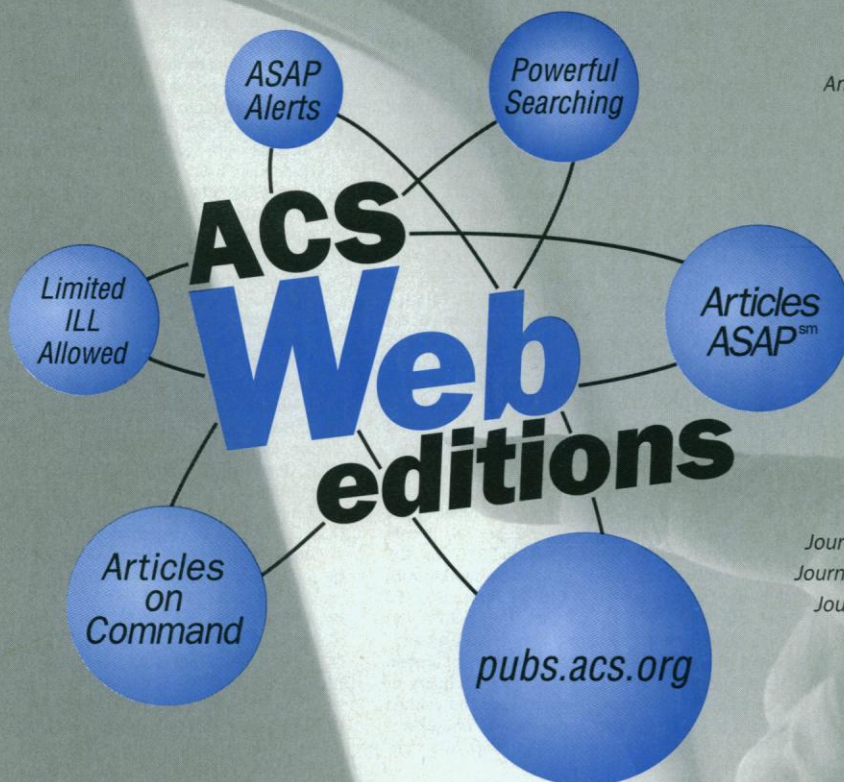


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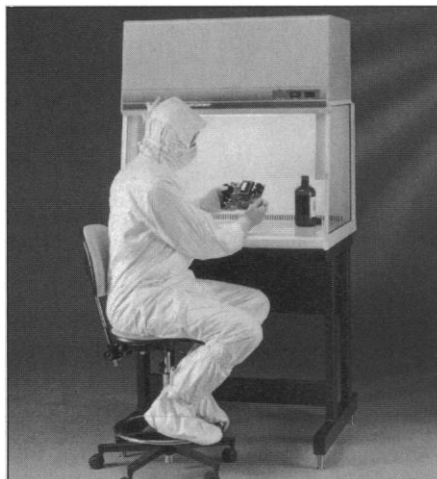
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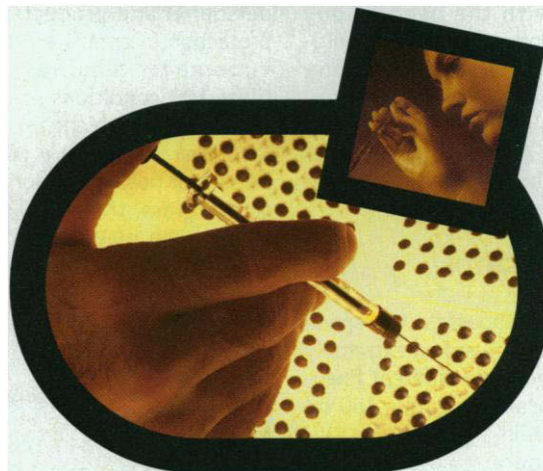
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Position in CT for a BS/MS in synthetic organic chemistry with 2+ years of relevant research experience. Candidates must possess sound knowledge of the practical and theoretical aspects of synthetic organic chemistry and the demonstrated ability to perform and improve multi-step organic synthesis sequences. Familiarity with modern analytical techniques for compound purification and characterization, i.e., chromatography (TLC, column, HPLC) and spectroscopy (NMR, IR, MS) is required. **Code: PRRH103YP**

## Applied Genomics

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## Postdoctoral Fellow

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## Analytical Research and Development Research Investigator

Position in NJ for a MS or Ph.D. in Cell Biology, Immunology, Biochemistry or Molecular Biology with 4-7 years experience. Candidate will design, optimize, validate cell, immunology and molecular based assays used to characterize natural and recombinant protein products. You will also design, produce and qualify biotechnology reagents needed to perform above assays. In addition, you will operate a Fluorescence Activated Cell Sorter facility. **Code: PRDM103RD**

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## Virology

### Molecular Virologist/Biochemist

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Develop primary mammalian cell lines within a centralized cellular resource facility. Experience with insect cell culture, adenoviral and retroviral mediated gene transfer, as well as experience with immortalization of primary cell lines, is preferred. General molecular biology skills are also required for this position. **Code: PRCC103AC**

### Enzymologist/Biochemist, Ph.D.

Interact with therapeutic area scientists in design and development of in vitro enzymatic and biochemical high-throughput assays. You will implement these screens, their scheduling, running and data analysis, as well as participate in target working group meetings, presentation of data and follow-up studies. Additional responsibilities may include supervising scientists. Area of expertise should include all aspects of enzyme work, such as purification, characterization, kinetics, and assay design. **Code: PRCC103RP**

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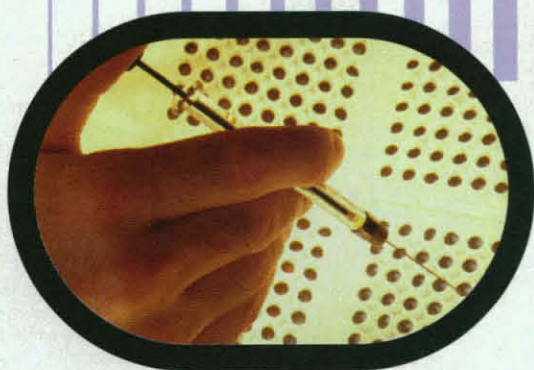
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## Career Opportunities and Graduate Programs for B.S. and M.S. Scientists



### a matter of degrees

**Individuals with Bachelor's and Master's degrees in life science and related fields have a wide variety of career options. Here's a sampling of the possibilities.**

You have completed your B.S. or M.S. degree in life science. The graduation ceremonies have become a distant memory. You have even framed your diploma. Now, you face the serious question: What next? Do you continue your education, to pursue a Ph.D.? Or do you set out on a career that will immediately earn you real money?

It's important to realize that you have landed in a win-win situation rather than a zero-sum game. A good Bachelor's or Master's degree in life science or a related field gives you a wide variety of options. You can, of course, continue your education to the Doctoral level. But if you decide to move beyond academe, plenty of options stay open to you. In the following pages, we outline several of the possibilities.

You don't even burn your career boats when you opt to halt your education after you receive your B.S. or M.S. degree (or, at some colleges and universities, a B.A. or M.A. in life science). Several life science organizations, including corporations and the federal government, encourage their employees to continue their education by taking courses, for which the employers pay in part or in whole. Occasionally, an employer will finance a bright scientist's work for a Ph.D. And universities universally welcome students with B.S. and M.S. degrees who return to academe after a period in the work force. Professors often find such students to be better motivated and more mature than those who move straight from their undergraduate degrees into the Ph.D. stream.

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**By Peter Gwynne**





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**Scientists Dana Bonar, B.S., Ted Joe, B.S. and Ning Su, M.S. working together as a team in the Bayer Research Center.**

**C**ertainly a Ph.D. degree qualifies life scientists for top positions in academic and industrial life. Almost all professors of life science subjects and most group leaders in biotechnology and pharmaceutical companies have earned Doctorates. The Ph.D. gives its holder a wide swath of opportunity, not only in laboratory science but also in management of science-based companies.

On the other hand, there's a strong argument for finding work after you receive your B.S. or M.S. in life science; the United States has a glut of Ph.D.'s in that broad area. A panel of the National Academy of Sciences (NAS) reported on the situation last September: the number of Doctorates in life sciences awarded annually by U.S. universities, the panel found, rose from about 5,000 in the mid-1980s to 7,600 in 1996; during the same period, opportunities for Ph.D.'s rose by only single percentage numbers.

As a response to the glut, the NAS panel suggested, among other remedies, that "universities should identify specific areas in biomedical and biological sciences for which a focused Master's degree program would be more appropriate than Doctoral training." The committee cited, as an example, interdisciplinary Master's programs that would combine training in life science with training in fields such as management, public affairs, and engineering. "Such programs," the report states, "should be geared toward opportunities in the labor market."

Production of non-Ph.D. graduates in life science is also on the rise. According to the National Science Foundation, the number of fresh recipients of B.S. degrees in biological and agricultural

sciences in the United States increased from 46,451 in 1990 to 71,470 in 1995, the latest year for which figures are available. M.S. recipients in the same subjects increased from 7,527 to 9,069 during the same period. What differentiates this situation from that of Ph.D.'s, though, is the fact that plenty of jobs are available for holders of M.S. and B.S. degrees.

Both the pharmaceutical and biotechnology industries are increasingly seeking recruits at the Bachelor's and Master's levels who have some interdisciplinary training. Probably the most sought-after set of qualifications is a mixture of skills in life science and computing. As genomics becomes more ingrained in the advance of life science, corporations increasingly need individuals who can interpret the data that the field produces in profusion. Laboratory managers generally look for such individuals at the Master's level. The recruits can be either life science majors who have taken a Master's degree in computing or computer science majors who have qualified in life science at the Master's level. In each case, the important fact is the ability to understand the data needs of life scientists in the lab and translate those needs into specific programs and equations.

The value of interdisciplinary experience is not limited to computing. Increasingly, companies that hire B.S. and M.S. scientists want evidence of a cross-cutting view, one that can take in two or more fields of science, or even science and law or management. University life science departments are beginning to respond to this new need, by offering cross-cutting courses at the undergraduate and Master's levels. M.S. students can improve their job

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The experiences you gain at the NIH in this program will be valuable wherever your career takes you. Interested candidates should submit electronically a *curriculum vitae*, three letters of recommendation emphasizing your research potential, a statement of your research interests and a list of college grades through the NIH Office of Education website. To be eligible, you must be a U.S. citizen or permanent resident.



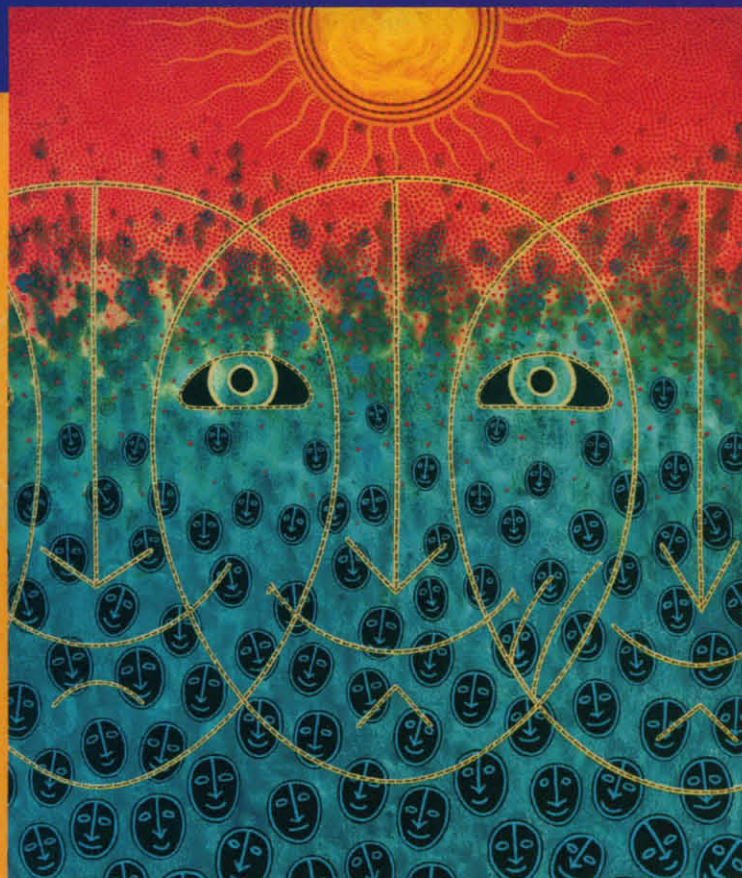
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Another significant requirement for recruits to the pharmaceutical and biotechnology industries is laboratory experience. Employers want evidence that candidates for jobs can handle work in the lab with a minimum of training. That means more than showing good grades on the lab work in the conventional curriculum. B.S. graduates should try to ensure that their curricula vitae include a successful internship or undergraduate research project. M.S. students should ensure that their courses involve challenging lab projects.

Compared with an undergraduate degree, the M.S. has some career advantages. It has tangible value for individuals who want to teach science in high schools or community colleges. Holders of Master's degrees not only earn higher pay than their B.S. colleagues, they also have opportunities to head departments that aren't available to the less-qualified. Similarly, individuals with M.S. qualifications sometimes have more opportunity to move up

the corporate ladder in biotechnology and pharmaceutical companies than those with a plain B.S.

What subjects are hot for non-Ph.D. life scientists? Besides computer scientists, life science companies probably have the greatest demand for chemists. That need stems from the demand for new drug targets, synthesized by chemists, which has been stimulated by the human genome sequencing project.

Just as intriguing is the fact that M.S. or B.S. degrees don't pin down their holders to specific lines of work in the lab. Once employed by life science companies, non-Ph.D's frequently undergo career changes that see them move out of the laboratory into human resources, technical writing, library work, and other fields.

In the following pages, representatives of three employers and an industry association discuss the career opportunities for life scientists with credentials at the Master's and Bachelor's levels. And scientists from biomedical departments at three universities and an organization that supports graduate research in the life sciences outline their graduate programs, and give their view of the options that face graduates.

**WEST HAVEN, Connecticut:** "The pharmaceutical industry has far and away the highest demand for life scientists with Bachelor's and Master's degrees," says William Schoen, head of the department of chemistry at the U.S. research center of pharmaceutical giant Bayer. "Recruiting at the Bachelor's and Master's levels is our top priority, because we have demand for many more associates, who have those degrees, than for Ph.D's. We recruit at the Master's and Bachelor's levels across the United States and Canada. And our investment at the front end — in advertising, campus visits, and evaluating résumés — is no different between associates and Ph.D's."

This Bayer research center, one of four worldwide, takes responsibility for four diseases: cancer, osteoporosis, diabetes, and obesity. The center's work force averages between two and three associates — individuals with Bachelor's or Master's degrees — to each Ph.D. The Master's to Bachelor's ratio runs at about two to one. The center currently employs roughly 100 Ph.D's and 220 associates. The vast majority of associates take an active role in research. Others work in such areas as human resources, information science, and medical affairs.

At present, the center has a particular need for chemists with M.S. and B.S. degrees. "We are involved in looking at new targets, and chemistry will support identification of new lead compounds for those targets," explains Schoen. The center also seeks molecular biologists and protein biochemists with M.S. and B.S. qualifications.



William Schoen

What abilities appeal to Bayer recruiters who seek new associates? "We're looking for some demonstrated experience in a laboratory environment," says Schoen. "That means more than the standard curriculum of a standard laboratory course." Candidates with Master's degrees should have demonstrated

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Under moderate supervision, you will perform carbohydrate characterization of recombinant glycoproteins using a variety of analytical techniques, including mass spectrometry, Dionex HPAEC-PAD and other high-performance liquid chromatography methods. This position will also involve carrying out the qualification of analytical methods for use in the release of Phase I and Phase II clinical material. Requires at least a PhD with some experience, or equivalent combination. Expertise in characterization of glycoprotein oligosaccharides in a pharmaceutical development and/or quality control laboratory essential; experience with method qualification and validation a definite plus. E-mail: [Bayerpharm3@hotmail.com](mailto:Bayerpharm3@hotmail.com). Job Code BK-0187-BD

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You will manage one of three QC Microbiology labs at our Berkeley site, which perform all QC Microbiology testing and discrepancy investigations for one or more manufacturing buildings. Your aim is to ensure that product quality and release goals are met through the efficiency, timeliness and accuracy of testing, while conforming to safety and cGMP issues. Requires a BS in

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You will coordinate change control (CSR) and validation activities that require microbiology and environmental monitoring testing. This will include analyzing data, completing investigations, and preparing reports based on your findings. Requires a BS in Microbiology or related science, and 4+ years' experience as a microbiologist or biologist in the pharmaceutical or biotechnology industry with emphasis in aseptic processing, QC microbiology, environmental monitoring, water systems, validation and manufacturing processes. Experience performing investigations, troubleshooting and writing reports required. Good knowledge of MS Access and Excel essential. General GMP knowledge is a must. E-mail: [Bayerpharm3@hotmail.com](mailto:Bayerpharm3@hotmail.com). Job Code 5555-BD

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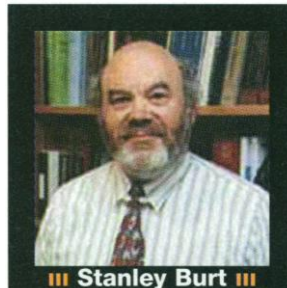
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their comfort in the lab through an appropriate research project. Scientists with B.S. degrees, meanwhile, need to show evidence of a successful internship or undergraduate research project.

Once they join the Bayer center, holders of M.S. degrees can expect higher pay than rookies with B.S. degrees. And in the lab, says Schoen, "there's an element of independence that comes with the Master's degree. The Bachelor's degree person has had very limited exposure to the laboratory, and is likely to require more supervision.

"Overall, Master's and Bachelor's scientists who perform well have more diverse opportunities than their Ph.D. colleagues in pharmaceutical companies," says Schoen. "The fact that they're not as highly specialized as Ph.D's makes them in some ways more valuable."

**FREDERICK, Maryland:** Science Applications International Corporation Frederick (SAIC Frederick) works on cancer and AIDS research and biotechnology for the National Cancer Institute's Frederick Cancer Research and Development Center. The staff of more than 1,200 scientists, technicians, and others helps to screen over 50,000 compounds each year for anti-cancer and



anti-viral properties, in an effort to develop new drugs.

SAIC Frederick also operates the world's only high-performance computing center devoted strictly to biomedical research. "We support high-performance computing done mainly by theoreticians and modelers," says Stanley Burt, director of the organization's Advanced Biomedical Computing Center. "We also support bioinformatics. We manage several servers for scientists doing genome analysis, and we act as consultants for many people who use typical biological programs."

The center employs about 32 people, including several individuals with Master's degrees. "My support staff for bioinformatics is trained in biology and computers," says Burt. "I've just hired someone who has a Master's degree in computer science and bioinformatics. That's a perfect combination."

Certainly, the combination of biological and computer training precludes the need for a higher degree. So does education in

## Casting Call for Chemists

"The highest demand right now is for chemistry graduates," says William Schoen, who heads the Department of Chemistry at Bayer's U.S. research center. "The disciplines in highest demand are synthetic chemistry and analytical chemistry." Significantly, chemists have been historically underrepresented in the industry compared with biologists. But now, says Schoen, "the supply of chemists is limited, and the demand much higher. Recruiting for chemists with Master's and Bachelor's degrees is very competitive."

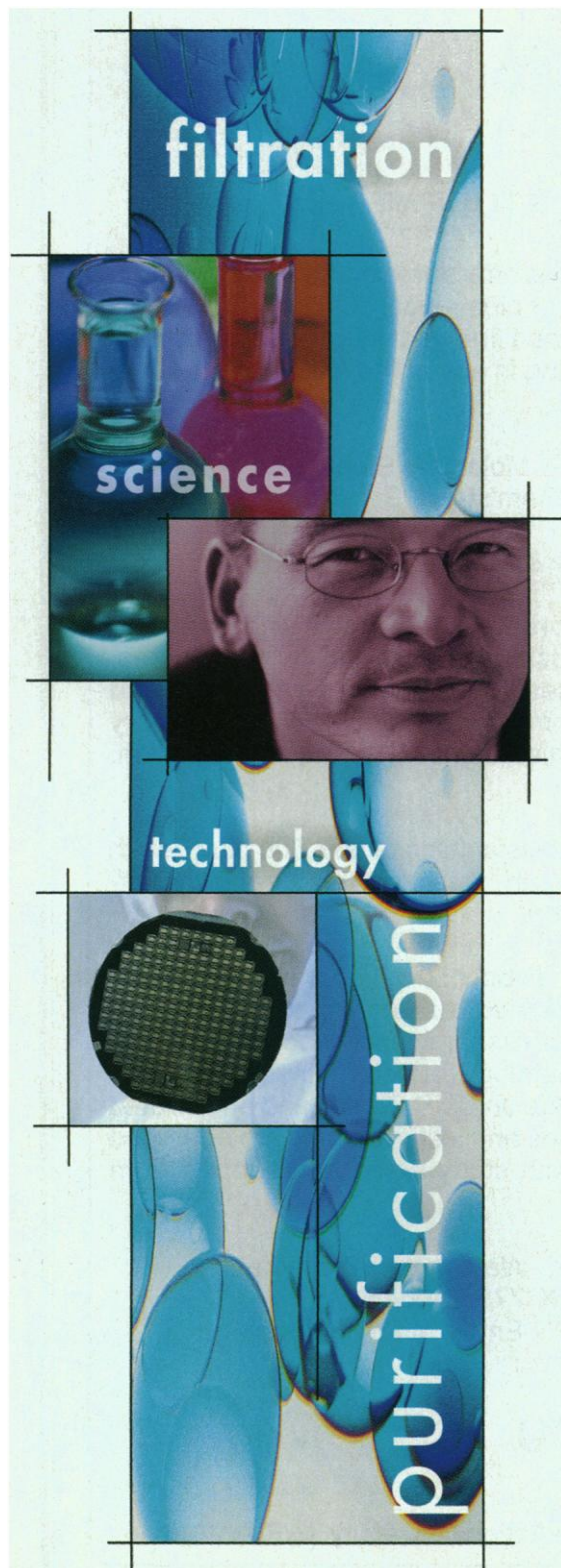
The major factor that drives the pharmaceutical industry's need for chemists, Schoen continues, "is the explosion in new targets that has emerged from the human genome project. For pharmaceutical research units to translate genes into high-throughput screening and lead structures, you need protein biochemistry, as well as molecular biology. However, to translate new lead structures into new drugs consistently, you need chemistry."

Schoen cites another reason why the pharmaceutical industry is desperately seeking individuals with M.S. and B.S. degrees in chemistry: the emergence of rational drug design, which involves theorizing new molecules with drug potential on the basis of observations of the behavior of specific chemical groups. "Companies are realizing that pharmaceutical research is a highly empirical activity," he explains. "However you design molecules with drug potential, sooner or later you have to make them and test them. Chemists help to close the loop of rational drug design and testing in animal models and eventually humans."

Continued ➤



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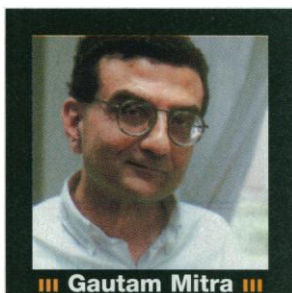
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mathematics and life science. "Someone who has a B.S. in mathematics and an M.S. in biology will find opportunities in algorithm development, database structuring, and statistics," says Burt. "I can't tell you how much easier it makes it for my staff to be able to talk to biologists. There's a different way of looking at problems." He regards computing for biology as "a new, mid-level field in which you don't need a Ph.D. I think there's going to be plenty of opportunity for people with Master's degrees and specialized training."

Gautam Mitra, technical director of SAIC Frederick's biopharmaceutical development program, also heads a multidisciplinary department whose strength consists largely of non-Ph.D's. "We have about 50 people, in biochemistry, biochemical engineering, chemistry,



III Gautam Mitra III

microbiology, cell biology, and similar disciplines," he says. "They are largely M.S. and B.S. holders. Our job is to show proof of concept. We start with the investigator who has done some preliminary studies, and make the work into a *bona fide* project. We ensure the right cell line and expression system, and the production of the material in the right reac-

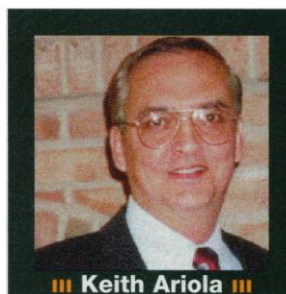
tor; purify the biological entity; do all the development work associated with it so that it's suitable for human administration; and release the project so that it can be tested in humans."

Holders of Bachelor's and Master's degrees both have opportunities to advance in Mitra's group. "We have certain grade levels at which they come in, according to their educational backgrounds," he says. "But within their degree level they can progress at their own pace. The fact that somebody does not have a Master's degree does not hold him or her back. If the individual has a Master's degree, he or she has been through some kind of laboratory exposure. That simply means that the need for training is less."

SAIC Frederick as a whole offers opportunities to holders of Bachelor's and Master's degrees to obtain extra training. "We have a lot of technicians who go to school while at SAIC and get their Master's degrees," says Burt. "I think the M.S. degree really helps you to be better equipped to manage, owing to the extra training you receive. With a Master's degree, you get introduced to biology equipment and machines that you don't have the opportunity to access as an undergraduate. The best thing to do is to have a Master's degree but be cross-trained — with a Bachelor's degree in biology and a Master's in computer science, for example."

Leadership positions are well within the capability of M.S. holders. "You need a certain amount of experience in the area in which the group is involved, because you will be held responsible for the output," says Mitra. "You have to be able to work with people. When you're a group leader, the output is not dependent on an individual alone."

**ROCKVILLE, Maryland:** "The Food and Drug Administration (FDA) hires biologists, pharmacologists, toxicologists, chemists, microbiologists, pharmacokineticists, and immunologists. The list is almost endless," says Keith Ariola, medical staff recruiter for the FDA's Center for Drug Evaluation and Research (CDER). "In CDER, we recruit scientists with B.S. and M.S.



III Keith Ariola III

degrees, among others, to serve as consumer safety officers/project managers. They monitor incoming drug applications, track the progress of the drug application review conducted by review team members, and serve as liaisons between FDA and pharmaceutical companies, in order to gather information and resolve problems."

The FDA has five centers in total: CDER, the Center for Biologics Evaluation and Research, the Center for Food Safety and Applied Nutrition, the Center for Devices and Radiological Health, and the Center for Veterinary Medicine. All five centers have the tasks of reviewing, testing, and/or evaluating the newest technological developments in a wide range of scientific fields.

In government service, as in much of the private sector, a recruit's level of education determines initial salary level and the amount of responsibility attached to the entry-level position. Employees of the Federal government are categorized in 15 general schedule (GS) levels. "Individuals with B.S. degrees would start at the GS-5 or GS-7 level, depending on their grade point averages," says Ariola. "Individuals with an M.S. degree would enter at the GS-9 level. And a recent graduate with a Ph.D. would qualify for grade GS-11 on initial employment."

Life scientists with B.S. and M.S. degrees have plenty of opportunity for advancement in the FDA and other government agencies. Appropriate work experience in the private sector, the military, or academe can boost a recruit's entry level by one or two grades. And once on the job, scientists' performance can advance them toward "full performance levels" for the specific line of work that are several grades above the entry level. "Once individuals reach the full performance level in their position, they have the opportunity to compete for team leader and supervisory positions that will take them to the next higher grade level," explains Ariola. "In many cases, these may go to grade levels GS-14 and GS-15."

Staffers can also take advantage of internal opportunities for advancement. "Many government agencies have management development programs, which provide intensive management and communicative skill training," says Ariola. "This training prepares individuals to compete for senior management positions, such as division and office director." Scientists can also advance through a peer review conducted by several science-based government

Continued ➤



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## **QUALITY**

### **Supervisor, Quality Assurance Operations**

Responsibilities include supervising QA Operations personnel for efficient coordination in the areas of manufacturing support, material and product inspection and release and product sampling. Requires a Bachelor's degree (preferably in science), 5+ years quality or manufacturing experience in the pharmaceutical or biologics industry and 2+ years supervisory experience.

### **Quality Assurance Specialist**

You will be the QA representative on project teams and will interface with pharmaceutical partners on quality and product issues and with FDA during cGMP audits. Requires a BS in Engineering or Science with 5-10 years quality assurance or process development experience in the pharmaceutical or device industry. A thorough working knowledge of FDA regulations and cGMPs and experience implementing ISO 9000 for devices are essential.

### **GMP Training Coordinator**

You will coordinate and administer cGMP training at Inhale, including safety, production and other training programs. Requires a Bachelor's degree (preferably in Education or Science) and 3 years experience in a medical manufacturing environment, preferably in QA. Practiced knowledge of cGMP and international harmonized standards, proven training and materials development skills, as well as computer skills (MSWord, PowerPoint, database management) are essential.

### **QC Research Associate**

Perform release and stability testing on clinical drug products, assist in developing analytical methods and provide technical support to ongoing project teams. Experience in HPLC, spectroscopy, calorimetry and particle sizing is essential. Familiarity with methods such as SDS-PAGE and GMP is preferred. Requires a BS/MS in Chemistry or Chemical Engineering or 3+ years industry experience.

### **QC Methods Research Associate**

Responsibilities include developing/validating analytical methods for drug stability, documenting/validating methods, writing/reviewing clinical trials documents and performing QC release, stability and other technical support to projects. Requires a BS/MS in Chemistry, Biochemistry (or related field) and 2+ years pharmaceutical industry experience.

### **QC Research Associate**

Responsibilities include developing/validating analytical methods for cleaning validation purposes, supporting testing for cleaning validation/QC release/stability studies and writing validation protocols, SOPs and final reports. Requires a BS/MS in Chemistry or related field and 2+ years industry experience.

### **QC Stability Coordinator**

You will assist in preparing stability protocols and coordinating stability testing for drug products. Additional responsibilities include performing stability testing, reviewing stability data, preparing data reports, and providing support to project teams. Requires a BS/MS in Chemistry, Biology, or related field and 5+ years of industry experience.

## **DRUG DEVELOPMENT GROUP**

### **Technical Leader**

You will direct scientists in the development of drug product for delivery via the lung, including ensuring effective utilization of resources; assisting in developing project work-plans/technical reports; and coordinating activities leading to IND, NDA (or BLA). Requires a PhD in Chemistry, Biochemistry, Pharmaceuticals, Chemical Engineering or a related field and 5-10 years pharmaceutical development experience.

## **DRUG DEVELOPMENT AND RESEARCH GROUPS**

### **Scientist/ Sr. Scientist**

Responsibilities include: characterizing protein/peptide drug substances in solution/solid state, designing and performing pre-formulation/formulation studies and optimizing formulation parameters. Requires a PhD in Chemistry or Chemical Engineering and 2+ years post-PhD industry experience. Experience with HPLC analysis and techniques used to study the solid state is essential.

### **Research Associate/Sr. Research Associate**

You will develop analytical methods for characterizing protein and peptide powder formulations, characterize the chemical and physical stability of these formulations, and process solution formulations into fine particle powders for aerosol delivery. Requires a BS/MS in Biochemistry, Chemistry, Biology, Chemical Engineering and 5+ years industrial experience.

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## Biotechnology's Multidisciplinary Movement

**Biotechnology companies have traditionally hired large numbers of molecular biologists with M.S. and B.S. degrees. Now, however, they have started to broaden their outlook.**

**"They are looking for a different type of scientist — people with interdisciplinary strength," says Carl Feldbaum, president of the Washington D.C.-based Biotechnology Industry Organization (BIO). "They are seeking life scientists who have other expertise. It could be in computers, engineering, optics, robotics, or even business. Those interdisciplinary strengths are greatly valued."**

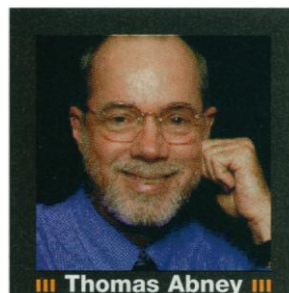
**The trend started about two years ago. "The human resources people reported it first," says Feldbaum. Some colleges and universities have already responded to the trend, by offering courses in life science that emphasize interdisciplinary skills. "The schools are looking at what the market is demanding," says Feldbaum.**

**What does this imply for graduating life scientists? Undergraduates should aim to take a broad array of courses beyond their own majors, particularly in computing or business. And individuals who go beyond the B.S. level should consider taking their Master's degrees in subjects other than their undergraduate majors. "The interdisciplinary approach at the Master's level is more favorable than the same discipline as the undergraduate degree," advises Feldbaum. "That second discipline may be business and not science. Ultimately, biotechnology companies need people who understand science but can help with business development."**

agencies. "Once scientists have reached a very high level of experience in a position, they can be referred by their supervisors to be evaluated through the peer review process and recognized as experts in their field of work," continues Ariola. "Expert scientists are usually promoted to grade levels GS-14 and GS-15."

What does Ariola recommend for scientists thinking of government service? "My advice to anyone pursuing a B.S. or M.S. degree is to go into the field that they like and that interests them most," he says. "If individuals work in fields they find enjoyable and intellectually stimulating, the greater is the likelihood that they will succeed and contribute to the advancement of their chosen field of science."

**AUGUSTA, Georgia:** "I always make a point to undergraduates interviewing for graduate studies," says Thomas Abney, professor in the Departments of Physiology and Endocrinology and of Biochemistry and Molecular Biology at the Medical College of Georgia (MCG). "When you look at the research being done in individual academic departments at undergraduate colleges and medical schools, regardless of the different fields, you find the use of very similar approaches and techniques. Everybody's using molecular biology and cell biology. We have core courses that our biomedical graduate students have to take, basically consisting of molecular



III Thomas Abney III

biology, cell biology, and systems biology. They need that same foundation whatever field they specialize in. The hot areas right now are developmental biology, genetics, immunology, neurosciences, and vascular biology. These research areas are emphasized in our graduate programs."

Students who pursue Master's degrees at MCG also have plenty of choices for specialist fields. MCG's School of Graduate Studies has roughly 400 graduate students, more than 300 of whom are pursuing Master's degrees. Most of those students are enrolled in the Schools of Nursing and Allied Health Sciences, which offer M.S. degrees in about ten different health-related areas, such as medical technology, occupational therapy, and physical therapy.

Abney advocates the value of a Master's degree particularly for students who do not plan to continue their education to the Ph.D. level. "Individuals with Bachelor's degrees have the most limited options," he says. "Their salaries and advancement would most probably be limited. I believe that most young people who really want to make a career in science should consider going beyond the Bachelor's level. Someone with a Master's degree has more options

**Continued ➤**



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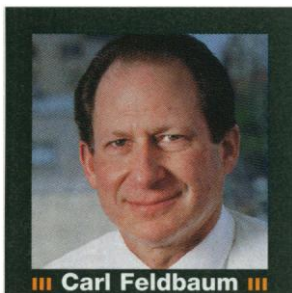


in terms of careers available in universities and industry. People with an M.S. degree can probably earn higher salaries. And they have more room for advancement, even to the management level."

How about Ph.D.'s? "A Ph.D. gives you the most options," Abney declares. But it's possible to take a break in education after taking a Master's degree. "We emphasize the Ph.D. degree in the biomedical sciences, and we always welcome students with Master's degrees into our Ph.D. programs," he continues. "They make really good students. They're usually several years older than their fellow students, they're more mature and well-focused, and they know what they want."

**WASHINGTON, D.C.:** "Biotechnology companies have recognized the fact that they don't need Ph.D.'s in every position," says Carl Feldbaum, president of the Biotechnology Industry Organization (BIO). "There is a wide spectrum of opportunity for holders of Master's and Bachelor's degrees."

Those opportunities are emerging with particular strength for life scientists familiar with the world of computers. "We are seeing new companies in biotechnology that are basing their products on silicon," says Feldbaum. "It requires an impressive array of overlapping tech-

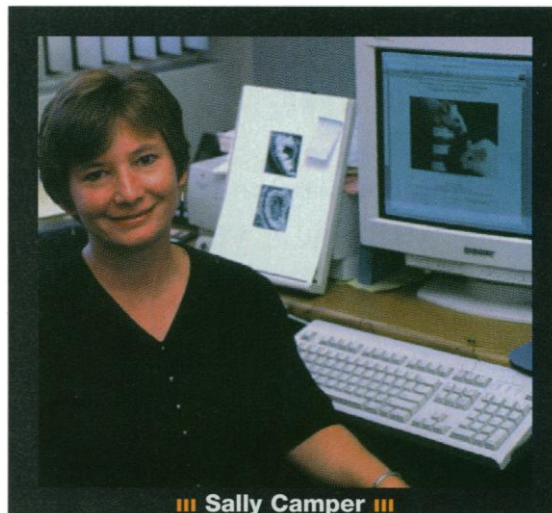


nologies. I'm seeing more and more companies use computer chips, fluorescence, and other ways to identify the qualities of compounds."

The trend that sees biotechnology moving increasingly from R&D into manufacturing has also stimulated biotechnology firms to seek out non-Ph.D.'s in a wide variety of specialties. "The biotech companies are looking for everyone, across the life sciences, into physical science, and even business," explains Feldbaum. "One need is for people who can manage others — who know enough about computer science to manage computer jocks and help them to cooperate with biologists."

What does that mean for life scientists with B.S. degrees? Feldbaum advises them to obtain skills and understanding in fields beyond their undergraduate majors.

**ANN ARBOR, Michigan:** "The difference between the Ph.D. and the Bachelor's and Master's degrees is that Ph.D.'s have much more extensive research experience," says Sally Camper, associate director of biomedical sciences at the University of Michigan. "In industry, B.S. and M.S. scientists tend to produce product; they work in a lab generating data. People with Ph.D.'s tend to be more in supervisory positions. They are



more involved in making the decisions on what the experiments will be and what the data mean. If you're interested in having a broader intellectual impact on a project, it helps to have the Ph.D. If you like producing data, then it may not be as necessary."

Employers seeking recruits with M.S. and B.S. degrees are attracted by one particular factor. "They always have a need for people who have interdisciplinary skills," says Camper. "Some of the students who get Master's degrees here do it to get themselves a credential in a different area from their undergraduate major." Thus, a basic biologist might want to obtain an M.S. in biostatistics. Individuals interested in a teaching career may obtain a Master's in education. And life science majors who seek serious cross-training could move on to training in the law.

For science fields, Camper pinpoints a handful of hot fields for M.S. studies. "In chemistry," she says, "organic synthesis is a hot area, focusing on natural products and drug synthesis. In biology, it's the biotechnology industry, including both pharmaceutical and agribusiness. In addition, informatics is a hot area."

Michigan has recognized the need for cross-disciplinary training by offering an interdepartmental degree in biochemistry at the undergraduate level, administered by the Chemistry, Biology, and Biological Chemistry Departments. In addition, the university has developed a common gateway to the Ph.D. degree for four interdepartmental and seven specialized programs in biomedical sciences. "My sales pitch for our new combined graduate program is its attractiveness to a wide variety of students," says Camper. "It is possible to start specialized training in a specific field immediately, but the Program in Biomedical Sciences (PIBS) also allows a lot of flexibility in the first year. "Many come in with a degree in biology or chemistry and want to do an advanced degree, but aren't sure of their area of specialization. This gives

Continued ➤





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Photos: scenes from the campus in Ann Arbor, Michigan.





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them an opportunity to have a short laboratory experience with three different professors. At the end of their first year, they can declare a specialty."

Camper adds one piece of advice that applies universally to students preparing to face the job market. "You should follow your heart and do what you really like doing," she says. "My personal opinion is that it's a mistake to plan your career based on what the job market looks like. It will change, and people aren't very good at forecasting the changes."

**BETHESDA, Maryland:** The Howard Hughes Medical Institute (HHMI) has an indirect but powerful influence on the work of life scientists with B.S. and M.S. degrees. The vehicle: its funding of principal investigators in medical research. "We currently have 313 investigators in the institute," says Maxwell Cowan, vice president and chief scientific officer of HHMI. "Most have one or more graduate students, who are assigned projects that they run with the advice and guidance of their mentors. They are, in fact, scientists in training."

They specialize in five areas of most interest to HHMI: genetics, cell biology, immunology, neuroscience, and structural biology. "Some students in structural biology and neuroscience come into the laboratory with backgrounds in mathematics and physics, and students in neuroscience have backgrounds in psychology," says Cowan. "A significant number are working toward M.D.-Ph.D. degrees, and have backgrounds in biology. The bulk of their work is in molecular biology."

HHMI doesn't fund the students directly. The more than 900 graduate students in HHMI-supported laboratories "are selected by the departments with which the investigators are associated," explains Cowan. "We make contributions to those institutions in recognition of their support. We've been spending in excess of \$10 million per year in this mode."

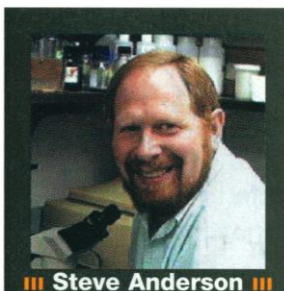
Graduate students connected with HHMI in this way include the best and the brightest. "At least two-thirds have GRE scores in the 700s," says Cowan. "And the overwhelming majority go on to complete Ph.D's."

However, HHMI investigators frequently hire life scientists with M.S. and B.S. degrees who don't plan on further education. "The largest single group are technicians," says Cowan. "Those with some significant experience are often assigned a research project that they can publish, although the work originates with the investigators' ideas. Some people have more advanced experience as laboratory managers, who do such tasks as ensuring that sup-

plies are available and equipment is maintained. There are also research specialists, many of whom have Master's degrees. They may run a major piece of equipment like a DNA sequencer or a mass spectrometer."

That type of opportunity indicates that life scientists can have productive careers without acquiring Doctorates. "For people without Ph.D's, the bulk of the positions will be at the technical level — and those can be very satisfying," says Cowan. "A lot of scientists are very content not to have the responsibility of running a laboratory and getting funding for it."

**DENVER, Colorado:** Steve Anderson, director of biomedical science at the University of Colorado Health Science Center, takes a somewhat skeptical view of the usefulness of a Master's degree. "I feel it to be rather limited in its utility," he says. "Ph.D. training gives far more degrees of freedom than a Master's degree."



However, 13 years of experience at the University of Colorado and the State University of New York at Stony Brook have convinced him that a Master's degree has value for students with certain specific career goals. "I think it's useful for teachers in high schools or community colleges," he says. "It corresponds to higher pay in public schools, and to

higher salaries in the biotechnology industry. The person who receives a Master's degree from a biology or biochemistry department can become a research professional in a biotechnology company or science center. The biotechnology industry needs people with advanced training, including Master's degrees."

What subjects are hot for M.S. applicants? "Master's training in animal husbandry is very important for work in transgenics," says Anderson. "For genomics, Master's training in the computational side is very valuable. That will probably remain a hot area for several years."

Indeed, Anderson regards the ability to understand both computing and life science as extremely valuable to potential employers. "As life scientists are leaving pure test-tube systems and trying to develop gene therapies and animal work, they need people to evaluate their data," he explains. "Computation, biostatistics, and mathematics will become more valuable. Students with B.S. degrees in computer science should consider getting a Master's degree in biology." ❧

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## **Research Training Fellowships for Medical Students**

An opportunity for medical students in the United States to explore a burgeoning interest in fundamental research. Support is awarded for one year of full-time fundamental research in a laboratory at the student's medical school or another institution (except NIH in Bethesda, Maryland). *Application deadline: early December.*

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## **Research Scholars at the National Institutes of Health**

Under this joint HHMI–NIH program, medical students in the United States spend an intensive year in research in the intramural program at NIH in Bethesda, Maryland. Residence is provided at the Cloister on the NIH campus. *Application deadline: early January.*

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## **2000 Program Announcements and Applications**

### *For Predoctoral Fellowships:*

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

### *For Other Programs:*

Howard Hughes Medical Institute  
Office of Grants and Special Programs  
Department AN00  
4000 Jones Bridge Road  
Chevy Chase, MD 20815-6789  
United States of America  
Telephone (301) 215-8889  
Fax (301) 215-8888  
E-mail [fellows@hhmi.org](mailto:fellows@hhmi.org)  
[www.hhmi.org/fellowships](http://www.hhmi.org/fellowships)

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



## Inquire Within

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[www.gene.com](http://www.gene.com)

## Postdoctoral Opportunities

Postdoctoral positions are available to investigate the role of the wnt1/b-catenin signaling pathway in cancer. Research will focus on mechanism of b-catenin regulation and the identification and characterization of genes activated by this pathway. Familiarity with signal transduction and gene expression plus technical expertise in molecular biology, cell culture and expression cloning are preferred. Manager: Dr. Paul Polakis. Email: [ppolakis@gene.com](mailto:ppolakis@gene.com). Job Code SCI420

A postdoctoral position is available to study the control of apoptosis by novel members of the tumor necrosis factor receptor and ligand families (see, for example, Marsters et al., Curr. Biol. 7, 1003, 1997; Marsters et al., ibid., 8, 525, 1998; Sheridan et al., Science 277, 818, 1997; Ashkenazi and Dixit, Science, 281, 1305, 1998; Pitti et al., Nature 396, 699, 1998; Gurney et al., Curr. Biol. 9, 215, 1999). Applicants should have a recent PhD in Molecular Biology, Cell Biology, or Biochemistry, at least one first-author publication in a major journal, and preferably some practical experience in the field of apoptosis. Manager: Dr. Avi Ashkenazi. Job Code SCI1867

We offer industry-leading benefits. Send your resume/c.v., indicating appropriate Job Code, to: Genentech, Inc., Human Resources, PO Box 1950, South San Francisco, CA 94083-1950. Please use plain typefaces. You may email your resume, again indicating appropriate Job Code, to [jobs@gene.com](mailto:jobs@gene.com) (ASCII files only with a maximum line width of 76 characters). We cannot accept faxed resumes. Genentech is an Equal Opportunity Employer.

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extraordinary science



## POSTDOCTORAL POSITION

A postdoctoral position is immediately available to study strategies of vaccination and immunotherapy. The applicant should have a Ph.D. or M.D./Ph.D.

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

**Dr. J. L. Hurwitz**  
Department of Immunology  
St. Jude Children's  
Research Hospital  
332 N. Lauderdale  
Memphis TN 38105

Equal Opportunity Employer

## Infectious Disease Immunology Faculty Positions The Ohio State University Department of Microbiology



Applications are invited for TWO tenure-track Assistant Professorships in the Department of Microbiology, College of Biological Sciences at The Ohio State University. Applicants must have a Ph.D. or equivalent education in Microbiology or related discipline, and postdoctoral research training. Preference will be given to individuals with documented expertise and future research plans that address the immune or innate host responses to microbial infections, ideally by an intracellular pathogen. Successful applicants will be expected to develop and maintain an externally funded research program investigating some aspect of host cell-pathogen interactions, host-cell resistance mechanisms, and/or responses to infection at the molecular level, and to participate in teaching at the undergraduate and graduate levels. Very competitive personal and professional employment start-up packages are available for individuals to join a nationally recognized and growing Department within an excellent research environment.

To expedite the review process, applicants should send a copy of their curriculum vitae and a short description of their research interests by e-mail to [microsearch@osu.edu](mailto:microsearch@osu.edu) and submit a letter of interest, description of future research plans, curriculum vitae and the names of at least three potential referees to **Prof. Bruce S. Zwillig**, Search Committee Chair, Department of Microbiology, The Ohio State University, 484 W. 12th Ave., Columbus, OH 43210. For a more detailed description of these positions please visit the Department's web-site at <http://www.biosci.ohio-state.edu/~microbio/>. To guarantee full consideration, applications must be received by **October 15, 1999**.

OSU is an Equal Opportunity / Affirmative Action Employer.

## W H E R E Challenge + Creativity IS THE FORMULA FOR SUCCESS.

MedImmune, Inc., a dynamic biotechnology company focused on developing antibodies and vaccines for the prevention and treatment of human diseases, is seeking the following individual for our Corporate headquarters in Maryland.

### Postdoctoral Position in Research

We are seeking an individual with training in immunology, biochemistry, microbiology or molecular biology that is interested in applying these skills to the immunoprophylaxis of bacterial infections. The individual will conduct studies in one of two areas: 1) lipopolysaccharide as an adjuvant and an immune target, 2) evaluation of *in vivo* expression of bacterial surface antigens and virulence factors. Individuals with previous postdoctoral experience will be considered. Candidates should possess a Ph.D. in a biological science, and good interpersonal, communication, and organizational skills.

Please forward resumes to: **MedImmune, Inc., HR Dept., referencing Job Code 917, 35 West Watkins Mill Road, Gaithersburg, MD 20878. Fax: (301) 527-4215.**  
E-mail: [jobopenings@medimmune.com](mailto:jobopenings@medimmune.com)

Visit our website:

**[www.medimmune.com](http://www.medimmune.com)**

oe, m/f/d/v



**MedImmune, Inc.**

# Postdoctoral Research Fellowships for Physicians

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## 2000 Competition

30 Fellowships will be awarded to physicians by the Howard Hughes Medical Institute for three years of training in fundamental biomedical research. Awards, based on an international competition, focus on research directed to understanding basic biological processes or disease mechanisms. Fellowships may be held at academic or nonprofit research institutions, including but not limited to HHMI laboratories.

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## Fellowship Terms

- Three years of support
- Full-time fundamental research
- \$40,000–\$60,000 annual stipend
- \$16,000 annual research allowance
- \$13,000 annual institutional allowance

Note that the terms of the fellowship differ in some respects for those in HHMI laboratories.

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## Eligibility

- M.D., M.D./Ph.D., M.B.B.S., or D.O., with the first medical degree awarded no earlier than 1990
- At the start of the fellowship
  - at least two years of postgraduate clinical training completed
  - no more than two years of postdoctoral research training completed
- Applicants may not have faculty appointments
- Fellows may not be enrolled in graduate degree programs
- No citizenship requirements for application; U.S. citizens may study abroad, but others must study in the United States

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## Schedule

- Application deadline: December 6, 1999
- Awards announced: June 2000
- Fellowships start: September 1, 2000–September 1, 2001

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## 2000 Program Announcements and Applications

Howard Hughes Medical Institute  
Office of Grants and Special Programs  
Department CC00  
4000 Jones Bridge Road  
Chevy Chase, MD 20815-6789, United States of America  
Telephone (301)215-8889  
Fax (301) 215-8888  
E-mail [fellows@hhmi.org](mailto:fellows@hhmi.org)  
[www.hhmi.org/fellowships](http://www.hhmi.org/fellowships)

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



# EXPERIENCE EVERY ADVANTAGE



Pursue your future with Promega, a biotechnology leader, and experience every career advantage including diversity, growth opportunities, exceptional benefits, on-site fitness center and the appeal of one of America's most livable cities, Madison. Currently we are seeking Genetic Analysis, Cell Regulation and Signal Transduction and Nucleic Acid Analysis Technology Managers to join us in Madison, WI.

Join our R&D Management team as a Technology Manager and supervise scientists while leading various projects. You'll identify key technologies (within their area of expertise), develop and maintain external collaborations, determine resource allocation to meet prioritized goals and objectives, and work with the Platform Manager to develop technology strategies. Five plus years managing R&D Scientists, 4+ years project management experience in an industrial organization, the demonstrated ability to coach and develop staff, experience recruiting/hiring scientists at various levels, and a background working with scientists from different disciplines are required.

## GENETIC ANALYSIS

Candidates must have a Ph.D. in Molecular Biology, Eukaryotic Genetics, Biochemistry or a related discipline, with preference given to candidates with extensive experience in nucleic acid amplification and detection methods, comparative genomics, or gene mapping.

## CELL REGULATION AND SIGNAL TRANSDUCTION

Candidates must have a Ph.D. in Cell Biology, Cell Signaling, or a related discipline.

## NUCLEIC ACID ANALYSIS

Candidates must have a Ph.D. in Molecular Biology, Eukaryotic Genetics, Biochemistry or a related discipline, with preference given to candidates with extensive experience in genomics research including identification of new genes, determination of gene structure, expression analysis, and gene function.

Preference will be given to candidates with strong credentials as a technical innovator and leader with demonstrated experience in technology acquisition and transfer into commercial products, demonstrated ability working with consultants and outside vendors for developments of new products, and experience managing groups of 10 or more scientists.

Promega offers the challenge of working in a non-traditional environment, a competitive salary and benefits package, onsite fitness and childcare facilities as well as career advancement opportunity. For confidential consideration, please mail, e-mail or fax your resume to: Promega Corporation, Human Resources, 2800 Woods Hollow Rd., Madison, WI 53711. Fax: 608-277-2601. E-mail: hr@promega.com. Please indicate the title of the Technology Manager position you wish to be considered for.

Equal Opportunity Employer

[www.promega.com](http://www.promega.com)



## MAYO CLINIC POSTDOCTORAL POSITION

A position is available for a postdoctoral fellow with an interest in the molecular mechanisms of cancer development in the Department of Pathology. Major emphasis will be on cell-cycle proteins and regulation of gene expression. Individuals with a strong background in biochemistry or molecular biology, with experience or interest in endocrine tumors are encouraged to apply. Salary will be determined by the successful candidate's experience. There is also an attractive benefit package. Mayo Foundation is a nonprofit physician led clinical practice integrated with education and research in a unified multi-campus system.

Applications including a curriculum vitae, summary of past accomplishments and the names of three references should be sent to:

**Ricardo V. Lloyd, M.D., Ph.D.**

**Mayo Clinic**

**Laboratory Medicine and Pathology**

**200 First Street SW**

**Rochester, MN 55905**

**e-mail: [lloyd.ricardo@mayo.edu](mailto:lloyd.ricardo@mayo.edu)**

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

## Research Specialist

The Howard Hughes Medical Institute, at the MIT/Whitehead Institute, seeks a Research Specialist to work with a dynamic group studying protein structure-function, protein folding, protein design, and viral membrane fusion. **Responsibilities:** direct the solid phase synthesis, purification and analyses of synthetic peptides including operation and maintenance of automated peptide synthesis instruments, cleavage, work-up, and analyses of peptides by mass spectrometry (MALDI-TOF and LC/MS), train lab personnel in these methods and supervise a Research Technician. **Minimum qualifications:** Ph.D. and two years relevant experience, experience with peptide synthesis including chemical ligation methodologies, and excellent interpersonal skills.

## Research Technician

An opening also exists for a Senior Research Technician with experience in Biophysical and Analytical Chemistry to assist in studies of viral membrane fusion. **Minimum qualifications:** BS plus four years relevant experience or MS plus two years relevant experience; previous experience with analytical and preparative HPLC, capillary electrophoresis, mass spectrometry, circular dichroism spectroscopy, microscopy, and analytical ultracentrifugation methods.

HHMI offers competitive salaries and an excellent flexible benefits package. Please send resume, noting position of interest and the names of three references, to: Pam Dvorak, HHMI/Whitehead Institute, 9 Cambridge Center, Cambridge, MA 02142. E-mail: [dvorak@wi.mit.edu](mailto:dvorak@wi.mit.edu)

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Visit our website at:  
[www.hhmi.org](http://www.hhmi.org)

**HHMI**  
HOWARD HUGHES MEDICAL INSTITUTE



**As an emerging force in infectious disease research.**

**LEADERSHIP THROUGH INNOVATION AND SCIENTIFIC EXCELLENCE.**

Eli Lilly and Company is a premier leader in the world's pharmaceutical industry. Lilly is an Indianapolis-based global research pharmaceutical company dedicated to enabling people to live longer, healthier, more active lives through innovative and creative pharmaceutical-based health care solutions. We are currently seeking several BS/MS scientists to join one of our research programs with special emphasis in the following therapeutic areas: Cardiovascular, Endocrine, Infectious Diseases (please refer to accompanying positions), Oncology, and Neuroscience. Lilly is currently seeking the best, most diverse scientists to succeed in the race to discover and develop novel drug targets.

**Join us today.**

**Infectious Disease Research - BS/MS Scientists**

The Infectious Diseases Research Division is seeking scientists with proven expertise in biochemistry, microbiology and molecular biology. Individuals with experience with microorganisms (bacteria and fungi) would be preferred. These scientists will be involved in multidisciplinary teams committed to developing novel antimicrobial targets utilizing the noted skills:

- Biochemists:** The successful candidate must have a Bachelor's or Master's degree in biochemistry. Experience purifying and characterizing proteins, developing functional assays for proteins and the study of kinetics and mechanisms of inhibition of enzymes and proteins is critical. Knowledge of microbiology, molecular biology, and protein biochemistry is highly desirable.
- Microbiologists:** The successful candidate must have a Bachelor's or Master's degree in microbiology or Bacterial Molecular Genetics with broad-based training in mycoplasma, mycobacteria, and molecular biology. Experience working with different species of bacteria is required.
- Molecular Biologists:** The successful candidate must have a Master's degree in Microbiology or Bacterial Molecular Genetics and have broad-based training in bacterial physiology, genetics and molecular biology. Experience working with different species of bacteria is required. In addition, a successful candidate must have experience with bacterial culture methods, bacterial strain construction, in vivo mutagenesis and mutant isolation, genetic mapping, construction of vectors for gene cloning and protein expression, protein purification, protein analysis, transcript analysis, and HPLC analysis of metabolites.

**Eli Lilly and Company**

For immediate consideration, please send your resume to:

**Eli Lilly and Company**  
US Recruiting and Staffing  
Lilly Corporate Center  
DC #1818  
Reference Source Code: ADSCMB108  
Indianapolis, IN 46285.

We are an equal opportunity employer dedicated to diversity and the strength it brings to the workplace. To learn more about Eli Lilly and Company, please visit our website at: [www.lilly.com](http://www.lilly.com).



**FACULTY POSITIONS  
(RANK OPEN)  
DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING  
UNIVERSITY OF ILLINOIS  
AT URBANA-CHAMPAIGN**

The Department of Materials Science and Engineering at the University of Illinois at Urbana-Champaign invites applications for regular, full time tenure-track or tenure faculty positions in the broad areas of materials research, especially polymers, biomaterials, ceramic engineering and imaging using X-rays, electrons or neutrons. To be considered for a tenure position, the applicant must have recognized national and international stature. All applicants are asked to provide a professional curriculum vitae including teaching experience and interests, a list of publications, and an outline of a few pages describing their proposed program of research. Candidates for tenure-track positions should also request that three (3) letters of reference be sent directly to the department. Candidates for tenure positions should include the names, addresses, email and telephone numbers of at least three (3) references. Applicants must hold an earned Doctorate in an appropriate field. Salary and rank will be commensurate with qualifications. The proposed starting date for these positions is January 2000 or later. To ensure full consideration, applications must be received prior to November 30, 1999. Interviews may take place during the application period, but a final decision will not be made until after the deadline for applications. Although rank is open based on qualifications, preference will be given to applicants at the rank of Assistant Professor.

Applications should be addressed to:  
**Chair, Faculty Search Committee  
Department of Materials Science and Engineering  
1304 W. Green St.  
Urbana, IL 61801  
Telephone: (217) 333-1440  
Fax: (217) 333-2736  
Email: [mse@uiuc.edu](mailto:mse@uiuc.edu)**  
*The University of Illinois is an Affirmative Action, Equal Opportunity Employer.*

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*community*

Paracel Inc. is a leading provider of high-performance genetic data and text analysis systems for the pharmaceutical, biotechnology and government markets. We are interested in experienced bioinformatics professionals to provide scientific leadership in the following positions:

- Product Manager, Bioinformatics**  
Plan, prioritize and promote products used in high-throughput sequence analysis. Represent the company and gather feedback through conferences and customer visits to assure that products meet customer needs. Bioinformatics experience in a commercial setting required.
- Principle Scientist, Bioinformatics**  
Design, develop and validate Paracel's high performance genomic analysis products. Tools such as Smith-Waterman, HMMs, and protein threading will be used in hands-on research of problems in genomics. UNIX C experience required.

Paracel offers a positive work environment and competitive salaries and benefit packages. We are an equal opportunity employer.

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Fax 626-744-2001 E-mail [info@paracel.com](mailto:info@paracel.com)  
Paracel Inc., Attn: Human Resources, 80 South Lake Ave. #650  
Pasadena, CA 91101  
**PARACEL**  
*Because The Real Race Is Against Time*



# Research Technologists

St. Jude Children's Research Hospital, located in Memphis, Tennessee, is one of the world's premier research centers for research and treatment of catastrophic diseases in children, primarily pediatric cancers. St. Jude is a learning environment offering professional growth and diversity for the research technologist where biomedical education extends beyond the laboratory and clinical experience. Workshops, seminars and lectures are regularly presented by both the St. Jude faculty and distinguished visiting investigators. Our non-faculty research staff career ladder provides several levels of promotion and financial compensation for talented and motivated technologists to advance in their field. Experienced technologists may assist the principal investigator by performing research experiments, developing new procedures, participating in the publication of research results, managing laboratory operations and training laboratory personnel. Opportunities are available in the following areas for new graduates as well as positions requiring 3+ years laboratory experience:

- Animal Resource Center • Bioinformatics • Hematology Oncology • Cell and Gene Therapy • Experimental Hematology • Genetics • Immunology • Molecular Pharmacology • Pharmaceutical Sciences

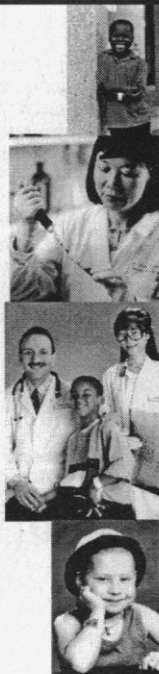
For additional information, please refer to our website:

**www.stjude.org/hr**

Resumes may be sent to:

**St. Jude Children's Research Hospital  
Human Resources Dept. SC326  
332 N. Lauderdale, Memphis, TN 38105  
Fax: 901-495-3123  
E-mail: [virgil.holder@st.jude.org](mailto:virgil.holder@st.jude.org)**

SJCRRH is an equal opportunity employer.  
Photos courtesy of St. Jude Biomedical  
Communications Dept.



## Post Doctoral Position

Postdoctoral position immediately available for NIH-funded research to study the molecular mechanisms of human uterine endometrial stromal cell differentiation and human decidua prolactin gene expression. Ph.D. or M.D. with experience in molecular biology required. Send CV, description of research experience, and names of three references to:

**Stuart Handwerger, M.D.  
Division of Endocrinology  
Children's Hospital Research  
Foundation  
3333 Burnet Avenue  
Cincinnati, Ohio 45229-3039  
[stuart.handwerger@chmcc.org](mailto:stuart.handwerger@chmcc.org)**

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

## ASSISTANT PROFESSOR BIOCHEMISTRY & BIOPHYSICS SCHOOL OF MEDICINE

### UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

The Department of Biochemistry and Biophysics invites applications for a beginning tenure-track Assistant Professor position. Candidates should possess a Ph.D. or M.D. degree, have two or more years of postdoctoral experience, and have demonstrated excellence in their research. The research area should complement or expand existing Department strengths, which include signal transduction, cell cycle regulation and oncogenesis, DNA repair and photobiology, development and activities of the nervous system, membrane processes, mechanistic enzymology, and protein structure/function. Our Department comprises a large, well funded (over \$7 million in direct costs) faculty whose expertise spans the disciplines of molecular, cellular, and structural biology. The position includes an excellent start-up package, quality research space, and access to numerous, state-of-the-art core facilities. We have a highly successful departmental graduate program, and a strong, interdisciplinary biophysics predoctoral training program is centered in the Department. In addition, faculty have access to graduate students through numerous interdepartmental programs including the Genetics or Neurobiology Curricula. Many of our faculty are also members of the UNC Lineberger Comprehensive Cancer Center and the Program in Molecular Biology and Biotechnology.

Interested candidates should send a curriculum vitae and a letter describing their research interests and plans to: **Dr. David Lee, Chair, Department of Biochemistry & Biophysics, CB#7260, University of North Carolina, Chapel Hill, NC 27599-7260.** Three letters of reference should also be provided.

*Our Department is committed to increasing representation of women and members of minority groups on our faculty. The search committee particularly encourages applications from such candidates. UNC-CH is an Equal Opportunity/Affirmative Action Employer.*



**SLUCare**  
The Health Services Division  
of Saint Louis University

## CEREBROVASCULAR RESEARCH PROGRAM

The Souers Stroke Institute at Saint Louis University is establishing a laboratory for basic research. An M.D./Ph.D. with a minimum of three years of post-doctoral research or M.D. with five years of post-doctoral research is sought to establish a basic research program to study brain ischemia and neuro-protective agents. Applicants with peer reviewed publications and active grant support are preferred. Research space and intramural support is available.

Applicants should submit a curriculum vitae and letter outlining their interest to:

**Francis A. Mithen, M.D., Ph.D.  
Department of Neurology  
Saint Louis University School of Medicine  
3635 Vista at Grand  
St. Louis, MO 63110**

## Expanding Horizons in Cancer Research at the University of Utah



### New initiatives

at the University of Utah,  
including the opening of the Huntsman Cancer Institute,  
provide expanding opportunities for graduate training in cancer research.

#### Graduate Programs Information and Admissions

<http://molbio.med.utah.edu>  
<http://biologicalchem.med.utah.edu>  
<http://neuroscience.med.utah.edu>

#### Huntsman Cancer Institute Information

<http://www.hci.utah.edu/graduate-studies.html>



#### M.D. Ph.D. Program

<http://www-medlib.med.utah.edu/som/education/mstp/mstp2.html>

#### Research Areas

*Oncogenes and Tumor Suppressors*  
*Genome Stability*  
*Signal Transduction*  
*Cell Proliferation and Apoptosis*  
*Cell Adhesion and Metastasis*  
*Drug Discovery*  
*Epidemiology*

#### Disease Programs

##### Huntsman Cancer Institute

*Colon Cancer*  
*Leukemia*  
*Brain Cancer*  
*Ovarian Cancer*



**Purdue University Department of Biomedical Engineering** is inviting applications for Assistant and Associate Professor tenure-track faculty positions. This newly formed department represents a major investment by Purdue in this growing field at the interface between engineering and life/medical sciences. Candidates must have a Ph.D. Degree

and a strong background in biomedical engineering. We are seeking highly qualified, creative individuals with research interests in implantable devices, tissue engineering, biomaterials, molecular or cellular imaging, or other related areas. The department currently grants master and doctoral degrees. New faculty will have the opportunity to collaborate with numerous faculty involved in biomedical research in the Purdue Schools of Engineering, Science, and Veterinary Medicine, and Indiana University Schools of Medicine and Dentistry. Interdisciplinary biomedical engineering efforts are currently supported through a Special Opportunities Award from the Whitaker Foundation and an Integrative Graduate Education and Research Training (IGERT) award from the National Science Foundation. In addition, new faculty will be expected to teach graduate level biomedical engineering courses, develop a strong (externally-funded) research program, and help foster departmental growth.

Applicants should submit a detailed resume, a description of teaching and research plans, copies of selected publications and a list of four professional references to **Professor George R. Wodicka, Head, Department of Biomedical Engineering, 1296 Potter Engineering Building, Purdue University, West Lafayette, Indiana, 47907-1296**. Screening of candidates will begin October 1, 1999 and will continue until the positions are filled. Qualified women and minority candidates are encouraged to apply. *Purdue University is an equal opportunity/affirmative action employer.*

## PHYSICS INSTRUCTOR

### Physical Science/History of Science

Eugene Lang College, a division of New School University seeks candidates for a full-time position starting Fall 2000 teaching Physical Sciences/Mathematics to a broad range of undergraduate non-science majors. All teaching is conducted in small sized classes using an interactive discussion format that incorporates historical, economic, political and cultural perspectives. All applicants must be engaged, innovating, and enthusiastic science educators and willing to develop and expand the natural sciences program. Computer technology and a small teaching lab are available for courses and summers are free for research. Ph.D in Physics or the History of Science required.

Review of applications will begin October 1, 1999 and will continue until the position is filled. Applications should include c.v., 3 letters of reference, 3 course descriptions, and a statement of teaching philosophy. Send to: Katayoun Chamany, Eugene Lang College, 65 West 11th Street, New York, NY 10011. Because we are committed to an educational environment reflective of the multi-cultural world in which we live, women and scholars of color are particularly encouraged to apply. AA/EOE.



**New School University**



**CORVAS**, a fast-paced biopharmaceutical company in La Jolla, CA, is engaged in the design and development of next generation therapeutic agents for the prevention and treatment of cardiovascular, cancer and other major diseases. We are currently seeking highly motivated, experienced candidates for the following positions:

#### **MOLECULAR MODELING/ COMPUTATIONAL CHEMIST**

This dedicated and creative PhD research scientist will work with colleagues in medicinal chemistry and structural biology to design new chemical entities using molecular structures of target proteins determined by x-ray and NMR techniques. Additional responsibilities include supervising the NMR facility with respect to applications support and computer systems administration. Requires significant experience in computational chemistry, molecular modeling and use of state-of-the-art software packages (including SGI- and UNIX-based systems) as applied to drug design. Background in NMR spectroscopy and methods development for drug discovery research and/or experience with protease structure and inhibitor design are preferred.

#### **PROTEIN EXPRESSION/FERMENTATION**

As a member of our dynamic biology group, you will direct the production of recombinant proteins in microbial systems. Significant experience with fermentation of *Pichia pastoris* is required, and familiarity with the New Brunswick BIOFLO III, IV, and/or 3000 systems is desired. Experience with protein production using other expression systems, such as *E. coli* and/or mammalian systems (e.g., CHO cells), is preferred. Supervisory experience is also preferred.

We also have positions available at BS, MS and PhD levels for:

#### **SYNTHETIC ORGANIC/MEDICINAL CHEMISTS**

For consideration, please send/fax CV and letter to: Corvas International, Inc., 3030 Science Park Road, San Diego, CA 92121, Attn: HR; Fax (858) 455-0457. [www.corvas.com](http://www.corvas.com). EOE.

**CORVAS**  
INTERNATIONAL

## Take Pride as a Member of Our Research Team



The Children's Hospital of Philadelphia, the nation's first hospital dedicated solely to pediatric care, currently has the following outstanding opportunities available:

#### **Sr. Research Tech-SRT/DW**

The successful candidate will have 2-3 years experience in histology, cell biology, tissue culture, plasmid preparation, transfection and/or vector purification. Requires a Bachelor's degree in biology, biochemistry, molecular, or a related field (Master's preferred).

#### **Research Tech-RT/DW**

The successful candidate will be a skilled bench molecular biologist with 2-3 years previous experience including subcloning, cDNA library sequencing, PCR, southern blotting, western blotting, immunohistochemistry, cell/tissue culture techniques and utilizing in vivo assays and in vitro assays. Requires a Bachelor's degree in biology, chemistry, molecular biology or biochemistry. Previous laboratory experience at the graduate level in molecular biology preferred.

#### **Research Tech-PSY/DW**

The successful candidate will work in the Neurosciences Department. Requires a Bachelor's degree in psychology, social science or a related field along with 1-2 years previous clinical research experience.

Please send resume, indicating position of interest and salary requirements, to: Human Resources, The Children's Hospital of Philadelphia, 34th & Civic Center Blvd., Philadelphia, PA 19104-4399; Fax 215-590-3184; or Email: [williamsde@email.chop.edu](mailto:williamsde@email.chop.edu). For more information about us, please visit our web site at <http://www.chop.edu>. EOE M/F/D/V.

**CH** The Children's Hospital of Philadelphia  
A pediatric healthcare network



At Pfizer, you'll have all the resources you need to bring new and dynamic ideas to fruition. As a company committed to innovation, we share your goal of making this world a healthier place and value the creative drive and professional expertise it takes to get there. Working together, we will continue to develop and launch the products that make such a difference in the lives of so many. At Pfizer, the power to create a better world is as immediate as it is real—and it belongs to you. The following position is based in our Groton, CT facility.

#### **Ph.D. RESEARCH SCIENTIST COMPUTATIONAL CHEMISTRY**

We are expanding our Computational Chemistry Group and are seeking two creative Computational Chemists to work as members of a multidisciplinary team facilitating our efforts in combinatorial chemistry, chemical diversity, pharmacophore development, lead optimization and structure-assisted drug design. The successful candidate must possess a Ph.D., have significant experience in computational chemistry as well as strong programming skills along with the ability to work in a UNIX environment. In addition, this person should possess solid communication skills and the ability to work on a multidisciplinary project team and/or independently. Postdoctoral and/or pharmaceutical experience is desirable.

Pfizer offers exceptional salaries and benefits, as well as tremendous growth potential. Please send your resume in confidence to: Pfizer Inc, Job Code: 9924149SCI, Central Research, c/o Aon Consulting, P.O. Box 25, Findlay, OH 45839, or e-mail to: [Pfizer@aon-hros.com](mailto:Pfizer@aon-hros.com). As an Equal Opportunity Employer, Pfizer is focused on building a diverse workforce.



LIFE IS OUR LIFE'S WORK.



#### **Molecular Geneticist Faculty Position Assistant, Associate or Full Professor Brown University Division of Biology and Medicine**

The Department of Molecular Biology, Cell Biology and Biochemistry at Brown University announces the opening of a tenure track/tenured faculty position in Molecular Genetics to be appointed July 1, 2000. The appointment may be made at the level of Assistant, Associate or Full Professor depending on the qualifications of the candidate selected.

Qualifications include a Ph.D. or M.D. degree and a demonstrated track record of excellence in research. The applicant will be expected to pursue an independent, vigorous, externally-funded research program that emphasizes molecular genetic approaches to study contemporary biological problems, and to be an active member of the NIH-funded predoctoral training program in Molecular Biology, Cell Biology and Biochemistry. The applicant will be expected to participate in graduate and undergraduate teaching.

The Search Committee will give full consideration to applications received by October 1, 1999 that include a curriculum vitae, description of research interests, and at least three letters of reference (five for a senior level appointment). Application materials should be sent to: Professor John M. Sedivy, Molecular Geneticist Search Committee Chair, c/o Ms. Elaine Butler, Department of Molecular Biology, Cell Biology and Biochemistry, Brown University, Providence, RI 02912. Letters of reference should be sent under separate cover to the same address.

*Brown University is an Affirmative Action/Equal Opportunity Employer. Qualified women, minorities, and protected persons are strongly encouraged to apply.*

## Lockheed Martin Space Operations

Lockheed Martin has several immediate and planned openings for life scientists in our Science Operations group as part of our NASA contract supporting the development of the Space Station Biological Research Project at Ames Research Center in Mountain View, CA. These are excellent alternative careers for individuals with strong research experience and demonstrated communication and teamwork skills.

### **Immediate openings:**

#### **INSECT HABITAT LEAD SCIENTIST**

You will be responsible for overseeing the science requirements and development of the Insect Habitat to be used for multi-generational studies in space. You should have a background in *Drosophila* genetics or entomology and a recent PhD, or MS with 5-6 years research experience.

#### **CELL CULTURE UNIT LEAD SCIENTIST**

You will be responsible for overseeing the science requirements and development of the Cell Culture Unit to be used for cell biology studies in space. You should have a background in cell biology, plant cell tissue culture or microbiology, with a recent PhD and post-doctoral experience.

#### **ADVANCED ANIMAL HABITAT LEAD SCIENTIST**

You will be responsible for overseeing the science requirements and development of the Advanced Animal Habitat to be used for research studies with rats and mice in space. You should have a recent PhD with a background in animal physiology, genetics or immunology and solid experience using rodent research models.

### **Planned Openings:**

#### **CELL BIOLOGISTS FOR HABITAT VALIDATION**

You will be responsible for integrating experimental requirements into the Space Station research program and for ensuring that habitats meet original design requirements for conducting research. You should have a background in cell biology, plant cell tissue culture or microbiology, with a recent PhD.

Information on the Space Station Biological Research Project can be found at [http://spaceprojects.arc.nasa.gov/Space\\_Projects/SSBRP/index.html](http://spaceprojects.arc.nasa.gov/Space_Projects/SSBRP/index.html) For information on NASA life sciences, point to [lifesci.arc.nasa.gov](http://lifesci.arc.nasa.gov).

Lockheed Martin offers a competitive salary and benefits package. For immediate consideration, please FAX your resume indicating position of interest to (650) 604-3579; or EMAIL to [hrlmesc@mail.arc.nasa.gov](mailto:hrlmesc@mail.arc.nasa.gov) or mail to: Human Resources, Lockheed Martin, P.O. Box 168, Moffett Field, CA 94035-0168. Equal Opportunity Employer.

LOCKHEED MARTIN



**X-ceptor Therapeutics** is a newly formed drug discovery company studying orphan nuclear receptors, which function as regulators of gene expression. We employ proprietary technology integrating molecular biology, high-throughput screening and medicinal chemistry to develop small molecule compounds for the treatment of a broad range of diseases.

*Opportunities are available for the following:*

#### **Research Scientists**

##### ***Chemistry***

The successful candidates will work closely with biologists to discover and develop novel small molecule drug candidates. Requires a PhD in synthetic organic chemistry, bio-organic chemistry or medicinal chemistry with working knowledge of structure-based and computational-aided drug design. Creativity, a commitment to scientific excellence and a desire to work in a multidisciplinary approach are essential qualities for these positions.

**Job# S-99116/17-SCI**

##### ***Molecular Biology***

Requires a PhD or MS in biological sciences and experience in molecular biology, including transcriptional control, cell culture and protein expression. **Job# S-99124/28-SCI**

##### ***Cell Biology***

The successful candidate will be responsible for transfer and implementation of new assays and new assay technologies into lead discovery for high throughput screening. Candidate will be responsible for the routine monitoring of high throughput screening data (quality control and data validation), and will participate fully in planning of subsequent lead follow-up and characterization with the Chemistry department. Requires a PhD or MS in Cell Biology or related discipline, with at least 5 years experience in biotech/pharmaceutical industry. Strong computer skills are a must. Management experience and experience with data handling software is preferred. **Job# S-99111-SCI**

#### **Research Associates**

The successful candidates will be responsible for the synthesis and structural elucidation of novel organic compounds. Requires an MS in chemistry and experience in multi-step organic synthesis and current spectroscopic techniques. **Job# RA-99118/20-SCI**

**X-ceptor Therapeutics** offers an informal, friendly work environment and full benefits package including stock options. Salary commensurate with experience and fit. For consideration, please send your resume to: **X-ceptor Therapeutics, Inc.**, Human Resources, Job# (see above), 10555 Science Center Drive, Suite B, San Diego, CA 92121; fax to: (619) 623-3395. EOE.



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## SCIENTISTS

Junior to Senior Levels, BS to Ph.D

- Immunochemistry and Metabolic Disease State; Methods Integration, Assay Development
- Infectious Disease Assays; Product Development
- Clinical Evaluation & Biostatistics
- System Qualification & Validation

## CARDIOVASCULAR

- Manager, Cardiovascular Disease Marker Assessment
- Manager, Cardiovascular Method Development

## DIAGNOSTIC ONCOLOGY

- Manager, Clinical Research (MD)
- Manager, New Marker Discovery

## MARKETING

- Marketing Manager; Immunoassay

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## MAYO CLINIC Section of Scientific Publications Manuscript Editor Positions

The Mayo Foundation and Mayo Clinic Section of Scientific Publications is undergoing significant growth and is recruiting 4 full-time staff biomedical editors located at Rochester, MN, Jacksonville, FL, and Scottsdale, AZ. The ideal candidates should have significant experience in biomedical editing. A literature, communications or biomedical Ph.D. or M.D. degree is desirable but not essential. These positions supplement the current 4 biomedical editors and 24 editorial assistants and proof-readers. The Mayo Clinic publishes more than 2,000 peer-reviewed papers and 15 textbooks annually. In addition to editing authors' manuscripts and grants, the successful candidates will be expected to participate in undergraduate and postgraduate teaching. Successful applicants will hold a faculty position at Mayo Medical School (level commensurate with experience). Excellent salary and benefits. Send CV to:

Joseph G. Murphy, M.D., FRCPI  
Chair, Section of Scientific  
Publications

Mayo Foundation and Mayo Clinic  
Plummer Building, S-10  
200 First Street, SW  
Rochester, MN 55905  
Fax: 507-284-2107

E-mail: [murphy.joseph@mayo.edu](mailto:murphy.joseph@mayo.edu)

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



## Post-Doctoral/ Research Fellowships

Mount Sinai School of Medicine is a leader in medical research and education. We have the following fellowships, funded by NIH National Research Awards, available:

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### Division of Infectious Diseases

Two research training positions are available July 1, 2000. Training will be under the direction of faculty members in one of the following areas:

- 1) molecular genetics and development;
  - 2) immunology, virology and gene therapy;
  - 3) cell cycle and signal transduction;
  - 4) adhesion molecules and matrix; and
  - 5) molecular basis of transport.
- Reply to: **Dr. Paul Klotman, Box 1243; Fax: 212-987-0389; E-mail: [PKlotma@smtplink.mssm.edu](mailto:PKlotma@smtplink.mssm.edu)**

### Division of Endocrinology and Metabolism

A post-doctoral fellowship is immediately available to study the genetics of thyroid autoimmunity in a well-funded and productive laboratory. Genomics experience helpful and capacity for independent work important. Reply to: **Dr. Terry F. Davies, Box 1055; Fax: 212-241-4218; E-mail: [TDavies@smtplink.mssm.edu](mailto:TDavies@smtplink.mssm.edu)**

Applicants must have M.D. with residency training, Ph.D., or M.D./Ph.D. degrees. Government regulations require that candidates selected for the above positions be U.S. citizens or permanent residents. For consideration, send C.V., following "Reply to" information for position of interest, to: **Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574.** We are an equal opportunity employer fostering diversity in the workplace.



GREENEBAUM CANCER CENTER  
University of Maryland Medicine

## POSITIONS IN MOLECULAR IMMUNOLOGY

The University of Maryland Greenebaum Cancer Center is expanding its translational research involving immunotherapy of multiple myeloma, prostate cancer and other malignancies. We wish to recruit individuals at the Assistant or Associate Professor level (M.D./Ph.D. or M.D., Ph.D.) with a background in molecular biology and human cellular immunology. Individuals with interests in tumor antigen discovery and characterization and/or a background in genomics with an emphasis in mutational analysis are strongly encouraged to apply. The ideal candidates will have a record of extramurally funded research. The Cancer Center and the University are expanding sophisticated clinical and laboratory programs which integrate molecular genetics, gene therapy, experimental hematology and immuno-biology, and have focused these programs on translational oncology research. Salary commensurate with experience. Interested applicants should submit their CV to: **Dean L. Mann, M.D., Professor, Greenebaum Cancer Center, N9E25, University of Maryland Medicine, 22 S. Greene Street, Baltimore, MD 21201**

*The University of Maryland, Baltimore encourages women and minorities to apply and is an AA/EEO/ADA Employer.*

## MEETINGS

### Whitehead Symposium XVII

#### "The Biology of Drug Discovery"

**October 24 - 26, 1999**  
**Kresge Auditorium, MIT**

**Speakers include:** Susan Amara, Carolyn Bertozzi, Patrick Brown, Jonathan Ellman, Ronald Evans, Stanley Fields, Judah Folkman, Claire Fraser, Ulrike Heberlein, Ira Herskowitz, Peter Kim, Chaitan Khosla, Eric Lander, John Mekalanos, Stuart Schreiber, Edward Scolnick, Robert Siliciano, Jose Varghese, Inder Verma, Charles Weissman, Jim Wells, Dyann Wirth.

#### Registration

Regular (includes postdocs): \$100  
Student: \$35 (ID required)  
MIT Student: No charge

To obtain a registration form call Whitehead Institute Public Affairs at 617-258-5183, or visit Whitehead Institute's website at [www.wi.mit.edu](http://www.wi.mit.edu) and click on "conferences."



DuPont, a world leader in fundamental and applied research in the chemical and biological sciences, is involved in research programs ranging from industrial bioprocesses to genetically improved crops. DuPont Central Research & Development, Biochemical Science & Engineering, has immediate opportunities for Ph.D. Principal Investigators, as well as M.S. and B.S. support staff to join multidisciplinary teams of Scientists. Candidates should have good communication skills and the ability to thrive in a team-oriented research setting.

#### **Synthetic Organic Chemistry**

This position offers unique opportunities to learn various aspects of research and development, from crop protection to medicinal chemistry using classical organic synthesis and molecular genetics to increase productivity. We are looking for a person with a Ph.D. in synthetic organic chemistry and a broad background in synthetic methodologies and discovery chemistry, with particular experience in one of the following areas: heterocyclic chemistry, transition metal catalyzed organic synthesis, solid phase synthesis of organic molecules, and solution or solid phase combinatorial synthesis. The successful candidate will work to develop new technologies for the discovery of novel agrochemical and pharmaceutical leads and will interact closely with DuPont's Agricultural and Pharmaceutical Products business. The candidate should enjoy collaborations with other scientists working in areas such as biochemistry, plant biology, chemical ecology, and development of automation. Ideally, we are looking for candidates who, while focused on organic synthesis, are interested in the scientific, business, environmental and social impact of their research. **Code: 99BSE2713N**

#### **Protein Engineering**

DuPont is expanding its commitment to research in Life Sciences. We are seeking a molecular biologist to join our Protein Engineering group to work interactively with enzymologists, microbiologists and structural biologists in the area of enzyme evolution to generate novel biocatalysts. We are interested in candidates who have a broad knowledge of microbial genetics and molecular biology in order to develop appropriate mutagenic, screening and selection strategies for evolving enzymes, pathways and organisms. An understanding of enzymology is highly desirable for characterizing the evolved enzymes obtained through mutagenesis. The successful candidate will have a Ph.D. and the demonstrated ability to conduct independent research in mutagenesis and protein evolution. Good communication skills and the ability to thrive in a team-oriented research setting are essential. **Code: 99BSE2714N**

#### **Bioprocess Engineering**

Bioprocess Engineering has openings for Ph.D. Chemical/Biochemical Engineers. The successful candidates will join a multidisciplinary team of molecular biologists, microbiologists, biochemists, chemical and biochemical engineers and other members of DuPont's research staff. The Bioprocess Engineering group seeks to understand and develop processes that utilize biotransformations to synthesize products for DuPont's chemicals and materials businesses. Key research areas are fermentation process development, optimization and modeling, enzymatic pathway modeling, separations process research and development, and process synthesis and evaluation. **Code: 99BSE2711N**

#### **Molecular Microbiology**

The Microbial and Industrial Biotechnology group is seeking Principal Investigators in the area of molecular microbiology. The focus of the group is to discover the enzymes and the genes of new bacterial or fungal biochemical pathways, as well as engineer new organisms for industrial applications. Candidates should have a Ph.D. in microbiology, a strong knowledge of microbial diversity and metabolism, and extensive experience in microbial biochemistry of molecular genetics. Specialists in other forefront approaches to microbiology such as structural and functional genomics will also be considered.

**Code: 99BSE2715N**

#### **B.S. and M.S. Positions**

DuPont Central Research & Development, Biochemical Science & Engineering also has openings for B.S. and for M.S. degree candidates for research and process development support in the following areas: Chemical/Biochemical Engineering, micro/molecular biology, biology, biochemistry, organic chemistry, polymer science, plant biology or related fields. The successful candidates will join a multidisciplinary team of molecular biologists, microbiologists, biochemists, chemical and biochemical engineers and other members of DuPont's research staff. **Code: 99BSE2912N**

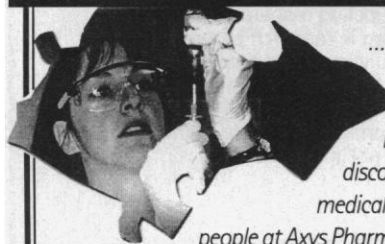
DuPont offers a competitive salary and an outstanding benefits package. To apply, please refer to job code and mail your resume to: DuPont Company, Professional Staffing, N12400, 1007 Market Street, Wilmington, DE 19898 or FAX to: 1-800-631-2206/302-773-4745. An Equal Opportunity Employer.



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Located in South San Francisco, Axys Pharmaceuticals is a leader in the integration of drug discovery technologies from gene identification through clinical development. We are focused on the discovery of small molecule therapeutics, and have several promising research collaborations with world-class pharmaceutical companies. We currently have an excellent opportunity for experienced scientists and researchers to join our multidisciplinary R&D team.

## Scientist, Medicinal Chemistry

In this pivotal role, you will carry out the design and multistep syntheses of small molecule drug candidates for inflammation or oncology. The position requires a Ph.D. in organic or medicinal chemistry with 0-4 years of postdoctoral research experience. The ability to collaborate with a multidisciplinary team of medicinal chemists, enzymologists, crystallographers, molecular modelers, cell biologists and pharmacologists is essential. (Job# N99-017-SCI)

## Research Associates/ Senior Research Associates, Medicinal Chemistry

You will carry out multistep syntheses of small molecule drug candidates; synthesize and characterize novel compounds for biological assays; perform purification and characterization of intermediates and products; and identify/verify organic materials. The positions require a BS/MS in medicinal/organic chemistry; 2-4 years of hands-on experience in NMR, HPLC, MS, and multistep synthetic organic chemical reactions; the ability to utilize chemical literature and design synthetic approaches; a proven record of accomplishment; and excellent problem solving and written/verbal communication skills. (Job# N99-003,020,021-SCI)

## Scientists & Research Associates Synthetic Organic/ Combinatorial Chemistry (Ph.D. & MS/BS levels)

We have immediate openings in our Advanced Technologies Division for Scientists with a Ph.D. and 1-3 years' postdoctoral/industrial experience and Research Assistants/Associates with BS/MS training and 1-5 years' industrial experience. We are seeking outstanding synthetic or medicinal chemists who are active experimentalists and who are eager to work in an integrated, multidisciplinary drug discovery environment. Preferably, you have experience in synthetic organic, combinatorial or medicinal chemistry, and will carry out design and laboratory-scale syntheses of organic compounds and combinatorial libraries for evaluation as part of continuing medicinal chemistry programs. Experience in multistep organic chemical transformations on gram scale is absolutely necessary. Use of NMR, IR, MS, HPLC and routine compound isolation and characterization methodology is required. Good written and verbal communication skills, a record of accomplishment, and the ability to work well with others are also required. (Job# N98-ACH-SCI)

We offer an extremely competitive salary, full benefits, and career advancement within a progressive, growing company. Please forward your resume/cv to:

Axys Pharmaceuticals  
HR Department  
(Attn: Job#), 180 Kimball Way  
South San Francisco, CA 94080; email:  
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## Head of Molecular and Cellular Biology

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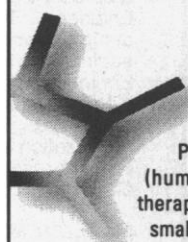
In this key role, you will provide scientific guidance as you oversee the expansion of an existing, small molecular biology research group to a department covering screens and experiments which will facilitate drug discovery efforts in the areas of oncology and infectious diseases, including mainly in vitro (cell based and cell free) systems.

The ideal candidate will have a Ph.D. in molecular and cellular biology, along with postdoctoral training, at least 5-10 years of industrial experience at various levels, and a demonstrated level of accomplishment as evidenced by publications. The position calls for in-depth knowledge of the mechanisms governing gene transcription, a solid background in functional genomics, and excellent interpersonal skills, including the proven ability to lead scientists within an interdisciplinary task, ensuring scientific excellence and result orientation. The demonstrated ability to manage and recruit world-class scientists is crucial. In addition to broad knowledge and scientific excellence/leadership in molecular biology, candidates should have extensive experience in assay development and screening for drug discovery in general, and lead optimization in particular. Basic or preferably in-depth knowledge in the fields of oncology and/or infectious diseases is highly desirable.

We offer a competitive salary & benefits package, along with the opportunity to join our interdisciplinary team of highly motivated, future-oriented scientists dedicated to the application of our technology. Please forward your CV to:

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**Scientist/Senior Scientist/Division****Manager, Preclinical/Regulatory Toxicology**

PhD with at least 5 years of experience as Study Director in GLP environment. Broad background in preclinical safety assessment essential, experience in teratology, reproductive toxicology, and/or neurotoxicology desirable. Successful candidate will serve as Study Director for toxicology studies conducted in support of regulatory submissions. Candidates with board-certification (D.A.B.T.) and at least 10 years of experience will be considered for appointment as Manager of IITRI's Regulatory Toxicology Division. **Job Code: SCI-01**

**Senior Scientist/Division Manager,****Experimental Toxicology and Carcinogenesis**

PhD with at least 10 years of experience in toxicology and/or carcinogenesis. Experience in cancer chemoprevention highly desirable. Successful candidate will apply molecular, biochemical, or cell biological approaches to studies of the efficacy and toxicology of novel chemopreventive and chemotherapeutic drugs. Candidates with a strong history of extramural funding will be considered for appointment as Manager of IITRI's Experimental Toxicology and Carcinogenesis Division. **Job Code: SCI-02**

**Study Directors (2), Inhalation Toxicology**

PhD with at least 5 years of experience as Study Director in a GLP environment. Board certification (D.A.B.T.) and previous inhalation toxicology experience preferred, but not essential. **Job Code: SCI-03**

**Study Director,****Developmental/Reproductive Toxicology**

PhD with at least 5 years of experience as a Study Director conducting GLP developmental and reproductive toxicology studies. D.A.B.T. preferred. **Job Code: SCI-04**

**Study Director, General Toxicology**

PhD to serve as Study Director of GLP toxicology studies. Interest in neurotoxicology desirable but not essential; board certification (D.A.B.T.) preferred. **Job Code: SCI-05**

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**Scientist, Molecular Diagnostics**

PhD in Molecular Biology with at least 2-5 years of post-doctoral experience, preferably in infectious diseases. Experience in molecular diagnostics, particularly the TaqMan System, highly desirable. Candidates must have ability to obtain US government security clearance. **Job Code: SCI-06**

**Scientist, Mass Spectroscopist**

Analytical chemist with at least 10 years of hands-on experience in mass spectrometry to provide analytical support to programs in inhalation toxicology and pharmacokinetics and metabolism. BS required, MS preferred. **Job Code: SCI-07**

**Inhalation Technologists (2)**

BS/MS with at least 5 years of hands-on experience in generation and monitoring of test atmospheres (vapors and respirable aerosols) for inhalation toxicology studies. Experience with both rodent and non-rodent studies desirable. **Job Code: SCI-08**

**Senior Technical Writer/Editor**

BS/MS/PhD with at least 10 years of experience to supervise and participate in preparation of technical reports and proposals. Outstanding editorial and data management skills essential; experience in preparing FDA- and EPA-compliant study reports highly desirable. Suitable candidate may be appointed as Supervisor of Life Sciences Technical Reporting Section. **Job Code: SCI-09**

IITRI offers a complete benefits package. Qualified candidates should forward resume including salary history/requirements indicating appropriate **Job Code**. Mail: **IIT Research Institute, Human Resources Dept. SCI, 10 W. 35th St., Chicago, IL 60616**. Fax: **ZV-6215, 800-232-9237**. E-mail: **hr-chgo@iitri.org**

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**POSTDOCTORAL FELLOWSHIP****IN****CYTOKINE mRNA REGULATION****Laboratory of Immunology, NEI, NIH**

An Intramural Research Training Award to study post-transcriptional regulation of cytokine mRNAs during T cell activation is available in the Clinical and Molecular Immunology Section. The lab is engaged in basic research and clinical trials related to autoimmune diseases. The aim of the current project is to develop novel immunotherapies based on CD28 mediated signal transduction. Applicants will be highly self-motivated individuals with an extensive working knowledge of current techniques in molecular biology. Prior experience in the isolation and characterization of RNA binding proteins is desirable. A background in immunology/ophthalmology is not required. The position is available beginning Fall 1999 for 2 or more years. Candidates must have a doctoral degree or equivalent training and less than 5 years of postdoctoral experience. Salary is based on the NIH pay scale and benefits are included. Applicants should send a brief cover letter describing their research interests and experiences, curriculum vitae with bibliography, and three letters of recommendation to:

**Jack A. Ragheb, M.D., Ph.D.**  
**Laboratory of Immunology/NEI/NIH**  
**Bldg.10, Rm.10N112A**  
**10 Center Dr. MSC-1857**  
**Bethesda, Maryland 20892-1857**

Deadline for receipt of applications is September 30, 1999.

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**TRAINING****Medical Informatics Training****at the****Lister Hill National Center****for Biomedical Communications****National Library of Medicine (NLM)**

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- Medical language processing
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- Database design
- Machine learning
- Expert systems
- Computer-based learning

The NLM is one of the National Institutes of Health, the government's primary agency for support and conduct of biomedical research. More details can be seen at our Web site at

**<http://lhncbc.nlm.nih.gov>**

If you are interested in one of our training programs, contact:

May Cheh; National Library of Medicine;

8600 Rockville Pike, Mail Stop 54;

Bethesda, MD 20894-6075 (Email: [cheh@nlm.nih.gov](mailto:cheh@nlm.nih.gov))





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For further information, contact:

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Narragansett, RI 02882  
<http://www.gso.uri.edu>  
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660 So. Euclid Ave., Box 8226  
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The next major biomedical discoveries will be made at the interface between cell and molecular biology and other disciplines. Join us in partaking in a new campus-wide venture that brings together biologists, chemists, physicists, engineers, and computer and physician scientists to pioneer the new frontier.

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<http://biochem.stanford.edu>



GREENEBAUM CANCER CENTER  
University of Maryland Medicine

**FACULTY POSITION:  
UNIVERSITY OF MARYLAND  
GREENEBAUM CANCER CENTER**

The University of Maryland Greenebaum Cancer Center invites applications for a full time faculty position at the Assistant Professor level to play a pivotal role to develop basic and translational medical research aimed at applying insights gained from molecular pathways of cell death to advance the treatment of hematologic malignancies. The candidates are required to be board eligible/certified in hematology and medical oncology. The successful candidate should have an academic background in hematologic malignancies, allogeneic and autologous bone marrow transplantation, and molecular biology as well as a demonstrated ability to integrate these fields through active translational research. Qualified candidates should send a CV, a detailed description of research plans, and three letters of reference (addressing clinical and research abilities) to: **Sanford A. Stass, M.D., Director, University of Maryland Greenebaum Cancer Center, 22 South Greene Street, Baltimore, MD 21201.**

*Women and minority candidates are encouraged to apply. The University of Maryland Greenebaum Cancer Center is an affirmative action equal opportunity employer and provides a smoke free work environment.*

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A firm commitment is a philosophy easily recognized in the Discovery Research programs at our **Nutley, NJ** location. We believe the key to innovating the products of tomorrow begins with hiring the most impressive professionals today. We're seeking an ambitious, talented individual who is interested in utilizing our prestigious, modernized laboratory capabilities along with our network of world-class scientists and collaborators in genomics, functional genomics, and high-throughput screening to drive discovery research to a higher level.

### Software Engineer/Programmer

You will provide support in the development of computer programs, tools and processes. Your associated responsibilities will include helping in data handling procedures for manipulation, analysis and organization and writing, coding, testing and debugging programs for large scale biological data management applications, data analysis and visualization. You'll also comprehend and apply programming solutions to Bioinformatics projects. Your additional responsibilities will include performing application programming and development and helping design, configure and integrate databases.

Successful candidates will have a MS or PhD in computer science, statistics or biology or an equivalent knowledge of programming. 2+ years of programming experience and a strong background in C, C++/Java and Perl is essential. You must have excellent oral and written communication skills. Experience with databases and related programming, statistical approaches/packages, SAS and S-Plus is desirable.

We offer an excellent salary and benefits package, along with a work environment that encourages career growth. For immediate consideration, please send your resume, indicating salary requirements, to: **Roche Vitamins Inc., Human Resources/AM-99029, 45 Waterview Boulevard, Parsippany, NJ 07054-1298.** We appreciate your interest in Roche Vitamins Inc., but can only respond to qualified candidates. Roche Vitamins Inc. is an equal opportunity employer fully committed to diversity in the workplace.



## GENETIC EPIDEMIOLOGIST Tenure Track Position

The Marshfield Medical Research Foundation seeks applications for a tenure track position in the field of genetic epidemiology. Both new and more established investigators are welcome to apply. Candidates must hold a doctorate degree in statistics, genetics, epidemiology or related field. At least 2 years postdoctoral experience preferred. Marshfield boasts a rapidly growing, vibrant research environment with strong programs in both genetics and epidemiology. Send curriculum vitae and the names of three references to: **Mary Treichel, Marshfield Clinic, 1000 N. Oak Avenue, Marshfield, WI 54449; phone 800-782-8581, ext. 94880; fax 715-389-4889; email treichel@mfldclin.edu.** *Marshfield Clinic is an Equal Opportunity/Affirmative Action Employer.*



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Transgenomic is a rapidly growing global company with a core biotechnology business that includes principal technologies for DNA/RNA and protein analysis and separations. We offer an opportunity to be involved in the development of cutting-edge molecular biology applications with the WAVE™ Nucleic Acid Analytical platforms as well as other research tools. Positions are in San Jose, CA; Boston, MA; Bethesda, MD; Omaha, NE; Tokyo, Japan and Germany.

### APPLICATIONS SCIENTISTS

We have highly challenging positions available in our Applications Pre- and Post-sales support group. You will be expected to demonstrate molecular biology experience with excellence in PCR trouble shooting, RT-PCR, differential display, RNA work and mutation detection. A Ph.D. or MS in molecular biology with 5+ years of experience in molecular biology is needed. You will be designing and conducting experiments with customers, evaluating data and preparing research documentation. Travel up to 30% to customer sites, scientific meetings and industry shows.

### RESEARCH ASSOCIATES

We are seeking individuals with a BS/MS in Biology, Biochemistry or Molecular Biology with 5+ years of experience in an academic or industrial setting. You will be expected to demonstrate experience in developing and validating PCR methodologies, DNA and RNA isolation and have a solid knowledge of spectral chemistry. Hands on experience with HPLC preferred.

For confidential consideration please send or fax resume to: **Transgenomic Human Resources, 2032 Concourse Dr. San Jose, CA 95131; Fax 408-432-8910.**  
Email: [info@transgenomic.com](mailto:info@transgenomic.com)  
We are an Equal Opportunity Employer  
<http://www.transgenomic.com>



## POSITIONS OPEN

### FALL 2000 FACULTY POSITIONS CHEMISTRY AND BIOCHEMISTRY

Applications are invited for two full-time tenure-track positions in the Department of Chemistry and Biochemistry at Worcester Polytechnic Institute (WPI). WPI is situated in Worcester, Massachusetts, an innovative technological university of engineering, science, management, the humanities and arts, and the social sciences with an enrollment of 2,600 undergraduate and approximately 1,000 full- and part-time graduate students.

The Department of Chemistry and Biochemistry has undergone considerable growth in the past few years with the appointment of a new Head, two new faculty in biochemistry, extensive renovation of facilities, acquisition of new equipment, and procurement of significant external funding. In addition, undergraduate and graduate enrollments have more than doubled. We seek to continue our growth with the appointment of two faculty in the focus areas of synthesis and biochemistry.

**Biochemistry:** The Department of Chemistry and Biochemistry solicits applications for a tenure-track appointment in biochemistry at the **ASSISTANT PROFESSOR** level. Applications are invited from candidates in all areas of biochemistry. However, we seek individuals who will complement existing areas of expertise in the department.

**Synthesis:** The Department of Chemistry and Biochemistry solicits applications for a tenure-track appointment in synthesis at the **ASSISTANT PROFESSOR** level. Applications are invited from candidates in all areas of synthesis. However, we seek individuals who will complement existing areas of expertise in the department.

Applicants should have a Ph.D. degree and will be expected to develop strong teaching and externally funded research programs at the undergraduate and graduate levels.

To apply, please submit a letter indicating position of interest. Enclose a complete résumé, a three-page statement of research plans, and arrange to have three letters of recommendation sent to: **James P. Dittami, Head, Department of Chemistry and Biochemistry, Worcester Polytechnic Institute, 100 Institute Road, Worcester, MA 01609-2280.** Review of applications will begin September 20, 1999, and will continue until the positions have been filled.

WPI offers a smoke-free environment. To enrich education through diversity, WPI is an Affirmative Action/Equal Opportunity Employer.

### ANATOMY AND PHYSIOLOGY/ BIOLOGY EDUCATION

The Department of Zoology and Genetics at Iowa State University seeks a tenure-track faculty member to teach human anatomy and physiology, to supervise coordination of accompanying laboratories, and to develop a program of scholarship in biology education. The successful candidate will have a Ph.D. in a biological science and a record of scholarly accomplishment in biological science education. Those making a transition from biological research into educational scholarship are encouraged to apply. Areas of interest may include distance education, innovative teaching methods, outreach to teachers, or issues such as gender in science education or curriculum reform. The person chosen will be expected to attract outside funding to support their scholarship or teaching innovations, and attract graduate students in the area of biology education. The person will join a growing campus community with interests in science education. A portfolio approach to evaluation and opportunities for professional development will provide clear support for this position, and a start-up package and logistical staff support will be provided. This position is available starting January 1, 2000. By October 1, 1999, submit a curriculum vitae, a statement of teaching philosophy, and a plan for future scholarly activities and arrange for three letters of reference to be sent to: **Dr. Dennis G. Emery, Department of Zoology and Genetics, Iowa State University, Ames, IA 50011. E-mail: dgemery@iastate.edu.**

## POSITIONS OPEN

### FACULTY POSITION IN NEUROSCIENCE NORTHEASTERN OHIO UNIVERSITIES COLLEGE OF MEDICINE

The Department of Neurobiology and Pharmacology of the Northeastern Ohio Universities College of Medicine (NEOUCOM) ([website: http://www.neoucom.edu](http://www.neoucom.edu)) seeks applications for a tenure-track position in cellular and/or molecular neuroscience. Proposed starting date of July 1, 2000, or earlier. We seek applicants at the **ASSISTANT PROFESSOR** level, but may consider more advanced faculty. Candidates must have a Ph.D. and/or M.D. and should have at least two years of postdoctoral research experience. Applicants must have demonstrated research productivity and the capability of establishing an externally funded research program. Current research interests in the department include sensory and auditory processing in the central nervous system, neurochemical anatomy and steroids in the nervous system, neuroimmunology, synaptic plasticity, LTP in spatial learning, age and gender relations to neuropathic pain, opiate-induced analgesia, and apoptosis and molecular correlates of Alzheimer's disease. We seek individuals who can complement ongoing research. Opportunities for collaborations are excellent. Successful candidates will teach medical and graduate students an integrated neuroscience course and participate in an interdisciplinary neurosciences graduate program and develop graduate courses in their field of expertise.

NEOUCOM participates in a consortium with Kent State University, University of Akron, Youngstown State University, and eight teaching hospitals to offer combined B.S./M.D. degrees. Basic medical science faculty participate in Ph.D. graduate programs in conjunction with the School of Biomedical Sciences at Kent State University. Graduate training opportunities in biomedical engineering are available in collaboration with the Institute for Biomedical Engineering Research at The University of Akron.

Applicants should send a letter of application accompanied by a curriculum vitae, a statement describing research interests, goals and plans for external support, as well as the names and complete addresses of three references by October 15, 1999. Send materials to:

#### Human Resources

c/o Raymond E. Papka, Ph.D.

Professor and Chairperson

Department of Neurobiology and Pharmacology

Northeastern Ohio Universities

College of Medicine

P.O. Box 95

Rootstown, OH 44272

NEOUCOM is an Affirmative Action/Equal Opportunity Employer.

### FACULTY POSITIONS IN MOLECULAR BIOLOGY

The University of Texas

Southwestern Medical Center

The Department of Molecular Biology at the University of Texas Southwestern Medical Center invites applications for tenure-track faculty positions. We are especially interested in individuals working on vertebrate development and cell cycle control. Successful applications should be capable of establishing a vigorous independent research program and teaching in one of several active graduate programs. Attractive start-up packages, state-of-the-art core facilities, and new laboratory space are available.

Applicants should submit a curriculum vitae containing a brief summary of past research accomplishments, a statement of future objectives, and names of three references to:

Eric N. Olson

Chairman

Department of Molecular Biology

University of Texas

Southwestern Medical Center at Dallas

5323 Harry Hines Boulevard

Dallas, TX 75235-9148

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## POSITIONS OPEN

### FACULTY POSITIONS UNIVERSITY OF SOUTH FLORIDA DEPARTMENT OF MARINE SCIENCE

The Department of Marine Science at the University of South Florida (USF) invites applications for two tenure-track positions in biological oceanography. Applications will be welcomed from individuals with a research specialty in the two following broad topic areas: marine zooplankton and marine fishes. Positions can be filled as early as 1 August 2000 and will be located on the St. Petersburg campus of the University of South Florida. Salary and start-up funds will be competitive.

**Requirements:** Candidates must hold a Ph.D. degree in a relevant field at the time of appointment. Candidates must have a publication record, potential to attract external funding for their research, and be committed to quality teaching of graduate students. Appointments are expected to be made at the **ASSISTANT PROFESSOR** level, but qualified candidates may be considered at the **ASSOCIATE** level. Appointment at the Associate Professor level will require that the candidates meet or exceed university and departmental standards for tenure. USF's Department of Marine Science is a multidisciplinary graduate-level department with 25 core faculty and about 100 graduate students in the fields of biological, chemical, geological, and physical oceanography. It has close ties with the Florida Institute of Oceanography, USF Center for Ocean Technology, the Florida Department of Environmental Protection's Marine Research Institute, and the USGS Center for Coastal Geology. Additional information about the department is available at the [website: http://www.marine.usf.edu](http://www.marine.usf.edu).

Contact: Applicants should submit a curriculum vitae, statements of research and teaching interests, and the names, addresses (including e-mail), and telephone numbers of three references to: **The Search Committee Chair, Dr. Jose Torres, Department of Marine Science, University of South Florida, 140 Seventh Avenue South, St. Petersburg, FL 33701.** Deadline: 1 October 1999.

The University of South Florida is an Equal Opportunity/Affirmative Action/Equal Access Institution. For disability accommodations, please Telephone: 727-553-3938.

### ASSISTANT CHAIR BIOMEDICAL ENGINEERING DEPARTMENT Northwestern University

The Biomedical Engineering Department at Northwestern University seeks a Ph.D. in bioengineering or a related field to serve as Assistant Chair, with a co-terminus appointment as Lecturer. The Assistant Chair will work closely with the Chair on many academic activities. A major responsibility will be administration of Northwestern's component of a multi-institutional educational project, involving coordination across sites, working with industrial partners, performing program assessment, and assisting in the production of educational materials. The Assistant Chair will also work with current and prospective students, staff, and faculty to administer the department's well-established graduate and undergraduate programs, and prepare written and World Wide Web-based materials. Some teaching is possible. Excellent communication and interpersonal skills are required; previous administrative experience is desirable. The Biomedical Engineering Department is one of the nine departments of the McCormick School of Engineering and Applied Sciences on the Evanston Campus. Please see our [website: www.nwu.edu/bme](http://www.nwu.edu/bme) for further information. For full consideration, applications should be received by October 1, 1999. Please send a letter, résumé, and names of four references to: **Chair, Biomedical Engineering Department, Northwestern University, 2145 Sheridan Road, Evanston, IL 60208-3107. E-mail: bme@nwu.edu.** Women and minorities are encouraged to apply. Northwestern University is an Affirmative Action/Equal Opportunity Employer. Hiring is contingent upon eligibility to work in the United States.

## Chair and Chief of Surgery Yale University School of Medicine Yale-New Haven Hospital

Applications are invited for the position of Chair/Chief of Surgery at Yale University School of Medicine and Yale-New Haven Hospital. Applicants should be distinguished surgeons/investigators with outstanding records of educational, clinical and scholarly achievements. A broad knowledge of the surgical disciplines and demonstrated leadership and administrative skills are required. The Chair/Chief will assume responsibility for directing the clinical, research and teaching programs in Surgery at the Medical School and Surgery services of Yale-New Haven Hospital and the Veterans Affairs Medical Center in West Haven. The Yale Department of Surgery is comprised of nearly 80 full-time faculty, is nationally recognized for its robust investigative and teaching programs, and is responsible for all surgical services at Yale-New Haven Hospital, a 900 bed teaching hospital affiliated with Yale University. It is expected that the appointment will be made at the Professorial level.

Interested candidates should send their curriculum vitae and expression of interest by November 1, 1999 to: Ralph I. Horwitz, M.D., Chair, Department of Medicine, Yale University School of Medicine, P. O. Box 208056, New Haven, Connecticut 06520-8056.

Yale University is an equal opportunity, affirmative action employer. Minority and women candidates are urged to apply.

## ANNOUNCEMENTS

## DOES THIS SOUND LIKE YOU OR SOMEONE YOU KNOW?

*"I have long been interested in science, and in helping people. During my training, I had a number of clinical experiences which convinced me that I wanted to specialize in immunology at the bench, but still have patient contact."*

*"I was always tinkering with my toys, taking them apart, trying to fit the square peg in the round hole. NIH is the only place to be for cutting-edge training, creativity, and pure excitement."*

Has your interest always been to pursue medical research? Do the realities of staggering educational debt appear to prevent you from realizing your dreams? NIH offers a variety of clinical and basic science postdoctoral training fellowships that can be combined with educational loan repayment incentives. You owe it to yourself to know about these programs (or share the information with someone in need!) as you make your career decisions. You owe it to yourself to learn more about what NIH can do for you.

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



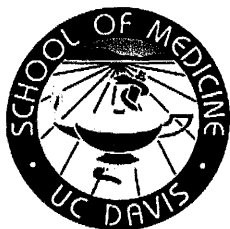
For more information on the Loan Repayment Program and postdoctoral training, visit our websites at:

**<http://www.training.nih.gov> and  
<http://lrp.info.nih.gov>**



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



The UNIVERSITY OF CALIFORNIA, DAVIS SCHOOL OF MEDICINE is planning an expansion of its Cardiovascular Medicine program with an emphasis on vascular biology. Resources have been committed for a Chief of Cardiovascular Medicine, a Chief of Endocrinology, an Endowed Professor within the Department of Pathology, and an Endowed Professorship in Inflammation within the Division of Nephrology.

### THE DEPARTMENT OF INTERNAL MEDICINE DIVISION OF NEPHROLOGY ENDOWED PROFESSORSHIP

UC Davis has a full-time Endowed Professorship position available in the tenured track as an Assistant/Associate Professor. Appointment will be in the Department of Internal Medicine, Division of Nephrology and either Human Physiology or one of the other basic science departments. Candidates must possess a Ph.D. and have interests in molecular or cellular biology, as related to inflammation and vascular biology. Applicants at the associate professor level must have an established externally-funded research program. Applicants at the assistant professor level must have postdoctoral experience with the potential to build a solid research program based on externally funded support as well as documented productivity. The responsibilities for this position include development of an active, innovative, independent research program and participation in graduate education. Applicants should submit 1) a curriculum vitae (including teaching experience); 2) a synopsis of past, present, and future research goals; 3) up to 3 representative reprints; and 4) 5 names of reference to: **George A. Kaysen, M.D., Ph.D., TB 136, University of California, Davis, CA 95616**. Open until filled, but not later than July 1, 2000. For further information on the vascular biology program contact Dr. Fitz-Roy E. Curry, Associate Dean for Research at [fc Curry@ucdavis.edu](mailto:fc Curry@ucdavis.edu)



**NATIONAL INSTITUTE OF MENTAL HEALTH**  
NATIONAL INSTITUTES OF HEALTH

#### Chief, Molecular and Cellular Neuroscience Research Branch Chief, Developmental Neurobiology Program

Applications are being accepted for two program positions in the Division of Neuroscience and Basic Behavioral Science. This Division is responsible for NIMH funding of extramural research grants in the areas of basic and clinical neuroscience, genetics, therapeutics development, and basic behavioral science, as well as research training in these areas. The Molecular and Cellular Neuroscience Research Branch is a major component of the Division, with an annual budget of approximately \$60 million, and the Developmental Neurobiology Program will be a major focus for growth within the Branch.

##### • Chief, Molecular and Cellular Neuroscience Research Branch (GS-15)

The Branch Chief will plan and administer a broadly based nationwide program of support for neuroscience research at the molecular and cellular level. Current scientific areas of emphasis include developmental neurobiology, signal transduction, synaptic plasticity, neuroendocrinology, neuroimmunology, neuropharmacology, and therapeutics development. Responsibilities will include evaluation of the portfolio of extramural grants, participation in funding decisions, and the development and implementation of policies related to resource allocation. **Applications for this position will be accepted through September 20, 1999.**

##### • Chief, Developmental Neurobiology Program (GS-13/14)

The Program Chief will evaluate and manage a portfolio of extramural research grants focused on the topic of developmental neurobiology. Responsibilities include participation in funding decisions, policy development and implementation, and coordination with other programs, such as neurogenetics. **Applications for this position will be accepted through November 12, 1999.**

Applicants should have a Ph.D. or M.D. degree, or equivalent training, in a discipline related to neuroscience. They should have experience conducting neuroscience research at the postdoctoral level or as an independent investigator. GS-15 Civil Service positions have a salary range from \$80,658 to \$104,851 per annum (with locality pay) which includes special salary for Medical Officers. GS-13/14 positions have a salary range from \$58,027 to \$93,233 per annum (with locality pay) which includes special salary for Medical Officers. Physicians may be eligible for a Physician's Comparability Allowance (PCA) between \$5,000-\$20,000 a year.

Copies of the full text vacancy announcements are available via the World Wide Web: <http://www.nimh.nih.gov/om/pmb/jobs.htm>. Interested candidates may contact Ms. Margot Darby, NIMH Personnel Management Branch, at (301) 443-9094. Applications will be accepted if postmarked by the closing date and received within 5 working days.

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## POSITIONS OPEN

The Department of Biology at East Carolina University invites applications for two nine-month **TENURE-TRACK FACULTY POSITIONS** in (i) plant-insect interactions and (ii) phycology, effective August 14, 2000. We seek candidates with postdoctoral experience and an established publication record to contribute to the undergraduate and graduate programs. Successful candidates are expected to develop an externally funded research program, teach at both undergraduate and graduate levels, and render appropriate professional service.

Plant-insect interactions. **ASSISTANT PROFESSOR** appointment for an Ecologist or Evolutionary Biologist working in an area of plant-insect interactions to complement existing departmental research interests. Applicants should send a statement of teaching and research interests, curriculum vitae, and names, addresses (including e-mail), and telephone numbers of three references to: **Dr. Trip Lamb, Department of Biology, East Carolina University, Greenville, NC 27858-4353.**

Phycology. **ASSISTANT PROFESSOR** appointment to develop a graduate phycology course and participate in the M.S. program in biology and the Ph.D. program in coastal resource management. A letter of application describing qualifications and interests, curriculum vitae, and the names, addresses (including e-mail), and telephone numbers of three references should be sent to: **Dr. Donald W. Stanley, Department of Biology, East Carolina University, Greenville, NC 27858-4353.**

The thirty-plus Biology Department faculty includes a strong contingent conducting research in benthic, fish, microbial, plant, ecosystem, and evolutionary ecology ([website: http://www.ecu.edu/biology/](http://www.ecu.edu/biology/)). ECU's proximity to the North Carolina coast provides excellent access for ecological and evolutionary studies. Application deadline for both positions is 15 October 1999. *ECU is an Equal Opportunity/Affirmative Action University and accommodates persons with disability. Applicants must comply with the Immigration Reform and Control Act.*

### ASSISTANT DEAN FOR ACADEMIC AFFAIRS GRADUATE SCHOOL Yale University

The Yale Graduate School invites applications for the position of Assistant Dean for Academic Affairs in Science and Engineering. This individual will work closely with the Dean and Associate Deans to administer and develop academic programs leading to both Master's and Ph.D. degrees. The Assistant Dean will contribute to the oversight and management of the graduate programs in the sciences and engineering and provide a high level of academic support to the Dean and Associate Deans.

Ph.D. in science or engineering and three years of experience in teaching and/or administration at the college or graduate level required.

Three-year term appointment, renewable. Start date prior to September 30, 1999.

Please send cover letter, curriculum vitae, and three letters of references to: **D. M. Cable, Yale University, Department of Human Resources, P.O. Box 208256, 155 Whitney Avenue, New Haven, CT 06520-8256.** Please refer to Source Code EACH4997 on all correspondence.

*Yale University is an Affirmative Action/Equal Opportunity Employer.*

**FACULTY POSITION** at the rank of **RESEARCH INSTRUCTOR** is available to lead a NIH-funded research on molecular basis of hereditary colon cancer. Candidate should have a Ph.D. or a M.D.-Ph.D. degree with three to five years of productive postdoctoral experiences. Qualified candidates with documented track record in genetics and molecular biology are strongly encouraged to apply. *U.S. citizenship or permanent residency is required.* Interested applicants should send curriculum vitae and the names of three references to: **Dr. Bo Liu, University of Pittsburgh Cancer Institute, E1047BST, Pittsburgh, PA 15213.** FAX: 412-624-7737; e-mail: [liub@msx.upmc.edu](mailto:liub@msx.upmc.edu).

## POSITIONS OPEN

### DEPARTMENT CHAIR

The School of Veterinary Medicine of the University of Nevada, Reno invites applications for the position of Department Chair. The School of Veterinary Medicine offers undergraduate and graduate degrees in the disciplines relating to veterinary medicine and animal science. The department's highly regarded preveterinary program has a remarkable success at placing its students in the nation's veterinary colleges.

The successful candidate must have (1) a Doctorate degree in a discipline relative to veterinary medicine and/or animal science; (2) at least 10 years of experience as a faculty member, with credentials in teaching, research, and extension; (3) demonstrated experience with applied and basic programs of veterinary medicine; and (4) a working knowledge of contemporary biotechnology relating to animal health and production.

The successful candidate will provide leadership for the department's undergraduate and graduate programs in veterinary medicine and animal science research programs together with the administration of the department's extension and outreach programs and the administration of departmental office and facilities. This position has full administrative and leadership responsibility for departmental academic programs, personnel management, budget, and services through personal leadership. The Chair will be required to strengthen the department's activities in the molecular sciences.

Candidates should submit (1) a letter of interest, (2) a current curriculum vitae and copies of three significant publications, and (3) names and addresses of at least three references (including e-mail, FAX, and telephone numbers) to:

**Department Chair Search Committee  
Dr. Ronald S. Pardini  
College of Agriculture, Mail Stop 222  
University of Nevada, Reno  
Reno, NV 89557**

To receive full consideration, applications must be received for review by September 30, 1999.

*Affirmative Action/Equal Opportunity Employer.*

### FACULTY POSITION IN IMMUNOLOGY

The Division of Basic Medical Sciences of Mercer University School of Medicine requests applications for a tenure-track **ASSISTANT PROFESSORSHIP** in immunology. The successful applicant will contribute to immunology and one or more related fields (such as immunogenetics, neuroimmunology, parasitology) in an interdisciplinary, problem-based medical education curriculum that is presented in small-group tutorials rather than lectures. It is expected that the appointee will establish an externally funded research program in her or his area of expertise. Applicants should have a Doctoral degree (Ph.D., Sc.D., M.D., D.V.M.) in immunology or a related field and postdoctoral training involving contemporary immunology. Send a curriculum vitae, names of three references, and a statement of both teaching and research interests to: **Robert J. Moon, Ph.D., Chairman, Division of Basic Medical Sciences, Mercer University School of Medicine, 1550 College Street, Macon, GA 31207.** Visit our website: [www.mercer.edu](http://www.mercer.edu). *Mercer University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply. Affirmative Action/Equal Opportunity Employer/ADA.*

### YALE UNIVERSITY

The Department of Electrical Engineering invites applications for a junior faculty position in the broad area of computer engineering. Applicants must have a proven record of innovative research and a commitment to teaching. Please send résumé and a list of five references to: **Professor Juozas Vaisnys, Chair, Computer Engineering Search Committee, Department of Electrical Engineering, Yale University, P.O. Box 208284, New Haven, CT 06520-8284.** Applications must be received by September 30, 1999. *Yale University is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### CENTER FOR AGING, GENETICS, AND NEURODEGENERATION MASSACHUSETTS GENERAL HOSPITAL

The new Center for Aging, Genetics, and Neurodegeneration at Massachusetts General Hospital and Harvard Medical School is recruiting for three positions: (1) High-Throughput Drug Screening Laboratory. New **FACULTY** or **RESEARCH SCIENTIST** to direct the development of high-throughput microassays that can be used to screen for new therapies for neurodegenerative disorders. (2) Protein Neurochemistry Laboratory. New **FACULTY** or **RESEARCH SCIENTIST** to develop a protein chemistry laboratory. The purpose of this new laboratory is to advance our understanding of abnormal protein behavior (e.g., expression, folding, and trafficking) in the neurodegenerative diseases. (3) Transgenic Animal Facility for Neurodegenerative Diseases. New **FACULTY** or **RESEARCH SCIENTIST** to develop transgenic animal approaches to neurodegenerative diseases including behavioral and molecular assessments. Each Center laboratory will interact closely with other laboratories and scientists investigating the basic neurobiology of neurodegenerative diseases. Applications with curriculum vitae and the names and addresses of three professional references familiar with the candidate's qualifications should be submitted by September 15, 1999, to:

**Anne B. Young, M.D., Ph.D.  
Chief, Neurology Service, VPK-9  
Massachusetts General Hospital  
Boston, MA 02114**

Salaries and academic appointments will be commensurate with experience. *The Massachusetts General Hospital is an Equal Opportunity Employer.*

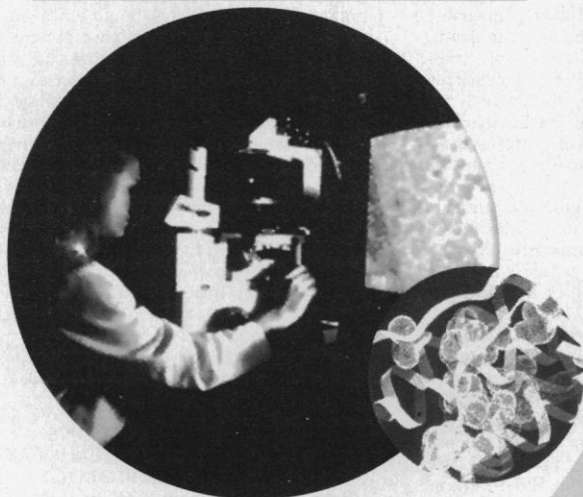
### NEUROLOGY CHAIR THE CHICAGO MEDICAL SCHOOL

We seek applicants for the Chair of Neurology and are interested in an academic Neurologist with a track record in sponsored research, patient care, and education. She/He will be responsible for developing educational and research programs and will have a unique opportunity to strengthen clinical affiliations with our affiliated teaching hospitals. Neuroscience is an area of strength at Chicago Medical School, with a dedicated department, Doctoral program, and several NIH-funded faculty in other departments. It is expected that the new Chair will form collaborative bridges to existing programs while promoting new initiatives within neurology. The Chicago Medical School is located in the northern suburbs, amidst communities that value education, the arts, and recreation. Our 100-acre campus includes the School of Medicine, an outpatient clinic, and a women's health center. Recent appointments of a University President and Medical School Dean provide an exceptional opportunity to build a clinical department in concert with a new administration at an important time in the school's history. Nominations and applications should be sent directly to: **John Sladek, Ph.D., Chair, Neurology Search Committee, Department of Neuroscience, The Chicago Medical School, 3333 Green Bay Road North, Chicago, IL 60664.**

*The Chicago Medical School is an Equal Opportunity/Affirmative Action Employer.*

**FACULTY POSITION.** The Department of Medicine, Division of Nephrology, of the University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School is recruiting for the position of **INSTRUCTOR**. Must have a Ph.D. in biochemistry/molecular biology and postdoctoral experience in the area of eicosanoids, particularly thromboxane  $A_2$ . Please send letter of interest and curriculum vitae to: **Elias A. Lianos, M.D., Ph.D., Chief, Division of Nephrology, University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School, One Robert Wood Johnson Place, P.O. Box 19, New Brunswick, NJ 08903-0019.** *UMDNJ is an Affirmative Action/Equal Opportunity Employer, Minorities/Females/Disabled/Veterans, and a member of the University Health System of New Jersey.*

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At Amgen®, a leader in biopharmaceutical research, we tackle some of the world's most challenging unmet medical needs, risking the unknown each day, intent on success. We are looking for **RESEARCH ASSOCIATES** to join us in our future drug discovery efforts.

### MOLECULAR GENOMICS (Ad Code: 360)

Participate in the genomics-based research program, identifying and cloning genes for potential protein therapeutics and drug targets. Develop tools for gene functionation and drug screening using yeast as a surrogate host in collaboration with other scientists. Requires 4-5 years molecular biology experience in a productive research lab, and demonstrated success and independence evidenced by publications in peer reviewed journals. Yeast lab experience a plus. Molecular biology skills should include: RNA and DNA manipulation, cDNA library construction, Western blot, Northern blot, PCR etc., and a background in yeast based tools and screening technologies. BS (MS preferred) with 4-5 years molecular biology research experience essential. Our ideal candidate will be a highly motivated, independent thinker who enjoys working in a team environment.

### PHARMACOLOGY (Ad Code: 361)

Requires experience in cellular and molecular immunology. Knowledge of primary T- and B-cell culture, ELISA, flow cytometry, SDS-PAGE, Western blot, PCR analysis necessary. Must have 2-5 years experience in a productive immunology lab with strong molecular biology and cell culture skills. A BS/MS in Life Science is essential; experience in rodent models of inflammatory autoimmune diseases preferred. The ability to learn and work in a team environment is critical.

Our benefits package includes a 401(k) plan, on-site fitness center and child care programs, three weeks vacation and more. Please mail your resume (on plain white paper using standard fonts - no bullets, italics, underlining or bold) to: **Amgen, Staffing, (indicate Ad Code), P.O. Box 2569, Thousand Oaks, CA 91319-2569.** E-mail your ASCII text resume, (indicating Ad Code) to: [jobs@amgen.com](mailto:jobs@amgen.com) EEO/AA Employer M/F/D/V

# AMGEN®

### MEETINGS

## Microscale Characterization for Materials Discovery

### AN EXCITING INTERNATIONAL CONFERENCE

October 21 & 22, 1999 • University of Delaware • Newark Campus

World-renowned speakers discuss leading-edge technologies for characterizing new materials and catalysts produced using combinatorial methods.

**Keynote Address:** George M. Whitesides (Harvard)  
**Dinner Speaker:** Nadrian C. Seeman (NYU)

#### Infrared & Fluorescence Techniques

Richard C. Willson (Univ. of Houston)  
Wilhelm F. Maier (Max-Planck-Institut fuer Kohlenforschung)  
John F. Rabolt (Univ. of Delaware)

#### Atomic Force Microscopy

Daniel W. van der Weide (Univ. of Delaware)  
Richard J. Colton (Naval Research Laboratory)

#### Sensors, Arrays &

#### Spectroscopic Methods

W. Henry Weinberg (Symyx)  
Selim Senkan (UCLA)  
Nathan S. Lewis (CAL Tech)  
M. Bonner Denton  
(Univ. of Arizona)

#### Chromatography . . . and more

Thomas J. Baiga (Charybdis)  
Bruce D. Quimby  
(Hewlett-Packard)

For registration information, contact:  
Engineering Outreach  
University of Delaware  
Newark, DE 19716-3101  
phone: (302) 831-4863  
fax: (302) 831-8179  
e-mail: [enggoutreach@udel.edu](mailto:enggoutreach@udel.edu)  
Visit our web site:  
[www.udel.edu/engg/outreach/](http://www.udel.edu/engg/outreach/)

### ANNOUNCEMENTS



California State University, Los Angeles

## CEA-CREST

CENTER FOR ENVIRONMENTAL ANALYSIS - CENTERS OF RESEARCH EXCELLENCE IN SCIENCE AND TECHNOLOGY

### CEA-CREST: Center for Environmental Analysis Centers for Research Excellence in Science and Technology

Multidisciplinary investigations into society's environmental problems are among the most exciting scientific endeavors of our time. CEA-CREST places graduates and undergraduates in integrated research teams tackling key environmental research questions, and thus provides a superb educational experience. Each team is lead by outstanding environmental scientists in one of four emphasis areas:

- Natural and altered dynamics of intertidal marine communities
- Chemistry of air pollution and its impact on neighborhoods
- Ecophysiological and fire ecology of evergreen-dominated ecosystems
- Application of molecular techniques to population studies

A major goal of CREST is to increase the number of underrepresented minorities with Ph.D.'s in science, mathematics, engineering, and technology. CEA-CREST provides generous financial support for students: \$8,000/year undergraduates research assistantships and \$13,000/year fellowships for master's degree students, plus funds for travel to national scientific meetings.

For more information please contact: **CEA-CREST, California State University, Los Angeles, 5151 State University Drive, Los Angeles, CA 90032-8970.** Telephone: (323) 343-5799, Email: [ceacrest@calstatela.edu](mailto:ceacrest@calstatela.edu), Website: <http://cea-crest.calstatela.edu>



## POSITIONS OPEN

Greenville, one of the fastest growing cities in North Carolina, serves as the cultural, commercial, educational, and medical crossroads hub of Eastern North Carolina. East Carolina University, Department of Emergency Medicine has an open-rank **FACULTY POSITION** for a qualified applicant with strong prior experience in writing research proposals, implementation of evaluation and research projects, preparation of articles for publication, and mentoring or precepting Trainees and graduating Resident Physicians. Training and prior experience should include study design, data analysis, and statistics. This position (vacancy #8832) will serve as a major resource in the ongoing research activities in the clinical practice of emergency medicine, injury prevention, toxicology, Emergency Medical Services, and air medical transport. He or she will be assisting and serving as a scientific advisor to the Chief of the Division of Research in developing and refining areas of research focus for the department. Applicants must have a terminal degree (Ph.D., M.D., or equivalent). Please submit letter of interest and curriculum vitae to: **Nicholas H. Benson, M.D., Professor and Chair, Department of Emergency Medicine, East Carolina University School of Medicine, Greenville, NC 27858-4354. Telephone: 252-816-4757; FAX: 252-816-5014.** Current references must be provided upon request and proper documentation of identity and employability required at the time of employment. Screening of applicants will continue until position is filled. For best consideration, respond by October 1, 1999. *East Carolina University is an Equal Employment Opportunity/Affirmative Action Employer and accommodates individuals with disability. Applicants must comply with provisions of the Immigration Reform and Control Act.*

## TWO FACULTY POSITIONS ASSISTANT PROFESSOR

Tenure-track, Ph.D. required. Start 1 January 2000. The University of South Carolina Aiken is an undergraduate institution with strong emphasis on teaching and research. **PLANT ECOLOGIST.** Expertise preferred in botany, phycology, mycology, or physiology. Teaching duties include introductory biology, ecology, and specialty area. Chair: **Dr. H. E. Shealy.** **INVERTEBRATE ZOOLOGIST.** Expertise preferred in developmental biology, systematics, parasitology, or physiology. Teaching duties also include introductory biology and human anatomy. Chair: **Dr. H. G. Hanlin.** Send letter of application, curriculum vitae, and names and addresses of three references to: **Chair, Search Committee, Department of Biology and Geology, University of South Carolina Aiken, Aiken, SC 29801-6309.** Complete applications received by 15 September 1999 will receive full consideration.

For further information, **website: [www.usca.sc.edu/biogeol/](http://www.usca.sc.edu/biogeol/).** Women and minorities are encouraged to apply. *USCA is an Affirmative Action/Equal Opportunity Employer.*

## FACULTY POSITION CHIEF DIVISION OF MOLECULAR MEDICINE Department of Medicine

The Department of Medicine at Harbor-UCLA Medical Center, Torrance, California invites applications for the Chief of the newly created Division of Molecular and Cellular Medicine. Outstanding candidates who qualify at the rank of **ASSOCIATE/FULL PROFESSOR** are encouraged to apply. Applicants must have a Ph.D. and/or M.D. degree with a strong background in cellular and molecular biology. The successful applicant will be expected to have an established independent research program and recruit additional independent faculty for the Division. Applicants should submit a curriculum vitae, a brief summary of current and future research plans, and names of three references to: **Ronald S. Swerdlhoff, M.D., Department of Medicine, Box 446, Harbor-UCLA Medical Center, 1000 West Carson Street, Torrance, CA 90509-2910. E-mail: [swerdlhoff@gcsc.humc.edu](mailto:swerdlhoff@gcsc.humc.edu).** *Equal Opportunity/Minorities/Females/Disabled.*

## POSITIONS OPEN

### TENURE-TRACK OR TENURED FACULTY POSITION GASTROENTEROLOGY RESEARCH

As part of a major expansion in its basic research activities, the Division of Gastroenterology at the University of Arkansas for Medical Sciences invites applications for a tenure-track or tenured faculty position at the **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** level. Applicants should have a Ph.D., M.D., or both degrees and a minimum of three years of postdoctoral experience, backed by publications in established journals and active NIH or comparable research support. Preference will be given to candidates with expertise in molecular aspects of gastrointestinal diseases. The position is available immediately.

The Division has established expertise in biochemistry, and cell and molecular biology. This is a dynamic campus with core laboratories, a GCRC, and the possibility of collaboration with other basic scientists. Potential for joint appointments in basic science departments will provide access to graduate students from a large pool of well-organized interdepartmental graduate programs. A highly competitive start-up package, including ample laboratory space, is available for the successful candidate. Little Rock is an excellent place to live and work.

Applicants should submit curriculum vitae, selected reprints, description of research interests and goals, history of past and present grant support, and names of three references to: **Jean-Pierre Raufman, M.D., Director, Division of Gastroenterology and Hepatology, University of Arkansas for Medical Sciences, 4301 West Markham Street, Slot 567, Little Rock, AR 72205-7199. FAX: 501-686-6248; e-mail: [raufmanjeanpierre@exchange.uams.edu](mailto:raufmanjeanpierre@exchange.uams.edu).**

### FRED HUTCHINSON CANCER RESEARCH CENTER, SEATTLE

The Division of Human Biology at the Fred Hutchinson Cancer Research Center is soliciting applications for positions at the junior faculty level. The newly formed Division combines programs in molecular medicine, cancer biology, and mammalian genomics/genetics with a goal of fostering interdisciplinary research on the biological basis for human diseases. We are seeking individuals with research interests that would enhance any of these three emphasis areas. The Division laboratories are part of the new lakeside campus and include state-of-the-art research facilities. Additional information about the Division can be found at **website: [http://www.fhcr.org/science/human\\_biology/](http://www.fhcr.org/science/human_biology/).** Candidates should send a curriculum vitae, a concise research plan, and three letters of reference to:

**Human Biology Faculty Search Committee  
Fred Hutchinson Cancer Research Center  
Division of Human Biology  
Mailstop: A2M-015  
1100 Fairview Avenue North  
P.O. Box 19024  
Seattle, WA 98109-1024**

Application deadline is October 15, 1999.

*FHCRC is an Equal Opportunity Employer committed to work force diversity and provides a smoke-free environment. Applications from female and minority candidates are strongly encouraged.*

**EVOLUTIONARY DEVELOPMENTAL BIOLOGIST.** The Department of Zoology, University of Hawaii invites Evolutionary Developmental Biologists to apply for a tenure-track **ASSISTANT PROFESSOR** position. Teaching responsibilities will include an advanced undergraduate course in developmental biology and a graduate course in the individual's specialty. Applicants must have a Ph.D., evidence of significant research accomplishments, and a commitment to excellence in teaching. To apply: Send letter of application, curriculum vitae, statement of research accomplishments and goals, reprints of three publications, and names of three references to: **Search Committee, Department of Zoology, 2538 The Mall, University of Hawaii, Honolulu, HI 96822.** Closing date: October 29, 1999. *Equal Employment Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### FACULTY POSITION IN COMMUNITY ECOLOGY Indiana University, Bloomington

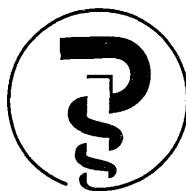
The Department of Biology is seeking to hire a Community Ecologist at any level from **ASSISTANT to FULL PROFESSOR**. The successful candidate will join a strong and growing group of Biologists in our program in evolution, ecology, and behavior. We welcome applications from candidates who take empirical and/or theoretical approaches to understanding multispecies plant, animal, and/or microbial communities. Junior candidates should send a curriculum vitae, a statement of research (past, present, and future), and representative publications, and arrange to have four letters of recommendation sent to: **Dr. Keith Clay, Chair, Community Ecology Search Committee, Department of Biology, Indiana University, 1001 East Third Street, Bloomington, IN 47405-3700. FAX: 812-855-6705; e-mail: [clay@indiana.edu](mailto:clay@indiana.edu).** Senior candidates should send a letter of interest and curriculum vitae. Review of applications will begin October 1, 1999, and will continue until a suitable candidate is identified. For more information about our department, see our home page at **website: <http://www.bio.indiana.edu>.** *We are committed to increasing the representation of women, minorities, and disabled individuals on our faculty and strongly encourage applications from such candidates. We also welcome inquiries from two-career couples.*

### FACULTY POSITIONS DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY Penn State University College of Medicine

Applications are invited for two tenure-track positions at the **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** rank. We seek individuals that have a record of success (1) in research in human genetics, model genetic systems, or genomics, or (2) in using biochemical/biophysical and computational techniques to study macromolecules. Successful candidates must have a Ph.D. and/or M.D., are expected to establish or to have established (depending on rank) independent, extramurally funded research programs, and to participate in the education of medical and graduate students in the College and in the Life Sciences Consortium of Penn State. Applicants should send curriculum vitae, a one- to two-page synopsis of research plans, the names and addresses of three references, and indicate whether the application is for (1) or (2) above, to: **Search Committee, Department of Biochemistry and Molecular Biology, P.O. Box 850S, The Penn State University College of Medicine, H171, Hershey, PA 17033-0850.** Review begins August 16, 1999; applications accepted until positions are filled. *Affirmative Action/Equal Opportunity Employer.*

### FACULTY POSITIONS IN BACTERIAL PATHOGENESIS AND IMMUNOLOGY

The Department of Microbiology and Immunology at the Wake Forest University School of Medicine invites applications for a tenure-track **ASSISTANT PROFESSOR** position in bacterial pathogenesis and a similar position in immunology, beginning July 2000. Applicants must have a Ph.D. degree, postdoctoral training in bacterial pathogenesis or immunology, and documented evidence of high-quality research. Successful candidates will be expected to establish independent research programs and participate in the teaching of graduate and medical students. Information about the department and its faculty and students may be found at **website: [www.wfubmc.edu/microbio](http://www.wfubmc.edu/microbio).** Candidates should submit a curriculum vitae, a description of proposed research, and arrange for three letters of recommendation to be sent directly to: **Dr. Steven B. Mizel, Chair, Department of Microbiology and Immunology, Wake Forest University School of Medicine, Medical Center Boulevard, Winston-Salem, NC 27157.** *Wake Forest University is an Affirmative Action/Equal Opportunity Employer.*



The Picower Institute  
for Medical Research

The mission of The Picower Institute for Medical Research is to apply the insights gained from basic laboratory and clinical research to the cure of disease and the improvement of human health.

## POST-DOCTORAL FELLOWS AND STAFF INVESTIGATORS

Established in 1991, The Picower Institute for Medical Research is undergoing a substantial growth phase that will result in doubling its size. We are seeking innovative and dynamic individuals interested not only in doing research, but also having their research move to clinical application.

You will establish creative new research groups within The Picower Institute's highly interactive and interdisciplinary "laboratory without walls" research facility. It is a unique environment where a multi-disciplinary population of well-published, collegial scientists can interact in carrying out focused research programs in molecular medicine.

Currently, our Laboratory of Molecular Oncology is unravelling the signal transduction pathways activated by Rho family proteins in the regulation of cell proliferation and motility. If you're a qualified Protein Biochemist interested in the identification and characterization of signal proteins, then we're interested in you. In addition, we also need a Protein Chemist in our Laboratory of Computational Medicine and Bioinformatics. Opportunities also exist in these areas:

- MOLECULAR BIOLOGY
- IMMUNOLOGY • ONCOLOGY

Your research will be an integral part of our team-building approach that encourages collaboration with bio-organic chemistry, structural biology, and molecular modeling to develop novel pharmaceutical and diagnostic technologies.

The Picower Institute for Medical Research is a fully independent, medical research organization located on Long Island's historic North Shore. We operate a New York State-chartered Ph.D. program in Molecular Medicine - open to recent M.D. graduates - and also publish the international research journal, *Molecular Medicine*.

Applicants with a proven track record of "cutting edge" research are encouraged to apply by forwarding a c.v., a list of publications and references, along with a cover letter indicating area of interest, to: Department-FEM, The Picower Institute for Medical Research, 350 Community Drive, Manhasset, New York 11030, USA; Fax #: (516) 869-0629; e-mail: [hr@picower.edu](mailto:hr@picower.edu). We are an equal opportunity/affirmative action employer.

## POSTDOCTORAL

Argonne National Laboratory, one of the United States' premier energy research & development organizations located 20 miles SW of Chicago, currently has a Postdoctoral position available for an individual interested in microbial proteomics and bioinformatics. The laboratory, which is involved in high-throughput two dimensional gel electrophoresis, seeks an individual with training in DNA sequence analysis and annotation with some knowledge of protein chemistry and an interest in utilizing skills to interpret the changes in protein expression revealed by 2DE in the context of gene sequence and regulation. Candidates must have very good computer skills.

Candidates must also have a Ph.D. in either Computer Science or Biochemistry received not more than three years prior to the start date of the appointment.

Argonne provides an excellent compensation/benefits package. Interested candidates should forward their resume and the names and addresses of three references to Susan Walker, Employment & Placement, Box BIO205611-43, Argonne National Laboratory, 9700 S. Cass Ave., Argonne, IL 60439 or fax to 630/252-9388. TDD: 630/252-7722. Argonne is an equal opportunity/affirmative action employer.

Please refer to Argonne's Home Page on the internet: <http://www.anl.gov/welcome.html>.



MAYO CLINIC

## POSTDOCTORAL RESEARCH FELLOW

A gene therapy laboratory in the Molecular Medicine Program is seeking a highly motivated individual. The overall goal of the program is to develop novel therapeutic genes and gene transfer strategies for eventual application in the clinic. The aim of the specific research project is to develop a targeted therapeutic fusogenic membrane glycoprotein based on the Gibbon Ape Leukemia virus envelope protein for eventual application in the treatment of B cell malignancies. The project will involve the use of retroviral display technology and various viral vector systems in vitro and in vivo. Applicants must have a recent Ph.D. degree and be competent in molecular biology and tissue culture techniques. Research experience in gene therapy and/or virology is highly desirable. Competitive salary and benefits are available for the successful candidate. Please send a letter of application, curriculum vitae, names and contact details of three references to:

Adele Fielding, MD  
Molecular Medicine Program, Guggenheim 18  
Mayo Clinic  
200 First St., SW  
Rochester, MN 55905  
Telephone: 507-266-0969

*Mayo Clinic is an affirmative action and equal opportunity employer and educator.*



## POSITIONS OPEN

### FACULTY POSITION CANCER/IMMUNOLOGY

Texas Tech University Health Sciences Center School of Pharmacy invites applications for a tenure-track faculty position at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level in the Department of Pharmaceutical Sciences. The Department is composed of 17 full-time faculty members with interests in biomedical and pharmaceutical research. Applicants must have a Doctoral degree and demonstrated research expertise in the area of cancer biology. Successful candidates will be expected to develop a strong, extramurally funded research program as well as teach undergraduate/graduate courses in immunology/oncology. The School of Pharmacy is located in a 102,000-plus-square foot building on the Harrington Regional Medical Center in close proximity to the Amarillo campus of the Texas Tech School of Medicine. For more information on the school, visit our home page at website: <http://pharmacy.ama.ttuhsu.edu>. Applicants should submit a curriculum vitae, a brief summary of research and teaching interests, and names and addresses of at least three references to: **Dr. Quentin Smith, Texas Tech University Health Sciences Center, School of Pharmacy, 1300 Coulter Drive, Amarillo, TX 79106. FAX: 806-356-4034; e-mail: quentin@cortex.ama.ttuhsu.edu**. Application review will begin September 13, 1999, and continue until the position is filled. *Texas Tech University Health Sciences Center is an Equal Opportunity/Affirmative Action Institution. Minorities and women are encouraged to apply.*

### PLANT BIOLOGIST CARNEGIE INSTITUTION OF WASHINGTON Department of Plant Biology Stanford, California

The Carnegie Department of Plant Biology is seeking to fill a **FACULTY POSITION** in the area of plant cell and molecular biology. The successful candidate is expected to have a Ph.D. and demonstrated ability to carry out independent and innovative research. The institutional philosophy is to encourage scientific discoveries by providing outstanding individuals with the freedom and long-term support to explore the frontiers of science. Carnegie faculty enjoy complete freedom with respect to the choice of research topic and have no obligatory teaching or administrative responsibilities. Opportunities exist for participation in graduate and undergraduate education through a concurrent courtesy appointment in the Department of Biological Sciences at Stanford University.

Please send a curriculum vitae, statement of research interests, and three letters of reference by September 15, 1999, to: **Chris Somerville, Carnegie Institution, 260 Panama Street, Stanford, CA 94305.**

*The Carnegie Institution is an Affirmative Action/Equal Opportunity Employer.*

### RETINA/GENETICS

The Storm Eye Institute seeks a candidate to fill a full-time research position in the area of retinal cell biology or ocular genetics. Large patient base for clinically related studies. Candidates should possess a Ph.D. or M.D. Preference will be given to those with existing grant support and productive publication record. Growing faculty of 17 in a recently expanded university eye institute. Competitive salary, excellent benefits. Applications accepted until position is filled. Appointment will be made at the **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** level depending on the applicant's qualifications. Send cover letter, curriculum vitae, and names of three references to: **M. Edward Wilson, M.D., Chairman, Department of Ophthalmology, Medical University of South Carolina, 167 Ashley Avenue, P.O. Box 250676, Charleston, SC 29425. FAX: 843-792-1166. Equal Opportunity Employer, Minorities/Females/Disabled. Qualified minority, women, and disabled candidates are encouraged to apply.**

## POSITIONS OPEN

### FACULTY POSITION IN EVOLUTIONARY ANIMAL PHYSIOLOGY Indiana University, Bloomington

The Department of Biology is seeking to hire an Evolutionary Animal Physiologist at any level from **ASSISTANT** to **FULL PROFESSOR**. The successful candidate will join a strong and growing group of Biologists in our program in evolution, ecology, and behavior. Candidates should bring an evolutionary/comparative perspective to work in any area of animal physiology broadly defined, including but not limited to areas such as neurobiology (e.g., neuroethology/sensory processing, neuroendocrinology, cognitive ecology), immunology (e.g., host-parasite interactions, development of immune competence), or behavioral development (e.g., development of sex differences in behavior). Junior candidates should send a curriculum vitae, a statement of research (past, present, and future), and representative publications and should arrange to have four letters of recommendation sent to: **Dr. John Phillips, Chair, Evolutionary Animal Physiology Committee, Department of Biology, Indiana University, 1001 East Third Street, Bloomington, IN 47405-3700. FAX: 812-855-6705; e-mail: phillips@indiana.edu**. Senior candidates should send a letter of interest and a curriculum vitae. Review of applications will begin October 1, 1999, and will continue until a suitable candidate is identified. For more information about our department, see our home page at website: <http://www.bio.indiana.edu>. We are committed to increasing the representation of women, minorities, and disabled individuals on our faculty and strongly encourage applications from such candidates. We also welcome inquiries from two-career couples.

Tenure-track faculty position in biology for Investigator using molecular and/or cellular approaches to address questions in development, physiology, biophysics, or neurobiology. Preference will be given to individuals whose research complements that of departmental faculty in these areas (see website: [www.life.umd.edu/biology/](http://www.life.umd.edu/biology/)). The new hire will also be expected to teach an upper-level course in mammalian physiology. The search is for appointment to **ASSISTANT PROFESSOR** but the hire could be at the **SENIOR LEVEL** if an exceptional person were identified. Send curriculum vitae, statements of research and teaching interests, and names of three references (include address/e-mail/FAX) to: **Chair, NBD Search Committee, Department of Biology, University of Maryland, College Park, MD 20742** by September 30, 1999, for best consideration. Applications are especially encouraged from women and minorities. *The University of Maryland is an Affirmative Action/Equal Employment Opportunity Employer.*

### UNIVERSITY OF FLORIDA

Seeks a **RESEARCH ASSISTANT PROFESSOR** in the Department of Medicine, Division of Rheumatology. M.D. degree, Board-certified/Board-eligible in rheumatology. This is a non-tenure-track position. Responsibilities of seeing patients in the outpatient clinic setting. Attend on the rheumatology and internal medicine consults services. Salary and benefits commensurate with experience. Recruiting deadline August 26, 1999. Anticipated starting date October 1, 1999. Please reply with curriculum vitae and a cover letter to: **Eric Sobel, M.D., Department of Medicine, Box 100221, JHMHC, Gainesville, FL 32610. Affirmative Action/Equal Opportunity Employer.**

**FACULTY POSITION** in tuberculosis available at the University of Texas Health Center at Tyler for a Ph.D. scientist to work with five NIH-funded Investigators on projects related to molecular and immunologic aspects of tuberculosis. Expertise in molecular immunology, molecular microbiology, or intracellular signaling an asset. Send curriculum vitae and names of three references to: **Dr. Peter Barnes, Center for Pulmonary and Infectious Disease Control, University of Texas Health Center, 11937 U.S. Highway 271, Tyler, TX 75708-3154. FAX: 903-877-5516; e-mail: pbarnes@uthct.edu**. The University of Texas is an Equal Opportunity Employer.

## POSITIONS OPEN

### TWO FACULTY POSITIONS UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL Division of Medicinal Chemistry and Natural Products

The Division of Medicinal Chemistry and Natural Products invites applications for two tenure-track positions at the **ASSISTANT PROFESSOR** level available fall 2000. Outstanding applications for more senior levels are also welcomed. Candidates for Assistant Professor must have a Ph.D. degree and postdoctoral experience is desirable. The Assistant Professor position requires development of an internationally recognized program of scholarly research and the demonstration of commitment to excellence in teaching at the professional and graduate levels. Programs in all areas of medicinal chemistry will be considered, but preference given to studies in structural biology, molecular recognition, and functional genomics pertinent to medicinal chemistry. Applicants should submit curriculum vitae, publication list, a concise description of proposed research, and arrange for four letters of recommendation to be sent to: **Professor Harold Kohn, Chair, Division of Medicinal Chemistry and Natural Products, School of Pharmacy, University of North Carolina at Chapel Hill, CB# 7360, Beard Hall, Chapel Hill, NC 27599-7360**. Applications will be reviewed beginning October 11, 1999, and continue until the positions are filled. *Women and members of minority groups are encouraged to apply. The University of North Carolina at Chapel Hill is an Equal Opportunity Employer.*

The University of California, San Diego, Department of Chemistry and Biochemistry invites applications for tenure-track and tenured faculty positions in biochemistry at the **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** level. Candidates must have a Ph.D. and a demonstrated ability for creative research and teaching at the undergraduate and graduate levels. Applicants will be considered in all areas, but the Department is particularly interested in candidates with new experimental approaches in supramolecular structure determination, protein engineering, or genomic analysis. Salary commensurate with qualifications and based on University of California pay scale. Candidates should send a curriculum vitae, list of publications, reprints of up to five representative papers, and a summary of research plans to: **Chair, Biochemistry Search Committee 3-617 (S), University of California, San Diego, Department of Chemistry and Biochemistry, La Jolla, CA 92093-0332**. Candidates should also arrange to have three letters of reference sent under separate cover. The deadline for applications is October 1, 1999, but until positions are filled, all applications received will be assured full consideration. *UCSD is an Equal Opportunity/Affirmative Action Employer with a strong institutional commitment to the achievement of diversity among its faculty and staff.*

### ASSISTANT PROFESSOR OF PHYSIOLOGY

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

**Your work means**

**He can enjoy an active lifestyle.**



It's our solid dedication, vision and constant search for answers that allow us to touch millions of people around the world every day. As a major division of Fortune 100 American Home Products Corporation, we help people lead healthier lives through the development of innovative pharmaceutical, vaccine and nutritional products. We achieve this through our superior research, manufacturing, sales and marketing capabilities. Enjoy the freedom to develop your own career while having the support of a valuable team. We currently have the following opportunities available in our **Pearl River, NY** facility.

### **Principal Research Scientist**

We are seeking an experienced immunologist with proven hands-on experience and expertise in cutting-edge methods of viral immunological investigations. Experience in experimental disease models of viral infection and immune response as well as in human systems, and a working knowledge of nucleic acid vaccine, viral vector and adjuvant technologies are desirable. Your leadership skills and effective interaction with team members are essential.

A Ph.D in Microbiology/Immunology with a minimum of 8 years of relevant experience in virology and immunology is required. Managerial and supervisory experience are required. Excellent written and verbal communication skills are necessary.

### **Senior Research Scientist II**

In this position, you will isolate and enrich specific populations of antigen presenting cells in order to determine their functional potential. You will also be responsible for developing strategies to target plasmid DNA expressed antigens to antigen presenting cells. In addition, you will be responsible for maintaining records, preparing reports and presenting data both internally and externally.

A Ph.D in Immunology/Cellular Biology plus 5 years' relevant experience is required. Mucosal immunology experience is preferred, and 2-4 years' postdoctoral research experience working in the area of dendritic cell biology/antigen targeting is helpful.

### **Senior Research Scientist I**

You will be responsible for the performance of clinical and preclinical immunological studies in support of influenza vaccines. You will also develop and implement methods for evaluation of cellular and mucosal immune responses, as well as participate in the development of new influenza vaccines.

A Ph.D in Microbiology/Immunology with a minimum of 2 years' relevant experience is required. Hands-on experience in cutting-edge methods of viral immunological investigation and the ability to function in a team environment are essential.

### **Senior Research Scientist II**

Your responsibilities will be dedicated to the Immunology department, working with the development of nucleic acid vaccines for the human papillomaviruses. Other duties such as the performance of vector design, construction, gene expression and immunogenicity studies will be an integral part of this role.

A Ph.D in Immunology, Virology and/or Molecular Biology with 5 years' experience and 2-4 years' post Ph.D experience in the field of Molecular Immunology are required. Experience in virology and immunological assays is desirable. Proficiency in computers and the ability to solve problems independently are necessary.

Wyeth-Ayerst offers competitive compensation and benefits programs including stock options, child-care subsidies, flex time, business casual Fridays, educational assistance and professional development programs. Please forward your resume with salary requirements to: **Wyeth-Ayerst, Reference OPSCI, P.O. Box 7886, Philadelphia, PA 19101-7886. Fax in fine mode to: (610) 989-4854. Email: jobs@RAMAIL1.wyeth.com** (ASCII format, no attachments, subject: resume). For more information, visit our website at **www.ahp.com/wyeth.htm** Principals only. Equal Opportunity Employer, M/F/D/V.

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## **POSITIONS OPEN**

### **AQUATIC ECOLOGICAL/ECOSYSTEM MODELER POSITION TENURE-TRACK, 12-MONTH ASSISTANT/ASSOCIATE PROFESSOR Michigan State University**

A collaborative position with NOAA's Great Lakes Environmental Research Laboratory (GLERL). Qualifications: Ph.D. in limnology, oceanography, fisheries, ecology, or other disciplines with strong emphasis on ecological or ecosystem modeling required. Strong quantitative and excellent communication/interpersonal skills essential. Prefer candidates with interest and experience in ecological or ecosystem modeling including physical and biological processes in large aquatic systems, and in empirical verification of model predictions. Position description: Develop a coordinated research, teaching, and outreach program emphasizing development, testing, and use of models of aquatic systems. Research and outreach concentrating on applications to Great Lakes aquatic systems, with additional opportunities to work in marine coastal and estuarine systems. Will build a research program taking advantage of computer/laboratory facilities and collaborators at GLERL; maintain an active presence in the Department of Fisheries and Wildlife at Michigan State University (MSU) in East Lansing and at GLERL in Ann Arbor, Michigan. Collaborates extensively with both MSU and GLERL Physical and Biological Limnologists and other scientists, and build an extramurally funded research program complementary to existing research at GLERL and MSU. Research interests should include community, population, and ecosystem ecology; limnology/oceanography; modeling of dynamic ecological systems; and aquatic ecology. Will teach courses in area of expertise, direct/advise graduate students, serve on committees, and provide extension and outreach to international, national, and state agencies involved in research and management of Great Lakes and coastal ecosystems. Application deadline: October 1, 1999, or until suitable candidate is found. Competitive salary commensurate with education, experience, and demonstrated ability. Applicants should submit a letter of application stating professional goals and objectives, statements of research interests and philosophy, a curriculum vitae with supporting materials including transcripts, examples of scientific writing such as reprints of recent publications, and three letters of reference to: **Dr. James R. Bence, Search Committee Chairperson, Department of Fisheries and Wildlife, 13 Natural Resources Building, Michigan State University, East Lansing, MI 48824-1222. Telephone: 517-432-3812; FAX: 517-432-1699; e-mail: bence@pilot.msu.edu. Michigan State University is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are encouraged to apply. Persons with disability have the right to request and receive reasonable accommodation.**

The University of Florida (UF) College of Medicine is seeking nominations and applications for the position of **PROFESSOR** and **CHAIR** of the Department of Neurology. The Chair will be responsible for the management of the department including faculty recruitment and development, undergraduate and graduate medical education, fiscal affairs, clinical programs, and research. The Chair will also provide an effective interface between the department, the UF Brain Institute, and other research and clinical centers. Applicants should have an M.D. or M.D.-Ph.D. degree and demonstrated accomplishments in research, education, clinical service, and administration. Candidates should also have proven leadership capabilities and excellent interpersonal skills. Applicants should submit a curriculum vitae and three letters of recommendation to: **William A. Friedman, M.D., Chair, Search Committee, Department of Neurological Surgery, University of Florida College of Medicine, P.O. Box 100265, Gainesville, FL 32610-0265.** The closing date for the position is October 1, 1999, with an anticipated starting date on or after July 1, 2000. Salary will be commensurate with experience. *The University of Florida is an Equal Opportunity/Affirmative Action Employer.*



## POSITIONS OPEN

### ASSISTANT PROFESSOR POSITIONS VASCULAR BIOLOGY PROGRAM

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

Located in the Medical Center of the University of Tennessee in Memphis, the Vascular Biology Program provides a productive research environment for scientific endeavors and interdisciplinary collaborations. Basic, translational, and clinical research are integral parts of the Program's activities.

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

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

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

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

### FACULTY POSITION ANATOMY AND CELL BIOLOGY UNIVERSITY OF NORTH DAKOTA School of Medicine and Health Sciences

Applications are invited for a tenure-track position at the **ASSISTANT/ASSOCIATE PROFESSOR** level to begin January 1, 2000. This position requires expertise in human histology and developmental anatomy, and cell biology. The successful candidate will be expected to contribute to team-taught courses for graduate and medical students in those fields. Candidates must have a Ph.D., M.D., or equivalent with at least two (2) years of postdoctoral training. Research experience in developmental biology, cell and molecular biology, and/or related fields is preferred. The successful applicant will be expected to carry on a vigorous research program supported by extramural funds. Review of applications will begin on September 1, 1999, and continue until the position is filled. Candidates should send a curriculum vitae, descriptions of research and teaching experience, and names of three (3) individuals willing to serve as references to: **Dr. Edward C. Carlson, Search Committee Chair, Department of Anatomy and Cell Biology, Box 9037, University of North Dakota School of Medicine and Health Sciences, Grand Forks, ND 58202.** *The University of North Dakota is an Equal Opportunity/Affirmative Action Employer and invites applications from all qualified individuals.*

### YALE UNIVERSITY DEPARTMENT OF CHEMISTRY

The Department of Chemistry, Yale University, invites applications for a position at the **ASSISTANT PROFESSOR** level to commence fall 2000. We seek creative Teacher-Scholars who show promise for developing outstanding research programs in the broad fields of inorganic, theoretical, and biophysical chemistry. Applicants should send curriculum vitae and a statement of research plans and arrange for the submission of three letters of recommendation. All materials should be received by 22 October 1999. Send applications to: **Professor Andrew Hamilton, Chair, Junior Faculty Search Committee, P.O. Box 208107, Yale University, New Haven, CT 06520-8107.** *Yale University is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### BIOCHEMISTRY

Queen's University, Department of Biochemistry. Applications are invited for a faculty position at the **ASSISTANT PROFESSOR** level in the area of structural biology. We are particularly, but not solely, interested in individuals with NMR expertise; time is available on a new 500 MHz instrument in the Department of Chemistry. The Department has X-ray crystallography instrumentation, SGI workstations, and is about to purchase an electron paramagnetic resonance spectrometer. Applicants should have a Ph.D. and a minimum of two years of postdoctoral experience. The goal is to select a candidate whose expertise will complement and build on the existing research strengths in the department (See website for list of research areas, <http://meds-ss10.meds.queensu.ca/medicine/biochem/>). The Department has a strong research program and strengths in both graduate and undergraduate teaching. The successful candidate will be expected to apply for external salary funding to the Medical Research Council of Canada or other appropriate agencies for a five-year position during the first two years of the appointment. The successful candidate will be eligible to apply for an available tenure-track position at the completion of their externally funded period, provided provincial funding allows filling of open positions. *In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.* Letters of application should include a curriculum vitae and indicate area(s) of expertise, future research interests, and the names and addresses of three to five referees and be sent to: **Dr. Albert Clark, Head, Department of Biochemistry, Queen's University, Kingston, Ontario K7L 3N6 Canada. FAX: 613-533-2022; e-mail: clarkaf@post.queensu.ca.** Letters of reference will be sought by the Appointments Committee for short-listed candidates. The application deadline is September 30, 1999. *Queen's University is committed to Employment Equity and welcomes applications from all qualified women and men, including visible minorities, aboriginal people, persons with disability, gay men, and lesbians.*

### ASSISTANT PROFESSOR NEURO/ENDOCRINE PHYSIOLOGY

Individuals employing modern cellular and molecular approaches to investigate the physiology of organs and organ systems are invited to apply for a twelve-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 neuro/endocrine physiology. The successful candidate will be expected to pursue an active, independent research program and participate in medical and graduate teaching. Applicants should send a curriculum vitae, a brief description of current and future research interests, and three letters of references to: **Dr. Robert Beesley, Vice Chair, Department of Physiology, College of Medicine, The University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, OK 73190. E-mail: robert-beesley@ouhsc.edu; website: <http://w3.ouhsc.edu/physiology>.** Completed applications will be accepted until November 15, 1999. Anticipated starting date: July 2000. *OUHSC is an Equal Opportunity Institution.*

### ASSISTANT/ASSOCIATE PROFESSOR

Ph.D. in molecular biology or related field, with three to five years of postdoctoral experience, to work on the regulation of genes controlling muscle growth. Candidate will collaborate with funded studies on mechanism of muscle wasting at a UCLA-affiliated institution. Required: expertise in gene cloning, expression, and cell culture. Background in receptor cloning, gene therapy, and muscle physiology preferred. Attractive salary commensurate with experience and qualifications. FAX letter with career goals and curriculum vitae to: **Dr. Bhasin, FAX: 323-563-9352.**

## POSITIONS OPEN

### EXTENSION WILDLIFE ECOLOGIST POSITION (AG-38) TENURE-TRACK, 12-MONTH ASSISTANT PROFESSOR Michigan State University

Ph.D. required; preference will be given to applicants with strong quantitative skills and expertise on the impact of habitat management on wildlife populations and communities on private lands or urban landscapes. Candidate is expected to develop a strong extension/research program interacting closely with state and federal agencies and conservation organizations. Candidate is also expected to teach courses at undergraduate and graduate levels, obtain research grants, and publish findings. Candidate will also advise and serve on committees.

Application deadline: November 20, 1999, or until a suitable candidate is found. Salary is competitive and commensurate with education, experience, and demonstrated ability. Interested persons should submit a letter of application stating professional goals and objectives; statements of extension, research, and teaching interests and philosophy; curriculum vitae with supporting materials including transcripts; and three letters of reference to: **Dr. Harold H. Prince, Search Committee Chairperson, Department of Fisheries and Wildlife, 13 Natural Resources Building, Michigan State University, East Lansing, MI 48824-1222. Telephone: 517-355-3697; FAX: 517-432-1699; e-mail: [hhprince@pilot.msu.edu](mailto:hhprince@pilot.msu.edu).** *Michigan State University is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are encouraged to apply. Persons with disability have the right to request and receive reasonable accommodation.*

### AGRICULTURE AND THE ENVIRONMENT

Tenure-track **ASSISTANT PROFESSOR**. Agriculture and the environment, January 1, 2000. The successful candidate will be expected to conduct research and teach in the area of agriculture and the environment (e.g., agroecology, pasture/forage management and utilization, sustainable cropping systems/modelling, marginal land use) and to participate in the McGill School of Environment. Requirements: Ph.D. in a relevant field, excellent academic credentials, ability to teach effectively at the undergraduate and graduate levels, ability to develop a strong independent research program. Send curriculum vitae and statement of teaching and research interests, and arrange for three letters of reference to be sent to: **Dr. D. Mather, Department of Plant Science, McGill University, 21,111 Lakeshore Road, Ste-Anne-de-Bellevue, Quebec H9X 3V9 Canada. E-mail: [infoplsci@agradm.lan.mcgill.ca](mailto:infoplsci@agradm.lan.mcgill.ca); website: [www.agrenv.mcgill.ca/plant/plantsci.htm](http://www.agrenv.mcgill.ca/plant/plantsci.htm) by October 1, 1999.** *In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. However, all qualified applicants are encouraged to apply. McGill University is committed to Equity in Employment.*

Biology. **ASSISTANT PROFESSOR**. August 2000. **MEDICAL MICROBIOLOGIST** to teach microbiology for nurses and general microbiology. Ph.D. and strong commitment to undergraduate teaching and research required. Priority deadline October 4, 1999. Send inquiry to: **Chair, Department of Biology, University of Wisconsin-Eau Claire, Eau Claire, WI 54702-4004. E-mail: [glennale@uwec.edu](mailto:glennale@uwec.edu); Telephone: 715-836-4166; FAX: 715-836-5089.** More information, website: [www.uwec.edu/Academic/Biology/biology.html](http://www.uwec.edu/Academic/Biology/biology.html). *Equal Opportunity/Affirmative Action Employer.*

Princeton University. The Department of Chemistry invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level from individuals whose research interests are in organic chemistry, broadly defined. Applications should include a description of research interests, a curriculum vitae, and three letters of recommendation. Send by November 1, 1999, to: **Organic Search Committee, Department of Chemistry, Princeton University, Princeton, NJ 08544.** *Princeton University is an Equal Opportunity/Affirmative Action Employer.*



DEAN

COLLEGE OF SCIENCES

SAN DIEGO STATE UNIVERSITY

San Diego State University is seeking an innovative and energetic academic leader to serve as Dean of the College of Sciences and create a twenty-first century college for a highly dynamic and advancing university. The College of Sciences consists of the departments of astronomy, biology, chemistry, geological sciences, mathematics and computer sciences, physics and psychology. The College also maintains 11 research centers and institutes, the Mt. Laguna Observatory, and over 7,000 biological sciences field station acres. The College's current grant and contract activity is over \$20 million, a substantial portion of which is NSF and NIH supported. The College offers 18 undergraduate degree programs, 16 master's degree programs, and 5 joint doctoral degree programs with the University of California, and has 194 full-time faculty, 110 part-time faculty and 94 staff and technical positions. The College supports a strong teacher/scholar model placing equal value on teaching and research. The College also strongly supports the education of its students through direct student involvement in faculty research projects.

The Dean of the College of Sciences reports to the Provost and Vice President for Academic Affairs and is a member of the Academic Deans' Conference. The Dean is the chief academic and administrative leader for the College with primary responsibility for its programs and future development. The Dean provides leadership for the College in the oversight of its instructional, research and service programs; provides direction to and receives recommendations from appropriate College committees charged with curriculum and personnel responsibilities; and develops and administers the College's budget. Additional information about the College is available at <http://www.sci.sdsu.edu/cos/>.

San Diego State University is the largest of twenty-three campuses in the California State University system with a diverse student population of over 31,000 and over 2,000 faculty. SDSU is currently designated a Doctoral University II by the Carnegie Foundation and anticipates meeting the criteria for Research University II status in the near future. Established in 1897, SDSU offers bachelor degrees in 76 areas, master's in 54 and the doctorate in 10. Additional information about the University is available at <http://www.sdsu.edu>.

**Qualifications:** An earned doctorate. Extensive administrative experience in a College of Sciences or allied discipline. Recognized scholarly and professional accomplishments. The ability to develop a twenty-first century vision for the college. Excellent leadership and interpersonal skills, capable of promoting collegiality and building consensus. Demonstrated ability to secure external financial support for instructional and research programs. A thorough knowledge and understanding of the management and operation of large research programs. The ability to build corporate partnerships in San Diego's vibrant technology-based business community. An ability to expand the college's international interests and efforts. An appreciation of diversity and an ability to work effectively in a multicultural campus and community setting. Willingness and ability to successfully undertake significant fund raising and advancement activities.

**Applications/Nominations:** Nominations are welcome. Candidates may apply directly by sending a letter of application, curriculum vitae, and the names, addresses and phone/fax numbers of at least five references. References will only be contacted with permission of the candidate. Applications received by October 15, 1999, are guaranteed to receive full consideration, although application review will continue until the position is filled. Preferred starting date is July 1, 2000. Please send all communications to: **Office of the Provost/VPAA, Search Committee for Dean of Sciences, San Diego State University, 5500 Campanile Dr., San Diego, CA 92182-8010.**

*SDSU is an Equal Opportunity employer and does not discriminate against persons on the basis of race, religion, national origin, sexual orientation, gender, marital status, age or disability. Women, ethnic minorities and persons with disabilities are encouraged to apply.*

## POSITIONS OPEN

### ASSOCIATE PROFESSOR/PROFESSOR FACULTY POSITION IN COMPARATIVE MEDICINE Department of Comparative Medicine Stanford University School of Medicine

The Department of Comparative Medicine, within the School of Medicine, is seeking a tenure-track basic science faculty position as Associate Professor or Professor. Candidates must have received the Ph.D. degree and have a demonstrable record of research productivity as evidenced by grant support and publications in peer-reviewed journals in the area of neuroscience/neurobiology as applied to disease. The D.V.M. or V.M.D. degree from an institution accredited by the American Veterinary Medical Association is desirable, but not required. Applicant whose research focuses on neurologic/psychiatric diseases based on systems of neuroanatomy and neuropsychological approaches to behavior are especially encouraged to apply.

The mission of the Department of Comparative Medicine is (1) to advance the health of all species; (2) to make significant contributions to our knowledge of vertebrate biology and pathobiology through independent and multidisciplinary research; (3) to foster a collegial, synergistic environment for its faculty.

The Department of Comparative Medicine also has a University-wide mission: (1) to use its diverse veterinary expertise to provide excellent quality humane care for laboratory animals; (2) to promote animal welfare and improve the quality and integrity of animal-based research; (3) to share its comparative biological and veterinary expertise through teaching and consultations with faculty, students, and staff.

In addition to its academic functions, the Department of Comparative Medicine provides the clinical care and management for a large, modern, AAALAC-accredited, central animal facility, which includes a critical care unit staffed by Veterinary Technicians. Research strengths at Stanford include genetics, neuroscience, molecular biology, noninvasive nuclear and magnetic imaging, and transgenic mouse studies among others. Interested candidates should send a letter containing a description of their career goals and research interests, their curriculum vitae, and names and addresses of five references, to: **Linda C. Cork, D.V.M., Ph.D., Professor and Chairman, Department of Comparative Medicine, MSOB X347, Stanford University School of Medicine, Stanford, CA 94305-5415.** Applications will be reviewed upon receipt and searches will be continued until the position is filled. *Stanford University is committed to increasing representation of women and members of minority groups on its faculty, and particularly encourages applications from such candidates.*

The Department of Psychiatry and Behavioral Sciences at Stanford University is seeking a faculty member at the **ASSISTANT or ASSOCIATE PROFESSOR (RESEARCH)** level with expertise in neurophysiology and pharmacology of sleep and its disorders. This individual will be expected to lead an independently funded research program in the area of neuropharmacology and neurophysiology of narcolepsy. Extensive collaborative interactions will be available with members of the University neuroscience and sleep disorders research community. Applicants may consult **website: <http://www-med.stanford.edu/school/Psychiatry/narcolepsy/>** for details on currently ongoing research. Duties will involve managing a colony of dogs with the sleep disorder of both the pathophysiology of the disorder, and to find new therapeutic approaches. Applicants must hold a Ph.D. and/or M.D. degree with relevant research experience in neurophysiology/neuropharmacology and sleep disorders. Work experience involving large-animal research is highly preferable. Applicants should forward a curriculum vitae and the names of five referees to: **Dr. Emmanuel Mignot, Center for Narcolepsy, 1201 Welch Road, Room P114, Stanford, CA 94305-5485.** *Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.*



## POSITIONS OPEN

The University of Florida seeks recruitment for a **RESEARCH ASSISTANT PROFESSOR** for the Department of Medicine, Division of Cardiology. This is a 1.00 full-time non-tenure-track position. Ph.D., Pharm.D., or five years of clinical research experience required. Duties include acting as the Assistant Director to the Clinical Programs. This position will function as a senior-level Administrator and faculty member of the Division of Cardiology, Clinical Trials Program, under the Director of Clinical Programs. The responsibilities will include, but are not limited to, day-to-day management of the Coordinators for Clinical Programs; direct oversight of the INVEST Pharmacy Coordinating Center and day-to-day oversight of the INVEST Administrative Coordinating Center; facilitation of IRB review for the Cardiology Clinical Trials Program; facilitation of protocol proposal development; facilitation of publication development; travel as necessary to support the Clinical Trials Program; and provide backup coverage for the Cardiology Clinical Trials Program in the absence of the Director and the Chairman, Division of Cardiology. In addition, the position will be responsible for conducting independent research projects. Salary and benefits commensurate with experience. Send curriculum vitae to: Eileen Handberg-Thurmond, Ph.D., Assistant Professor, Division of Cardiology, Box 100277, JHMC, Gainesville, FL 32610. Recruiting deadline: August 13, 1999. Anticipated start date: September 7, 1999. *An Affirmative Action/Equal Opportunity Employer.*

### ASSOCIATE PROFESSOR PHYSIOLOGY

Individuals employing modern cellular and molecular approaches to investigate the physiology of organs and organ systems are invited to apply for a tenure-track position at the Associate Professor level. Candidates must possess a Ph.D., M.D., or equivalent degree. A strong record of continuous research productivity and funding, including current support from national sources, is required. Preference will be given to candidates with expertise in cardiovascular physiology, but individuals with outstanding credentials in other areas of physiological research will be considered. The appointee will be expected to pursue an active research program and participate in medical and graduate teaching. Applicants should send a curriculum vitae, a brief description of current and future research interests, and the names and addresses of three references to: Dr. Robert Beesley, Vice Chair, Department of Physiology, College of Medicine, The University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, OK 73190. E-mail: robert-beesley@ouhsc.edu; website: <http://w3.ouhsc.edu/physiology>. Review of applications will begin November 15, 1999. Anticipated starting date: July 2000. *OUHSC is an Equal Opportunity Institution.*

The University of California, San Diego, Department of Chemistry and Biochemistry has a tenure-track opening in environmental chemistry at the **ASSISTANT PROFESSOR** level. All research areas of chemistry or biochemistry focusing on environmental problems will be considered. The candidate will be expected to teach in the department's newly established minor in environmental chemistry. Applicants must have a Ph.D. or equivalent degree in a field related to environmental chemistry. Candidates should send a curriculum vitae, list of publications, reprints of up to five representative papers, and a summary of research plans to: Chair, Environmental Search Committee 3-613 (S), University of California, San Diego, Department of Chemistry and Biochemistry, La Jolla, CA 92093-0332. Candidates should also arrange to have three letters of reference sent under separate cover. The deadline for applications is October 1, 1999, but until the position is filled, all applications received will be assured full consideration. Salary to be commensurate with qualifications and based on the University of California salary scale. *UCSD is an Equal Opportunity/Affirmative Action Employer with a strong institutional commitment to the achievement of diversity among its faculty and staff.*

## POSITIONS OPEN

### MOLECULAR BIOLOGIST

Baylor University, a private, comprehensive university of 12,000 students, seeks a Molecular Biologist for a tenure-track position at the **ASSISTANT PROFESSOR** level beginning summer 2000. Applicants must have a Ph.D. and use current molecular approaches to examine biological processes. Position responsibilities: (1) Teach an upper-level course using molecular biology in organismal, cellular, or microbial biology (developmental biology preferred). (2) Teach introductory biology for majors. (3) Establish a research program involving undergraduate and graduate students. (4) Participate in departmental and university service activities. Baylor is renowned for excellence in teaching, balanced with quality faculty/student research. To ensure full consideration a complete application should be received by October 8, 1999. Applications will be reviewed beginning October 15, 1999, and will be accepted until the position is filled. A complete application consists of application letter, statements of teaching philosophy and research interests, curriculum vitae, graduate and undergraduate transcripts, and names and addresses of three references. Send materials to: Dr. Dave Eldridge, Search Committee Chair, Department of Biology, Baylor University, Waco, TX 76798-7388. Telephone: 254-710-2911; FAX: 254-710-2969; e-mail: david\_eldridge@baylor.edu; website: <http://www.baylor.edu>. Baylor University is a Baptist university affiliated with the Baptist General Convention of Texas. *As an Affirmative Action/Equal Employment Opportunity Employer, Baylor encourages minorities, women, veterans, and persons with disability to apply.*

The University of Florida Shands Cancer Center invites applications for several tenure and non-tenure-track faculty positions at the **ASSISTANT to FULL PROFESSOR** level. Research interests of the Center include stem cell biology/gene therapy, signal transduction, cancer biology/gene regulation, and molecular virology and immunology. In addition, applicants dealing with research in the areas of breast, lung, and colon cancer are being recruited. Applicants will be expected to develop or have previously established a funded research program. The successful candidate will have a M.D. and/or Ph.D. degree, demonstrated organizational skills, and a strong record of personal research accomplishments supported by publications in leading peer-reviewed journals. Application deadline will be September 1, 1999, with an anticipated starting date as early as October 1, 1999. Salary and rank will be commensurate with experience. Interested applicants should submit a curriculum vitae, a brief description of proposed research, and three letters of recommendation to: James B. Flanagan, Ph.D., Search Committee Chair, Shands Cancer Center, University of Florida, Health Science Center, P.O. Box 100232, Gainesville, FL 32610-0232.

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

### RESEARCH AND DEVELOPMENT POSITION AVAILABLE IN PHOTONICS AND IMAGING

**RESEARCH SCIENTIST.** Microcosm, Inc., one of the top photonics imaging laboratories in the world, has an immediate opportunity in Columbia, Maryland for a Research Scientist specializing in time-resolved fluorescence imaging and photonics. You should have an advanced degree in physics, biophysics, material science, or a related area with zero to three years of postgraduate laboratory experience (Ph.D.) or three to five years of experience (M.S. degree). Essential skills include experimental design, execution, and troubleshooting, and employing methods such as multiphoton excitation, time-resolved spectroscopy, and imaging. Strong analytical, computer, and verbal skills are required. We offer an attractive salary, comprehensive benefits, and a progressive work environment. *This position is open only for U.S. citizens.*

Please FAX or e-mail résumés to: Dr. H. Malak, FAX: 301-725-2941; e-mail: henryk@microcosm.com.

## POSITIONS OPEN

### PHYSIOLOGIST

#### THE UNIVERSITY OF NEW MEXICO SCHOOL OF MEDICINE

Applications are solicited for a tenure-track faculty position at the **ASSISTANT/ASSOCIATE/FULL PROFESSOR** rank. Applicants must have a Doctoral degree and have completed postdoctoral training. Preference will be given to candidates with demonstrated productivity as evidenced by extramural grant support and by a strong publication record. The successful applicant is expected to sustain an active research program in physiology employing contemporary techniques that interact with existing programs in vascular smooth muscle regulation and endothelial cell physiology. Special consideration will be given to candidates with interests in ion channels, signal transduction, and gene expression in vascular tissue relevant to control of vessel tone, although all areas of physiology will be considered. This individual is also expected to perform medical and graduate teaching. For best consideration, applicants should submit a curriculum vitae, a short description of their research program, and the names of three references by November 1, 1999, to: Benjamin R. Walker, Department of Cell Biology and Physiology, University of New Mexico School of Medicine, Albuquerque, NM 87131. *UNM is an Equal Opportunity/Affirmative Action Employer.*

### RESEARCH PLANT PATHOLOGIST

The USDA, Agricultural Research Service Root Disease and Biological Control Research Unit, Pullman, Washington is seeking a Research Plant Pathologist, GS-11/12/13. Salary range is \$39,960 to \$74,035, and is commensurate with experience. *Candidates must be U.S. citizens.* The incumbent conducts basic and applied research of fungal plant pathogens that cause root and crown rot diseases of wheat and barley. In addition to the basic educational requirements, applicants must demonstrate (1) knowledge of the ecology, physiology, and genetics of fungal root pathogens, (2) knowledge of classical and molecular plant pathology, (3) skills in recombinant DNA techniques, and (4) skills in experimental design and computer analysis of data. For information about the research program, contact: Dr. David M. Weller, Telephone: 509-335-6210; e-mail: wellerd@mail.wsu.edu. This position has specific education and experience requirements, and factors that must be addressed. In order to ensure submission of a complete application, applicants must request a copy of the vacancy announcement by calling Pam Dean, Telephone: 509-335-8663 or by printing it from the Internet at website: <http://www.ars.usda.gov>. Applications must be postmarked by September 7, 1999. *USDA/ARS is an Equal Opportunity Employer and Provider.*

### ASSISTANT PROFESSOR MICROBIAL GENETICS

The Department of Biological Sciences, Mississippi State University invites applications for a nine-month, tenure-track Assistant Professor position to begin August 16, 2000. The successful applicant will be expected to develop a vigorous, externally funded research program and to direct M.S. and Ph.D. students. The area of research is open. The applicant must be able to teach bacterial genetics and a course in the area of specialization. Applicants must have a Ph.D. and a record of research productivity in a relevant field. Teaching and postdoctoral experience are desirable. Applicants should submit a curriculum vitae, selected reprints, a concise statement of research and teaching interests, and should arrange for three letters of reference to be sent to: Dr. Donald N. Downer, Head, Department of Biological Sciences, P.O. Box GY, Mississippi State, MS 39762. For more information, Telephone: 662-325-7587; e-mail: gloria@biology.msstate.edu; website: <http://www.msstate.edu/Dept/BioSciences/bio.html>. Screening of applications will begin on December 1, 1999, and will continue until the position is filled. *MSU is an Affirmative Action/Equal Opportunity Employer.*

# Advancing the Challenges of the Day, of the Future, of Human Endeavor.

**A**t The National Academies (National Research Council, National Academy of Sciences, National Academy of Engineering, and Institute of Medicine) we bring about advances that positively impact human endeavor. This is not a solitary undertaking. It reflects a highly collaborative approach that brings together the talents, skills and backgrounds of an exceptional group of professionals.

We invite you to explore the synergy of the institution that is chartered to serve as expert advisor to the nation, and to private enterprise, in such areas as:  
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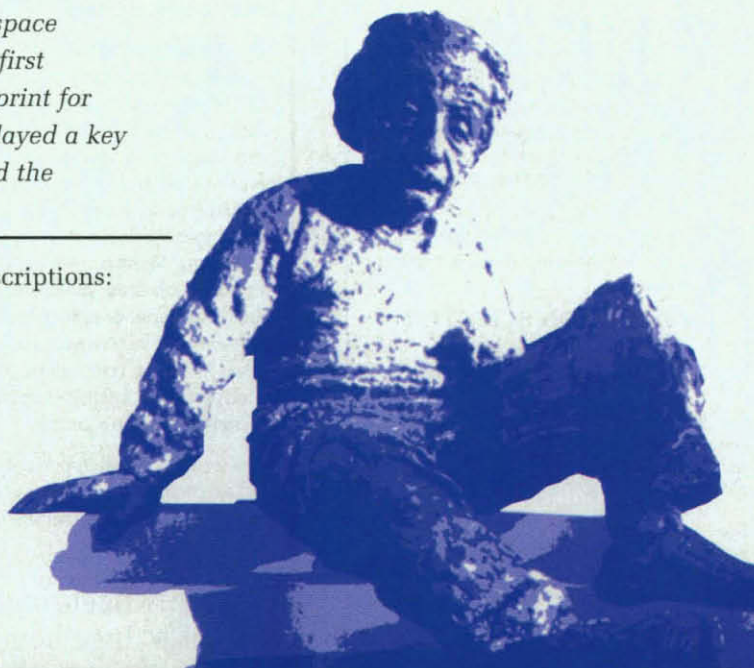
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Send resumes in confidence to:

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GR-146 SM,  
2101 Constitution Avenue, NW,  
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The Scientist positions below require a PhD or equivalent in Biology, Biochemistry or Molecular Biology.

**Assay Development, GEM Technology  
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Genotyping**

**RESEARCH ASSOCIATES**  
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**MECHANICAL ENGINEER,  
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For Fremont positions, please reply with resume and letter to: Incyte Microarray Systems, 6519 Dumbarton Circle, Fremont, CA 94555, fax 510/739-2200, email [microarrayjobs@incyte.com](mailto:microarrayjobs@incyte.com)

At our main campus in Palo Alto, we are recruiting for the following positions:

### PROGRAM MANAGER/DIRECTOR

Ten years project management experience required; MBA/OD background in pharmaceuticals or biotechnology preferred.

### QC SCIENTIST

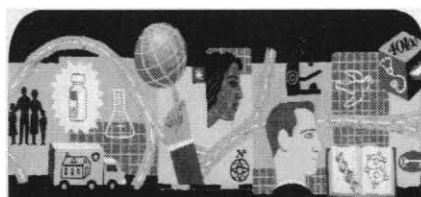
PhD or equivalent in Molecular Biology for QC of expression data for patent applications.

### APPLICATION SCIENTIST

### BIOINFORMATICS PROGRAMMER

For Palo Alto positions, please reply with resume and letter to: Incyte Pharmaceuticals, Inc., 3174 Porter Dr., Palo Alto, CA 94304, fax 650/845-4176, email [employ@incyte.com](mailto:employ@incyte.com)

For more information, go to [www.incyte.com](http://www.incyte.com). Incyte is proud to be an equal opportunity employer, and recognizes the talent of its diverse workforce. EOE F/M/V.



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### Senior Scientist/Biochemist

In this position, you will be responsible for working within a team-oriented drug discovery environment to identify new, immunologically related molecular targets and support existing discovery programs. Successful candidates should possess a Ph.D. in Biochemistry, Immunology, or Pharmacology with at least 3 years of postdoctoral training. Applicants should have experience in enzymology with additional background in biochemistry, protein chemistry, and intracellular signal transduction. A familiarity with chemistry is a plus. Candidates should have experience in research project management with excellent verbal and written communication skills, the capability to effectively interact with diverse disciplines, and the ability to work in a team environment. Previous industrial experience is an asset, but not essential.

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### POSTDOCTORAL POSITION

Applications are invited for a postdoctoral (Ph.D. or M.D.) position, available immediately, in Bethesda, MD, at the level of Research Fellow or IRTA Fellow to study the pathogenesis of neurotropic viruses, JC virus and HIV in human brain cultures. The studies will include in part 1) the identification of cell types and cellular factors involved in the establishment of a latent or persistent infection leading to neurological involvement by the viruses, and 2) the identification of cis- and trans-acting factors required for viral gene expression in human brain cells. These studies will also require the cloning and characterization of the gene(s) of the factor(s) involved in viral gene expression.

These studies will require several years experience with molecular biological techniques including manipulation and characterization of DNA and RNA and gene amplification using PCR techniques. Some experience with protein biochemistry and tissue culture would be helpful. Salary will be commensurate with experience and qualifications.

For position, information and qualification requirements contact Mr. Glenn Hartzoge, 301-496-5468.

Please send a curriculum vitae, the names of three references, and a brief summary of research accomplishments and interests to:

**Dr. Eugene O. Major,  
Laboratory of Molecular Medicine and  
Neuroscience, NINDS, NIH, Building 36, Room  
5W21, 36 Convent Drive, MSC 4164,  
Bethesda, MD 20892-4164**

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### Faculty Positions in Ecology and Organismal Biology

The Department of Ecology and Evolutionary Biology at Yale University invites applications for Faculty Positions in Ecology and Organismal Biology.

We are broadly interested in individuals doing research on organisms and their relationship to the environment at all levels of organization. The Department of Ecology and Evolutionary Biology at Yale has current strength in molecular evolution, systematics, and theoretical biology. We are committed to continued growth in the areas of organismal biology, diversity, and ecology, and anticipate making several appointments at the junior faculty ranks. Interested candidates should submit a CV including a list of publications, a brief research and teaching statement, and names and addresses of four potential evaluators. The committee will begin reviewing applications starting September 15 and will continue until the positions are filled. Send all materials to:

**Chairman  
Department of Ecology and  
Evolutionary Biology  
Yale University  
P.O. Box 208106  
New Haven, CT 06520-8106**

Send inquiries to: [jan.taschner@yale.edu](mailto:jan.taschner@yale.edu)

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opportunity employer*

Laboratory of Molecular and Developmental Biology, National Eye Institute, National Institutes of Health, has a postdoctoral position available for the study of glaucoma using molecular biology approaches. Research projects include identification and characterization of genes involved in glaucoma formation using animal models. A background in molecular/cellular/developmental biology is desirable. Applicants must be U.S. citizens or permanent residents. Applicants must have less than 5 years postdoctoral experience. Starting salary ranges from \$27,500 to \$38,000 per year depending upon experience. Please send curriculum vitae, bibliography, and the names and addresses of 3 references to:

**Dr. Stanislav Tomarev**  
**Laboratory of Molecular and Developmental Biology**  
**National Eye Institute**  
**NIH, Building 6, Room 2A04**  
**6 Center Drive MSC 2730**  
**Bethesda, Maryland 20892-2730**  
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## DEFINING GENE FUNCTION

Development of disease fighting drugs used to be a matter of searching for and screening millions of compounds for therapeutic efficacy. Today, the hunt for new drugs and therapies lies within the cells - in the genes. Using its proprietary gene trap technology, Lexicon Genetics is discovering novel genes at an unprecedented rate. Lexicon Genetics Incorporated, a biotechnology company in The Woodlands, is seeking to fill the following openings:

### Scientist - Full Length Cloning

A position is available immediately for a talented scientist to bolster our efforts to define new drug targets and therapeutics. Requirements include a Ph.D. in Molecular Biology or related field, 3 years postdoctoral experience, and proven expertise in the skills necessary to establish full length cDNA sequences including cDNA library manipulation, PCR, RACE, and working knowledge of sequencing software. Excellent communication skills, a team orientation, and the ability to manage multiple projects are required and supervisory experience and familiarity with bioinformatic tools used to mine large data sets are pluses. Please refer to **job code SCI-FLC**.

### Research Assistant - Micro-Injection

Requirements include a BS degree in a science area and two years of experience using micro-injection technologies in a research laboratory environment. A background in tissue culture and animal handling is strongly preferred. Please refer to **job code RA-1**.

### Scientist - Homologous Recombination.

A position is available for an experienced scientist to perform HR contracts. Requirements include a Ph.D. in Molecular Biology or related field, 3 years of postdoctoral experience and proven expertise in homologous recombination methods. Please refer to **job code SCI-HR**.

We provide a competitive salary and a complete benefits package. Please send your CV and cover letter to:

**Human Resources**  
**LEXICON GENETICS INCORPORATED**  
**4000 Research Forest Drive**  
**The Woodlands, Texas 77381-4287**  
**Fax (281) 364-3207**  
**Email: thompson@lexgen.com**  
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##### HPLC Chemist

B.S. in chemistry or biology and 3 years experience in HPLC and oligonucleotide purification. Demonstrated knowledge of all aspects of purification including isolation of dye incorporated oligonucleotides. Proven experience in methods development and validation. Experience working in an automated manufacturing environment a plus.

##### Molecular Biologist/Assay Development

B.S. or M.S. in molecular biology, microbiology, biochemistry, or a related field, and 1-10 years laboratory experience with demonstrated expertise in DNA/RNA isolation, manipulation and analysis, sample processing and cloning/expression. Experience in mutation detection, gene expression, or molecular diagnostics is required.

##### Oligonucleotide Synthesis Chemist

B.S. or M.S. in the biological or chemical sciences and 3 years experience in small scale oligonucleotide synthesis. Demonstrated knowledge of all aspects of DNA synthesis including incorporation of labels, dyes, and minor bases. Proven experience in methods development. Experience working in an automated manufacturing environment a plus.

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### Postdoctoral Position Laboratory of Epithelial Cell Biology

A postdoctoral position is currently available in the Laboratory of Epithelial Cell Biology at the Alfred I. duPont Hospital for Children in Wilmington, DE. The primary focus of the laboratory is the regulation of chloride channel activity in cystic fibrosis and the biochemical basis for the relationship between the loss of CFTR activity and CF pathophysiology. Recent work from the laboratory has identified drugs with therapeutic potential that we are now testing in transgenic mice. The current position involves in vivo studies in transgenic animals. Expertise in care and breeding of mice is essential. Knowledge of electrophysiology, cell culture and molecular biology would be helpful.

The Alfred I. duPont Hospital for Children is the pediatric teaching hospital for Thomas Jefferson University and the laboratory of Epithelial Cell Biology is part of the Department of Pediatrics. Competitive salary and benefits plans are offered. For consideration send a curriculum vitae with the names of three references to **Dr. William Reenstra, Department of Clinical Science, The Alfred I. duPont Hospital for Children, PO Box 269, Wilmington, DE 19899, wreenstr@nemours.org, or FAX (302) 651-6881.**

For more information about the Alfred I. duPont Hospital for Children and our employment opportunities, please visit our Web site at <http://www.KidsHealth.org>.

The Alfred I. duPont Hospital for Children is an equal opportunity/affirmative action employer.

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- The 2000 Winter and International GRC programs will appear in the October 8, 1999 issue of **SCIENCE**.
- The preliminary 2000 Summer GRC schedule will appear in the November 26, 1999 issue of **SCIENCE**.

visit the frontiers of science at:

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Exciting opportunity to join expanding group of cell and molecular biology researchers at North Shore Long Island Jewish Health System studying the basic molecular functions of the breast cancer susceptibility gene BRCA1 in the development of prostatic and breast cancers.

Candidates should have a PhD in molecular or cellular biology and experience in molecular oncology research. Salary commensurate with qualifications and experience. Send CV to: Nancy McCarthy, Department of Radiation Oncology, LIJ Medical Center, 270-05 76th Avenue, New Hyde Park, NY 11040. LIJ is the Long Island campus for the Albert Einstein College of Medicine.



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University of Minnesota  
School of Public Health  
Position Announcement

### HEAD DIVISION OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH

The University of Minnesota, School of Public Health (SPH) seeks applicants and nominees for the head of Division of Environmental and Occupational Health (EOH). This is a full-time position with a tenured faculty rank of Full Professor. Salary is commensurate with qualifications and experience.

The SPH currently has 94 faculty, 360 students in its degree programs, and \$51 million in expenditures. EOH is a well-established unit, one of four administrative divisions in the School and offers the MPH, MS and PhD degrees. It currently has 21 faculty with expertise in the areas of exposure assessment (chemistry, microbiology, industrial hygiene), health effects (toxicology, epidemiology, nursing) and policy.

EOH is also home of the Center for Environment and Health Policy; the Midwest Ecological Risk Assessment Center; the Center for Violence Prevention and Control; the Midwest Center for Occupational Health and Safety; and the Regional Injury Prevention Research Center.

The SPH seeks candidates with strong leadership capabilities and outstanding scholarship who can continue to maintain and enhance the excellent record of achievements of the EOH Division. The requirements include:

- Earned doctorate related to environmental or occupational health sciences
- Commitment to academic excellence
- Sustained sponsored research program
- Strong record of teaching at the graduate level
- Successful administrative experience, preferably in an academic setting, including research administration, human resources, and finances
- Effective communication skills with a variety of constituencies

The position is currently open. Review of applications/nominations will begin November 1, 1999 and will continue until the position is filled. Send letter of application/nomination, and curriculum vitae to search committee chair Bryan Dowd, Ph.D., c/o Kathy Buxton, Division of Environmental and Occupational Health, Box 807 Mayo, 420 Delaware St. SE, Minneapolis, MN 55455.

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# Clinical Research Opportunities

## Consumer Skin Care Products

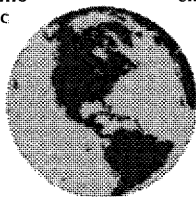
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BEHIND OUR GLOBAL SUCCESS

UNILEVER has the distinction of ranking with the top consumer products companies in the world in sales and innovation. Our success is built upon collaborative scientific research and product development efforts resulting in over 1000 nationally and internationally known brands including *Dove and Lever 2000*, *Vaseline Intensive Care*, *Suave*, *Pond's* and premium fragrance and skin care products including *Elizabeth Arden* and *Calvin Klein Cosmetics*. Other household names include *Lipton*, *Good Humor-Breyers Ice Cream*, *Snuggle* and *Wisk*. Our global research center based in Edgewater, New Jersey currently seeks experienced individuals recognized for research and project leadership in the field of skin research.

We are expanding our clinical research efforts and seek individuals who are experienced and/or knowledgeable in good clinical practices and sound scientific process. You should be degreed in Biological/Physical Sciences or Nursing.

We are seeking **Scientists** and **Managers** who will participate in the development of novel methodologies in the conduct of global clinical studies in skin research. Responsibilities will include study design, protocol development, study coordination as well as data analysis, interpretation, and presentation of study results. You will also



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be involved in the selection of study sites and interaction with external panelists and contract research organizations.

Computer literacy and an understanding of statistics is highly desired.

Management level candidates must have experience initiating, developing and implementing multiple clinical projects as well as managing human and financial resources including grant negotiation. You will have frequent interactions with management at other Unilever laboratories and innovation centers and with scientific experts in academia and industry. PhD level training is preferred.

As an international leader, Unilever offers a competitive compensation package and a comprehensive benefits and relocation program. For consideration, please forward a full C.V. or resume, including publications to: Human Resources Dept. CR-SCI, Unilever Research U.S., 45 River Road, Edgewater, NJ 07020 or E-Mail as a Microsoft Word (version '97 or lower) attachment or flat text file: [job.mca@unilever.com](mailto:job.mca@unilever.com) providing CR-SCI as the subject. We appreciate your interest in our company and will contact applicants who most closely meet our immediate requirements. Applicants must be authorized to work in the USA. Unilever is an Equal Opportunity Employer m/f/d/v.

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Working in our Bioinformatics group, Molecular Biology Department, you will analyze gene expression data, provide informatics support to various high-throughput gene expression systems, as well as work closely with other scientists to utilize the data, and help the Bioinformatics Technical Team develop algorithms and software for data mining. This position requires a PhD in Molecular Biology or the Life Sciences and postdoctoral experience in bioinformatics or genomics research. Must have experience with programming in Perl, UNIX, SQL and relational databases, and web/CGI applications. The ability to manage projects, and collaborate with other scientists is essential. Experience in handling data from high-throughput systems is highly desirable.

We offer competitive salaries, outstanding benefits, and an environment that's conducive to professional growth. We have the above opportunity in ANN ARBOR, MI. For consideration, please forward your resume with JOB CODE, to: Parke-Davis, Resume Processing Center, P.O. Box 92242, Los Angeles, CA 90009-2242. Fax: 310-337-3367. E-mail: [parkedavis@isearch.com](mailto:parkedavis@isearch.com)

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Work with project teams to develop project plans for projects in, and approaching clinical trials. Provide project oversight, track critical activities, facilitate information flow and influence decisions affecting the company's programs. Requires an understanding of pharma/biotech product development. Life sciences degree and a minimum of 3 years relevant experience required.

### Postdoctoral Opportunities

**Biochemist/Chemist.** Incorporate, couple, and characterize synthetic ligands in our gene delivery systems. Experience in peptide and coupling chemistry, analysis of ligand-receptor interactions and the intracellular trafficking gene delivery vehicles in cells is preferred.

**Biochemist/Biophysical Chemist.** Develop and optimize methodology and analytical tools to generate, characterize and integrate Nucleic Acid-Polycation complexes into our gene delivery systems. Experience in DNA chemistry and characterization of DNA complexes required.

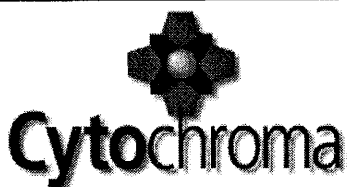
**Formulations Scientist (2).** Develop lipid and polymer based nanoparticle formulations for use in in vivo gene therapy modalities. Experience in pharmaceutical formulation development and characterization using either lipid or polymer based systems required.

For consideration, please send your C.V. to:

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**Human Resources**  
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Seattle, WA 98101  
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You will be involved in planning and conducting research in the field of *in vitro* and *in vivo* immunology of dendritic cells. If you are experienced in the use of basic and applied cellular immunology techniques and have a scientific track record in studying cellular immunology and/or cancer biology, we'd like to see your curriculum vitae. A Ph.D. in Immunology or related discipline with at least 3 years of postdoctoral experience is required.

#### SCIENTIST, MOLECULAR BIOLOGY

You will plan and conduct research in the field of discovery and engineering of target antigens for immunotherapy of cancer. Familiarity with a wide variety of current molecular cloning techniques is needed for this position along with a scientific track record in gene discovery, cloning, and characterization. A Ph.D. in Molecular Biology or related discipline with at least 3 years of postdoctoral experience is required.

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Beckman Research Institute, City of Hope  
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- Eugene H. Levy, PhD, University of Arizona  
*"Places to Live: The Formation, Prevalence and Nature of Planetary Systems in the Universe"*
- Paul R. Schimmel, PhD, Scripps Research Institute  
*"From the RNA World to the Theatre of Proteins"*
- J. William Schopf, PhD, UCLA  
*"Discovery of the Earth's Earliest Fossils: Solution to Darwin's Dilemma"*
- Janet D. Rowley, MD, University of Chicago  
*"Genes in Chromosome Translocations: Clues from Other Organisms"*
- Thomas S. Ray, Jr., PhD, University of Oklahoma  
*"Evolution in the Digital Medium"*
- George B. Dyson, Western Washington University  
*"Darwin Among the Machines"*

For information, call Sharyn Webb at 626/256-8735 or E-mail: [swebb@coh.org](mailto:swebb@coh.org), or visit our website at [www.cityofhope.org/~ctb/BecSym.html](http://www.cityofhope.org/~ctb/BecSym.html)



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Candidates must possess DDS, MD and/or PhD degrees, must have outstanding administrative experience, and must be a distinguished researcher with national/international reputation. Position offers competitive salary and benefits package.

Please send curriculum vitae to: **Professor Racquel Z. LeGeros**, NYU College of Dentistry, 345 East 24th Street, Room 806, New York, NY 10010. **Closing Date: September 30, 1999.**

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**E-mail: [virgil.holder@stjude.org](mailto:virgil.holder@stjude.org)**

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## Using Our Vision To Make A Difference

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At Roche Diagnostics, the world's leading diagnostics company, we continuously strive to delight customers with quality innovative systems, products and services for the research, diagnostics and patient care markets. There are no limits to innovation at Roche Diagnostics. We are a global company whose objective is achieved through the efforts of qualified people. Individuals with a competitive spirit and commitment to Roche and its customers will be rewarded by challenging personal development opportunities.

### Applied Mathematician

Working closely with blood glucose research and development teams on system design, calibration and performance validation tasks, you will be responsible for algorithm development and the design of supporting manufacturing calibration systems. Your scientific skills would be utilized to enhance the efforts of various development projects.

### Who you are

... a team oriented professional with an advanced degree in electrical engineering, applied mathematics, statistics and/or physics (Ph.D. preferred) as well as demonstrated experience in the medical device measurement instrument field in system design, mathematical modeling, and data analysis both in R&D and manufacturing consulting. Independent, innovative work ethics, excellent communication skills, self motivation and a strong attention to detail are essential assets.

### 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, Applied Mathematician - 412213, 9115 Hague Road, Indianapolis, IN 46250**, or e-mail to **[Roche@webhire.com](mailto:Roche@webhire.com)** Principals only please. Roche is committed to providing equal opportunity to a diverse workforce.

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Diagnostics

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

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Located in the San Francisco Bay Area—close to Stanford University and near scores of biotechnology companies—Roche Bioscience is proud to offer competitive salaries and a full benefits package, which includes incentive bonuses, relocation assistance, 401(k) and pension plans. Our progressive environment also features an on-site Fitness Center to help our employees maintain the best possible quality of life. If you would like to explore our opportunities firsthand, apply today by sending your resume, indicating the research area of your interest, to: Roche Bioscience, 3401 Hillview Avenue, A2-HR, Job Code: SCI81399-GF, Palo Alto, CA 94304. Fax 650/424-8159. EOE.

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#### SYNTHETIC ORGANIC CHEMISTS - BS/MS

- Opportunities for scientists to conduct pharmaceutical research using state-of-the-art synthetic methods and spectral systems, especially NMR and MS. Experience with milligram scale multistep synthesis, modern chromatographic and analytical methods is desirable. We are also seeking individuals with hands-on experience in scaling up multi-step syntheses, particularly those familiar with the operation of 50-100 L reactors. BS or MS degree in Chemistry with 0-4 years proven experience in organic chemistry. Job code: CP-CCA

#### COMBINATORIAL CHEMISTS - BS/MS

- Opportunities for scientists to conduct pharmaceutical research focusing on molecular design and diversity sciences. Individuals will work closely with computational and structural scientists and be responsible for the design and construction of small molecule diversity libraries to support lead discovery and optimization. BS or MS degree in Chemistry with 0-4 years proven experience in organic chemistry. Job code: CP-CCM

#### INFORMATION SCIENTIST/ SR. INFORMATION SCIENTIST - BS/MS

- Provide patent, chemical structure, reaction, and general scientific searching. Use a variety of in-house and external databases to facilitate basic scientific discovery, drug development and intellectual property needs. Identify and evaluate new chemistry, patent and scientific electronic resources and provide database training. BS or MS degree in Chemistry with 3-5 years proven experience in information retrieval. Extensive knowledge of online database searching and experience in chemical structure, reaction and patent searching is highly desired. Job code: CP-LIS

#### CHEMICAL TECHNICIAN - BS

- You will be responsible for coordinating chemical purchase orders, placing orders with vendors, receiving and delivering materials, and monitoring chemical inventory databases and equipment. BS degree in Chemistry and a working familiarity with computer systems is desired. Job code: CP-CCT

- Please e-mail your resume to [pharma.hr@bayer.com](mailto:pharma.hr@bayer.com) indicating the job code in the subject line. Resumes suitable for scanning (white paper, 12 or 14 point Times Roman or Helvetica, no boldface, italics, shading, graphics, borders or underlining) can be sent to: Bayer Corporation, Dept GD-C28, 400 Morgan Lane, West Haven, CT 06516-4175. Fax: (203) 812-3188. The job code must be indicated at the top of the resume. No phone calls please. For more information on Bayer Corporation, please visit our website at [www.bayerpharmana.com](http://www.bayerpharmana.com)

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## THE FIELD MUSEUM

### Evolutionary Biology

The Field Museum seeks candidates for a two year post-doctoral position in Evolutionary Biology that emphasizes interdisciplinary research as well as the central role of collections for studies in evolutionary biology. This year the successful candidate should have a demonstrated record of research in an area of evolutionary biology that bridges Botany and Zoology. Research in plant-animal interactions, coevolution, herbivory, system biodiversity and other fields of inquiry at the interface of botany and zoology are encouraged. Research must involve development and use of museum collections such as the botany herbarium, the zoological collections, and/or the tissue collections for molecular studies. The Boyd fellow will be expected to participate fully as part of the Field Museum academic community, to undertake high-quality original research, and to present the subject matter of their work for both an academic and a public audience.

Send cover letter, including outline of a project, C.V. and names of references to: **Chair, Boyd Post-Doctoral Fellow Search Committee, Office of Academic Affairs, The Field Museum, 1400 S Lake Shore Drive, Chicago, IL 60605. Applications will be accepted until November 1, 1999. Candidate is expected to start as of January, 2000.** The Field Museum is an equal opportunity employer and actively encourages applicants from diverse backgrounds. For more information, visit: [www.fieldmuseum.org](http://www.fieldmuseum.org)

The Field  
Museum

## Innovative Postdoctoral Positions in Research and Education

The University of North Carolina at Chapel Hill (UNC-CH) and collaborating historically minority universities (HMUs) in the state of North Carolina are seeking outstanding candidates for a unique NIH-supported postdoctoral training grant. Seeding Postdoctoral Innovators in Research and Education (SPIRE) is designed for life scientists interested in academic careers that emphasize both research and teaching. These multi-year fellowships will enable the postdocs to pursue independent, original research in one of over 100 participating UNC-CH laboratories representing diverse life-science disciplines. Fellows will also receive training in science education, instructional technology-supported learning, and workplace professional skills. The fellows will receive mentored, practical classroom experience by training at HMUs and designing and teaching undergraduate biology courses. In addition, SPIRE's collaboration with North Carolina HMUs enables fellows to contribute to achieving diversity in the life sciences.

Each fellowship includes an allowance for research and teaching activities, support of an undergraduate apprentice, a laptop computer, workshops on workplace skills, and participation in an annual SPIRE symposium. As a Community of Postdoc Scholars, SPIRE fellows will administer a Distinguished Scholars seminar series for the larger university community. Applicants can be either new PhDs or postdocs with up to three years postgraduate training. Underrepresented candidates are strongly urged to apply. Stipends will begin at \$29,000/year and health insurance will be provided. Candidates should send a curriculum vitae, a letter explaining how the SPIRE program will help them to achieve their career goals, and three letters of reference to **Dr. W. E. Bollenbacher, Professor of Biology, CB#3280, University of North Carolina at Chapel Hill, NC 27599-3280.**

Selection of fellows will begin on **September 15, 1999**. If you desire further information about SPIRE before applying, contact Dr. Bollenbacher by phone (919-966-2631) or email ([wbollenb@email.unc.edu](mailto:wbollenb@email.unc.edu)). Application submission by email is preferred.

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**Inhibitex, Inc.** is an innovative and exciting early stage biopharmaceutical company now entering its first clinical trial with an antibody based product. The Company is pursuing the development and commercialization of products for the infectious disease market. The lead R&D programs are directed to the development of differentiated antibody products that will be used to prevent and treat bacterial and fungal infections. Inhibitex is seeking motivated individuals for the following positions:

#### VP of Clinical and Regulatory Affairs

MD with 10+ years of corporate experience in all aspects of Phase I-III clinical trials, preferably with expertise in biologicals for use in infectious diseases or nephrology.

#### Research Scientist-Antibody Humanization

Ph.D. level scientist with 3+ years industrial experience in the area of molecular humanization of murine antibodies.

#### Research Associate-Hybridomas

B.S./M.S. and 3+ years of working experience in all aspects of murine monoclonal production, including immunization, cell fusions and screening.

Inhibitex, Inc. offers competitive salaries and a complete benefits plan. Please send your resume/CV to: Human Resources, Inhibitex, Inc., 8995 Westside Parkway, Alpharetta, GA, 30004, or email to [jobs@inhibitex.com](mailto:jobs@inhibitex.com), MS Word files only. Visit our website at [www.inhibitex.com](http://www.inhibitex.com).

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- Renal physiology • Electrophysiology of cardiac, vascular and endothelial cells
- Lipid mediators • Genetics, molecular biology of transcription factors, Cyt. P450 enzymes
- Mathematical modeling • Microcirculation • Signal transduction mechanisms

**Allen Cowley, Jr., Ph.D.** - Renal and vascular physiology - from genes to integrated organ system analysis.

**William Chilian, Ph.D.** - Growth factor angiogenesis, coronary circulation.

**David Gutterman, M.D.** - Human coronary circulation; hyperpolarization factors; diabetes and vascular disease.

**Theodore Kotchen, M.D.** - Salt sensitivity in African Americans; hypertension and insulin resistance.

**Jane Kotchen, M.D.** - Hypertension control in African American communities.

**Richard Roman, Ph.D.** - Renal vasculature; molecular genetics in hypertension.

**William Campbell, Ph.D.** - Regulation of vascular tone and steroid secretion by endothelium-derived mediators.

**Julian Lombard, Ph.D.** - Structure and function of the microcirculation.

**Andrew Greene, Ph.D.** - Mechanisms of vascular growth and rarefaction.

**David Harder, Ph.D.** - Vascular muscle signal transduction, ion channels, molecular biology of lipid mediators.

**Owen Griffith, Ph.D.** - Nitric oxide syntheses; chemical mechanisms and isoform-selective ischemia.

**Garrett Gross, Ph.D.** - Role of ATP-sensitive K<sup>+</sup> channels in ischemia.

**Nancy Rusch, Ph.D.** - Vascular muscle ion channels in hypertension.

**David Warltier, M.D., Ph.D.** - Coronary collateral circulation; ventricular diastolic function.

**Zeljko Bosnjak, Ph.D.** - Actions of anesthetics on ion channels in cardiac and smooth muscle.

**Kirkwood Pritchard, Ph.D.** - LDL; monocyte adhesion to endothelium.

*Contact David R. Harder, Ph.D. Director, CVRC  
Medical College of Wisconsin • 8701 Watertown Plank Road  
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**POSITIONS OPEN**

**TOXICOLOGIST**

Ciba Specialty Chemicals is a global leader in the discovery, manufacture, and marketing of innovative specialty chemicals. We currently have an opportunity available in our Regulatory Affairs and Legal Department at our Tarrytown, New York location. In this position, you will be responsible for contracting and monitoring toxicology testing needed for U.S. and European registrations. In addition, you will communicate with the EPA and FDA on technical matters related to product toxicology. The qualified candidate must have a Master's degree in toxicology or related discipline. A Ph.D. in toxicology is preferred. Four to eight years of experience in toxicology and hazard assessment is required. Experience with chemical regulatory requirements and issues is desired. Excellent written and oral communication skills are essential. This is a rare opportunity to make a vital and highly visible impact with a leading global organization that values and rewards initiative and teamwork. Interested candidates should contact: **Ciba Specialty Chemicals, Human Resources, 540 White Plains Road, Tarrytown, NY 10591. FAX: 914-785-4167; e-mail: lindacummings@cibasc.com.** *It is the policy of Ciba Specialty Chemicals Corporation that there shall be no discrimination with respect to the employment, or any of the terms of conditions of employment, because of race, color, religion, national origin, sex, age, disability, or military or veteran status. Selection is based upon individual qualifications. It is requested that only individuals who meet the stated qualifications apply for this position.*

Nine-month tenure-track **ASSOCIATE PROFESSOR** in an academic department of the College of Natural Resources and affiliation with the Natural Resource Ecology Laboratory; 70 percent research, 20 percent teaching, and 10 percent service. Ecosystem Scientist to collaborate on multidisciplinary environmental problems (e.g., land-water-atmosphere interactions, mathematical/simulation modeling, human dimensions of ecosystems); establish research program to fund 70 percent of nine-month salary; teach one course per academic year in area of expertise. Requirements include Ph.D. in relevant area and proven ability in research and teaching. Submit curriculum vitae, statement of research and teaching interests, representative reprints, and three letters of reference to: **Dr. Lee Sommers, Search Committee Chair, College of Natural Resources, Colorado State University, Fort Collins, CO 80523-1401. FAX: 970-491-0279.** Applications and nominations will be considered until the position is filled; however, applicants should submit materials by November 1, 1999, for full consideration. Position is available immediately. For questions, contact: **Dr. Sommers, Telephone: 970-491-5371; e-mail: lsommers@lamar.colostate.edu or Dr. Diana Wall, Telephone: 970-491-2504, e-mail: diana@nrel.colostate.edu.** See website: <http://www.ColoState.EDU/Depts/OEO/employ.htm> for full position description. *CSU is an Equal Employment Opportunity/Affirmative Action Employer.*

**SCIENTIST/RESEARCH SPECIALIST**

The Transgenic Mouse Facility of the Memorial Sloan-Kettering Cancer Center seeks a highly motivated individual to interface with Investigators and expedite the implementation of mouse molecular genetics into their research programs. Applicants should have a Ph.D. and two to three years of experience in (1) gene targeting and ES cell culture; (2) genotyping of transgenic and targeted mice by Southern and PCR; and (3) preparation and purification of transgene and targeting vectors; and (4) recovery, culture, and surgical reimplantation of embryos. Animal husbandry experience is also desirable. Salary will be commensurate with research experience. Interested individuals should send their curriculum vitae and the names and contact information for three references to: **Dr. Elizabeth Lacy, Head, Transgenic Mouse Facility, Box 86, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. FAX: 212-639-2861; e-mail: e-lacy@ski.mskcc.org.** *Equal Opportunity Employer.*

**CAREERS @ MAYO**

# Senior Research Technologist

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The Center for Basic Research in Digestive Diseases at the Mayo Clinic is currently searching for a motivated individual with skills in electron microscopy who can work independently with an interactive group of basic cell biologists.

A BS or MS degree in biology, chemistry, or related field is required, as well as strong skills in immuno-electron microscopic techniques. Applicant should have an extensive working knowledge of fixation, embedding and sectioning of cells and tissues, as well as an interpretive knowledge of cell ultrastructure. The candidate is expected to have background in experimental procedures, statistical analysis techniques, and development of troubleshooting and writing/presentation skills.

For other current research opportunities, please visit our website at **[www.mayo.edu/hr-jobs](http://www.mayo.edu/hr-jobs)**. As a leader in healthcare, Mayo Clinic offers an excellent salary and benefits package, including relocation assistance. To apply send or fax cover letter and resume to:



**Mayo Clinic**

Colleen King, Human Resources, OE-2, 200 1st Street SW, Rochester, MN 55905

*Mayo Clinic uses optical scanning technology. Please use a 12 point font in your resume with minimal use of bullets, italics, underlining and bolding.*

**fax** 507-538-1295 **e-mail** [king.colleen@mayo.edu](mailto:king.colleen@mayo.edu) **www** [www.mayo.edu](http://www.mayo.edu)

## POSITIONS OPEN

### ASSOCIATE PROFESSOR OF PSYCHIATRY HARVARD MEDICAL SCHOOL

The Department of Psychiatry at the Massachusetts Mental Health Center (MMHC), and the Center for Biochemical and Biophysical Sciences and Medicine (CBBSM), Harvard Medical School, wish to pursue a program of research in the field of alcohol addiction that involves studying the mechanism of action of antidepressant isoflavones present in folk/herbal medicines. A position is available at the rank of **ASSOCIATE PROFESSOR** of psychiatry for an individual with a Ph.D. in biochemistry, pharmacology, or a related field, who has at least six years of experience in natural products chemistry, and a demonstrated ability to support and direct a competitive research program that pertains to the mechanisms underlying alcohol addiction/abuse. The ideal applicant will have a solid background in neuropharmacology, a demonstrated commitment to addiction-related research, conducted research on alcohol-metabolizing enzymes, extensive experience working with laboratory animals, as well as strong leadership, organizational, interpersonal, and communication skills. The individual will be expected to participate in the predoctoral education program of Harvard Medical School and the postdoctoral training programs of the MMHC and the CBBSM.

Applicants should send a curriculum vitae indicating their area of expertise and a career statement to: **Professor James F. Riordan, Chairman, Search Committee, Center for Biochemical and Biophysical Sciences and Medicine, Harvard Medical School, 250 Longwood Avenue, Boston, MA 02115.** Applications must be received prior to September 30, 1999. *Harvard Medical School is an Equal Opportunity Employer committed to diversity.*

**CHEMICAL ENGINEER or RESEARCH FOOD TECHNOLOGIST.** GS-12/13/14/15. The USDA, Agricultural Research Service, is recruiting a Chemical Engineer or Research Food Technologist for a research assignment attached to the Western Regional Research Center, but with a duty station in Fairbanks, Alaska. The mission of this research is to develop effective and economical utilization of by-products from fish processing, particularly to convert what now is discarded into useful feed ingredients that can supplement or replace edible fish for aquaculture and other livestock. The incumbent will develop techniques for economically collecting, processing, and utilizing waste byproducts, and for extracting and processing high-value minor constituents of the waste byproducts. The research program is cooperative with the University of Alaska Institute of Marine Sciences at Fairbanks, Alaska, with temporary work assignments at Kodiak, Alaska. Salary is commensurate with experience, \$45,236 to \$102,907 per annum (plus 25% COLA). A Ph.D. is preferred. *U.S. citizenship is required.* For more information contact: **Dr. Arthur Schipper, Telephone: 510-559-6071** or see the vacancy announcement (#ARS-X9W-9368) on our website: <http://www.ars.usda.gov>. Applications must be postmarked by August 30, 1999. *The USDA is an Equal Opportunity Provider and Employer. Women and minorities are encouraged to apply.*

### DIRECTOR, GENOMICS FACILITY University of California, San Francisco

The Program in Human Genetics, School of Medicine offers a senior position (non-faculty) as Director of its Genomics Core Facility. The facility provides DNA sequencing, genotyping, and mutation detection services to laboratories working on vertebrate genetics projects. Requirements are a Ph.D. degree or equivalent, genomics postdoctoral experience, management and supervisory experience, and ability to interface with genomic researchers. The position starts January 1, 2000, or later. Send a cover letter; curriculum vitae, at least three reference letters, and relevant reprints by October 1, 1999, to: **Laura Baxter, Biochemistry Department, University of California, San Francisco, 513 Parnassus Avenue, Room S-960, San Francisco, CA 94143-0448.** *The University of California, San Francisco is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

## POSITIONS OPEN

### PHYSIOLOGICAL PLANT ECOLOGIST SCHOOL OF NATURAL RESOURCES AND ENVIRONMENT University of Michigan

The School of Natural Resources and Environment invites individuals with expertise in the physiological ecology of woody plants to apply for a nine-month, tenure-track faculty position at the **ASSISTANT PROFESSOR** level. The School of Natural Resources and Environment is keenly interested in individuals with the ability to use their knowledge of woody plant physiology to understand the dynamics of native and managed forest ecosystems. The successful candidate will be expected to develop a vigorous research program on the physiological ecology of woody plants. The successful candidate will also be expected to teach undergraduate and graduate courses, two of which would cover woody plant physiological ecology, vegetation management/silviculture, or restoration ecology. The successful candidate will be expected to interact with students and faculty with diverse interests in natural resources. A Doctoral degree is required and postdoctoral experience is desirable. A more detailed description of the position and School of Natural Resources and Environment can be found at website: [www.snrc.umich.edu](http://www.snrc.umich.edu)

Candidates should forward a statement of research and teaching interests, a curriculum vitae, and three letters of reference to: **Physiological Plant Ecologist Search Committee, School of Natural Resources and Environment, 430 East University Avenue, Ann Arbor, MI 48109-1115.** Review of applications will begin 15 October 1999 and will continue until a suitable candidate is found. For further information contact: **Donald R. Zak, Telephone: 734-763-4991; e-mail: drzak@umich.edu.**

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

### X-RAY CRYSTALLOGRAPHER COLORADO STATE UNIVERSITY

The Department of Biochemistry and Molecular Biology seeks applications for a tenure-track position at any academic level from X-ray Crystallographers who are studying the structure of biological macromolecules and/or macromolecular complexes. The department has considerable expertise in the areas of structural biology, gene expression, and cellular biochemistry. It occupies a modern building with excellent core facilities, including crystallization, X-ray diffraction, and computing facilities. Further information is available on our website: <http://mmr.bmb.colostate.edu/bmb>. Candidates must have a Ph.D., the ability to sustain an independent and productive research program, and the desire to participate effectively in undergraduate and graduate teaching. Complete applications consisting of a curriculum vitae, a statement of research and teaching interests, and three reference letters should be received by October 15, 1999, for full consideration. However, applications and nominations will be considered until the position is filled. Send to: **Dr. R. W. Woody, Department of Biochemistry and Molecular Biology, Colorado State University, Fort Collins, CO 80523-1870.** *CSU is Equal Employment Opportunity/Affirmative Action Employer. E.O. Office: 101 Student Services.*

### U.S. GENOMICS

**MICROFABRICATION ENGINEER.** Position will require expertise in photolithography techniques including dry etch processes, thermal evaporation, PECVD, clean room procedures, chemical treatment of surfaces, spincoating, anodic bonding, and GDSII or AUTOCAD programs. B.S./M.S. with experience.

**MECHANICAL ENGINEER/FLUIDS ENGINEER.** Expertise in fluid dynamics, mechanical device design, AUTOCAD drawings and layouts, fluid-handling mechanisms. Position requires excellent technical deftness. B.S./M.E.

**DEDICATED TECHNICIAN.** Position requires work with BACs, genomic DNA isolation, agarose digestion protocols, restriction enzyme digestion, Southern blotting, and cell culture. B.S./M.S.

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

## POSITIONS OPEN

### RESEARCH ASSOCIATE

The successful candidate will work with Center scientists on the molecular basis of alcohol use and abuse. Major research goals are to (i) reveal the mechanism of action of daidzin, an alcohol-consumption suppressive (antidipsotropic) agent isolated from a medicinal plant, and (ii) to identify better and more efficacious antidipsotropic agents. He/she will study the effects of daidzin and its structural analogs on alcohol drinking behavior of, and alcohol metabolism in, selected laboratory animals; identify the physiological function of, and the effects of daidzin on, alcohol metabolizing enzymes, such as the various isozymes of alcohol dehydrogenase and aldehyde dehydrogenase. He will also run an antidipsotropic activity screening assay using alcohol-preferring laboratory rodents for the identification of new antidipsotropic compounds synthesized and/or identified by our Chemist. Applicants should have experience in performing experiments with living animals, isolation and kinetic analysis of enzymes, and isolation and analysis of metabolites from animal tissues. Preference will be given to those with experience in research on alcohol abuse/alcoholism and/or herbal medicine. Requirements include Master's degree (or equivalent) in biochemistry or pharmacology and three to five years of related research experience.

Send résumés to: **Center for Biochemical and Biophysical Sciences and Medicine, Harvard Medical School, 250 Longwood Avenue, Boston, MA 02115, Attention: Leila Snyder.**

*Harvard University is an Equal Opportunity Employer committed to diversity.*

### CARDIOVASCULAR PHARMACOLOGIST DARTMOUTH MEDICAL SCHOOL

The Department of Pharmacology and Toxicology seeks applicants for a tenure-track position at the level of **ASSISTANT/ASSOCIATE PROFESSOR**. We are interested in candidates with an exciting research program in all areas of cardiovascular pharmacology, although preference will be given to individuals whose work emphasizes mechanisms of signal transduction in vascular development, disease, or angiogenesis. The successful candidate will join a department with research expertise in many areas of cellular and molecular pharmacology and toxicology. Please visit our website: <http://www.dartmouth.edu/dms/pharmtox> for further details. Candidates should have a Ph.D. and/or M.D. degree(s) and a productive academic record. Review of applicants will begin October 1, 1999.

Submit curriculum vitae, a statement of research interests and accomplishments, and names of at least three references to:

**Dr. Alan Eastman  
Department of Pharmacology and Toxicology  
Dartmouth Medical School  
7650 Rensselaer  
Hanover, NJ 03755**

*Dartmouth, an Equal Opportunity/Affirmative Action Employer, strongly encourages applications from women and minority candidates.*

### RESEARCH FELLOW

Positions are available to develop a cardiovascular morphology program in the Vascular Biology Branch of the NHLBI. The research program in the Vascular Biology Branch focuses on the regulation of smooth muscle cell growth by cell cycle regulatory factors and development of gene therapy approaches to vascular disease. Experimental approaches include standard tissue preservation, embedding, and sectioning; routine histology stains; immunohistochemistry; *in situ* hybridization; fluorescence microscopy. Prefer M.S. or Ph.D. and advanced experience. Requires experience in cellular, molecular, and vascular biology. Salary will be proportional to experience. Interested candidates should send their curriculum vitae and three references to: **Dr. Elizabeth G. Nabel, Vascular Biology Branch, NHLBI, National Institutes of Health, Building 10, Room 8C103, Bethesda, MD 20892. Telephone: 301-496-1518; e-mail: enabel@nih.gov.**

*NIH is an Equal Opportunity Employer.*



**CHALLENGING BIOMEDICAL EMPLOYMENT OPPORTUNITIES  
DHHS/PHS/FOOD AND DRUG ADMINISTRATION  
CENTER FOR BIOLOGICS EVALUATION AND RESEARCH**

The Center for Biologics Evaluation and Research is searching for outstanding microbiologists, biologists, chemists, and medical technologists to work in areas such as molecular biology, immunology, cell biology, biochemistry, virology, medical technology and genetics. Some positions may involve working with HIV and/or HTLV-I virus. Opportunities for professional development may include further training and attendance at scientific meetings and conferences.

The Center's mission is to regulate blood, vaccines, biological therapeutics and related products according to statutory authorities in order to protect and enhance the public health. The regulation of these products is founded on science and how to ensure their purity, potency, safety, efficacy, and availability. In conjunction with regulation and research responsibilities, the Center statistically evaluates clinical and preclinical studies of human biological products and vaccines and epidemiologically evaluates post-marketing studies and adverse biologics reactions.

**Qualifications:** These positions require specific course work in the field of study and professional experience or directly related postgraduate education for positions above the entry level. Advanced training and/or experience in one or more of the following areas, is desirable: cell and molecular biology and immunology, virology, cytokines and growth factors or related disciplines. **U.S. Citizenship is required.**

**Location:** Offices and laboratories are strategically located on the campus of the National Institutes of Health in Bethesda, Maryland, in close proximity to the campus.

**Salary:** Salary range for GS-5 through GS-11 is \$22,208 to \$52,927 per annum, plus an excellent benefits package and flexible work schedules. Salary and level of responsibility are commensurate with education and experience.

**How To Apply:** Applications are accepted throughout the year, and candidates should indicate when they will be available for employment. Interested candidates should send an Application for Federal Employment (SF-171), Optional Application for Federal Employment (OF-612), OR a Curriculum Vitae/Resume with bibliography, transcripts, and names of three references to:

**Food and Drug Administration  
Center for Biologics Evaluation and Research  
1401 Rockville Pike, HFM-123  
Rockville, Maryland 20852-1448  
Attention: Lisa Durphy 99013**

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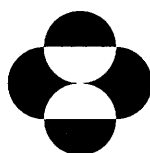
**Merck Research Laboratories in Rahway, New Jersey, a world leader in Biological and Pharmaceutical Research, has an excellent opportunity available for a Biochemist/Enzymologist.**

## Biochemist/Enzymologist

The selected individual will have strong biochemistry and cell biology skills. Responsibilities will include developing assays of key enzymes and receptors in mammalian sphingolipid pathway, quantitative determinations by LC/MS of lipid biosynthetic intermediates and drug samples, and maintenance of mammalian cell lines.

Individual should have a BS/MS or equivalent in biochemistry, enzymology or chemistry. Postgraduate experience in biochemistry is highly desirable. Ability and desire to work as part of a team toward development of screens and novel structure discovery is essential.

Merck Research Laboratories are located approximately 25 miles from New York City. Our salaries, benefits and growth potential are excellent. Applicants should send their CV (including names and addresses of three potential references) to **Merck & Co., Inc., P.O. Box 2000, AD #96, RY80-A3, Rahway, New Jersey 07065**. Merck Research Laboratories is an equal opportunity employer.



**MERCK**  
Research Laboratories

## POSITIONS OPEN

### ARABIDOPSIS DATABASE CURATOR

The Arabidopsis thaliana database (AtDB) is seeking full-time database Curators to participate in the collection and display of data for research use, the development of a data model for the database, and the development of tools for literature curation. Data types to curate will include experimental data from the Arabidopsis literature, genome sequencing and annotation data, gene and protein data, genetic and physical maps and genetic markers, microarray data, phenotype and allele data, and biochemical pathways.

Successful candidates will have a Ph.D. degree, a demonstrated ability for independent, critical thinking, and excellent written and verbal communication and teamwork skills. Prior laboratory experience with *Arabidopsis* is preferred. Candidates with some background in biochemistry, evolutionary biology, or systematics are especially encouraged to apply. While the candidate should have basic computer skills such as word processing and navigating the World Wide Web, no extensive background in computing is required. Familiarity with basic UNIX commands, spreadsheets, and commonly used biological research tools such as BLAST and MEDLINE searching would be assets.

For more information about AtDB, see our website: <http://genome-www.stanford.edu/Arabidopsis/> or contact us by e-mail: [atdb-curator@genome.stanford.edu](mailto:atdb-curator@genome.stanford.edu).

Please send a curriculum vitae and three letters of reference by September 15, 1999, to:

**AtDB, Attn: Eva Huala  
Department of Genetics  
Stanford University School of Medicine  
Stanford, CA 94305**

Inotek Corporation, located north of Boston, Massachusetts, is a rapidly growing pharmaceutical company focusing on new approaches in the treatment of inflammatory diseases. We have several positions immediately available for motivated, dynamic individuals with M.D. and/or Ph.D. degrees to join ongoing projects into novel anti-inflammatory therapeutics related to nitric oxide and poly (ADP-ribose) synthetase. A position for a staff **MOLECULAR BIOLOGIST** with experience in DNA/RNA isolation, PCR, Northern blotting, generation of deletional constructs to identify promoter elements, gel shift assays, and cell transfection is immediately available. A position for a staff **PHARMACOLOGIST** with extensive experience in *in vivo* models of inflammation and ischemia-reperfusion is also available. In addition, a position for a staff **IMMUNOLOGIST** with experience in flow cytometry and cell death is available. A **CHEMIST** position, with strong analytical background is also available. Finally, two positions are open for **RESEARCH ASSISTANTS**, with experience in molecular biology and small animal experimentation, respectively. We provide a dynamic environment and competitive salaries and benefits. Please send curriculum vitae and names, addresses, and telephone/FAX numbers of three references to: **Inotek Corporation, Suite 419E, 100 Cummings Center, Beverly, MA 01915. FAX: 978-232-8975.**

The Stanford DNA Sequencing and Technology Center is seeking a **RESEARCH ASSOCIATE** with a Ph.D. in molecular biology, genetics, or related discipline, to lead the effort of finishing and annotating shotgun-sequenced human BAC clones. The candidate will work closely with the human DNA variation group in identifying simple sequence polymorphisms in the coding and regulatory regions of the human genome. The candidate should be skilled in such molecular biology techniques as plasmid library construction, Southern and Northern blot analysis, stable and transient transfections, and sequencing. The candidate should be familiar with UNIX and Macintosh-based hard- and software. Good communication and organizational skills are a plus. A résumé as well as three references are to be forwarded to: **Dr. Peter Oefner, Stanford DNA Sequencing and Technology Center, 855 California Avenue, Palo Alto, CA 94304. E-mail: [oefer@genome.stanford.edu](mailto:oefer@genome.stanford.edu).**



## POSITIONS OPEN

### TENURE-TRACK POSITION HUMAN CANCER GENETICS

The Laboratory of Immunobiology (LIB), Division of Basic Sciences, of the National Cancer Institute invites applications for a tenure-track position in human cancer genetics. The applicant should have the potential to develop an independent research program in human cancer genetics. The position will be supported by two Postdoctoral Fellows, ample laboratory space, and access to the unique clinical resources of the National Cancer Institute. Through collaborative working arrangements, the tenure-track candidate can study patients with rare inherited malignant disorders. Current laboratory Principal Investigators are **Berton Zbar** (genetics of human kidney cancer), **Michael I. Lerman** (genetics of human lung cancer), **Edward Leonard** (inflammation), and **Steven Hou** (signal transduction in *Drosophila*). This position is available for a Physician with a salary in the \$75,000 range to be commensurate with education and experience and the successful candidate may be eligible for medical school loan repayment. Reimbursement for relocation expenses up to \$2,500 may be authorized. A one- or two-page statement of research interests and goals should be submitted in addition to three letters of recommendation and a curriculum vitae to: **Ms. Teri Cecil, Building 576, Room 102, NCI-Frederick Cancer Research and Development Center, P.O. Box B, Frederick, MD 21702. Telephone: 301-846-5402; FAX: 301-846-5397; e-mail: tcecil@mail.ncifcrf.gov.** Candidates must be U.S. citizens or permanent residents. Applications must be received by December 1, 1999. The National Cancer Institute is an Equal Opportunity Employer.

### RESEARCH SCIENTIST

Aurora Health Care, Wisconsin's largest not-for-profit healthcare system has an opening for a Research Scientist at St. Luke's Medical Center in Milwaukee, Wisconsin. Conducts research in the area of cellular immunology in organ transplantation. Involves PCR, general cloning techniques, transfections, Westerns, protein purification, and flow cytometry. Will supervise Technicians and publish research findings. Requires Ph.D. in immunology with relevant experience in molecular biology techniques or Master's degree with significant experience and accomplishment. Experience with small animal surgery would be a strong asset. Excellent written and verbal communication skills required. Send a cover letter with names of references to:

**Aurora Health Care  
E. Demos, Centralized Employment  
3033 South 27th Street, Suite 101  
P.O. Box 343910  
Milwaukee, WI 53234-3910  
Telephone: 414-649-7951**

*Equal Opportunity Employer. Minorities/Females/Disabled/Veterans. We support a safe, healthy, and drug-free work environment through criminal background checks and pre-employment drug testing.*

### SENIOR SCIENTISTS FOR RESEARCH IN VIRAL VECTOR

**Institute for Human Gene Therapy  
University of Pennsylvania**

We are recruiting a number of scientists to work in several areas relevant to vectors: (1) process development of adenoviruses, AAV, and lentiviruses, (2) molecular and immunologic analysis of *in vivo* vector administration, (3) creation of novel viral vector systems. The person will be recruited as a **RESEARCH ASSOCIATE**, which is in the non-faculty academic track. Will work with independence in the context of project teams. Must have Ph.D. or equivalent in the biological sciences with postdoctoral experience. Additional experience in academia or industry desired. Salaries are competitive and consistent with training and experience. Send curriculum vitae to: **James M. Wilson, M.D., Ph.D., Institute for Human Gene Therapy, 204 Wistar Institute, 3601 Spruce Street, Philadelphia, PA 19104-4268. E-mail: wilsonjm@mail.med.upenn.edu.** Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN

### BIO-PRODUCTION DIRECTOR

ATCC, serving as one of the world's largest and most diverse repositories of biological materials, with a new facility in Manassas, Virginia, has a challenging opportunity for an individual to develop and manage all aspects of biomaterial production at ATCC. Incumbent will be responsible for scheduling, quality, cost, and procedures used in the production of cultures, cells, and other biomaterials for internal and external distribution, and will work closely with the scientific staff to ensure the integrity of material produced. A Master's degree or equivalent in bioprocessing engineering or a related physical science and a minimum of seven years of management experience in a bioproduction environment required. Experience must include production of biomaterials such as cell lines, bacteria, fungi, yeast, protozoa, and similar organisms. Qualified candidate will be familiar with processes such as amplification, dispensing, media formulation, and preservation and must have experience with production systems and equipment and a working knowledge of quality systems such as GLP and ISO 9000. Strong management and teamwork skills, as well as excellent oral and written communication skills are critical for this position.

Competitive salary and comprehensive benefits package offered. Interested/qualified candidates should submit résumé, with salary requirement, to:

**ATCC  
Attn: Human Resources/BPD  
10801 University Boulevard  
Manassas, VA 20110  
FAX: 703-365-2735**

Visit our website: [www.atcc.org](http://www.atcc.org).  
*Equal Opportunity Employer/Minorities/Females/Disabled/Veterans.*

### POSTDOCTORAL FELLOWSHIPS IN CANCER RESEARCH

The University of Rochester Cancer Center invites applications for Postdoctoral positions in an NCI-supported research training program in the general areas of cell growth and regulation, molecular genetics, experimental therapeutics, and immunology. Projects include mechanisms of oncogene function and metastasis, growth factor and hormonal regulation of gene expression, evasion of immune response by tumors, immunotolerance, disease modeling in transgenic mice, investigation of cell cycle regulation using flow cytometry, autitumor drug inhibition of cell growth, mechanisms of drug resistance, and control of DNA synthesis, repair, and protein synthesis in tumor viruses and cells. Please send résumé and three letters of reference to: **Dr. Russell Hilf, Training Program, University of Rochester Cancer Center, 601 Elmwood Avenue, Box 704, Rochester, NY 14642.** U.S. citizenship or permanent residency required. The University of Rochester is an Equal Opportunity Employer.

Florida A&M University College of Pharmacy is seeking **RESEARCH ASSISTANTS/ASSOCIATES** with Ph.D. degrees in the areas of synthetic medicinal chemistry focusing on heterocyclic compound. Experience in drug design will be an advantage. Submit letter of interests and curriculum vitae to:

**Dr. K. Ken Redda  
Florida A&M University  
College of Pharmacy  
Tallahassee, FL 32307  
Telephone: 850-599-3910  
E-mail: kredda@famu.edu.**

**RESEARCH TECHNICIAN** required for current research project using T cell vaccine therapy in multiple sclerosis. Minimum requirements are B.Sc. (preferably in immunology or biochemistry) and at least two years of experience in tissue culture, including the generation and maintenance of T cell lines. Experience in other routine immunoassays would be preferable. Salary commensurate with experience. Send curriculum vitae and letters of reference to: **Dr. Brett Lund, USC School of Medicine, Department of Neurology, MCH 142, 1333 San Pablo Street, Los Angeles, CA 90033.**

## POSITIONS OPEN

### MOLECULAR EPIDEMIOLOGY/ SEQUENCING GROUP LEADER

VaxGen, founded in 1995, is building a science-driven organization dedicated to the development of an AIDS vaccine. We currently are searching for a Molecular Epidemiology/Sequencing Group Leader to support vaccine development and clinical trials research. The individual's primary responsibilities will involve (1) PCR cloning and automated sequencing of HIV-1 envelope glycoproteins from clinical specimens, (2) molecular epidemiologic analysis of virus sequence data, and (3) archiving and organization of data for regulatory submission. Good computer skills, particularly those related to sequence analysis and contig assembly are essential. Experience in virology, population genetics, bioinformatics, immunology, or protein structure is desirable, but not required. Excellent communication skills are required. A Ph.D. with at least two years of relevant postdoctoral experience, or an undergraduate science degree and at least six years of relevant molecular biology experience, is required. Résumés may be sent by mail or e-mail to: **VaxGen, Inc., Human Resources, 1000 Marina Boulevard, Suite 1000, Brisbane, CA 94005-1841. E-mail: jobs@vaxgen.com.**

### POSITION IN MOLECULAR NEUROBIOLOGY OF ALCOHOL

**The Department of Physiology  
and Pharmacology  
Wake Forest University School of Medicine  
Winston-Salem, North Carolina**

We are currently recruiting for a **TENURE-TRACK** position at any level for an individual whose area of research specialization is in the molecular neurobiology of alcohol. For information about our alcohol research program, please see our website: [www.wfubmc.edu/research/cnsa/cnsa.html](http://www.wfubmc.edu/research/cnsa/cnsa.html). For specific information, please contact: **Dr. H. Samson, Telephone: 336-716-8590; e-mail: hsamson@wfubmc.edu.** To apply, please send letter of intent and interest, a current curriculum vitae, and most relevant recent publications along with the names of three individuals who could provide letters of reference to: **Dr. H. Samson, Department of Physiology and Pharmacology, Wake Forest University School of Medicine, Winston-Salem, NC 27157-1083.** Affirmative Action/Equal Opportunity Employer.

### SCIENCE EXHIBIT DEVELOPER

The Museum of Science and Industry is recruiting a Developer to help produce exhibits. Responsibilities include project management, content research, evaluation, design development, and prototyping. Requirements include strong management skills and excellent communication abilities. A degree in an area of science or information design is desired.

Send letter, curriculum vitae, and description of exhibit interest, with salary history to:

**Museum of Science and Industry  
Human Resources Department  
57th Street and Lake Shore Drive  
Chicago, IL 60637  
FAX: 773-684-0019**

*Affirmative Action/Equal Opportunity Employer/ADA.*

### STAFF ASSOCIATE MOLECULAR BIOLOGY FACILITY COLUMBIA UNIVERSITY

A position is available for a Molecular Biologist to carry out mutational analysis of human disease genes, as part of a newly established facility. Emphasis is on neurodegenerative and cardiac disorders. (Salary \$35,000 to \$40,000, according to experience.) Apply to: **Benjamin Tycko, M.D., Ph.D., Associate Professor of Pathology, Columbia University, College of Physicians and Surgeons, 630 West 168th Street, New York, NY 10032. E-mail: bt12@columbia.edu.**

*Columbia University is an Affirmative Action/Equal Opportunity Employer.*

# SENIOR PROJECT SCIENTIST

## Specimen Processing

**Becton Dickinson, headquartered in northern Baltimore County**, is embarking on a comprehensive program in clinical diagnostics for oncology through our strategic alliance with Millennium Predictive Medicine, the leader in functional genomics for diagnostics. We are seeking highly motivated and talented Scientists and Technicians to help design, create and develop screening and staging tests for diagnosing a wide variety of cancers. These commercial systems will utilize tumor markers arising from our genomic partnership with Millennium Predictive Medicine and will guide primary physicians, pathologists and clinical oncologists in the effective treatment of cancer patients by providing individualized diagnostic and prognostic information.



We are looking for a professional to develop reagents and devices for the collection and processing of specimens for molecular pathology for use in clinical diagnostics.

Utilizing your proven track record of accomplishment in the development of diagnostic products, you will be responsible for developing specimen collection and processing systems for slide-based molecular pathology. Specific duties will encompass assessing customer requirements through interviews with clinical pathologists, prioritizing opportunities in cooperation with business development and intellectual property functions, scouting relevant outside technologies, establishing experimental strategies, and leading an R&D team in the development of reagents, devices and protocols for the collection/processing of tumors for in situ diagnostics.

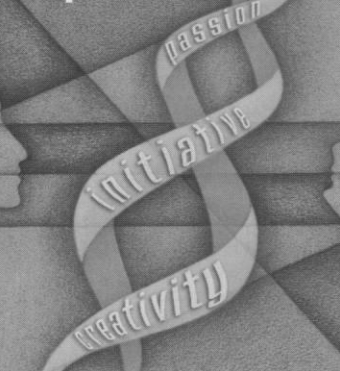
Along with a MD, PhD, MS or BS degree and 2-7 years experience in the clinical or medical diagnostics field, you must possess experience with the collection and processing of specimens for clinical diagnostics. Experience with molecular pathology (cytology, IHC, ISH) or molecular diagnostics would be a plus.



As an integral contributor to this major, very important effort, you will receive an attractive compensation package including comprehensive benefits. Relocation assistance will be provided, if necessary. For immediate consideration please e-mail, FAX or mail a detailed resume to: **JRN1079B, BECTON DICKINSON, P.O. Box 8255, Gaithersburg, MD 20898. FAX: (301) 519-8403 or (888) 771-9898. E-Mail: BD@alexus.com** We are an equal opportunity/affirmative action employer. Minorities, females, and individuals with disabilities are encouraged to apply. VISIT our WEBSITE for a complete listing of opportunities: [www.BD.com](http://www.BD.com)

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## Senior Scientist Recovery Sciences

Become an integral part of our Recovery Science Department within the Process Sciences group. You will take responsibility for developing and designing large-scale recovery and purification processes for recombinant therapeutic proteins from microbial and mammalian sources. Support research and technology development activities, supervise a group of highly skilled scientists and research associates, and fill project leadership roles. To qualify, you must possess a PhD or MS in Biology, Biochemistry, Chemical Engineering or related field, 3-5 years postdoctoral experience, and 5-10 years applied industrial experience. An extensive background in protein purification, excellent communication and team leadership skills, plus a willingness to work in a hands-on environment are essential to your success in this highly collaborative environment. Knowledge of cGMP procedures is desirable.

We offer industry-leading benefits. Send your resume, indicating Job Code SCI317, to: Genentech, Inc., Human Resources, PO Box 1950, South San Francisco, CA 94083-1950. Please use plain typefaces. You may email your resume, again indicating appropriate Job Code, to [jobs@gene.com](mailto:jobs@gene.com) (ASCII files only with a maximum line width of 76 characters). We cannot accept faxed resumes. Genentech is an Equal Opportunity Employer.

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extraordinary science

## POSITIONS OPEN

### PLANT ECOLOGIST AND PLANT SYSTEMATIST

Illinois Natural History Survey (grant-funded, full-time). These positions work in the Statewide Biological Assessment Program established by contract with the Illinois Department of Transportation (IDOT). The incumbents will be responsible for conducting vegetation surveys in IDOT project areas, describing noteworthy plant communities and occurrence of threatened and endangered species. Other duties include a program of independent research secured with external funding. Qualifications: Master's or Ph.D. in plant biology or related field. Expertise required includes strong knowledge of midwestern flora and skills in habitat assessment. The Plant Ecologist must have a thorough knowledge of how to design and implement quantitative sampling regimes for vegetation. The Plant Systematist must have a thorough knowledge of herbarium techniques and systematic field methodologies. Salary: for M.S. candidate \$28,000 to \$34,000; for Ph.D. \$38,000 to \$40,000. Benefits: generous vacation, sick, and personal leave. State Universities Retirement System. State Health Insurance. For complete position announcements and to apply, submit cover letter, résumé, and names, addresses, and telephone numbers for four references by September 3, 1999, to: Ms. Sue Key, Human Resources Manager, Plant Ecologist (PRF# 622A) or Plant Systematist (PRF# 622B), Illinois Natural History Survey, 607 East Peabody Drive, Champaign, IL 61820. Telephone: 217-244-7790. The Survey is an Equal Employment Opportunity/ADA Employer.

### FELLOWSHIP DEPARTMENT OF GYNECOLOGIC AND BREAST PATHOLOGY American Registry of Pathology at Armed Forces Institute of Pathology

The Department of Gynecologic and Breast Pathology announces the availability of a one-year Fellowship for the academic year 2000-2001. Department reviews nearly 7,000 difficult gynecologic-breast lesions per year. In addition to research based on clinical and morphologic features of a variety of lesions, the department is actively involved in identifying immunohistochemical markers of diagnostic and prognostic significance as well as analysis of molecular changes in gynecologic and breast tumors. Fellows are required to work on research protocols incorporating immunohistochemical and/or molecular analysis. Applicants must have completed four years of training in anatomic pathology.

Board certification in anatomic pathology and a record of prior publications desirable. Fluency in English mandatory. Applicants must be currently authorized to work in the United States on a full-time basis.

The deadline for applications is September 15, 1999. Interested individuals should send curriculum vitae with three letters of recommendation to:

F. A. Tavassoli, M.D.  
Chairman, Department of Gynecologic  
and Breast Pathology  
Armed Forces Institute of Pathology  
14th at Alaska Avenue N.W.  
Washington, DC 20306-6000

### CURATORIAL POSITION IN SYSTEMATIC ENTOMOLOGY CARNEGIE MUSEUM OF NATURAL HISTORY

Applications with Ph.D. are invited for a Curatorial position (any rank) in the Section of Invertebrate Zoology, with particular interest in candidates having administrative experience and expertise in strengths of Carnegie Museum of Natural History collections (e.g., Hymenoptera, Heteroptera, or Homoptera). Applicants should send curriculum vitae, addresses of three references, reprints, and letter describing professional goals by 1 October 1999 to: Bradley C. Livezey, Dean of Science, Carnegie Museum of Natural History, 4400 Forbes Avenue, Pittsburgh, PA 15213.

## POSITIONS OPEN

**POSTDOCTORAL/RESEARCH ASSOCIATE POSITION** available for developing novel approaches for (1) *ex vivo* expansion of human megakaryocyte progenitors; (2) apoptosis and megakaryocyte maturation at molecular level; and (3) platelet formation mechanism(s). Expertise in molecular biology, immunology, flow cytometry.

Send curriculum vitae and names of three references to:

Isaac Cohen, Ph.D.  
Northwestern University Medical School—RIC  
345 East Superior Street, Room 1407  
Chicago, IL 60611  
FAX: 312-908-1815  
E-mail: i-c@nwu.edu

## POSTDOCTORAL POSITION CARDIAC SIGNALING PATHWAYS

Two NIH-funded positions are available to study cardiac tissue-specific gene expression and hypertrophic signaling pathways. We utilize molecular techniques including transgenic mouse models and knockouts to investigate disease-causing pathways. Please send your curriculum vitae to: **Dr. Jeffery D. Molkentin, Children's Hospital Medical Center, Division of Molecular Cardiovascular Biology, 3333 Burnet Avenue, Cincinnati, OH 45229-3039. FAX: 513-636-5958. Children's Hospital is an Affirmative Action/Equal Opportunity Institution.**

**POSTDOCTORAL POSITION** in HIV/AIDS neuropathogenesis to study virus/neuronal cell interactions, neuronal apoptosis, and vector transduction of neurons and glia. Requires background in molecular virology, neurobiology, immunology, or related area. Submit letter, curriculum vitae, and three references to:

Dr. Dennis L. Kolson  
c/o Ms. Emily Deane  
Department of Neurology  
280C Clinical Research Building  
University of Pennsylvania  
Philadelphia, PA 19104-6140  
FAX: 215-573-2029

**POSTDOCTORAL POSITIONS** are available to study blood coagulation and thrombosis, with an emphasis on molecular biology of blood clotting factors. Projects incorporate structure-function studies, regulation of gene expression, and animal models of coagulation disorders. Send curriculum vitae and names of references to: **David Gailani, Hematology/Oncology Division, Vanderbilt University, 538 MRB II, 2220 Pierce Avenue, Nashville, TN 37232-6305. FAX: 615-936-3853; e-mail: dave.gailani@mcmail.vanderbilt.edu.**

**POSTDOCTORAL RESEARCH ASSOCIATE and TECHNICAL POSITIONS** available to study the resistance response of soybean to the soybean cyst nematode using cDNA microarrays and other techniques. Send curriculum vitae and names of references to:

Dr. Benjamin Matthews  
USDA ARS SARL  
Building 006  
Beltsville, MD 20705  
Telephone: 301-504-5730  
E-mail: bmatthew@asrr.arsusda.gov

**POSTDOCTORAL FELLOWSHIP** is available to pursue molecular analysis of craniofacial cartilage, bone and tooth development, using the zebrafish. Outstanding applicants with recent Ph.D. or finishing with expertise in molecular genetics and/or developmental biology are invited to apply. Please send résumé and names of three referees to: **Pamela C. Yelick, Forsyth Institute, 140 The Fenway, Boston, MA 02115. E-mail: pyelick@forsyth.org.**

## POSITIONS OPEN

## POSTDOCTORAL RESEARCH ASSOCIATE POSITION IN IMMUNOLOGY AND SIGNAL TRANSDUCTION

Two positions are available immediately to study the molecular mechanisms of a novel growth factor and its receptor tyrosine kinase in regulating inflammatory reactions. Transgenic models targeting the receptor expression in macrophages or lung epithelial cells will be used. The projects are to study (1) signaling events of the receptor in controlling inflammatory mediator synthesis during septic shock; and (2) mechanisms of the growth factor receptor in tissue remodeling of lung epithelial cells. The applicant must have Ph.D. or M.D. degree. Experiences in gene cloning and regulation, signal transduction, and protein biochemistry is required. Knowledge with macrophage and epithelial biology is a plus. Please send a curriculum vitae and names, addresses, and telephone numbers of three referees to: **Ming-Hai Wang, M.D., Ph.D., Department of Medicine, University of Colorado School of Medicine/Denver Health, Davis Pavilion 313N, 777 Bannock Street, Box #4000, Denver, CO 80204.**

**POSTDOCTORAL POSITIONS** available. Two Postdoctoral positions are available to study the factors and mechanisms involved in regulated mRNA stability using a novel *in vitro* system (see: *Genes Dev.* 13:188-201, 1999). Experience in molecular biology and/or biochemistry required. Send curriculum vitae, a summary of research interests, and the names/addresses of three references to: **Dr. Jeff Wilusz, Department of Microbiology and Molecular Genetics, University of Medicine and Dentistry of New Jersey-New Jersey Medical School, 185 South Orange Avenue, Newark, NJ 07103. E-mail: wilusz@umdnj.edu. 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.**

## POSTDOCTORAL POSITION STANFORD UNIVERSITY

A Postdoctoral position is available immediately in the Department of Radiation Oncology to study radiation-induced apoptosis, oncogenes, membrane-mediated events, ion channels/pumps, and signal transduction pathways. Candidates with a strong background in molecular and cell biology are encouraged to apply. Interested candidates should send curriculum vitae, bibliography, and names of three references to: **Dr. Susan Knox, Department of Radiation Oncology, Stanford University Medical Center, 300 Pasteur Drive, Room A093, Stanford, CA 94305-5302. FAX: 650-725-8231; e-mail: knox@reyes.stanford.edu. Stanford University is an Equal Opportunity Employer.**

## POSTDOCTORAL POSITION DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY University of California, San Francisco

Postdoctoral position available immediately to work on immunoglobulin hypermutation/heavy chain class switch.

Interested candidates should send a curriculum vitae and arrange for letters of references to be sent to:

Matthias Wabl, Ph.D.  
University of California, San Francisco  
San Francisco, CA 94143-0670  
E-mail: mutator@itsa.ucsf.edu

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**POSITION** is available immediately to characterize yeast genes and their encoded proteins involved in DNA repair/oxidative damage to cells. B.S./M.S. and experience in yeast genetics, molecular biology, and protein biochemistry is preferred but not required. Send curriculum vitae and references to: **Dr. Carol Wood Moore, Department of Microbiology, CUNY Medical School/SBE, Convent Avenue at 138th, J-920, New York, NY 10031. E-mail: moore@med.cuny.edu.**

## POSITIONS OPEN

**POSTDOCTORAL POSITION.** A Postdoctoral position is available November 1, 1999, to work on two viral diseases of chickens: infectious bursal disease and avian leukosis virus-J strain. Experiments will test the effect of the major histocompatibility complex on disease resistance, and will evaluate effects of drugs on infection both *in vivo* and *in vitro*. Requirements are a Ph.D. in biological science or biochemistry, with experience in microbiology, tissue culture, and molecular biology or biochemistry. Experience in virology and animal models of disease, especially chickens, is desirable. Review of applications will begin on October 1, 1999, and will continue until the position is filled. Send curriculum vitae and names and addresses of three references to: **Dr. Sandra Ewald, Department of Pathobiology, 264 Greene Hall, Auburn University, Auburn, AL 36849-5519. FAX: 334-844-2652. Auburn University is an Affirmative Action/Equal Opportunity Employer. Minorities and women are encouraged to apply.**

**NIH-funded POSTDOCTORAL POSITION** to study growth factor function and regulation in the context of prostate cancer and urogenital pathology. Studies now in progress include (1) cancer cell metastasis to bone; (2) regulation of apoptotic pathways by protein-protein interaction; (3) stromal-epithelial interaction; and (4) mechanochemical transduction and cell signaling. See: **Lin et al., Cancer Research 59: 2891-2897, 1999; Park et al., Amer. J. Physiol. 275 (Cell Physiol. 44): C1247-C1254, 1998.** Candidates should have a strong background in molecular/cellular biology. Ph.D. or M.D. required. Competitive salary and benefits in a strong academic environment. Contact: **Michael R. Freeman, Ph.D., Enders Research Laboratories, Room 1161, Children's Hospital, Harvard Medical School, 300 Longwood Avenue, Boston, MA 02115. E-mail: freeman\_m@al.tch.harvard.edu; FAX: 617-355-7760.**

**POSTDOCTORAL POSITION** available immediately in a laboratory studying primate embryonic development, trophoblast differentiation, and placental endocrinology and immunology. Ph.D. in cellular/molecular reproductive biology or immunology, or an interest in reproductive immunology and maternal-fetal interactions desired. Experience in cellular immunology and NK cell biology would be advantageous, but other highly motivated individuals are encouraged to apply. Submit curriculum vitae and names, addresses, and telephone numbers of three references to: **Dr. Thaddeus G. Golos, Ph.D., Wisconsin Regional Primate Research Center, University of Wisconsin, 1223 Capitol Court, Madison, WI 53715-1299. E-mail: golos@primate.wisc.edu. Affirmative Action/Equal Opportunity Employer.**

## POSTDOCTORAL RESEARCH FELLOW MOLECULAR IMMUNOLOGY

Position available immediately in a laboratory of the Department of Neurology, Columbia Presbyterian Medical Center, to investigate autoimmune mechanisms of neurological diseases and to generate humanized antibodies. Experience in molecular biology of antibody genes and cell culture desired. Salary commensurate with experience. Send cover letter, curriculum vitae, and names of three references to: **Norman Latov, M.D., Ph.D., Department of Neurology, Columbia University, 710 West 168th Street, New York, NY 10032. FAX: 212-305-3986; e-mail: nl2@columbia.edu.**

**POSTDOCTORAL POSITION** available at Weill Medical College of Cornell University, New York City to investigate (1) ubiquitin-dependent proteolysis in cell cycle control and tumorigenesis; (2) potential applications of an engineered proteolysis system. Send curriculum vitae and three references to the current address of: **Pengbo Zhou, Ph.D., Department of Pathology, Harvard Medical School, 200 Longwood Avenue, D2-641, Boston, MA 02115. FAX: 617-432-0727; e-mail: pzhou@hms.harvard.edu.**



## POST DOCTORAL FELLOWSHIPS

The Children's Hospital of Philadelphia, the nation's first hospital dedicated solely to pediatric care, currently has the following outstanding opportunities available for creative, highly motivated individuals.

### Rheumatology

In this challenging position, the independent worker we seek will spend at least 2-3 years in the laboratory studying the role and mechanism of cytoskeletal assembly and interactions between the T cell antigen receptor (TCR) and the cytoskeleton in signal transduction, energy and development. Position requires a Ph.D. or MD.

Please send CV, 3 references and letter of interest to: **Dr. Terri Finkel, MD, Ph.D., The Children's Hospital of Philadelphia, Abramson Research Center, 10th floor, 34th & Civic Center Blvd., Philadelphia, PA 19104-4399.**

### Oncology

In this challenging position, you will develop novel PCR-based strategies to clone genomic translocation breakpoints in childhood leukemia as well as develop in vivo assays and utilizing in vitro assays to investigate the role DNA topoisomerase II in leukemia associated translocations. Position requires a Ph.D. or MD. Prior tissue culture experience is desired.

Please send CV, 3 references and letter of interest to: **Dr. Carolyn Felix, MD, The Children's Hospital of Philadelphia, 902 Abramson Research Center, 34th & Civic Center Blvd., Philadelphia, PA 19104-4399.**

### Human Genetics

In this challenging position, the candidate we seek will study the molecular genetics of human cardiac disease. Position requires a Ph.D. or MD. A background in human molecular genetics is preferred.

Please send CV, 3 references and letter of interest to: **Dr. Nancy B. Spinner, Ph.D., The Children's Hospital of Philadelphia, 1007 Abramson Research Center, 34th & Civic Center Blvd., Philadelphia, PA 19104-4399.**

 **The Children's Hospital of Philadelphia**  
*A pediatric healthcare network*

An Equal Opportunity Employer.

## POSITIONS OPEN

### TWO POSTDOCTORAL RESEARCH FELLOWS BETH ISRAEL DEACONESS MEDICAL CENTER

Postdoctoral positions are available at the Center for Molecular Imaging Diagnosis and Therapy in the Department of Radiology to develop molecular technologies for enhanced diagnostic and therapeutic strategies for cancer, with particular emphasis on drug/gene targeting using genetically engineered proteins and viruses. Good communication skills and expertise in one or more of the following areas required: recombinant DNA techniques; viral gene transfer vectors; expression of proteins using bacterial and mammalian systems and their characterization; and protein chemistry/biochemistry. Send curriculum vitae and two references to: **Dr. Takeshi Sano, Harvard Institutes of Medicine, Room 118, 77 Avenue Louis Pasteur, Boston, MA 02115. FAX: 617-975-5560; e-mail: tsano@bidmc.harvard.edu.**

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

### TWO POSTDOCTORAL FELLOW POSITIONS

Two Postdoctoral Fellow positions available September 1, 1999. One position will examine the activation of latent TGF- $\beta$ 1 in the matrix of growth plate chondrocytes as well as TGF- $\beta$ 1-mediated signaling mechanisms. The second position will examine the regulation of growth plate chondrocytes by vitamin D metabolites, including the production of 1,25-(OH) $_2$ D $_3$  and 24,25-(OH) $_2$ D $_3$ , regulation of 24R- and 1 $\alpha$  hydroxylase activities, and signaling mechanisms mediated through the membrane receptor for 1,25-(OH) $_2$ D $_3$ . Both positions require a Ph.D. in biochemistry and/or molecular biology and are renewable for up to three years. Send a current curriculum vitae, names and addresses of three references, and a one-page summary of professional goals to: **Barbara D. Boyan, Ph.D., Department of Orthopaedics, Mail Code 7774, 7703 Floyd Curl Drive, San Antonio, TX 78229-3900.**

### POSTDOCTORAL POSITION MOLECULAR NEUROBIOLOGY OF PAIN

A position with NIH training grant support is available to examine the role of excitatory amino acid receptors (EAAR) in the neuronal plasticity of the spinal cord using mice with an absent or mutated EAAR. The individual will have a strong background in behavior and neuropharmacology and expertise with nociceptive and opioid models in mice. Send curriculum vitae, information on U.S. citizenship or permanent resident status, and the names and addresses of three references to: **Charles E. Inturrisi, Ph.D., Pharmacology LC-524, Weill Medical College of Cornell University, 1300 York Avenue, New York, NY 10021. An Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION** available immediately in a NIH-funded laboratory studying the cellular and molecular aspects of host-parasite interaction in the skin with particular emphasis on the role of antigen-presenting cell and cytokines. Ph.D. and experience in cellular immunology is essential. Please send curriculum vitae to: **K. Ramaswamy, Department of Biomedical Sciences, University of Illinois College of Medicine at Rockford, 1601 Parkview Avenue, Rockford, IL 61107. FAX: 815-395-5666; e-mail: ramswamy@uic.edu** for more information. *The University of Illinois is an Equal Opportunity/Affirmative Action Employer.*

**A POSTDOCTORAL FELLOWSHIP** is available immediately to study the molecular endocrinology/neurobiology of stress. Candidates should have a Ph.D. degree and experience in techniques of molecular and cellular biology. Send a curriculum vitae, a statement of research interests, and the names and addresses of three references to: **John Kasckow, M.D., Ph.D., Department of Psychiatry, University of Cincinnati, 231 Bethesda Avenue, Cincinnati, OH 45267-0559. FAX: 513-558-4805.**



## Novartis Agricultural Discovery Institute

**Novartis Agricultural Discovery Institute Inc. (NADI)** is one of the largest single fully funded research endeavors dedicated to agricultural genomics. We apply cutting-edge biotechnology to match genes with traits and provide advanced technologies that can be used widely in agribusiness research for the development of gene-based products. We currently seek a number of exceptional individuals to join NADI's growing team:

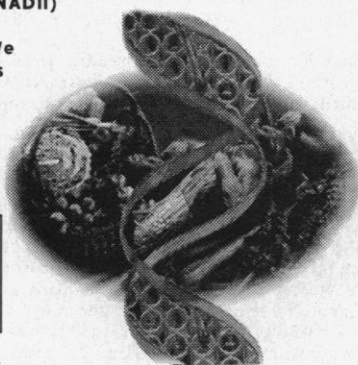
## Food for thought.

### Gene Expression Technology

Several positions are available at Ph.D., MS and BS levels. The incumbents will use DNA microarrays and other gene expression profiling technologies to dissect gene regulation pathways. Scientist level positions require a Ph.D. or MS degree in Molecular Biology or related area with at least 5 years' demonstrated experience in mRNA and cDNA manipulation. Experience with high-throughput PCR, quantitative PCR, fluorescence probing and automated equipment, as well as computer skills preferable. Associate level positions require a BS or MS degree with emphasis and significant experience in molecular biology, genetics, or biochemistry. All positions require strong communication and organizational skills and the ability to work in a team environment.

NADI offers excellent compensation and a great benefits package, including 401k. For immediate and confidential consideration, please send resume/salary history to: **Novartis Agricultural Discovery Institute, Inc., HR Dept/GEXP/TZ-SCI, 3115 Merryfield Row, Suite 100, San Diego, CA 92121-1102. Fax: (858) 812-1102. AA/EOE.**

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## POSITIONS OPEN

### POSTDOCTORAL POSITION CELLULAR ELECTROPHYSIOLOGY CARDIOVASCULAR NEUROSCIENCE

NIH-funded Postdoctoral positions are available to study neuronal signal transduction in genetic mouse models using patch clamp techniques for whole-cell and single-unit recordings. Projects include the role of calcineurin in neuronal signaling (*PNAS* 92:6269, 1995) and of nNOS in adrenergic signaling (*PNAS* 95:15090, 1998). Applicants must have Ph.D. or M.D. with at least two years of training in cellular electrophysiology.

Send curriculum vitae and brief description of research interest and career goal to: **Gail D. Thomas, Ph.D., or Ronald G. Victor, M.D., Hypertension Division/Department of Internal Medicine, The University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-8586. E-mail: gthom1@mednet.swmed.edu; FAX: 214-648-7902.**

*UT Southwestern Medical Center is an Equal Opportunity Employer/Affirmative Action Employer.*

**POSTDOCTORAL FELLOWSHIP.** A Postdoctoral Fellowship is immediately available in the laboratory of **Dr. Albert J. Wong** to study signal transduction pathways in tumorigenesis. The areas of interest include (1) signaling pathways induced by a naturally occurring mutant EGF receptor; (2) properties of the Gab1 docking protein, which plays a role in signaling for several receptor tyrosine kinases and cytokine receptors; (3) role of JNK in tumorigenesis. Please send or e-mail curriculum vitae to: **Albert J. Wong, M.D., Kimmel Cancer Institute, Thomas Jefferson University, BLBS 1002, 233 South 10th Street, Philadelphia, PA 19107 USA. E-mail: a\_wong@lac.jci.tju.edu. Equal Opportunity Employer.**

Two-year **POSTDOCTORAL POSITION** for Organic/Surface Chemist available October 1, 1999, on protein micro- and nanopatterning of self-assembled monolayers (SAMs) and polymeric biomaterials. Candidates must have previous experience in at least two of the following areas: (1) SAMs including micropatterning, (2) polymer chemistry with emphasis on surface modification, (3) surface analysis (ellipsometry, SPR, XPS, SIMS, AFM), (4) tissue culture. Contact: **Prof. A. Chilkoti, Box 90281, Department of Biomedical Engineering, Duke University, Durham, NC 27708. FAX: 919-660-5362; e-mail: chilkoti@duke.edu. Duke University is an Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION** is available immediately at the University of Pennsylvania to work on molecular mechanisms of mercury-induced apoptosis in lymphoid cells. Applicants should have a strong background in molecular and cellular biology. Please send curriculum vitae and names of three references to: **Bruce J. Shenker, Ph.D., Professor and Chair, Department of Pathology, University of Pennsylvania School of Dental Medicine, 4010 Locust Street, Philadelphia, PA 19104-6002.**

*An Affirmative Action/Equal Opportunity Employer.*

### UNIVERSITY OF CINCINNATI

**POSTDOCTORAL POSITION** available to study *Pneumocystis carinii* lipids; biochemistry, parasitology, or microbiology, and laboratory animal experience desired. Send curriculum vitae and names, telephone, FAX, and e-mail of three references to: **Edna S. Kaneshiro, Department of Biological Science, University of Cincinnati, Cincinnati, OH 45221. FAX: 513-556-5280; e-mail: edna.kaneshiro@uc.edu.**

Two **POSTDOCTORAL POSITIONS** available for studies in early diagnosis, genetic analysis, and immunotherapy of cancer. Solid background in immunology/molecular biology/flow cytometry. Excellent references and publication record. Three-year commitment required. Contact: **Dr. E. Vitetta, Cancer Immunobiology Center, University of Texas Southwestern-Dallas, e-mail: eviteta@mednet.swmed.edu. FAX: 214-648-1204. Affirmative Action/Equal Opportunity Employer.**

## POSITIONS OPEN

### OUTSTANDING OPPORTUNITIES IN CARDIOVASCULAR RESEARCH FOR CREATIVE GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

The University of Virginia

The University of Virginia offers a multidisciplinary training program in basic cardiovascular research. Our special strengths are in the area of vascular biology with studies emphasizing molecular biology, physiology, pharmacology, biophysics, and cell biology of the vessel wall. Thirty-one Investigators are participants in a training program with a long history of successful mentoring of both graduate students and Postdoctoral Fellows. Our particular strengths are in the areas of structural biology, cell signaling, and microvascular function. Laboratory investigations are underway in cell-cell communication in microvessels; cardiac, smooth muscle cell signal transduction; angiogenesis; and leukocyte-endothelial cell interactions. Positions are well supported and include stipend, health insurance, and travel. A special program also exists for M.D.'s wishing to pursue the Ph.D. Details of the interests of the faculty, a description of the program, and application forms may be found on the World Wide Web at website: <http://www.med.virginia.edu/medicine/inter-dis/cvrc>. For additional information, e-mail: [cimcon@virginia.edu](mailto:cimcon@virginia.edu). Interested and competitive applicants may also apply directly to: **Dr. Brian R. Duling, Department of Molecular Physiology and Biological Physics, P.O. Box 10011, Health Sciences System, University of Virginia, Charlottesville, VA 22906-0011.**

*These positions are restricted to permanent residents or citizens of the United States. The University of Virginia is an Equal Opportunity Employer.*

### POSTDOCTORAL RESEARCH POSITIONS IN MICROBIOLOGY

American Society for Microbiology/  
National Center for Infectious Diseases

Positions are available for Postdoctoral Scientists to conduct novel research with the overall objective of developing practical applications of microbiology, immunology, and epidemiology for diagnosis and prevention of infectious diseases. Associates will perform research in residence at the National Center for Infectious Diseases, which is headquartered at the Centers for Diseases Control and Prevention in Atlanta, Georgia.

Deadline for applications is November 15, 1999. Website: <http://www.asmsa.org/edusrc/edu23e.htm>; e-mail: [fellowships-careersinformation@asmsa.org](mailto:fellowships-careersinformation@asmsa.org).

### POSTDOCTORAL POSITION IN SYSTEMS NEUROSCIENCE

A McDonnell-Pew/NIH-funded position is available to study the neural basis of visual perception. Ongoing projects involve recording from neurons in multiple visual cortical areas, with an emphasis on the role of neuronal dynamics and on the interactions among populations of neurons on visual processing. Experience with electrophysiological techniques highly desirable. Send a curriculum vitae, a brief description of your research interests, and letters of reference to: **Dr. Timothy Gawne, University of Alabama at Birmingham, Department of Physiological Optics, Birmingham, AL 35294-4390. FAX: 205-934-5725; e-mail: tgawne@icare.opt.uab.edu. Equal Opportunity/Affirmative Action Employer.**

**Neuro-AIDS. POSTDOCTORAL FELLOWSHIPS** (two) are available within a highly interactive research group to study the neuropathogenesis of HIV infection. Ph.D. with excellent skills in molecular biology and protein chemistry or virology and pharmacology are needed. Please send letter of interest, curriculum vitae, reprints, and names of three references to: **Avindra Nath, M.D., Department of Neurology, University of Kentucky, KY Clinic-L445, Lexington, KY 40536-0284. E-mail: anath@pop.uky.edu; FAX: 606-323-5943. Affirmative Action/Equal Employment Opportunity Employer.**

## POSITIONS OPEN

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

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

**POSTDOCTORAL POSITIONS** are available for individuals interested in working at the crucial juncture between proteomics and genomics. Cutting-edge projects relevant to cancer and angiogenesis are ongoing. Superb facilities include DNA array instrumentation, MALDI TOF, and electrospray mass spectrometry. Individuals with experience in mass spectroscopy (MALDI or ES), phage-display, genomics, protein analysis, 2-D gel electrophoresis, and/or animal models of tumor metastasis are encouraged to apply. A publication record will be taken as evidence of potential. Positions require a Ph.D.

Send curriculum vitae, relevant reprints, and the names of three references to: **Jeffrey W. Smith, Ph.D., Director, Program On Cell Adhesion, The Burnham Institute, 10901 North Torrey Pines Road, La Jolla, CA 92037. E-mail: [jsmith@burnham-inst.org](mailto:jsmith@burnham-inst.org).**

A **POSTDOCTORAL FELLOWSHIP** or **RESEARCH SCIENTIST** position is available in the Division of Oncology, Department of Medicine, at the University of Washington to study the biodistribution and therapeutic effects of radiolabeled antibodies in mouse tumor xenograft systems. The laboratory has been continuously funded by the NIH and other agencies for 15 years. Applicants should have experience working with radioiodine and be proficient with mouse dissections and tailvein injections. Please send curriculum vitae and names of three references to: **Oliver W. Press, M.D., Ph.D., Box 356043, University of Washington, Seattle, WA 98195-6043.**

**POSTDOCTORAL POSITION** in HIV pathogenesis available immediately. Our research interests are the regulation of TNF/TNFR family members by HIV, and the role of CD4 down-modulation during infection (see: **Lama et al., Curr. Biology** 9:622-631, 1999). The applicants should have a solid background in molecular biology and molecular virology. Experience with HIV is desirable. Send curriculum vitae and names and addresses of three references to: **Dr. Juan Lama, La Jolla Institute for Allergy and Immunology, 10355 Science Center Drive, San Diego, CA 92121. FAX: 858-558-3526; e-mail: [juan@liai.org](mailto:juan@liai.org).**

**POSTDOCTORAL POSITIONS** are available immediately for highly motivated individuals interested in pursuing molecular and cellular studies on the basic biology of the ovary in a dynamic NIH-funded laboratory utilizing cutting-edge technology. Individuals with a Ph.D. or M.D. and experience in molecular or cellular biology are preferred. Interested individuals should send a curriculum vitae, a statement of research interests, and names of three references to: **Dr. Eli Y. Adashi, Division of Reproductive Sciences, Department of Obstetrics/Gynecology, University of Utah Health Sciences Center, ARUP II Room 109, 546 Chipeta Way, Salt Lake City, UT 84018.**

## CORNING

The most trusted tools of science.

Corning Science Products is a division of Corning Incorporated, a \$3.5 billion, Fortune 500 diversified product company with a strong tradition of technological innovation. The Science Products Division develops high technology research tools used for drug discovery and functional genomics, as well as for other exciting life science areas. We are seeking talented individuals to join our suburban Boston office in the following areas:

### **Bioinformatics Specialist**

This individual will be providing bioinformatics support to our Applications and Development group and assessing the strategic outlook in this area that will enable us to launch major new advanced life science product platforms. Additional responsibilities include representing the organization in outside discussions and technical forums related to bioinformatics and providing customer support for new products. Domestic and international travel requirements will be approximately 15 - 20%.

Qualified candidates will possess a M.S. or Ph.D. in Biological, Chemical, or Physical Sciences with 3 to 5 years experience in programming, database construction, maintenance and management; or M.S. or Ph.D. in Informatics or Computer Sciences with 3 to 5 years experience in life science research and development. Must have 1-2 years experience managing/tracking DNA and other biologicals, including physical clones and related information. Programming experience with Visual Basic, C++, and Perl required and product and application development experience preferred.

**Job Code: BI899SCI**

### **Marketing Manager, Drug Discovery**

This person will be responsible for providing leadership for our Marketing team to achieve our worldwide business goals as well as developing and executing the marketing plan for our High Throughput Screening, Genomics and Test Kit Component businesses. Additional responsibilities include, customer interfacing, product marketing, market analysis, supplier relations and channel management. Domestic and international travel requirements will be approximately 30%.

Qualified candidates will possess a B.S. in Life Sciences, Chemistry or Bio-chemistry, 5+ years of product marketing experience, knowledge of the drug discovery industry and several years of direct supervisory experience. Experience in sales is strongly desired. **Job Code: MM899SCI**

Corning offers a competitive compensation and benefits package including 401(k) with company match, defined pension plan, stock purchase plan, health and dependent care flexible spending accounts and tuition reimbursement.

Please submit your resume including Job Code along with your salary requirements to:

Human Resources Department  
Corning Incorporated  
Science Products Division  
45 Nagog Park  
Acton, MA 01720  
Facsimile # 978.635.2481  
E-mail: maysda@corning.com

*Corning is an Equal Opportunity Employer*

For more information about the Science Products Division of Corning, please visit our website: [www.scienceproducts.corning.com](http://www.scienceproducts.corning.com).



**NATIONAL INSTITUTE OF MENTAL HEALTH**  
NATIONAL INSTITUTES OF HEALTH

### **Chief, Integrative Neuroscience of Schizophrenia, Mood & Other Brain Disorders Program**

The National Institutes of Health, National Institute of Mental Health, invites applications for an extramural program position located in the newly created Clinical Neuroscience Research Branch, Division of Neuroscience and Basic Behavioral Science:

- **Chief, Integrative Neuroscience of Schizophrenia, Mood & Other Brain Disorders Program (GS-13/14)**

The incumbent will manage and develop a portfolio of extramural research grants involving clinical neuroscience approaches to understanding the bases of complex mental disorders such as schizophrenia, mood and other brain disorders.

Qualifications include an M.D. with a specialty in psychiatry or a Ph.D. in a relevant basic science discipline with significant training and experience in clinical neuroscience. GS-13/14 positions have a salary range from \$58,027 to \$93,233 per annum (with locality pay) which includes special salary for Medical Officers. Physicians may be eligible for a Physician's Comparability Allowance (PCA) between \$5,000-\$16,000 a year.

A copy of the full text vacancy announcement is available via the World Wide Web: <http://www.nimh.nih.gov/orm/pmb/jobs.htm>. Interested candidates may contact Ms. Margot Darby, NIMH Personnel Management Branch, at (301) 443-9094. Applications will be accepted if postmarked by September 20, 1999 and received within 5 working days.

**NIH IS AN EQUAL OPPORTUNITY EMPLOYER**

## MEETINGS

National Institute of Mental Health, NIH  
Center for Complex Systems and Brain Sciences at the  
Charles E. Schmidt College of Science, Florida Atlantic University

### **Dynamical Neuroscience VII Integration Across Multiple Imaging Modalities**

#### **Immediately Prior to SFN Annual Meeting**

Thursday, October 21  
8 a.m.-6 p.m.

Friday, October 22  
8 a.m.-10 p.m.

Marriott Delray Beach Hotel  
Delray Beach, Florida



Dynamical brain imaging has been a fundamental goal since the earliest days of neuroscience. Recent technological innovations are making that objective a reality. This symposium will survey the latest brain imaging techniques and address the issue of how data on several different space and time scales may be combined in order to obtain a deeper understanding of the brain in health and disease. The goal is that these methods may inform brain theory and experimentation.

#### **Invited speakers include:**

R. Buckner, M. Fabiani, A. Dale, J.D. Cohen, L.B. Cohen,  
W.J. Freeman, K.J. Friston, G. Gratton, R. Hari, N. Logothetis,  
T. Paus, C. Price and T. Sejnowski.

For further information, registration and other logistics, contact M. Burdetsky, Capital Meeting Planning, Inc.  
Phone: 703-207-1703, Fax: 703-207-1704, E-mail: [meetings@cmpinc.net](mailto:meetings@cmpinc.net)  
<http://www.nimh.nih.gov/diva/sn99/dynamics.htm>



• **FDA CAREER OPPORTUNITIES** •

**THE FOOD AND DRUG ADMINISTRATION, CENTER FOR DRUG EVALUATION AND RESEARCH (CDER) IS RECRUITING \* PHYSICIANS \* SCIENTISTS \* CONSUMER SAFETY OFFICERS \* MATHEMATICAL STATISTICIANS \* COMPUTER SPECIALISTS \*** to serve in the dynamic, highly challenging and innovative atmosphere of drug development and research. CDER's public health mission is to protect and enhance the health of the public through the review and evaluation of scientific data submitted by pharmaceutical manufacturers in support of new drug and investigational new drug applications (NDA/INDs), render an approval or disapproval for human use, and monitor events on marketed drug products.

**GENERAL INFORMATION:** The following positions may be filled as civil service or U.S. Commissioned Corps which requires U.S. citizenship. Permanent U.S. residents can apply for Staff Fellowship appointment in physician, scientist and mathematical statistician positions. Graduates of foreign colleges/universities must provide proof of U.S. education equivalency certification. Employment opportunities offer competitive salaries and excellent benefits.

\* **PHYSICIANS (Various medical specialties):** Evaluate data involving the animal testing and human clinical trials of new drugs to determine their safety and effectiveness. Basic qualification is a Doctor of Medicine or Doctor of Osteopathy. Graduates of foreign medical schools must be ECFMG certified. Board certification/eligibility in a medical specialty and experience in conducting clinical trials are highly desired for these positions. Civil Service Salary GS-14, \$74,162 to \$93,233 plus an additional Physician Comparability Allowance of \$14,000 to \$16,000 may also be paid.

\* **SCIENTISTS:** Biology, Chemistry, Microbiology, Pharmacology, Pharmacokinetics, Toxicology, Epidemiology: Scientists evaluate portions of NDAs/INDs that pertain to their particular discipline. They determine the scientific validity of manufacturers' tests, drug safety and efficacy claims. A doctorate degree in the scientific discipline with at least two years postdoc experience are highly desired for these positions. Civil Service Salary GS-12/13, \$48,796 to \$75,433.

\* **CONSUMER SAFETY OFFICERS:** Perform management and liaison responsibilities in conducting records maintenance, monitoring the work effort and advising review team members on regulatory requirements, and coordinating information with pharmaceutical industry officials. Qualifications; a

degree or combination of education and experience which includes at least 30 semester hours in any combination of courses in the fields of biological science, chemistry, pharmacy, physical science, food technology, nutrition, medical science, epidemiology, engineering, veterinary medical science, or related scientific field. Project management experience in the health care/pharmaceutical industries is highly desired for these positions. Civil Service Salary GS-9/11/12, \$33,650 to \$63,436.

\* **MATHEMATICAL STATISTICIANS:** Provide statistical support to the drug review divisions. Employ a broad variety of statistical procedures relevant to the regulatory and scientific preclinical and clinical drug development and approval decision processes. A doctorate degree in mathematics/statistics and experience in the design, performance and evaluation of clinical trials or related biomedical or pharmacokinetics investigations are highly desired for these positions. Civil Service Salary GS-12/13, \$52,776 to \$78,895.

\* **COMPUTER SPECIALISTS:** Provide ADP infrastructure, application and technology services to CDER in support of automated drug review, administrative, data storage/retrieval and training processes. An undergraduate/graduate degree in computer science, information science, information systems management, mathematics, statistics, operations research, engineering, or course work that required the development and/or adaptation of computer programs and systems and provided knowledge equivalent to a major in the computer field, OR experience that demonstrated accomplishment of computer project assignments that required a wide range of knowledge and techniques pertinent to the position to be filled, such as experience in software development tools (Oracle Developer 2000, Oracle Designer 2000 and Java), server (DEC Alpha, WIN/NT, MS Windows), and web development tools. Civil Service Salary GS-9/11/12/13, \$33,650 to \$75,433.

**HOW TO APPLY:** Submit curriculum vitae to on-site recruiter at annual meeting, or send with cover letter indicating that you are applying under **source code 99046** (Science Career Fair/Ad) to:

**FOOD AND DRUG ADMINISTRATION**  
7520 Standish Place, MPN1, Rm. 225, HFD-64  
Rockville, MD 20855  
Attn: Recruitment Staff

FDA IS AN EQUAL OPPORTUNITY EMPLOYER WITH A SMOKE FREE ENVIRONMENT

**GLOBAL OPPORTUNITIES**



The University of Sydney

**Associate Professor in Genomic Information and Head of Australian Genomic Information Centre**

*College of Sciences and Technology*

**Reference No. A29/01**

Applications are invited for the position of Head of the Australian Genomic Information Centre (AGIC) at the University of Sydney. The successful candidate will be responsible for research in Bioinformatics in the general area of Genomic information and the promotion of the Australian National Genomic Information Service (ANGIS) at the University of Sydney. The Head will play an important role in initiating research and collaborations within and beyond the University in the area of Genomic Information Science and is also expected to undertake research and maintain a high international reputation in one or more areas of Genomic Information Science.

The Head will be responsible for provision of the ANGIS Service within Australia including provision of courses and training, which is strength of the Service. Subscription to the Service and course fees support a small staff to carry out these operations on a day to day basis but this could be contracted out to EnCompass in the future. The Head will be responsible to a board with respect to policy directions and financial planning for ANGIS.

ANGIS was launched as a National Service in 1991 and now provides a comprehensive web based service widely used throughout Australia by Universities, Government and non-profit research institutions. A new company, EnCompass, has been established to develop markets overseas and handle commercial users in Australia, and will also undertake further development of the Service which will continue to be available to AGIC for its market.

This provides the opportunity for AGIC to focus on Bioinformatics. The new Head will have the opportunity to use the resources and experience available through the Service to undertake research in Bioinformatics, and where appropriate new algorithms or applications can be further developed to useful products in association with EnCompass as products.

The successful candidate will be an internationally distinguished researcher in Genomic Information or related areas, possess superior management skills/experience and high level communication and interpersonal skills, experience in strategic planning, and ability to enhance the reputation already established by the University through the operation of ANGIS.

The position, which is funded externally, is available for a fixed term period of five years. There is the possibility of further offers of employment subject to funding and the mutual agreement of the parties concerned. The successful candidate will hold the title of Associate Professor in the Department of Microbiology.

A salary package will be offered consisting of base salary in the range of AUD\$71,448 to AUD\$78,713 per annum (equivalent to Level D - Research only Academic), the University's employer contributions to superannuation and an annual leave loading. Additional benefits related to travel and relocation, including assistance of up to AUD\$15,000 to assist with the purchase of a home in Sydney may also be offered.

Membership of a University approved superannuation scheme is a condition of employment for new appointees.

A copy of an information package can be obtained from Personnel Services on +61-2 9351 2566 or e-mail: [personnel@cst.usyd.edu.au](mailto:personnel@cst.usyd.edu.au)

Further inquiries should be directed to Professor Peter Reeves, Executive Director of AGIC, on +61-2 9351 2536 or e-mail: [hod.micro@microbio.usyd.edu.au](mailto:hod.micro@microbio.usyd.edu.au) or Professor Donald H Napper, Pro-Vice-Chancellor (Sciences and Technology) on +61-2 9351 2754 or e-mail: [pvc@cst.usyd.edu.au](mailto:pvc@cst.usyd.edu.au)

The University reserves the right not to proceed with any appointment for financial or other reasons.

**Closing:** 16 September 1999

**Method of application for academic positions:** Five copies of application, which should quote the reference no, address the selection criteria, and include a CV a list of publications, the names, addresses, e-mail, fax and phone number of three confidential referees, should be forwarded to: The Personnel Officer, College of Sciences and Technology, Carlsaw Building, (F07), The University of Sydney, NSW, 2006 Australia.

*The University is a non-smoking workplace and is committed to the policies and principles of equal employment opportunity and cultural diversity.  
The University reserves the right not to proceed with any appointment for financial or other reasons.*

<http://www.usyd.edu.au/>



## Max-Planck-Institut für Strömungsforschung (Göttingen, Germany)

The Max-Planck-Institut für Strömungsforschung plans to expand its activity in the field of

### Physical Biology

The institute comprises three departments, one Department for Theoretical Research (Nonlinear Dynamics, Prof. T. Geisel) and two Departments for Experimental Research.

The Institute seeks candidates for two

### Department Heads for Experimental Research (Directors at the Institute)

Each of the successful candidates will be appointed as an autonomous head of a department at the full professor level (C4). The candidates should have a degree in physics (or an area close to physics) and they must have proven their ability to tackle problems of biological relevance. Examples of future fields of research are: the development of physical tools (e.g. diffraction techniques, force microscopy or near-field and related optical spectroscopies) for studying biological systems, components of systems or single macromolecules; functionalization of solid surfaces by biological components; self-organization of biological matter. Appropriate laboratory space and funding for laboratory set-up, operation and personnel will be provided.

The Max Planck Society is an equal opportunity employer and encourages applications by women. Applicants should submit their curriculum vitae, bibliography, copies of their five most relevant publications, names of three references (with e-mail addresses) and a brief description of their future research plans to

Prof. Manfred Rühle  
Chair, Search Committee  
Max-Planck-Institut für Metallforschung  
Seestr. 92  
D-70174 Stuttgart  
Germany

Deadline for application is September 30, 1999. It is planned to organize a symposium on November 25 and 26, 1999 in Göttingen where selected applicants will be invited to present their research activities.

### MEETINGS

#### Seventh Meeting of the European Society of Gene Therapy (formerly EWGT)

November 26 - 28, 1999  
Munich, Germany

#### SYMPOSIUM:

Vectors • Cancer  
Gene Therapy of Cardiovascular Disorders,  
Lung Disorders, Neuromuscular Disorders,  
Genetic Diseases and Infectious Diseases,  
Haematopoietic Cell Gene Therapy,  
Regulated Gene Expression

#### SATELLITE MEETINGS:

European Society of Animal Cell Technology (ESACT)  
European Regulation of Gene Therapy

EWGT Web Site: <http://www.cbti.ki.se>

For more information  
please contact the conference organizer

#### INTERPLAN

Congress, Meeting & Event Management  
Albert-Rosshaupter-Str. 65 / D-81369 Munich  
Tel. +49 / 89 / 54 82 34 - 0  
Fax +49 / 89 / 54 82 34 - 44  
e-mail: [info@i-plan.de](mailto:info@i-plan.de)

*At Monsanto, we share a common goal - to help people lead longer, healthier lives. We are pioneering the use of life-science technologies to understand how the connections between human health, nutrition and agriculture can be used to develop products to improve the quality of life for everyone, everywhere. To achieve this goal, we are selectively hiring the best and the brightest people in the world - people who can make a difference and want to leave their mark. Can you see yourself working on our dream of helping to improve food, health and hope in the world? Do you think about what you can achieve and the difference you, personally, can make? All of us at Monsanto ask these questions daily. It's what brought us together and keeps us together. Imagine the possibilities - a better world, healthier families, a more enjoyable life. We are a team with a dream, and we would like you to be a part of it.*

### LIFE SCIENCE INFORMATICS

We're putting together a team of top professionals who can work together to help us achieve our goals. You'll have a chance to make your mark and work with all aspects of our business relating to bioinformatics. This includes everything from pharmaceuticals to agriculture to genomics. It's silicon valley technology, right here in the Midwest. As you'd expect, our environment is cutting-edge and entrepreneurial. We can offer you the feel of a start-up and the resources of a global company. Positions available in St. Louis, MO, Boston, MA, and Mystic, CT.

### Bioinformatics Scientist

The Bioinformatics team supports the development and implementation of high-speed, high-throughput information and biology technologies, which comprise Monsanto's rapidly growing Genomics initiative. Your primary responsibility will be in the area of DNA polymorphism analysis. You will be responsible for processing and analyzing sequence data and molecular marker data. In addition, you will oversee DNA sequence data and analysis pipeline.

We require a Ph.D. in Molecular Biology, Genetics and 2 years experience in bioinformatics with a strong biology and computer background, especially in generating useful information from massive output of data generated by sequencing, genetic fingerprinting, mapping positional cloning, or transcriptional profiling efforts. An in-depth knowledge of bioinformatics tools and a demonstrated skill in a programming language such as C, C++, Java, or PERL are a must.

For fastest consideration, please submit your resume in scannable format to: [monsanto@aon-hros.com](mailto:monsanto@aon-hros.com), ad code 99-0315 on your subject line and cover letter for expedited review. Or mail to: **Monsanto-99-0315, PO Box 1262, Findlay, OH 45840.** You will receive a postcard acknowledging receipt of your resume. EEO/AA Employer M/F/D/V. Please visit our website at [www.monsanto.com](http://www.monsanto.com)

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## POSITIONS OPEN

### POSTDOCTORAL POSITIONS BAYLOR COLLEGE OF MEDICINE CELL BIOLOGY

Postdoctoral positions are available immediately with the following faculty: **Austin J. Cooney, Ph.D.** Analysis of orphan nuclear receptor roles in regulating gene expression during development and reproduction using molecular techniques and knockout mouse models. **Francesco J. DeMayo, Ph.D.** Investigation of the molecular biology of the pulmonary epithelium *in vitro* and *in vivo* in knockout and transgenic mouse models. **John P. Lydon, Ph.D.** Using steroid receptor knockout mice, the project will involve investigating progesterone's role in mammary gland development and tumorigenesis. **Nancy L. Weigel, Ph.D.** The project will be to study the role of phosphorylation in regulation of progesterone receptor activity and its interaction with coactivators. Experience in molecular biology, biochemistry, or transgenics preferred. Send application and curriculum vitae to the listed faculty at: **Department of Cell Biology, Baylor College of Medicine, 1 Baylor Plaza, Houston, TX 77030.**

*Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.*

**POSTDOCTORAL POSITIONS** are available to study the role of bHLH transcription factors in lymphocyte development and leukemia (*Cell* 79:893; *MCB* 17:844, 5888; *JEM* 189:501). The Postdoctoral Fellows are expected to join the laboratory recently relocated to Oklahoma Medical Research Foundation (OMRF). OMRF is an excellent institution with outstanding scientists, tremendous resources, and superb facilities. Oklahoma City is an interesting and affordable place to live. Candidates with Ph.D. in molecular biology and/or immunology are encouraged to send their curriculum vitae and names of referees to: **Dr. Xiao-Hong Sun, Oklahoma Medical Research Foundation, 825 N.E. 13th Street, Oklahoma City, OK 73104.** E-mail: [sunx01@mcrcr6.med.nyu.edu](mailto:sunx01@mcrcr6.med.nyu.edu).

**POSTDOCTORAL POSITION** available to study the molecular basis of cell activation by tobacco smoke extract components. This is a multidisciplinary program focused on identifying active components in smoke extract and understanding the mechanisms of cell-cell activation processes leading to inflammatory responses and tissue injury. Experience in biochemistry and cell biology is desired. Applicants with a broad knowledge of general biochemistry techniques such as RP-HPLC as well as cell culture and cell isolation procedures are required. Please send curriculum vitae to: **Dr. Tony E. Hugli, The Scripps Research Institute, 10550 North Torrey Pines Road, La Jolla, CA 92037.** FAX: 858-784-8307; e-mail: [hugli@scripps.edu](mailto:hugli@scripps.edu).

**POSTDOCTORAL POSITION** available at Children's Hospital/Harvard Medical School to study integrin-mediated signaling using model systems derived from mice carrying a targeted mutation in the  $\alpha 3$  integrin gene. Current results on the role of integrins in cytoskeletal organization and cell-cell interaction will be applied to studies on integrin-mediated signaling in the differentiation of epithelial organs. Previous experience in cell and molecular biology required. Please send curriculum vitae and names of three references to: **Dr. Jordan Kreidberg, Children's Hospital, 300 Longwood Avenue, Boston, MA 02115.** E-mail: [kreidberg@al.tch.harvard.edu](mailto:kreidberg@al.tch.harvard.edu).

A **POSTDOCTORAL POSITION** available in an NIH-funded research project to study function of Na-K-2Cl cotransporter in neurons. The applicant will conduct ion flux assays, intracellular Cl and Na measurements with fluorescent dyes, and signal transduction assays in primary neurons. Send curriculum vitae and names of three references to: **Dandan Sun, University of Wisconsin-Madison, Department of Neurosurgery, F4/311 CSC, 600 Highland Avenue, Madison, WI 53792.** Telephone: 608-263-4060; FAX: 608-263-1728; e-mail: [sun@neurosurg.wisc.edu](mailto:sun@neurosurg.wisc.edu).

## POSITIONS OPEN

### POSTDOCTORAL RESEARCH FELLOWSHIPS MALARIA PROGRAM Naval Medical Research Center

The Naval Medical Research Center (Malaria Program) is currently soliciting highly motivated individuals with training in molecular biology or cellular immunology for Postdoctoral positions to work on the development of a malaria vaccine. One position will focus on the development and application of high-throughput strategies to translate *P. falciparum* genomic DNA sequence to vaccine design. The second position will focus on the analysis of cellular immune responses to current vaccine candidates and the optimization of DNA and conventional vaccine strategies in rodent and nonhuman primate models. Candidates must have a demonstrated proficiency to carry out high-quality research and a proven record of accomplishment. Experience in functional genomics or DNA vaccination is particularly desirable. Successful applicants will have the opportunity to work in a laboratory that is recognized internationally as being at the forefront of vaccine research.

A statement of research interests, detailed curriculum vitae, and three letters of recommendation should be forwarded to:

**Dr. Stephen L. Hoffman**  
Naval Medical Research Center  
12300 Washington Avenue  
Rockville, MD 20852  
FAX: 301-295-6171

E-mail: [dooland@nmripo.nmri.nmcc.navy.mil](mailto:dooland@nmripo.nmri.nmcc.navy.mil)

Applications should be received by September 15, 1999, for full consideration, but the application process will continue until the positions are filled.

**Radiation biology. POSTDOCTORAL POSITION** is available to develop innovative methods to visualize DNA repair complexes formed in response to low-level ionizing radiation. Molecular biology experience essential, radiation biology, or microscopy background an asset. Position funded by three-year U.S. Department of Energy award beginning September 1999. The Medical College of Georgia, a unit of the University System of Georgia, offers an interactive environment and outstanding facilities. Send curriculum vitae to: **William S. Dynan, Chief, Gene Regulation Program, Institute of Molecular Medicine and Genetics, Medical College of Georgia, 1120 15th Street, Room CB-2803, Augusta, GA 30912.** E-mail: [dynan@immg.mcg.edu](mailto:dynan@immg.mcg.edu). MCG is an Equal Opportunity Employer. Women, minorities, and disabled are encouraged to apply.

**POSTDOCTORAL POSITIONS** available at the Cardiovascular Research Center, Massachusetts General Hospital, Harvard Medical School. Our laboratory studies the roles of nitric oxide (NO) in atherogenesis, cerebral ischemia, and cardiovascular physiology, using molecular biology, cellular, and *in vivo* physiology techniques. Experience in animal surgery/physiology, histology, and transgenics/knockouts is helpful. Send curriculum vitae and two letters of reference to: **Dr. Paul Huang, Cardiovascular Research Center, Massachusetts General Hospital East, 149 East 13th Street, Charlestown, MA 02129.** Massachusetts General Hospital is an Equal Opportunity Employer committed to work force diversity. Equal Opportunity Employer/Affirmative Action.

### POSTDOCTORAL FELLOWSHIPS PENN STATE COLLEGE OF MEDICINE

Positions available to study the molecular mechanisms responsible for targeting cytosolic proteins to the yeast lysosome for degradation. Applicants with backgrounds in cloning, PCR, Western blotting, and cell fractionation are strongly encouraged to apply. Send curriculum vitae and three names of references to: **Hui-Ling Chiang, Ph.D., Department of Cellular and Molecular Physiology, Penn State College of Medicine, 500 University Drive, H166, Hershey, PA 17033.** E-mail: [hlchiang@psu.edu](mailto:hlchiang@psu.edu). Penn State is committed to Affirmative Action/Equal Opportunity and the diversity of its workplace.

## POSITIONS OPEN

### EXCITING OPPORTUNITIES IN BACTERIAL PATHOGEN GENOMICS

High-profile positions with great opportunities for scientific impact at the Bacterial Pathogen Genome Initiative in Madison, Wisconsin. **POSTDOCTORAL POSITIONS** available with scope for making significant contributions to the understanding of genetics and evolution of bacterial pathogens. Apply genomics techniques in comparative sequencing of bacterial genomes and work with expert collaborators in all fields of bacterial pathogenesis to analyze and interpret genome sequence data relative to human diseases. Requires a Ph.D. with a background in molecular biology, microbiology, genetics, or pathogenesis, with computing experience. Knowledge of bioinformatics is an advantage.

The University of Wisconsin provides an outstanding research environment with world-class facilities and competitive benefits. Candidates please send a letter of application, résumé, and names plus contact information for three referees, to: **Dr. F. R. Blattner, Laboratory of Genetics, University of Wisconsin-Madison, 445 Henry Mall, Madison, WI 53706.** E-mail applications are acceptable (preferably in MS Word), to e-mail: [ecoli@genetics.wisc.edu](mailto:ecoli@genetics.wisc.edu).

### POSTDOCTORAL POSITIONS IN ENDOCRINE TRANSGENIC MOUSE RESEARCH

Postdoctoral positions are available immediately in the Departments of Physiology to work on transgenic mice that over-express the insulin-like growth factor binding proteins. Applicants should have a Ph.D., M.D., or equivalent and experience in molecular biology. Preference will be given to applicants with previous research experience in the IGF field. Suitable candidates should send their curriculum vitae to: **Dr. L. Murphy, University of Manitoba, Department of Physiology, Room 435, 730 William Avenue, Winnipeg, Manitoba R3E 3J7 Canada.** FAX: 204-789-3940; e-mail: [ljmurph@ms.umanitoba.ca](mailto:ljmurph@ms.umanitoba.ca).

**POSTDOCTORAL POSITIONS** are available to investigate the importance and mechanism of gonadotropin-releasing hormone receptor in tumors and molecular mechanism of pituitary tumor transforming gene in tumorigenesis. A Ph.D. and experience in molecular biology and protein chemistry are required. Send curriculum vitae, statement of research interests, and names of three (3) references to: **S. Kakar, Ph.D., Department of Physiology and Biophysics, 1918 University Boulevard, MCLM 982, University of Alabama at Birmingham, Birmingham, AL 35294.** E-mail: [kakar@phybio.bhs.uab.edu](mailto:kakar@phybio.bhs.uab.edu). The University of Alabama at Birmingham is an Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITION** to study pre-mRNA splicing, focussing on the actions of the cyclophilin U5A-CyP and the second-step protein hPrp18, as described in *Genes & Dev.* 11:139-151, 1997; *RNA* 3:1374-1387, 1997. Experience in molecular biology is essential; some experience in protein biochemistry or *in vitro* RNA work is desirable. Please send curriculum vitae including the names of three references to: **Dr. David Horowitz, Department of Biochemistry, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814.** Telephone: 301-295-3589; FAX: 301-295-3512; e-mail: [dhorowitz@usuhs.mil](mailto:dhorowitz@usuhs.mil). Affirmative Action/Equal Opportunity Employer.

### POSTDOCTORAL POSITION IN CELLULAR ELECTROPHYSIOLOGY Brigham and Women's Hospital Harvard Medical School

Position available for studies on assembly and trafficking of cardiac  $K^+$  channels. Cellular electrophysiology training required. Applicant should send curriculum vitae and names of three references to: **Gideon Koren, Cardiovascular Division, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115.** E-mail: [koren@calvin.bwh.harvard.edu](mailto:koren@calvin.bwh.harvard.edu). Equal Opportunity Employer.





### Senior Scientist

The Behavioral Biology Laboratory at the Swiss Federal Institute of Technology, near Zurich, Switzerland, announces the availability as of November 1st, 1999, of a senior scientist position (research and teaching) for the Behavioral Neurochemistry Unit.

The Laboratory is an international focus for innovative research on brain mechanisms of behavior and the development of animal models for psychiatric and neurological disorders.

The Unit comprises four HPLC systems with electrochemical analysers for the measurement of transmitter release in specific brain areas of freely moving animals. The analysers are calibrated for the simultaneous isocratic separation and amperometric detection of monoamines, choline and acetylcholine. In addition, four independent arenas are available for the simultaneous measurement of transmitter release in specific brain areas and behavior of freely moving animals. Each arena is fitted with heat sensitive activity monitors and high-resolution miniature video cameras connected to a Video Multiplex imaging system for refined behavioral analyses. In addition to these arenas, operant chambers have been modified to run microdialysis experiments in order to study the neurochemical concomitants of classical conditioning processes, learning and memory.

Applicants should submit a full *curriculum vitae* with a covering letter indicating their main interests and the names of at least three referees to:

Prof. Joram Feldon, Behavioral Biology Laboratory, Schorenstrasse 16, Postfach, CH-8603 Schwerzenbach, Switzerland.

Phone: +41-1-825-7448, Fax +41-1-825-7417, e-mail: feldon@toxi.biol.ethz.ch

Visit our Web site at: <http://www.toxi.ethz.ch/bbft/bbft.html>

## EUROPEAN OPPORTUNITIES

## THE CENTER FOR GENOMICS RESEARCH KAROLINSKA INSTITUTET POST-DOCTORAL OR FACULTY OPPORTUNITIES

### Human SNP analysis

For the study of complex disease phenotypes, the applicants need to have experience in current molecular biology techniques. Bioinformatics abilities would be an asset. Contact Anthony. Brookes@cgr.ki.se.

### Computational biology (Bioinformatics)

Research on the transcriptional regulation of gene expression. Construction and validation of models to enable the identification of genes selectively expressed in biologically interesting tissues or contexts. Applicants must have demonstrated quantitative/computational aptitude. Contact Wyeth.Wasserman@cgr.ki.se.

### Microarrays/transcript profiling

Background in molecular biology and an interest in differential gene expression. Opportunities are either in technology development (Harold.Swerdlow@cgr.ki.se) or in biomedical applications such as in the senescence field (Claes.Wahlestedt@cgr.ki.se).

### Microbial functional genomics

Individuals with background in microbiology and/or molecular biology and at least an interest in microbial genetics and the development of new approaches for gene function analyses (incl. antisense). Contact Liam.Good@cgr.ki.se or Claes.Wahlestedt@cgr.ki.se.

For more information on the Center for Genomics Research (CGR) and its links to Pharmacia&Upjohn, please see [www.cgr.ki.se](http://www.cgr.ki.se). Please direct applications for faculty positions to Dr. Claes Wahlestedt, Director of CGR, Karolinska Institutet, S-171 77 Stockholm, Sweden.

## PROFESSOR OF BOTANY

(Ecology and Environmental Science)

### Faculty of Science

The University, recognised internationally for excellence in teaching and research, is located centrally in Melbourne, a vibrant centre of Australian intellectual and cultural life.

Applications are invited for a professorial position in ecology and environmental science in the School of Botany at the University of Melbourne.

**The Position:** The School of Botany, a Faculty of Science department, is one of the premier Plant Sciences departments in Australia and has an outstanding international reputation. The School includes an ARC Special Research Centre for Plant Cell Biology and a Cooperative Research Centre for Plant Bioproducts. The School also provides teaching at the undergraduate level and research training to 50 postgraduate students.

**The Person:** The successful applicant will have a distinguished international record of research in the field of ecology and environmental science, which will complement the existing strengths in the School of Botany. The appointee will have demonstrated exceptional academic and management qualities combined with experience to provide leadership in teaching, research and external interactions of the School. The appointee must be committed to the further development of strategic objectives of the Faculty including supporting the environmental science program.

**The Benefits:** The remuneration package is approximately A\$111,000 including superannuation (excluding any loadings such as for Head of School). In addition, provision exists for four weeks annual leave and for study leave.

**Duration:** This Chair is offered on a continuing basis. Appointment will be available from 1 July 2000 or later by negotiation.

**Contact:** Further information on the School is available on the internet: <http://www.botany.unimelb.edu.au>. Enquiries of an academic nature may be directed to the Dean, Faculty of Science, Professor John McKenzie, telephone: 61 (3) 9344 6407; secure facsimile: 61 (3) 9344 6293; e-mail: [dean@science.unimelb.edu.au](mailto:dean@science.unimelb.edu.au) or the Head of the School of Botany, Professor Pauline Ladiges, telephone 61 (3) 9344 5067, secure facsimile 61 (3) 9344 7049; email: [p.ladiges@botany.unimelb.edu.au](mailto:p.ladiges@botany.unimelb.edu.au). Information about the position, including details of the application procedure, conditions of outside work, superannuation, travel and removal expenses, housing assistance and conditions of appointment, is available from Ms Lydia Simonow, telephone: 61 (3) 9344 7528; secure facsimile: 61 (3) 9344 6897; e-mail: [l.simonow@execserv.unimelb.edu.au](mailto:l.simonow@execserv.unimelb.edu.au). This information is also available on the internet: <http://www.unimelb.edu.au/ExecServ/Seniorapp/index.htm> or from the Association of Commonwealth Universities (47588), 36 Gordon Square, London WC1H 0PF (tel: 0207 387 8572 ext. 206; fax: 0207 383 0368; email: [adverts@acu.ac.uk](mailto:adverts@acu.ac.uk)).

**Application to:** University Secretary, The University of Melbourne, Parkville, Victoria 3052, Australia (secure facsimile 61 (3) 9344 6897) marked "PERSONAL AND CONFIDENTIAL" and identified as Application No. 99/15 by 30 September 1999.

The Council reserves to itself the right to make no appointment or to fill the Chair by invitation at any stage.

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# MELBOURNE

## POSITIONS OPEN

**POSTDOCTORAL POSITION** is available immediately to study cerebral angiogenesis. The project defines the role of arachidonic acid metabolites derived from astrocytes, in this process. Astrocyte-endothelial cell co-cultures will be genetically manipulated with recombinant virus over-expressing genes related to endothelial proliferation. Recent techniques for molecular analysis of growth-related signaling pathways will also be used to examine the mechanisms for angiogenesis in this model. Candidates with experience in examining growth pathways and cell culture will be preferred to join an active, multidisciplinary laboratory studying vascular biology in the brain. The ability to perform/learn whole-animal experimentation is required. Please submit your curriculum vitae and three references to:

**David R. Harder, Ph.D.**  
Professor and Director  
Cardiovascular Research Center  
Medical College of Wisconsin  
8701 Watertown Plank Road  
Milwaukee, WI 53226

## POSTDOCTORAL POSITIONS IN IMMUNOLOGY BAYLOR COLLEGE OF MEDICINE

Postdoctoral positions are immediately available in the Department of Microbiology and Immunology to study the somatic genetics of *in vivo* immune responses, antigen-driven lymphocyte differentiation, and germinal center biology. Applicants should have a Ph.D. or M.D. degree and experience in molecular and cell biology. Please send curriculum vitae and names and addresses of three referees to: **Biao Zheng, M.D., Ph.D., Department of Microbiology and Immunology, M929/DeBaake Building, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030-3498.** E-mail: bzheng@bcm.tmc.edu.

**POSTDOCTORAL POSITION** is available to study the mechanism of action of calcium-mobilizing agonists on lipid-derived second messengers and their biochemical and functional cross-talk with cAMP and cGMP in iris smooth muscle. Experience in tissue culture, protein kinases (PKA, PKC, MAPK), and publications in these areas are desirable. Candidates should have a Ph.D. in biochemistry or pharmacology. Send curriculum vitae, brief description of research interests, and addresses of three references to: **Professor Ata Abdel-Latif, Department of Biochemistry and Molecular Biology, Medical College of Georgia, Augusta, GA 30912-2100.** E-mail: labdel@mail.mcg.edu; FAX: 706-721-6608.

*The Medical College of Georgia is an Equal Opportunity/Affirmative Action Employer.*

## POSTDOCTORAL FELLOWSHIP PENN STATE COLLEGE OF MEDICINE

NIH-funded Postdoctoral Fellowship available to study regulation of basal and kinase-inducible gene expression. Fellow will examine mechanisms of transcription activation used by distinct constitutive and kinase-inducible activation domains in CREB. Please send curriculum vitae and the names of three references to: **Patrick G. Quinn, Ph.D., Department of Cellular and Molecular Physiology, Penn State University College of Medicine, 500 University Drive, H166, Hershey, PA 17033.** E-mail: pquinn@psu.edu. Penn State is committed to Affirmative Action/Equal Opportunity and the diversity of its workplace.

**POSTDOCTORAL FELLOWSHIP** position available in gene therapy. Successful candidate will have training in mammalian gene therapy and immunology. The project involves gene therapy via marrow transplantation. Other requirements include good publication record and grant-writing skills. Potential for long-term position. Send curriculum vitae, cover letter, and names of three references to: **Ms. MacMurray, Loma Linda University, P.O. Box 7210, Loma Linda, CA 92354.** Loma Linda University is an Equal Opportunity 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>  
*The NIH is an Equal Opportunity Employer.*

## MOLECULAR MODELLER

The Molecular Research Institute invites applications for a **POSTDOCTORAL** or **STAFF SCIENTIST** position available September 1, 1999. The successful candidate will participate in computational structural biology, molecular pharmacology, biochemistry, and biophysics projects including enzyme function elucidation, computer-aided and structure-based drug design, and molecular mechanisms of drug action. Qualified candidates must hold a Doctoral degree in computational chemistry, preferably with a molecular pharmacology and biochemistry/biophysics background. Special consideration will be given to candidates with expertise in the use of diverse computational methods including *ab initio* and semi-empirical quantum chemistry and macromolecular modeling. Entry-level candidates with appropriate background will also be considered. Please send résumés to: **Gilda H. Loew, Molecular Research Institute, 2495 Old Middlefield Road, Mountain View, CA 94043.** E-mail: loew@montara.molres.org. Visit our website: <http://www.molres.org>. *The Molecular Research Institute is an Equal Opportunity Employer.*

## POSTDOCTORAL POSITION MOUSE MOLECULAR GENETICS

A funded position is available immediately for a Postdoctoral Fellow with an interest in genetically dissecting tissue interactions involved in organizing and mediating gastrulation in the mouse. Potential projects include embryological, biochemical, and genetic studies on a novel transmembrane protein recently implicated in tissue interactions required for primitive streak assembly and function during gastrulation and for organogenesis at later developmental stages. Interested candidates please send curriculum vitae, summary of research accomplishments, and names and contact information of three references to: **Dr. Elizabeth Lacy, Box 86, Sloan-Kettering Institute, 1275 York Avenue, New York, NY 10021.** FAX: 212-639-2861; e-mail: e-lacy@ski.mskcc.org. *Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** in neurophysiology available to study how ion channels are involved in cell death. Requires Ph.D., M.D., or equivalent. Electrophysiology experience using single-channel and macroscopic patch-clamp recordings as demonstrated by publication is required. Knowledge of cell biology, molecular biology, and optical methods is strongly desirable. Send curriculum vitae, names of references, and description of previous research experience to: **T. Hoshi, Ph.D., Department of Physiology and Biophysics, The University of Iowa, Iowa City, IA 52242.** FAX: 319-335-7330; e-mail: toshinori-hoshi@uiowa.edu; website: [www.hoshi.org](http://www.hoshi.org). *The University of Iowa is an Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL/ASSISTANT RESEARCH PROFESSOR** positions available in the Division of Infectious Disease for a D.V.M., D.V.M.-Ph.D., or Ph.D. who wishes to pursue a research/academic career. Candidates must have a strong background in microbial pathogenesis and/or the host-immune response to conduct research in a newly funded, five-year NIH project on enteric protozoa in AIDS. Send curriculum vitae and three references to: **Saul Tzipori, Tufts University School of Veterinary Medicine, Grafton, MA 01536.** FAX: 508-839-7977; e-mail: stzipori@infonet.tufts.edu.

## POSITIONS OPEN

### POSTDOCTORAL POSITION UNIVERSITY OF CALIFORNIA, BERKELEY

Two-year NIH-funded Postdoctoral position available immediately to study signal processing in the vertebrate retina using electrophysiological methods. Ongoing projects involve whole-cell patch-recording from ganglion cells *in situ*, and the use of a multielectrode array to analyze ganglion cell activity elicited by natural stimuli. Applicants should have a Ph.D. and experience in retinal electrophysiology. Strong analytical and computational skills desirable. Send curriculum vitae with bibliography, description of research experience, and contact information for three references to: **W. Geoffrey Owen, D.Sc., Division of Neurobiology, Department of Molecular and Cell Biology, 181 Life Sciences Addition, University of California, Berkeley, CA 94720-3200.** E-mail: gowen@uclink4.berkeley.edu.

*The University of California is an Equal Opportunity Employer committed to excellence through diversity.*

## WASHINGTON UNIVERSITY SCHOOL OF MEDICINE LIPOPROTEIN METABOLISM

**POSTDOCTORAL RESEARCH ASSOCIATE/INSTRUCTOR** position available to study the structure-function relationship of apo B using novel gene-targeted mouse models that we have recently produced and to generate more mutant mouse lines. Stable funding and opportunities for career advancement. Strong background in cellular/molecular biology and biochemistry required. Previous experience in gene-targeting and/or an interest in lipoprotein metabolism preferred. Send curriculum vitae and names of three references to: **Gustav Schonfeld, M.D., Department of Medicine, Box 8121, Washington University School of Medicine, 660 South Euclid Avenue, St. Louis, MO 63110.** FAX: 314-362-8015; e-mail: schonfel@visar.wustl.edu.

**POSTDOCTORAL RESEARCH ASSOCIATE** position in hormone action and breast cancer available immediately. Ph.D. or M.D. required. Conduct research on steroid receptor action in normal breast and breast cancer using molecular biology, biochemical, adenoviral, and genetic approaches (see: *PNAS* 96:208, 1999; *Endocrinology* 139:2916, 1998; *Endocrinology* 139:4164, 1998). Experience in cell and molecular biology required. Send curriculum vitae and three references to: **Dr. Mecci-Huey Jeng, Department of Medicine, Division of Hematology/Oncology, Box 513, University of Virginia Health System, Charlottesville, VA 22908.** E-mail: mj5x@virginia.edu. *The University of Virginia is an Equal Opportunity/Affirmative Action Employer.*

A **POSTDOCTORAL POSITION** is available immediately to participate in a study of structural and functional genomics of the model legume *Medicago truncatula* as part of a consortium funded by National Science Foundation. Experience in recombinant DNA techniques and library construction is essential and in plant transformation is desired. Send résumé and names, addresses, e-mail, and telephone numbers of at least four references to: **Dr. Michael G. Hahn, University of Georgia, Complex Carbohydrate Research Center, 220 Riverbend Road, Athens, GA 30602-4712.** FAX: 706-542-4412; e-mail: hahn@ccrc.uga.edu. *An Affirmative Action/Equal Employment Opportunity Institution.*

## POSTDOCTORAL RESEARCH FELLOW IMMUNOCHEMISTRY

Position available immediately in a laboratory of the Department of Neurology, Columbia Presbyterian Medical Center, to investigate autoimmune mechanisms of neurological diseases. Experience with chemical conjugation, and with glycolipids, protein, and carbohydrate chemistry desired. Salary commensurate with experience. Send cover letter, curriculum vitae, and names of three references to: **Norman Latov, M.D., Ph.D., Professor of Neurology, The Neurological Institute, Columbia Presbyterian Medical Center, 710 West 168th Street, New York, NY 10032.** FAX: 212-305-3986; e-mail: nl2@columbia.edu.

## POSITIONS OPEN

### POSTDOCTORAL POSITION CARDIOVASCULAR NEUROPHYSIOLOGY

NIH-funded Postdoctoral positions are available to study sympathetic regulation of blood flow in exercising skeletal muscle using transgenic animal models. (PNAS 95:15090, 1998). Applicants must have Ph.D. or M.D. Send curriculum vitae and brief description of research interests and career goals to: Gail D. Thomas, Ph.D., or Ronald G. Victor, M.D., Hypertension Division/Department of Internal Medicine, The University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-8586. E-mail: gthom1@mednet.swmed.edu; FAX: 214-648-7902.

UT Southwestern Medical Center is an Equal Opportunity Employer/Affirmative Action Employer.

A POSTDOCTORAL POSITION is available immediately in the Laboratory of Molecular and Developmental Biology, National Eye Institute, to study signal transduction pathways regulating lens epithelial cell proliferation. Research will focus on the role of 12(S)HETE and protein kinase C in EGF-dependent signal transduction. Applicants must be U.S. citizens or permanent residents with Ph.D. or M.D. and less than five years of postdoctoral experience. Salary range \$27,500 to \$38,000, depending on experience. To apply send curriculum vitae, bibliography, and list of references to: Dr. Peggy Zelenka, Building 6/Room 214, 6 Center Drive MSC 2730, Bethesda, MD 20892-2730. E-mail: zelenka@helix.nih.gov. Closing date: August 20, 1999. NIH/NEI is an Equal Opportunity Employer.

### RESEARCH POSITION IN TUBERCULOSIS

A POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE position is immediately available to work with five NIH-funded tuberculosis Investigators studying microbial factors that enhance intracellular growth of *M. tuberculosis*. Experience in molecular biology is essential. Tyler is 100 miles east of Dallas, with low living expenses and excellent public schools. Send curriculum vitae to: David Lakey, M.D., or Peter Barnes, M.D., University of Texas Health Center at Tyler, 11937 U.S. Highway 271, Tyler, TX 75708-3154. Telephone: 903-877-5957; e-mail: dlakey@uthct.edu. The University of Texas is an Equal Opportunity Employer.

POSTDOCTORAL POSITION. Available immediately to study transcriptional regulation of lung morphogenesis. Successful candidate should have strong background in molecular and developmental biology. Possibility for promotion is available. Curriculum vitae and names of references to: Parviz Minoo, Department of Pediatrics, University of South Carolina School of Medicine, Women's and Children's Hospital, Room L919, 1240 North Mission Road, Los Angeles, CA 90033. E-mail: minoo@hsc.usc.edu.

## SYMPOSIUM

**MOLECULAR LIBRARY TECHNOLOGIES AT THE MILLENNIUM.** October 24-26, 1999; Holiday Inn, Chinatown, San Francisco. Keynotes: S. Brenner, Mol. Sci. Inst. Berkeley; S. Kauffman, Bios-Group; J. Wells, Sunesis; G. Winter, MRC. Speakers: A. Plückthun, Zurich, J. McCafferty, CAT, J. Marks, UCSF, A. Bradbury, Los Alamos, I. Tomlinson, MRC, W. Dower, Affymax, C. Barbas, Scripps, T. Clackson, Ariad, H. Hoogenboom, Maastricht, A. Skerra, Munich, K. Janda, Scripps, J. Ellman, Berkeley, A. Ellington, Texas, L. Gold, NexStar, K. Wittrup, Illinois, M. Taussig, Babraham, G. Nolan, Stanford, R. Brent, Mol. Sci. Inst., S. Michnick, Montreal, A. Griffiths, MRC, P. Stemmer, Maxygen, R. Roberts, CalTech, F. Arnold, CalTech. Abstracts due October 1, 1999. Organizers: D. Burton, J. Larrick, J. Marks. Sponsor: Palo Alto Institute of Molecular Medicine, 2462 Wyandotte Street, Mountain View, CA 94043 USA. Telephone: 650-694-1420; FAX: 650-694-7717; e-mail: paimm@netgate.net. Details, website: www.pano.com/paimm.

## POSITIONS OPEN

POSTDOCTORAL POSITION available for an individual to work on signal transduction mechanisms including patch-clamp analysis in the cerebrovasculature and astrocytes. Required training is an understanding of signal transduction of ion channels and molecular biology. Ability to patch-clamp is a plus but will train if necessary. Salary is competitive. Please send curriculum vitae along with three references to:

David R. Harder, Ph.D.  
Professor and Director  
Cardiovascular Research Center  
Medical College of Wisconsin  
8701 Watertown Plank Road  
Milwaukee, WI 53226

### POSTDOCTORAL POSITION PENN STATE COLLEGE OF MEDICINE

To investigate molecular and biochemical aspects of a kidney metalloprotease implicated in susceptibility to diabetic nephropathy. Experience with transgenic/knockout mice preferred. Send curriculum vitae and names and addresses of three references to: Dr. Judith S. Bond, Department of Biochemistry and Molecular Biology, H171, Penn State University, Hershey, PA 17033-0850. Affirmative Action/Equal Opportunity Employer.

## GRANTS

### FUNDS FOR STUDY OF FOUR RARE DISEASES

The National Organization for Rare Disorders, Inc. (NORD) announces the availability of funds for clinical research grants on adenoid cystic carcinoma, hereditary tyrosinemia type 1, chronic inflammatory demyelinating polyneuropathy, and essential thrombocythemia. Grants not to exceed \$30,000 per year for up to two years for adenoid cystic carcinoma and hereditary tyrosinemia type 1. Grants not to exceed \$30,000 for one or two years for chronic inflammatory demyelinating polyneuropathy and essential thrombocythemia. A one-page letter of intent, curriculum vitae, and brief budget outline due by October 1, 1999, to: Director of Development, National Organization for Rare Disorders, Inc., P.O. Box 8923, New Fairfield, CT 06812. Telephone: 203-746-6518; FAX: 203-746-6896.

## GLOBAL OPPORTUNITIES

### GRADUATE STUDIES IN SCIENCE IN THAILAND

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