virology, immunology, or a related area. Please send curriculum vitae and the names of three references to: **Dr. Francisco González-Scarano, Department of Neurology, 264 Clinical Research Building, University of Pennsylvania, Philadelphia, PA 19104-6146. FAX: 215-573-2029.**

A **POSTDOCTORAL POSITION** is available immediately to investigate the molecular and cellular aspects of the host response in diabetes. Candidates should have a background in molecular biology and diabetes and currently reside in the United States or Canada. The salary will be commensurate with experience and the appointment is for two years. Send curriculum vitae to: **Dr. Dana Graves, W-202, Boston University, 700 Albany Street, Boston, MA 02118. Telephone: 617-638-4733; e-mail: danatgraves@usa.net.**

**UNIVERSITY OF SOUTHERN
CALIFORNIA
SCHOOL OF ENGINEERING
DEAN**

The University invites applications and nominations for the position of Dean of the USC School of Engineering.

Located near the heart of Los Angeles, USC is one of the nation's elite private research universities, with 17 professional schools and the College of Letters, Arts and Sciences. The USC School of Engineering, founded in 1906, has 160 full-time and part-time faculty, organized into 8 departments. The School offers bachelor's and doctoral degrees, as well as professional master's degrees in a multitude of areas. It enrolls about 4,000 students and has an operating budget of \$69.7 million, and an endowment of \$104.8 million. The school was rated 12th in the nation in the latest U.S. News and World Report rankings. Additional information is available at http://www.usc.edu/dept/engineering/Distance_Learning/dean/.

The Dean is the academic leader and chief administrative officer of the School and reports to the Provost. As a member of the Provost's management team, the dean provides consultation and leadership on a broad range of university-wide issues. The Dean is responsible for the following: fostering excellence in the School's educational and research programs; fiscal planning and management; short-term and long-term strategic planning; faculty development and recruitment; and leading the School's development initiatives.

The Search Committee seeks an experienced engineering educator who has achieved international prominence, a distinguished record of research, teaching, and service appropriate for the appointment at senior faculty rank, and who has extensive experience in effective academic administration. A demonstrated knowledge of and abilities in fiscal management, development, superb human resources and leadership skills, and a commitment to diversity are essential.

Nominations and applications should include a letter describing the candidate's qualifications for this position, a curriculum vitae, names, addresses and telephone numbers of three references and should be sent to: **Dr. Edward L. Schneider, Chair, School of Engineering Dean Search Committee, in care of the Provost's Office, ADM 203, University of Southern California, Los Angeles, CA 90089-4019; FAX (213) 740-7606; gpetrov@usc.edu.** A confidential confirmation of receipt of the files will be mailed to nominators and applicants. Review of applications and nominations will begin immediately and will continue until the position is filled.

USC is proudly pluralistic and firmly committed to providing equal opportunity for outstanding men and women. USC actively seeks nominations of and applications from qualified individuals from the broadest possible community. AA/EOE

GLOBAL OPPORTUNITIES



**香港城市大學
City University
of Hong Kong**

City University of Hong Kong is a young and dynamic institution directly funded by the Government of the Hong Kong Special Administrative Region through the University Grants Committee (Hong Kong). Its strategic plan is an ambitious one, reflecting its aspirations to become one of the leading universities in the Asia-Pacific region by achieving excellence in teaching and research. The student population for 2000-2001 is approximately 16,000 (11,000 full-time and 5,000 part-time). The medium of instruction is English. Applications are invited for the following Professorship appointment:

**Professor in Chemistry (Professorial Scale/Salary Scale A)
Department of Biology and Chemistry [Ref. A/358/29]**

The Department of Biology and Chemistry, with 27 faculty members, offers three undergraduate programmes and one graduate programme. In addition to over 250 first degree students and 78 taught Master's degree students, it has 51 PhD students and 34 MPhil students. The Department places equal emphasis on teaching and research. Focusing on marine science and coastal pollution, research is built upon the interdisciplinary strength of biology and chemistry within the Department. Staff expertise lies in marine and coastal biology, pollution biology and chemistry, ecotoxicology, analytical and environmental chemistry.

Qualifications for Appointment

A world class scientist with an international reputation for research excellence is sought to fill this position. Applicants in any research area in chemistry will be considered, although those with an interest in analytical chemistry, environmental chemistry, catalysis and chemical biology are preferred. The successful candidate is expected to provide leadership in teaching and research, and to establish an internationally recognized research programme.

The University also accepts nominations and reserves the right not to fill the position.

Salary and Conditions of Service

Professor (Professorial Scale) : Salary is within a professorial range and will not be less than HK\$102,440 per month
Professor (Scale A) : HK\$74,870 to HK\$99,465 per month
(Exchange rate: £1 = HK\$11.5 or US\$1 = HK\$7.8 approximately)

The successful candidate will be offered appointment to an academic rank commensurate with the appointee's qualifications and experience. Appointment may be offered on superannuable terms with provision for superannuation benefits or on fixed term gratuity-bearing contract with contract-end gratuity. Generous fringe benefits include annual leave, medical and dental schemes, housing assistance and passage allowance where applicable.

Application and Information

Further information on the post and the University is available on the University's World Wide Web home page at the address <http://www.cityu.edu.hk> or the University's listserver accessible via E-mail at "hrmail@cityu.hk", or from the Human Resources Office, City University of Hong Kong, Tat Chee Avenue, Kowloon, Hong Kong (Fax: (852) 2788 1154 or (852) 2788 9334/ E-mail: hrrecruit@cityu.edu.hk). Please send nomination or application in the form of an application letter enclosing a current curriculum vitae and the names and addresses of three academic referees at full professorial or other appropriate level to the Human Resources Office by **31 January 2001**. Please quote the reference of the post applied for in the application letter and on the envelope.

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www.sciencecareers.org

**Faculty Positions in
Cancer Research
LSU Health Sciences Center**

The Stanley S. Scott Cancer Center at LSU Health Sciences Center in New Orleans invites applications for tenure-track or tenured positions at the Associate Professor or Professor level. Candidates should possess a Ph.D. or M.D. degree and have demonstrated excellence in their research as indicated by both publications and a track record of externally funded research grants. The successful applicants will be expected to pursue an independent yet collaborative approach, addressing broad issues that relate to oncologic science. Research interests in prostate and/or lung cancer are encouraged but not required.

The search will give full consideration to applications that include curriculum vitae (including funding grant history), four representative publications, and the names of three individuals that may be contacted for letters of reference.

Joint appointments in the Cancer Center and an appropriate Department at the LSU Medical School are anticipated. The individual Departments will be dependent on the successful applicants' expertise and interests. Laboratory space will be provided in a new state-of-the-art facility in the heart of the Medical School complex.

Interested candidates should submit their curriculum vitae to:

**Dr. Oliver Sartor, Director
Stanley S. Scott Cancer Center
533 Bolivar Street, Box CSB-4-17
New Orleans, Louisiana 70112**

LSUHSC is an EOE/AA

POSITIONS OPEN

POSTDOCTORAL POSITIONS VETERINARY INFECTIOUS DISEASE ORGANIZATION

Postdoctoral positions are available immediately (1) to work on the molecular biology of animal adenoviruses with emphasis on their development as vectors for vaccine delivery and human gene therapy. Candidates should have a Ph.D. with a strong background in molecular biology and virology. Experience with molecular techniques and virus vectoring is desirable. Interested candidates should direct applications, including curriculum vitae and three names of references, to: **Dr. S.K. Tikoo, Veterinary Infectious Disease Organization, 120 Veterinary Road, Saskatoon, SK S7N 5E3 Canada. FAX: 306-966-7478; e-mail: TIKOO@SASK.USASK.CA.**

Positions are available also (2) to work on CpG DNA motifs as adaptive and innate immunomodulators, to elucidate mechanisms of action, develop vaccine adjuvants, and test immunoprotection in disease models. Candidates should have a Ph.D. with a strong background in mucosal, cellular, or molecular immunology. Experience with RNA viruses is desirable. Interested candidates should direct applications, including curriculum vitae and three names of references, to: **Dr. D. Godson, Veterinary Infectious Disease Organization, 120 Veterinary Road, Saskatoon, SK S7N 5E3 Canada. FAX: 306-966-7478; e-mail: dale.godson@USASK.CA.**

The Veterinary Infectious Disease Organization, a research institute at the University of Saskatchewan, provides excellent opportunities to collaborate with other Scientists in bacteriology, virology, and immunology. VIDO has well-equipped laboratory and animal facilities and offers a stimulating research environment. The successful candidate will be expected to work in a team-based research environment.

The University of Saskatchewan is committed to the principles of Employment Equity and welcomes applications from all qualified candidates, including aboriginal people, persons with disabilities, visible minorities, and women.

POSTDOCTORAL FELLOWS

The Henry M. Jackson Foundation for the Advancement of Military Medicine is seeking Postdoctoral Fellows for the Department of Microbiology and Immunology at the Uniformed Services University of Health Sciences located in Bethesda, Maryland. Two NIH-funded positions are available to study the factors influencing the T helper cell differentiation during infectious disease. Emphasis will be placed on studying the antigen-specific response *in vivo*, with emphasis on the role of costimulatory molecules and cytokines in influencing Th2 cell commitment and trafficking in lymphoid microenvironments. This work will employ the latest technologies in imaging, laser capture microdissection, microarray construction and analysis, and real-time PCR. Fellows will benefit from collaborations with the National Institutes of Health, the USDA, and the Uniformed Services University. We are a nonprofit medical research organization supporting the military medical community and offer a competitive salary and generous benefits package. Send cover letter and résumé to:

Human Resources Department
Attention Number 000321
Henry M. Jackson Foundation
for the Advancement of Military Medicine
1401 Rockville Pike, Suite 600
Rockville, MD 20852
E-mail: jobs@hjff.org
Affirmative Action/Equal Opportunity Employer.

The Gertrude H. Sergievsky Center currently has a full-time position available for a **STAFF ASSOCIATE** to assist in coordinating a large genetic epidemiology study. Must be a medical school graduate and bilingual in Spanish/English. Salary is \$32,000 with good benefits. Qualified applicants should send their résumé to: **Richard Mayeux, M.D., Gertrude H. Sergievsky Center, P&S Box 16, 630 West 168th Street, New York, NY 10032. We take Affirmative Action toward Equal Employment Opportunity.**

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP POSITIONS DEPARTMENTS OF MEDICINE AND MOLECULAR BIOLOGY Massachusetts General Hospital and Harvard Medical School

A newly funded National Heart Lung Blood Institute program in genomics has been initiated at the Massachusetts General Hospital and Harvard Medical School. A program in bioinformatics, based in the Harvard Medical School Department of Genetics and the Department of Bioengineering at Boston University, is integrated into the genomics effort. Applicants with a Ph.D. in biochemistry, genetics, molecular or cell biology, or other related disciplines who are interested in participating in work integrating genomics and proteomics technologies into studies aimed at understanding inflammatory signal transduction pathways, microbial pathogenesis, atherosclerosis, or macrophage biology are encouraged to apply. The work within the program is highly collaborative and also involves interactions with genomics programs at 10 other centers in the United States. Faculty members in the program include **Fred Ausubel, George Church, Mason Freeman, Gerald Pier, Brian Seed, Temple Smith, and Jack Szostak.** Please send your curriculum vitae and three letters of reference to:

Ms. Carol Whooley
Program in Genomics Applications
Massachusetts General Hospital
GRJ 1328
32 Fruit Street
Boston, MA 02114
E-mail: whooley@molbio.mgh.harvard.edu

POSTDOCTORAL POSITIONS CANCER GENETICS AND DNA CHIPS

Positions available as part of a Cornell University Medical Center, Memorial Sloan-Kettering Cancer Center, Rockefeller University, tri-institutional NCI-funded program project grants for (1) the development of comprehensive genetic and epigenetic DNA chips for the profiling of human tumors, i.e., expression analysis, point mutations, LOH/gene amplification, DNA methylation status; (2) development of SNP DNA chips for identification of new cancer genes; and (3) identification of inherited mutations associated with increased risk for cancer development. Applicant should have a Ph.D., preferably with experience in cancer genetics, molecular biology, genomics, bioinformatics, population genetics, protein-DNA interactions, DNA arrays, and/or automation in DNA and PCR technology. Competitive salary commensurate with experience. Send curriculum vitae and names of three references to: **Professor Francis Barany, Program Director, Programs of Biochemistry, Structural Biology, and Molecular Biology, Box 62, Cornell University Medical Center, 1300 York Avenue, New York, NY 10021. FAX: 212-746-8588. Or to: Philip Paty, M.D., Department of Surgery, Box 453, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. FAX: 212-717-3678. Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE.

Join active research laboratory investigating the role of retinoic acid in neurogenesis. Assist Principal Investigator with the planning and execution of research protocols; oversee daily operations of the laboratory, including managing laboratory supplies and maintaining inventory; participate in preparation of grant proposals and manuscripts for publication. Position requires Ph.D. or equivalent in biochemistry or biomedical science. Research experience and/or interest in neuroscience or retinoids preferred. Salary \$28,000 to \$30,000 per year. Submit curriculum vitae and statement of interest to: **Tennessee State University Office of Human Resources, 3500 John A. Merritt Boulevard, Nashville, TN 37209 by November 20, 2000.** For further information, please contact: **M. A. Asson-Batres; e-mail: massonbatres@tstate.edu. An Equal Opportunity/Affirmative Action/Minorities/Females/Equal Opportunity Employer.**

POSITIONS OPEN

PREDOCTORAL AND POSTDOCTORAL TRAINING Opportunities in Stress and the Neurobiology of Drug and Alcohol Dependence Louisiana State University Health Sciences Center in Shreveport

Predocutorial and Postdoctoral Fellowships supported by an NIH training program funded through the National Institute on Drug Abuse are currently available for outstanding candidates. The Ph.D. degree for predocutorial candidates will be offered through the Department of Pharmacology and Therapeutics, and candidates must meet all requirements for admission into the Department. Postdoctoral candidates should have a Ph.D. in pharmacology, neuroscience, psychology, or a related discipline with relevant laboratory experience. The research areas of program faculty are briefly described below, and further details can be found at **website: <http://gradsch.shreveport.lsumc.edu/Gradsch/Pharm/Faculty.html>.**

Adrian Dunn: interactions between the nervous and immune systems, especially the roles of cytokines. Corticotropin-releasing factor as a mediator of stress.

John R. Glowa: the effects of drugs and toxicants on integrated behavioral functioning.

Nick E. Goeders: behavioral neurobiology of drug reinforcement.

Nancy J. Leidenheimer: regulation of ligand-gated ion channel function by protein phosphorylation.

Kenneth E. McMartin: alcohol and intracellular vitamin transport; toxic alcohol metabolism.

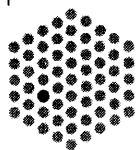
Sandra C. Roerig: signal transduction in spinal opioid and adrenergic agonist interactions; analgesia and tolerance.

Jeffrey D. Steketee: Mechanisms involved in development of sensitization to cocaine.

Minority candidates are strongly encouraged to apply. *Only U.S. citizens and permanent residents are eligible for these positions.* Applicants should send curriculum vitae; a description of research interests identifying a potential advisor(s); the names of three references; and, in the case of predocutorial applicants, a copy of their academic transcripts to: **Dr. Nick E. Goeders, Department of Pharmacology and Therapeutics, LSU Health Sciences Center, P.O. Box 33932, Shreveport, LA 71130-3932. E-mail: ngoede@lsu.edu.**

POSTDOCTORAL POSITION (RESEARCH ASSOCIATE). The University of Arizona invites applicants with an interest in molecular biological research designed to investigate novel therapies for pediatric cancers. Projects are underway to evaluate the effects of inhibitors of histone deacetylase and insulin-like growth factor signaling in a transgenic mouse model of the pediatric cancer neuroblastoma. The successful candidate will have full access to the resources of the Department of Pediatrics and the Arizona Cancer Center, an NCI-designated comprehensive cancer center providing an outstanding environment for multidisciplinary and translational research. Applicants must have an M.D. degree or Ph.D. in the biological sciences. Please reference Job Number 994611. Send curriculum vitae, cover letter, and contact information for three references to: **Rochelle Bagatell, M.D., AHSC, Pediatrics/P.O. Box 245073, 1501 North Campbell Avenue, Tucson, AZ 85724. E-mail: bagatell@peds.arizona.edu.** Review is ongoing and will continue until position is filled. Initial review began August 7, 2000. *The University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer; Minorities/Women/Disabled/Veterans.*

POSTDOCTORAL and ASSOCIATE RESEARCH SCIENTIST positions available to study the mechanisms by which host cell apoptosis and autophagy genes regulate CNS viral pathogenesis. Ph.D. and/or M.D. required. Send curriculum vitae to: **Beth Levine, M.D., Department of Medicine, Columbia University College of Physicians and Surgeons, P&S 8-463, 630 West 168th Street, New York, NY 10032. Columbia University is an Affirmative Action/Equal Opportunity Employer.**

**EMBL****Grenoble 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 in **Grenoble**:

STAFF SCIENTIST IN STRUCTURAL BIOLOGY (ref. no. 00/98)

The EMBL Outstation in Grenoble has an active research and an international visitors program in structural molecular biology making particular use of the world-leading third-generation synchrotron radiation source available at the neighbouring European Synchrotron Radiation Facility (ESRF). Four independent research groups are currently working at the Outstation. The Laboratory is fully equipped for biochemistry and molecular biology including bacterial, yeast and baculovirus expression facilities.

The post is in the group of Dr. Christoph W. Müller (protein/DNA interaction group). Interests in the group are the structural and functional analysis of transcription factor/DNA complexes and multi-protein complexes involved in transcriptional regulation and nuclear transport (see Becker et al., Nature 394, 145-151 (1998), Cingolani et al., Nature 399, 221-229 (1999). The group uses X-ray crystallography as a central method combined with other biochemical and biophysical techniques.

The suitable candidate will be expected to pursue a research project in the group, to support other group members and to develop new approaches in the analysis of multi-protein complexes.

The position is suitable for an experienced molecular biologist/protein biochemist with strong interests in structural biology or for a protein crystallographer with solid wet lab experience.

Starting date: January 2001. Closing date for applications: 20.12.2000.

For more information, please refer to: <http://www.embl-heidelberg.de/> and <http://www.embl-grenoble.fr>

Informal enquiries to Dr. Christoph Müller (mueller@embl-grenoble.fr)

EMBL is an inclusive, equal opportunity organisation.

Please send a complete CV, including a summary of past experience, and names and addresses of three referees, quoting ref. no. 00/98, to:

The Personnel Section, EMBL, Postfach 10.2209, D-69012 Heidelberg, Germany.

Fax: +49 6221 387555. email: jobs@embl-heidelberg.de

CALL FOR PROPOSALS**Functional Genomics Development Initiative****Support for Integrated, Thematic Biological Research Programmes Relevant to Human and/or Animal Health**

Purpose: The Functional Genomics Development Initiative provides support for the development and application of global (genome-wide or system-wide) experimental approaches and resources to assess gene function. The Wellcome Trust now invites preliminary applications from multi-disciplinary research groupings for the support of integrated, thematic programmes arising from genome sequencing projects. The programmes should address important biological questions that have clearly identified long-term objectives relevant to human and/or animal health. It is anticipated that these will be pursued in conjunction with the development of key technologies, such as array technology, proteomics, informatics and high throughput structure determination.

Eligibility: Principal applicants should hold an established position in a university or equivalent institution in the UK or Republic of Ireland in accordance with the Trust's key eligibility criteria, details of which can be found on the Trust's web site at: www.wellcome.ac.uk/en/1/biosfappeli.html. Scientists who are not normally eligible to apply for Trust funding, but who will play a major role in the project may, at the discretion of the Trust, be allowed applicant status.

Support Available: The Trust expects to support three to five programmes from within a total budget of £30 million over five years, in the first instance.

Support may be requested for: research and technical staff; running expenses; equipment; refurbishment (non-commercial, UK based laboratories only);

travel and subsistence costs to facilitate collaborations; training and dissemination of technologies.

Application Procedure: Preliminary applications should contain the following information:

- the overall aims of the proposal, including identification of the anticipated scientific and technological advances and the ultimate long-term biological significance of this research;
- the names, affiliations and sources of salary funding of the applicants, together with details of how they will contribute to and add value to the overall scientific programme;
- the organisational and management structure of the programme;
- the strategy for dissemination of data/information and new technologies;
- approximate costings.

Intending applicants should complete the preliminary application form available at: www.wellcome.ac.uk/functiongenomics and submit it by post to arrive by **1 March 2001**. Late applications will not be considered. Short-listed applicants will be notified in May 2001 and invited to submit a full application by 30 September 2001 for a final decision early in 2002.

Contact: Applicants who would like to discuss their proposals with the Trust should contact **Barbara Skene on 020 7611 7324 or b.skene@wellcome.ac.uk**

**The Wellcome Trust**

The Wellcome Trust is a Registered Charity, No. 210183, and its mission is to promote and foster research with the aim of improving human and animal health

POSITIONS OPEN

POSTDOCTORAL POSITION VIROLOGY

Postdoctoral position available immediately at The World Health Organization Collaborating Center for Tropical Diseases and the Department of Pathology at the University of Texas Medical Branch at Galveston to participate in research studying flavivirus pathogenesis *in vivo* and *in vitro*. The successful candidate should be knowledgeable in virology and have experience working with small laboratory animals. Project will involve working in a BSL-3 laboratory with several human pathogenic flaviviruses in cell culture and rodent models. Techniques include cell culture, virus titration, serology, histopathology, and molecular techniques (RT-PCR). Please forward curriculum vitae, bibliography, and three letters of recommendation to: **Shu-Yuan Xiao, M.D., Department of Pathology, University of Texas Medical Branch, 301 University Boulevard, Galveston, TX 77555-0588. FAX: 409-772-4676.** *University of Texas Medical Branch is an Equal Opportunity/Affirmative Action Employer; Minorities/Females/Disabled/Veterans.*

A neuroscience **POSTDOCTORAL POSITION** is available beginning immediately with the multidisciplinary Invertebrate Neurobiology Laboratory at the Krasnow Institute for Advanced Study and the School of Computational Sciences of George Mason University. The Postdoctoral person will work on an NSF-funded project to investigate light-induced currents and photoreceptor interactions involved in memory storage. Requirements include a recent Ph.D. in neuroscience or a related discipline, electrophysiology skills, and an interest in learning computational neuroscience techniques. See website: <http://www.krasnow.gmu.edu/avrarna/invertlab.html> for further details. Send curriculum vitae; (p)reprints; and names, e-mail addresses, and telephone/FAX numbers of three references to: **Avrama Blackwell, V.M.D., Ph.D., Krasnow Institute MS 2A1, George Mason University, Fairfax, VA 22030.** Review of applications will continue until position is filled. *Affirmative Action/Equal Employment Opportunity.*

A **POSTDOCTORAL POSITION** is available immediately to investigate the regulation of apoptotic signaling in carcinoma cells by the extracellular matrix. Areas of emphasis include receptor isolation and identification, intracellular signaling, and *in vivo/in situ* studies. Experience in cell and molecular biology is required. Good verbal and writing skills are also required. Please send curriculum vitae and names of three references to: **Dr. Yvonne Kapila, Department of Stomatology, University of California San Francisco, 513 Parnassus Avenue, Box 0512, HSW 604, San Francisco, CA 94143-0512. FAX: 415-502-4990; e-mail: ykapila@itsa.ucsf.edu.** *University of California San Francisco is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION available to work on mechanisms of neuronal cell death. Areas of interest include (1) mechanism(s) of glycogen synthase kinase (GSK)-3 β hyperactivation in neurons and (2) role of GSK-3 β hyperactivation in neuronal cell death. Research is supported by a newly funded four-year NIH grant and will include the use of virus vectors, cell culture methods, and phage display technology. Send curriculum vitae and names of three references to: **Dr. Stephen Dewhurst, Department of Microbiology and Immunology, University of Rochester Medical Center, 601 Elmwood Avenue, Box 672, Rochester, NY 14642. E-mail: stephen_dewhurst@urmc.rochester.edu.**

POSTDOCTORAL POSITION available immediately to study mechanism of ethanol's effects on renal folate transporters. Studies in cultured human kidney cells and knockout mice. Experience in molecular or cell biology techniques preferred. Send curriculum vitae, research interests, and references to: **Kenneth McMartin, Ph.D., Department of Pharmacology, Louisiana State University Health Sciences Center, Shreveport, LA 71130. E-mail: kmcmr@lsuhsc.edu.** *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

INTERESTED IN CLINICAL OR POSTDOCTORAL RESEARCH TRAINING?

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

<http://www.training.nih.gov>

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

POSTDOCTORAL POSITIONS SIGNAL TRANSDUCTION AND BIOSENSORS University of Virginia

Positions are immediately available for the following projects:

(1) The role of downstream effectors of Cdc42 in cell polarity establishment, cell motility, and cytokinesis (*Nature Cell Biol.* 2:531-539, 2000). Expertise in molecular and cell biology is required. Opportunities are available to work in crystallography, transgenic mouse production, proteomics, and cell biology of epithelial cell development. Opportunities are also available for investigating mechanisms of nuclear transport (*EMBO J.* 19:5502-5513, 2000).

(2) *In vitro* evolution and selection of polypeptide-based biosensors for the detection of small organic molecules. Development of mutant libraries and novel yeast-based screening technologies. Opportunities to collaborate with industrial partners. Experience in molecular biology is required. Additionally, expertise in yeast genetics and fluorescence spectroscopy would be useful.

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

**Drs. Ian Macara or Deborah Lannigan
Center for Cell Signaling
P.O. Box 800577
University of Virginia
Charlottesville, VA 22908-0577
E-mail: imacara@virginia.edu or
dal5f@virginia.edu**

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

POSTDOCTORAL POSITIONS

Two NIH-funded Postdoctoral positions in molecular biology/pharmacology/neuroscience are available immediately to study the structure and function of the recently discovered family of chimeric G protein-coupled/adhesion receptors (*Neuron* 18:925-937, 1997; *J. Biol. Chem.* 274:5491-5498, 1999). Experience in either molecular biology, biochemistry, or cell biology techniques is required. The salary will be commensurate with experience, with appointment for three to four years. Please send your curriculum vitae and names of two or three references to: **Drs. A. Petrenko and K. Ichtehenko, Department of Pharmacology, New York University School of Medicine, 550 First Avenue, New York, NY 10016. E-mail: petrea01@med.nyu.edu.**

POSTDOCTORAL RESEARCH POSITIONS in proteoglycan research. Thomas Jefferson University has two Postdoctoral positions available to investigate the biology of decorin and perlecan. Candidates will join a multidisciplinary team of researchers involved in investigating the molecular mechanism by which these two proteoglycans affect cell growth and tumor development. Other novel areas of investigation utilize expression cloning and the yeast two-hybrid system. Ph.D. or M.D./Ph.D. required; molecular biology background highly desirable. Send résumé and three letters of reference to: **Dr. Renato V. Iozzo, Department of Pathology, Anatomy, and Cell Biology, Thomas Jefferson University, 1020 Locust Street, Room 249 JAH, Philadelphia, PA 19107. FAX: 215-923-7969; e-mail: lozzo@lac.jci.tju.edu.** *Equal Opportunity Employer.*

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP UNIVERSITY OF MEDICINE AND DENTISTRY OF NEW JERSEY

The University of Medicine and Dentistry, Robert Wood Johnson Medical School, is seeking a candidate to study the receptor-dependent functions of extracellular matrix-laminins on early development and on the pathogenesis of muscle and nerve disorders. Project involves analysis of recombinant laminins bearing site-specific modifications in structure/function studies *in vitro* and the targeted expression of laminin subunits in animals. Applicants should have a Ph.D. and/or M.D. with experience in molecular biology. Visit website: <http://orion.umdj.edu> for laboratory description.

Send curriculum vitae and references to: **Peter D. Yurchenco, M.D., Ph.D., Professor, Department of Pathology and Laboratory Medicine, University of Medicine and Dentistry of New Jersey, Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854. E-mail: yurchenco@umdj.edu; FAX: 732-235-4825.** Visit our website: <http://www.umdj.edu>. *UMDNJ is an Affirmative Action/Equal Opportunity Employer, Minorities/Females/Disabled/Veterans, and a member of the University Health System of New Jersey.*

RESEARCH ASSISTANT PROFESSOR and POSTDOCTORAL RESEARCH ASSOCIATE positions available to work on the development of innovative new methods to study signaling networks and the regulation of cell proliferation by novel genes. Applicants for the Research Assistant Professor position must have M.D. or Ph.D. degree, potential for independent funding, and at least five years of postdoctoral training in the areas of molecular biology and protein production/characterization. Postdoctoral positions are available to highly motivated individuals with strong experience in molecular biology. Competitive salaries based on areas of expertise, research experience, and publication record. For fullest consideration, send by December 15, 2000, statement of research interest and experience, curriculum vitae, and names of three references to: **Dr. Oscar R. Colamonici (OC001), Department of Pharmacology, University of Illinois, 835 South Wolcott Avenue, Room E403 (M/C688), Chicago, IL 60612. E-mail: ocolamon@uic.edu.** *The University of Illinois is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION: Department of Physiology, The Brody School of Medicine at East Carolina University. A position is available to study the role of endothelin in atherosclerosis and extracellular matrix remodeling in cardiovascular disease. A strong background in cell culture, cellular, and molecular biology is necessary, and experience in extracellular matrix gene expression or cytokine signaling mechanisms is desirable. Must have a Ph.D. and/or M.D. degree. Interested applicants should forward curriculum vitae, a summary of research experiences and goals, and the names of at least three individuals willing to submit letters of reference to: **Laxmansa Katwa, Ph.D., Department of Physiology, The Brody School of Medicine at East Carolina University, Brody Medical Sciences Building, Room 6N98, 600 Moye Boulevard, Greenville, NC 27858-4354. FAX: 252-816-3460; e-mail: katwal@mail.ecu.edu.** *East Carolina University is a member of the University of North Carolina System and is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION

A Postdoctoral position is available to study the roles of heparan sulfate and heparan sulfate saccharide sequences in assisting viral infections. Requires a Ph.D. degree, strong training in biochemistry and chemistry, and experience with instrumental analysis of biomolecules. Background with characterizations of carbohydrates is desirable. Send curriculum vitae and names of three references to: **Dr. Jian Liu, Division of Medicinal Chemistry and Natural Products, School of Pharmacy, University of North Carolina, Chapel Hill, NC 27599. E-mail: jian_liu@unc.edu.**

POSITIONS OPEN

THREE POSTDOCTORAL POSITIONS ONE RESEARCH SPECIALIST POSITION

Are available for individuals with training in mammalian eukaryotic cell culture, molecular biology, single cell calcium imaging, and microinjection. The Airways Biology Group at the University of Pennsylvania is markedly expanding and seeks well-qualified, well-trained individuals with a minimum of two years of experience in the techniques described above. Studies will be performed examining the cellular and molecular mechanisms that regulate airway smooth muscle cell function in asthma. Candidates for the Postdoctoral position should have a Ph.D. and/or M.D. degree and experience in the techniques described above. The Research Specialist candidates should have a B.Sc., M.S., or equivalent and a minimum of two years of experience in techniques of biochemistry, molecular biology, cell biology and signaling, and transgenic technology.

Please send a résumé, statement of research interests, and a list of three references to:

Reynold A. Panettieri Jr., M.D.
Pulmonary, Allergy, and Critical Care Division
University of Pennsylvania Medical Center
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POSTDOCTORAL FELLOWSHIPS COMPUTATIONAL MOLECULAR BIOLOGY

The Sloan Foundation and the U.S. Department of Energy announce up to 10 Postdoctoral Fellowships to catalyze career transitions into computational molecular biology. Selections announced by May 6, 2001; funding can begin any time after September 1, 2001. Deadline: February 1, 2001. Full announcement at website: www.sloan.org or e-mail: Stanley@sloan.org.

POSTDOCTORAL POSITION to study cardiac tissue-specific gene expression and the molecular mechanisms underlining various forms of heart disease. Please send your curriculum vitae to: **Jeffery D. Molkentin, Ph.D.**, Children's Hospital, Division of Molecular Cardiology Biology, 3333 Burnet Avenue, Cincinnati, OH 45229-3039. FAX: 513-636-5958; e-mail: jeff.molkentin@chmcc.org. Children's Hospital is an Affirmative Action/Equal Opportunity Institution.

COURSES & TRAINING

SHORT COURSE ON TIME-RESOLVED FLUORESCENCE SPECTROSCOPY. The Center for Fluorescence Spectroscopy at the University of Maryland School of Medicine is offering a short course on "Principles and Applications of Time-Resolved Fluorescence Spectroscopy" in Baltimore, Maryland, March 19-23, 2001. The course will cover basic and advanced topics in fluorometry, including time- and frequency-domain measurements, and Förster energy transfer. Advanced topics include chemical sensing, imaging, fiber optics, infrared fluorometry, two-photon excitation, instrumentation, confocal and multiphoton microscopy, protein fluorescence, DNA technology, high-throughput screening, metal-ligand probes, lanthanides, and immunoassays. Textbook, course materials, lunches, and refreshments will be provided. For further information, a schedule, and fees, please contact: **Ms. Mary Rosenfeld** or Professor **J. R. Lakowicz** at the CFS, Department of Biochemistry and Molecular Biology, 725 West Lombard Street, Baltimore, MD 21201. Telephone: 410-706-8409; FAX: 410-706-8408; e-mail: cfs@cfs.umbi.umd.edu; website: <http://cfs.umbi.umd.edu>.

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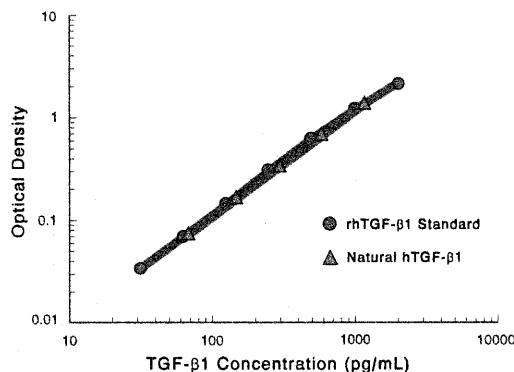
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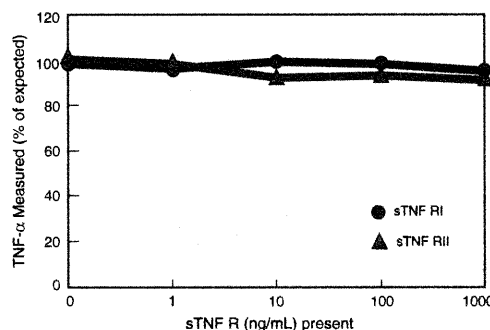
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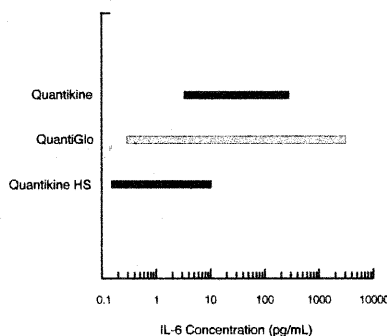


TNF-α was measured in the Human TNF-α ELISA (Cat # DTA50) in the presence or absence of sTNF RI or sTNF RII. Results demonstrate that neither receptor positively or negatively interferes with the measurement of TNF-α.

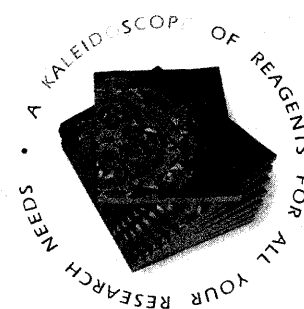
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