

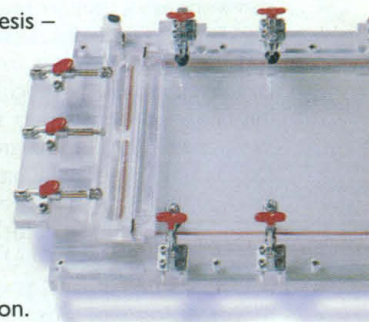
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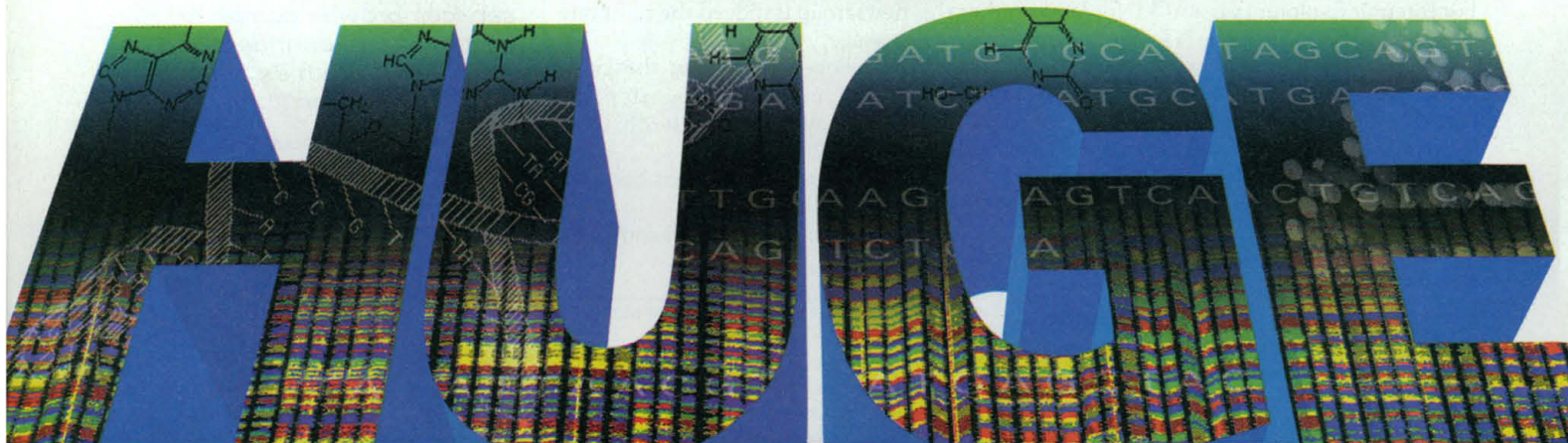


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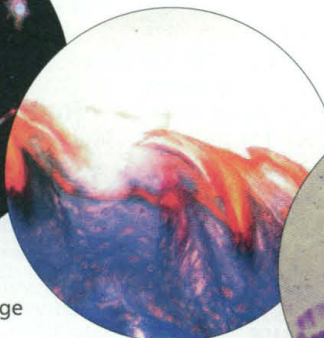
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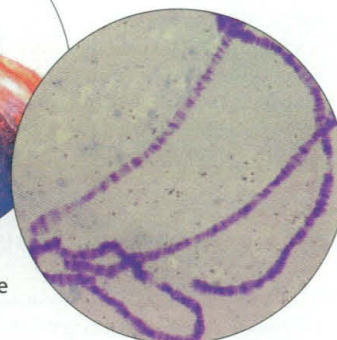
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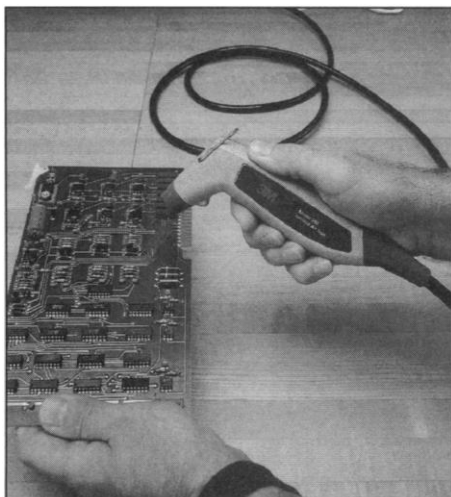


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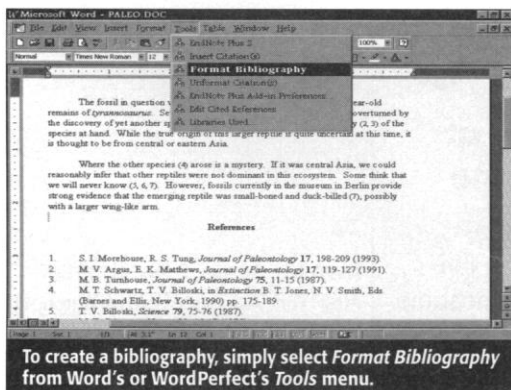
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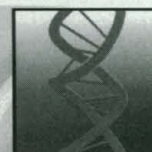
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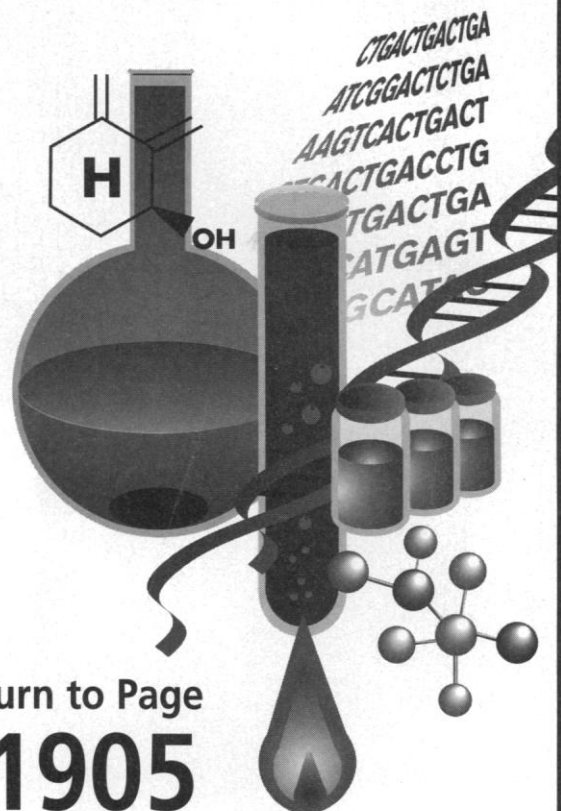
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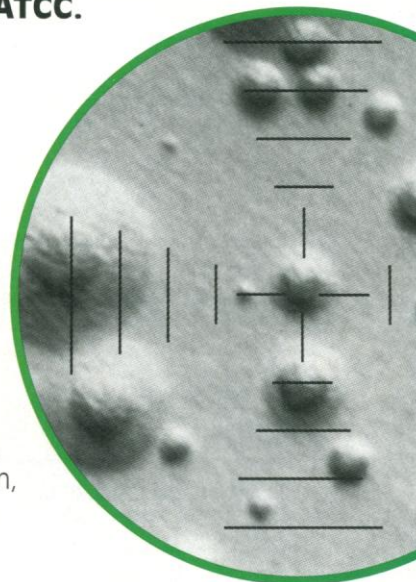
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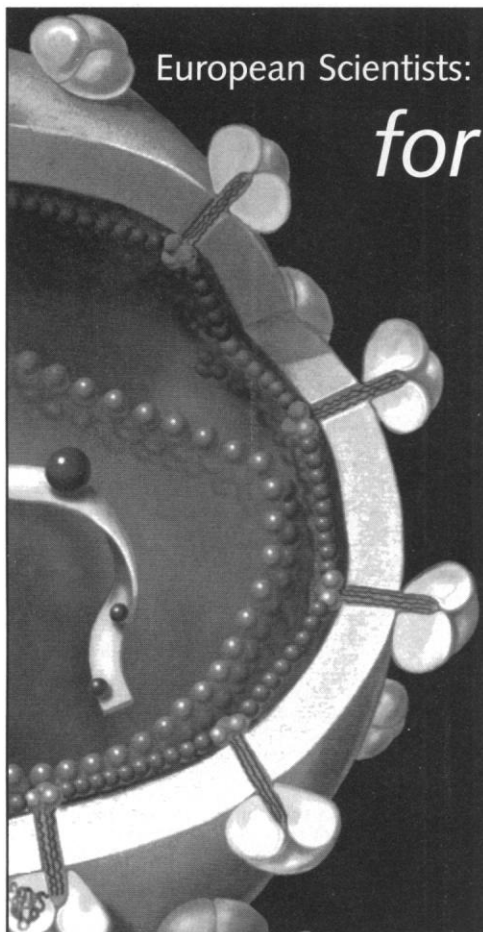


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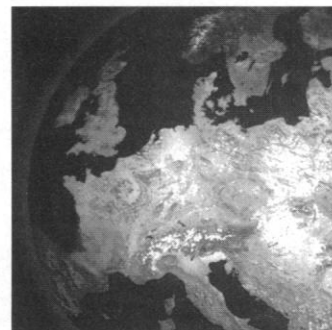
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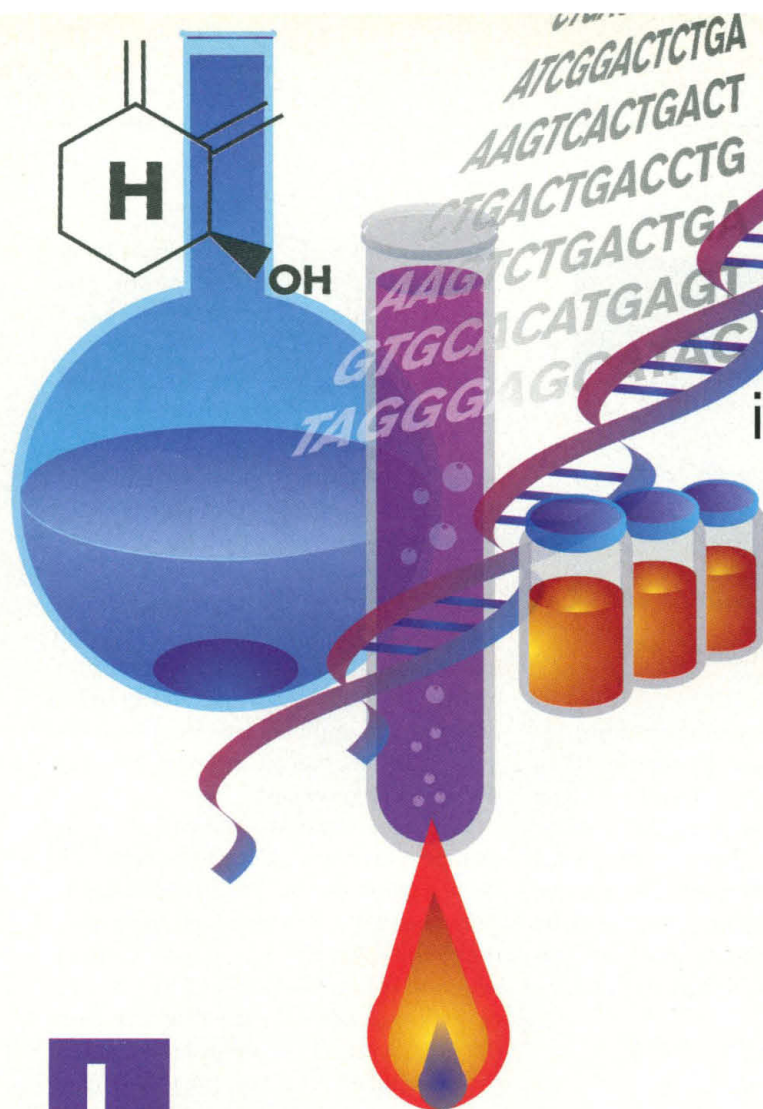
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Applications with a curriculum vitae and a list of publications should be submitted to: Prof. Dr. J. Nüesch, President, ETH Zurich, ETH Zentrum, CH-8092 Zurich, no later than August 31, 1997. The ETHZ specifically encourages female candidates to apply with a view towards increasing the proportion of female professors.

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The University of Iowa invites applications for the position of Director of the newly created Clinical Trials Office. The Director will work closely with faculty in marketing the University's capability to perform clinical trials. Minimum requirements include an M.B.A. or equivalent experience. The successful candidate will also be familiar with university-industry clinical trial agreements. Three to five years of relevant experience is desirable. Review of applications will begin on June 23, 1997 and continue until the position is filled. Please send cover letter, résumé, and names of at least three references to: CTO Director Search, c/o Dr. David Wynes, Research Services Administration, 2 Gilmore Hall, University of Iowa, Iowa City, IA 52242.

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



Scientists with disabilities in the Biotechnology and Pharmaceuticals Industry

By John Timpane

THE ADVANTAGE OF DISABILITY: RONALD NIEMAN OF ASU

TEMPE, ARIZONA—Ronald A. Nieman, academic research professional in the department of chemistry and biology at Arizona State University (ASU), directs the Nuclear Magnetic Resonance (NMR) Laboratory there. He has crafted a career in science despite Kugelberg-Wehlander disease (a form of spinal muscular atrophy), which necessitates use of a wheelchair. Nieman believes that disability can be an advantage to employees and employers alike.

His road has not been easy. Opportunities to get a good scientific education were almost nonexistent in primary and secondary school. "That left me unprepared for college," he says. "No scholarships, no access to the most prestigious schools. It became automatically harder to compete with other job candidates. I'm certain I lost the chance to get a faculty position because of it." In undergraduate school the pattern continued. Faculty just weren't encouraging when approached about research opportunities. Acceptance to the graduate program at ASU was a turning point, offering Nieman a teaching assistantship and good mentoring from the likes of John Cronin and Devens Gust. From them he learned about research techniques, grant writing, and career opportunities for scientists.

It turned out he had a flair in all these areas. When the position of NMR lab director came open in 1982, Nieman's reputation as NMR expert, talented grant writer, and effective teacher landed him the job. He develops and maintains instrumentation, software, and course materials on NMR, trains faculty and students, and collaborates on faculty research projects.

Nieman finds the statistics concerning scientists with disabilities "disturbing." According to National Science Founda-

Let's suppose you are the head of R&D in a large pharmaceutical company. Or you are an academic scientist and you've just landed a big grant. In both cases, you're looking to fill your lab with the best and brightest. Today is interview day. The next candidate's CV looks ideal: achievements, publications, stellar references. You look up, and before you sits a scientist—in a wheelchair, or missing a hand, or holding a cane.

Quick, now: What is your reaction? It will say a great deal about you and about the nature of science today. Scientists with disabilities face the same challenges all scientists face, plus a credibility gap. Below, we hear from scientists from Arizona State University (ASU), the University of California at San Diego (UCSD), and Pfizer Inc. Their stories reveal that, with a bit more work and understanding, people with disabilities can enjoy the good life of doing good science.

John Timpane, PhD, writes frequently on the biotechnology and pharmaceutical industries.

tion figures, people with disabilities make up 10.4 percent of the total labor force but only 2.7 percent (and falling) of the science and engineering labor force. Rates of persistence between educational levels are low, until only about one percent of all science and engineering graduate degrees are awarded to persons in this population. Nieman says that “scientists really have to consider whether science is doing its best to attract the broadest possible range of people.”

For Nieman, scientists with disabilities have more than potential—they may also have some advantages. “After all,” he says, “we spend most of our lives solving problems. Many of us are skilled in using technology. We’re ready to adapt. We can handle challenges in the face of which many other people might fold.”

As an NMR spectroscopist, Nieman works with materials scientists, geochemists, inorganic chemists, plant physiologists, physical chemists, biochemists, molecular biologists, environmental scientists, and others. “Just this morning,” he says, “we’ve been looking at solid state NMR of plant systems that combine heavy metals for remediation. Then we examined novel types of polymer systems, looking at molecules that will selectively target for binding to DNA. Soon we’ll be looking at some biomimetic systems that will model photosynthesis—and it’s only 12:00 p.m.” Nieman says his career as a scientist has changed his self-perception: “I’m much more of an empowered, confident individual than I used to be. I don’t think of myself as disabled, and heaven help anyone near me who does.”

His advice to those seeking a career in science is to become proficient in computers and technology. “That will open more doors than any one other thing and can help you get over many other hurdles,” he says. “Another thing: spend time researching your choice of undergraduate and graduate programs. Find schools that are supportive, schools



Ronald A. Nieman of ASU

where you can find good mentoring.”

Finally, he returns to his theme: “People should see their disability as a strength that has prepared them to be creative in science. Just dealing with their situations makes them likely to be very successful, possibly more so than the students around them. Such an outlook could help you. No lie; just fact.”

LOOKING FOR THE SWEET SPOT: JOAN ESNAYRA OF UCSD

SAN DIEGO, CALIFORNIA—Late this April, the Equal Employment Opportunities Commission set guidelines to help employers establish reasonable accommodations for workers with mental illness. This move was a belated acknowledgment of reality: over 13 percent of all complaints filed under the Americans with Disabilities Act have derived from employer-employee relations involving mental illness of some kind. Until very recently, scientists with mental illnesses were seldom discussed. Kay Redfield Jamison of the Johns Hopkins University School of Medicine changed that with her pioneering work on the challenges and obstacles facing scientists with depression or bipolar disorder.

Joan Esnayra, a graduate student in the biology department of the University of California at San Diego (UCSD), was hospitalized with bipolar disorder in 1996. Treatment includes drug therapy that causes a constant manual tremor.

She can no longer hold pipettes or do benchwork requiring fine motor control. Her career as a bench worker is effectively over.

With less than two years to go before completing her PhD, Esnayra had to create a new project, one that drew on her science background but did not involve bench research. She designed a thesis on the genetics of violence and the policy implications thereof. “It was difficult to accept no longer working at the bench,” she says, “but I’m also really excited about the problems identified by efforts to develop national genetics policies. I’m applying my genetics training to the analysis of current research on human aggression.”

Her department allowed her to change direction. “No one had ever done a genetics policy thesis before, and they were willing to allow me to explore that,” she says. The faculty was far from unanimous in its support of her, however, with one advisor expelling her from the lab, saying she was simply lazy. But at the chairman’s level, support was firm.

When asked whether science is open to people with disabilities, Esnayra says, “Not really. I don’t think those in power have bad intentions, but the way scientists are currently selected and trained implies a less diverse set of life experiences. I would rather think that varied life experience equals more wisdom.”

She and her physicians are still looking for the “sweet spot,” the drug regimen that will control her illness while allowing her to stay creative. In the meantime, she is grateful for supportive colleagues and friends (“I’ve told some of them, ‘I need you to call me every day,’ ”); she has also become part of an Internet support system of people with bipolar disorder.

Esnayra has three pieces of advice for scientists with mental illness: pursue your passions, always take your medicine, and have a backup plan. “Personally,” she says, “I’ve found it best to be open about my illness. That comes with

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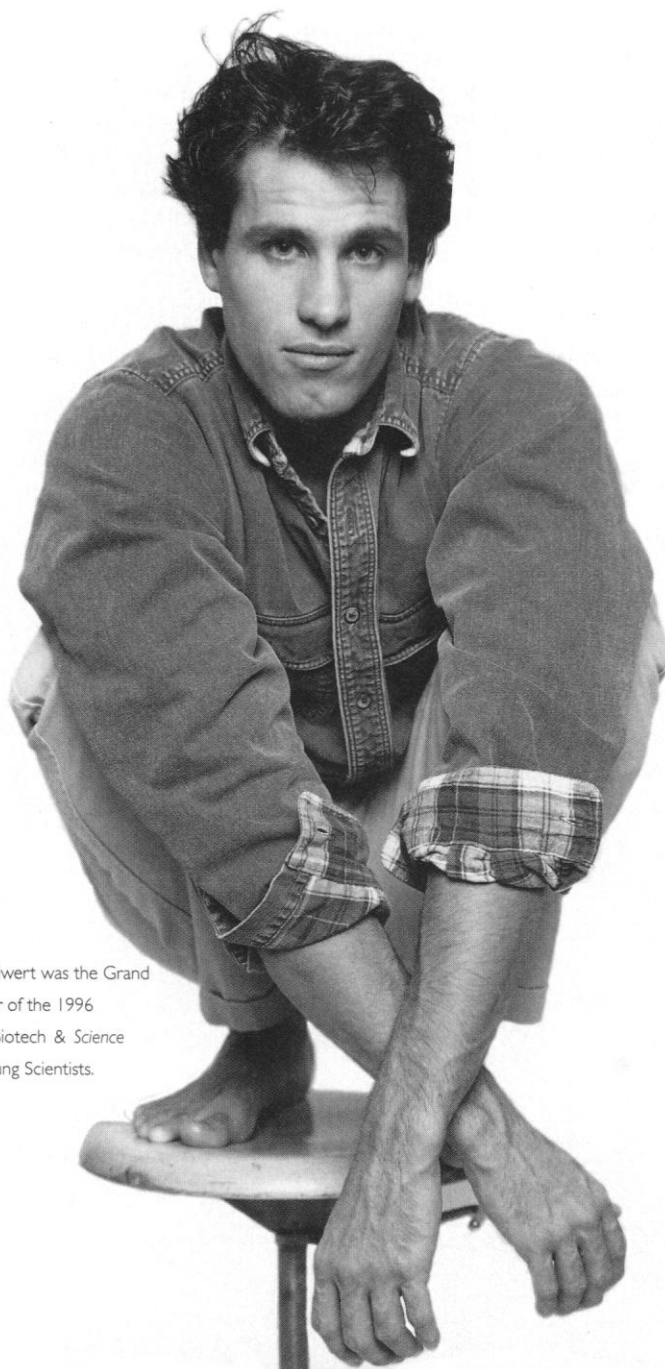
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The closing date for entries is 30 June 1997. All prizes will be presented in Sweden in December 1997. Full details and the required entry form can be collected from:

- the administrator of the Award Committee at the address below
- within the Science homepage at <http://www.aaas.org/science/prize.htm>
- within the Pharmacia Biotech homepage at <http://www.biotech.pharmacia.se>

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risk, of course, but I don't want to be anywhere where people can't deal with it." She also counsels careful consideration of the setting in which you will work: "If I'm in an environment that's really unhealthy, I need to stay away."

What does she see in her future? "Either a policy position at the National Institutes for Mental Health or a private consultancy," she says. Washington, D.C., is daunting: "I'm a little scared because everybody tells me how intense it is," she says. That's why consultancy is so attractive. "It's especially advantageous for a bipolar person," Esnayra says. "If you're having an off-day, you can simply knock off work; if you feel a bit insomniac, you can work until three a.m."

DOING IT BY DOING IT:

TODD BLUMENKOPF OF PFIZER

GROTON, CONNECTICUT—*Todd A. Blumenkopf is a senior research investigator in the medicinal chemistry section of the department of cancer, immunology, and infectious diseases at the central research division of Pfizer Inc. Blumenkopf, who was born with spina bifida and is paraplegic, does all of his research in a wheelchair. Below is a conversation with Blumenkopf about getting over the credibility gap that often faces scientists with disabilities.*

JT (John Timpane): Tell us about your research interests.

TB (Todd Blumenkopf): I'm in the immunology group here, involved in drug discovery. Working with enzymes and signaling pathways, we're looking for new agents useful as immunomodulators—agents that could suppress or regulate the operation of the immune system.

JT: What difference, if any, has your disability made in your career?

TB: Anyone from any underrepresented group faces issues of difference. In the end, these issues all have to do with how you earn and maintain credibility among your fellow scientists. It has been true for a long time that a scientist with an obvious disability really had to be among the very best scientists to be

considered credible. Today, that's still true, but it's perhaps less so than 20 years ago, when I was in college.

JT: Both employers and employees have told me that, at least in the past, there were some safety concerns about the scientist with disability. Do such concerns still exist?

TB: That concern has indeed existed for a long time. By now, we have plenty of studies that indicate that concern just isn't well founded. If anything, people with disabilities are more cautious. Many of them have had to solve practical and logistical problems their entire lives. They already have to think constantly in terms of safety measures. Further, as mentioned, many labs have implemented modifications that make it easier and safer for everyone. I understand the initial concern—the problem has been for students who don't get the opportunity to prove it's not warranted.

JT: I'm wondering about your own path to credibility. How did you earn the professional respect you obviously now have?

TB: Well, I did it by just doing it. I was an undergraduate at UCLA. That's a pretty large school, and when they asked me, "What do you want to major in?", I said, "Chemistry," and no one said anything to discourage me. That, as it turned out, worked to my advantage. By the time I graduated four years later, I had won the award for outstanding undergraduate achievement in organic chemistry. My professors were comfortable enough with me by then to admit that, at first, they'd thought I wouldn't last a semester. They'd expected to advise me to go into something else. I was just pleased that they were open-minded enough to give me the chance. I was able to prove to them that I deserved to be there. The same has held true in the work place.

JT: What advice would you have for people with disabilities who are considering a career in science?

TB: You should be thinking about



Todd A. Blumenkopf of Pfizer Inc.

how you're going to be dealing with resistance and skepticism. You have to recognize that they exist and not let them interfere with your objectives. Above all, don't get sidetracked into an emotional response. You simply need to have a plan for alleviating those concerns over time. Be patient. In my experience, it has taken months rather than years. ■

Todd Blumenkopf and Ron Nieman also appear in Working Chemists with Disabilities: Expanding Opportunities in Science, created and distributed gratis by the American Chemical Society. To get a copy, you can call or write Allison Edmondson at the American Chemical Society, 1155 16th Street NW, Washington, DC 20036 (phone, 202-452-2120; e-mail, a_edmondson@acs.org), or you can read it on the Internet at <http://www.acs.org/memgen/workchem/start.html>

Join us for a discussion group on Careers for Scientists with Disabilities at the Science Professional Network Web page (<http://www.sciencemag.org>). Click on Science Professional Network, and then click on Career Workshops. Todd Blumenkopf is our guest expert for the month of June.

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SR. RESEARCH SCIENTISTS/ STAFF SCIENTISTS IN PROTEIN CHARACTERIZATION

These positions involve the identification, purification and evaluation of novel potential protein therapeutics in a variety of indications, including tissue repair, inflammation and cancer. Successful candidates will have proven experience in the purification of proteins from recombinant and natural sources as well as demonstrated expertise in the analysis of protein ligand-receptor interactions and enzyme kinetics. Experience with molecular biological and cell culture/fermentation techniques is a plus. A proven desire and ability to excel in a highly interdisciplinary scientific environment coupled with demonstrated creative ability to initiate and conduct independent research is essential. Requires knowledge and training ordinarily acquired from a Ph.D. in Biochemistry or a related field with at least 4 years' experience, or an equivalent combination of education and experience. **Job Code MJY92.**

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SR. RESEARCH SCIENTIST/ STAFF SCIENTIST IN MOLECULAR BIOLOGY

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SR. ASSOCIATE SCIENTIST IN CELL BIOLOGY

We seek an individual with demonstrated expertise in RNA/DNA manipulation (e.g. mutagenesis, PCR, mRNA isolation) and in standard tissue culture techniques. Additional experience in primary cell/organ culture, cDNA cloning, and/or virus manipulation is desirable. The ability to work independently in a team-oriented environment, coupled with the desire to make direct and substantive contributions to projects is essential. Working knowledge of analyzing structure-function relationships of protein-protein interactions will be considered an asset. Requires a BS/BA in Biochemistry, Molecular Biology, or related field and 2-4 years' experience in a research-oriented environment. **JOB CODE MJY103.**

ASSOCIATE RESEARCH SCIENTIST IN PROTEIN SEPARATION

Within supervision, you will perform and maintain investigational activities within the confines of defined applied research programs and objectives. Activities include isolation of proteins, development of bioanalytical techniques, and assisting the supervisor in achieving defined goals. Experience in the use of HPLC, electrophoresis, UV/Vis, and knowledge in the evaluation of protein-protein interactions are desired. The successful candidate will be expected to work within a highly interdisciplinary environment and will possess excellent verbal and written communication skills. Requires knowledge ordinarily acquired from the highest undergraduate level college courses in Biochemistry/Biology and experience that includes at least 2 years' laboratory work and research experience in protein purification and/or characterization, or an equivalent of education and experience. **JOB CODE MJY93.**

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Candidates with a Ph.D. and/or M.D. and an excellent record of research productivity and quality should submit before 15 August, 1997 a curriculum vitae, summary of research accomplishments (including copies of key publications), description of future research plans, and the names of at least three references to:

**Chair, Search Committee
Department of Pharmacology
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Position available immediately for a faculty in the research track at the Assistant or Associate Professor level. Responsible for establishing a research program in cell biology relevant to gene therapy of inherited diseases with a focus on cell morphology and imaging techniques: Collaboration with existing research programs is essential although independent investigation is encouraged. State-of-the-art facility and start-up resources are available. M.D. and/or Ph.D. with postdoctoral and/or faculty experience in cell biology and working knowledge of morphology/imaging techniques at the light and electron microscope level is required.

Interested individuals should send their CV,
along with 3 references, to:

James M. Wilson, M.D., Ph.D.
Director, Institute for Human Gene Therapy
University of Pennsylvania Health System
Room 204 Wistar Institute
3601 Spruce Street
Philadelphia, PA 19104-4268

Email: wisnia@mail.med.upenn.edu

*Equal Opportunity/Affirmative Action Employer. We
encourage minority and women candidates.*

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A commitment to redefining the future of health care. That's Abbott Laboratories, and it's the talent of our professionals that makes us the health care leader we are today. If you're looking for a professional environment built on innovation, take a look at the opportunities available at Abbott Laboratories. Currently, our Pharmaceutical Products Division is meeting our commitment with several innovative breakthroughs, and now seeks the following individuals:



LABORATORY AUTOMATION SCIENCE

The successful candidate will work with scientists and technologists to develop software and database systems, to design efficient human interfaces, to provide accurate and reliable scientific computation and displays of pharmaceutical data, and to help solve problems that produce visible results. Access to technical training, opportunities for technical growth, project leadership and management are available on the basis of performance and merit.

A background in science or engineering with commercial experience in software development, relational databases, programming client server, 4GL, and object oriented applications, including the evaluation, specification, and startup of computer technology using project management tools, software development methodologies, software development environments, and presentation graphics are critical success factors.

A minimum of 2-4 years experience with application programming using a specific toolset, software development, project management, and laboratory automation systems are required, with an overall minimum experience of 4-8 years. These requirements are in addition to holding a BS, MS or Ph.D in a scientific or engineering discipline.

With 52,000 employees worldwide and over \$11 billion in annual sales, we've established ourselves as a respected and innovative leader in the health care industry. We offer an outstanding compensation and benefits package including profit sharing and a stock retirement plan. In addition, we are located in an attractive suburban setting approximately 30 miles north of Chicago. For confidential consideration, please send your resume with salary history to: Abbott Laboratories, Job #97-LHD-1721, D583, AP9A(LL), 100 Abbott Park Rd, Abbott Park, IL 60064. Abbott is an Affirmative Action Employer/

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STRESSGEN

BIOTECHNOLOGIES CORP.

STRESSGEN Biotechnologies is a growing biopharmaceutical company developing medical applications of the cellular stress response. STRESSGEN's R&D programs focus on utilizing stress proteins as immunomodulatory agents in therapeutic applications.

STRESSGEN Biotechnologies Corp. has immediate openings for experienced, technically qualified scientific staff to join our **Cancer Gene Therapy** group. Candidates must have the following qualifications:

SCIENTIST POSITIONS

1. Molecular and Cell Biology (#3/97-R&D)

Ph.D., with a minimum of five years of experience in the development and optimization of heterologous gene expression, preferably in the context of immunomodulatory genes in murine and human tumor cells. Expertise in gene cloning and transfection of eucaryotic cells is essential.

2. Oncology and Cancer Immunotherapy (#4/97-R&D)

Ph.D., with a minimum of five years of experience in murine tumor modeling and application of gene-based cancer immunotherapies. Expertise in immunology, oncology, and cancer immunotherapies is essential, and clinical oncology experience is highly desirable.

RESEARCHER POSITIONS

B.Sc. or M.Sc., with experience in one or more of the following areas: eucaryotic cell culture, cloning, and expression of eucaryotic genes; analysis of murine immune responses; and murine tumor modeling.

Please send C.V. & cite position code c/o:

Human Resources

STRESSGEN Biotechnologies Corp.
#350-4243 Glanford Avenue

Victoria, B.C. V8Z 4B9 Fax: (250) 744-2877

We thank all candidates for applying. Only those under consideration will be contacted.
Please - no phone calls or drop-ins.

RESEARCH UPDATE

American Cyanamid Company, a subsidiary of American Home Products, a Fortune 150 company, is seeking a detail-oriented and flexible Molecular Biologist to join us at our campus-like facility in Princeton.

MOLECULAR BIOLOGIST

You will work as part of a team dedicated to discovering new crop protection and pharmaceutical products by applying new genetic technologies to mechanism-based, high-capacity screening. To qualify, you should possess an MS in Molecular Biology and, preferably a background in Genetics, Biochemistry or Microbial Physiology. Yeast or fungal genetic experience is a plus.

We offer a competitive salary and excellent benefits, including a 401(k) savings plan. Please forward your resume and salary requirements to: Employment Office, Dept. KK/SS, American Cyanamid Company, Agricultural Research Center, P.O. Box 400, Princeton, NJ 08543-0400. An equal opportunity employer m/f/d/v.



Ribozyme Pharmaceuticals, Inc., a leader in the development of ribozyme-based products for pharmaceutical and agricultural applications, is currently seeking an experienced scientist to join the oligonucleotide chemistry group at our state-of-the-art facility in Boulder, Colorado.

BIO-ANALYTICAL CHEMIST

You will lead the formation of the bio-analytical section of the oligonucleotide chemistry department. Responsibilities include developing bio-analytical assay methods designed to support pre-clinical and clinical pharmacokinetics of drug candidates and in vivo/in vitro metabolism studies. Qualifications include a Ph.D. in Chemistry, Analytical Chemistry, Biochemistry or related pharmaceutical sciences and 5+ years' industrial experience. Proficiency in sample extraction from biological matrices and hands-on experience in modern analytical techniques (HPLC, CE, LC-MS/MS) is required. Knowledge of oligonucleotide purification protocols a definite plus. Must also have excellent communication skills and the ability to multi-task in a fast-paced environment. Please refer to Job #067.

We offer a competitive salary and a generous benefits package, including a stock option plan and matching 401(k). For consideration, please send a *curriculum vitae*, salary history and the names of three references to:

Ribozyme Pharmaceuticals, Inc., Job #067, 2950 Wilderness Place, Boulder, CO 80301. Fax: (303) 449-6995. E-mail: jobs@rpi.com.

Web site: <http://www.rpi.com>

No phone calls please. We are an equal opportunity employer.



DIRECTOR

RESEARCH SUPPORT PROGRAMS

SAIC Frederick, a division of Science Applications International Corporation, an employee-owned company, is paving the way for new programs and discoveries at the National Cancer Institute's Frederick Cancer Research & Development Center (NCI-FCRDC).

SAIC Frederick manages the Operations and Technical Support contract at the NCI-FCRDC, a Government Owned-Contractor Operated (GOCO) complex of highly technical research and development laboratories, as well as infrastructure support activities. We are a contemporary biotechnology organization dedicated to the development of knowledge and tools for diagnosis, treatment and prevention of human cancer and AIDS.

We seek a seasoned professional to perform in a leadership role as Director, Research Support Programs (RSP). The Director, RSP, serves as Corporate Vice President of Program Management, one of three contract-designated Key Personnel, and a member of the SAIC Frederick Executive Committee. This position is responsible for an incumbent scientific, technical and administrative staff of 660 employees with a budget of approximately \$53 million. The candidate will be responsible for directing and coordinating the scientific, laboratory and administrative support services to NCI intramural laboratories, other NIH laboratories and on-site contractor research laboratories.

Candidate must possess a PhD or MD degree with demonstrated expertise in biomedical research; extensive related experience and a national reputation in managing large groups of diverse scientific research or development programs, preferably in a government contracting environment. The ability to provide administrative leadership in the areas of budgeting, financial management, information technology management, and human resources management including cultural diversity enhancement is required. Experience with the NIH; an understanding of NIH policies and procedures; and federal contracting, grant or other funding mechanisms is desired. Knowledge of new technologies, such as genomics, bioinformatics, molecular diagnosis, new molecular technologies and drug design and development is also desired.

You will work in a campus-like environment in Frederick, Maryland, near Baltimore, Maryland, and Washington, DC. **SAIC Frederick** offers a salary commensurate with credentials and an attractive fringe benefits program, including insurance, 401(k) savings plan, stock purchase program, relocation assistance and more.

For consideration, please forward CV, references, publications list and salary requirements to: The Executive Search Committee, c/o Sharon J. Hose, **SAIC Frederick**, NCI-FCRDC, PO Box B, Frederick, MD 21702-1201. For further information, please e-mail us at: hr@mail.ncifcrf.gov. Applications must be received **no later than August 4, 1997**.

"We value cultural diversity in the workplace."



EOE

SAIC Frederick
A Division of Science Applications
International Corporation

M/F

Opportunities in Seattle with ZymoGenetics

ZymoGenetics, a leading biotechnology company and subsidiary of NOVO NORDISK, the world's largest producer of industrial enzymes, offers an exciting environment characteristic of a small research and development company, along with the scope and stability of a large pharmaceutical corporation.

Located in Seattle's historic Lake Union Steam Plant, we have the following opportunities available:

Scientist/Senior Scientist

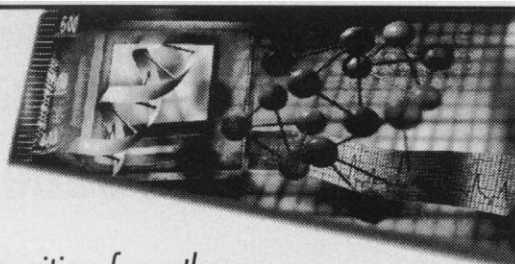
Innovative scientist needed to investigate function and dissect mechanism of action of novel therapeutic proteins. Must have a strong background in cell biology and extensive experience in the evaluation of diverse biological activities using in vitro assay systems. Will be responsible for identification, implementation and performance of in vitro assays for elucidation of protein ligand function. Knowledge of cytokines and growth factors, their receptors and signal transduction pathways required. Experience in the use of molecular biology techniques to create engineered cell lines and assay systems to address biological questions is desired. Your background must include a Ph.D and 2-5+ years of related experience, or B.S./M.S. and 10+ years' related experience. *Job #15R497.*

Research Associate II/III

Our Discovery Biology group has an opportunity for a Research Associate to support our effort in developing protein therapeutics for the treatment of human disease. The successful candidate will have strong skills in molecular biology techniques including cDNA library preparation, plasmid constructions, PCR and hybridization techniques. Good organization and computer skills are essential along with the ability to work effectively on a team. Previous experience in yeast molecular biology is desirable. *Job #15R397.*

ZymoGenetics offers intellectual challenge, state-of-the-art facilities and a generous benefits package. Please apply by sending your resume to: ZymoGenetics, Inc., Human Resources, 1201 Eastlake Avenue East, Seattle, WA 98102. *Please specify the position for which you are applying by listing the corresponding job number.* ZymoGenetics is committed to equal opportunity and diversity.

ZYMOGENETICS



*The transition from theory
to practical application transforms
molecules to medicines.*

BIOTECHNOLOGY DEVELOPMENT AT SCHERING-PLOUGH

At Schering-Plough's Biotechnology Process Development Facilities in Union, NJ, scientists skillfully perfect innovative and cost-effective methods to bring quality pharmaceutical products to market. In this technologically advanced environment, you will provide the vital link between research and manufacturing.

BIOANALYTICAL SCIENTIST

We seek a talented individual to design and execute experiments to develop and optimize high-throughput PCR-based assays for the quantitation of nucleic acid in samples derived from the clinic. This will include nucleic acid extraction, primer design, PCR optimization and assay validation. To qualify, you will need a BS degree and 7-10 years of experience in molecular biology or a related field, or an MS degree with 6-8 years of experience. Background must include experience with RT-PCR, PCR, recombinant DNA technology and RNA manipulations. Experience using real-time PCR instrumentation and knowledge of HCV virology are preferred. Industrial experience in the development of clinical applications under GLP guidelines is strongly desired.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to apply on-line at <http://www.sp-research.com> or send a scannable resume and cover letter, original copy only, referencing Dept. BD9709-JW, to: Schering-Plough Research Institute, MS #1250, 2015 Galloping Hill Road, Kenilworth, NJ 07033-0539. We are an equal opportunity employer. *We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.*



**Schering-Plough
Research Institute**

Using Science for Human Advantage

Ceres, Inc. Plant Bioscience

Senior Scientists, Research Associates/Assistants

Ceres, Inc., a Los Angeles based venture-capital-backed company, applies high-throughput genomic technologies to plants with the aim of identifying genes that will improve quantitative and qualitative traits in commercially important crops.

We are seeking senior scientists to conduct research in a discovery-oriented, multidisciplinary team setting. Successful candidates should have a Ph.D. in the area of genetics, biochemistry, molecular biology, or plant physiology or a field relevant to bioinformatics. Candidates should have at least two years of postgraduate experience or equivalent and excellent communication skills. In each of these areas we are also seeking research assistants/associates. These individuals should have B.S./M.S. degrees relevant to the research area of interest.

Molecular Genetics

The successful candidates will establish research projects to complement developing programs in biochemistry and bioinformatics. Projects will be centered around the identification, isolation, and characterization of agriculturally important genes. Experience investigating the organization and expression of eukaryotic genes and the use of robotics in genomic technologies is advantageous.

Biochemistry/Molecular Biology/ Development

The successful candidates will establish research projects to complement developing programs in molecular genetics and bioinformatics. The characterization of genes and proteins in agriculturally significant metabolic pathways and developmental processes will be a priority.

Bioinformatics

These positions will be filled by individuals with a background in computers and/or computer analysis as it relates to the biological sciences. Familiarity with UNIX systems and use of nucleic acid and protein database programs is desirable. The successful candidates will be responsible for maintaining and developing databases which contain public and proprietary sequence data and will interface with molecular geneticists and biochemists to identify agriculturally important target genes.

Ceres, Inc. is located in the Los Angeles area and offers competitive salaries and an excellent benefits package, including equity participation. Ceres, Inc. invites highly motivated researchers who want to become part of its research team to send a complete CV to: **Ceres, Inc., Human Resources Manager, 914 Westwood Blvd., Suite 567, Los Angeles, CA 90024.** *Ceres, Inc. is an equal opportunity employer.*

NATIONAL INSTITUTES OF HEALTH

Undergraduate Scholarship Program (UGSP)

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

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

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

During each year of the award, scholars serve for 10 weeks (with salary/benefits) as employees in NIH research laboratories. They are assigned mentors, participate in seminars and programs available to all NIH researchers, and are provided with housing and transportation. After graduation, they serve 1 year of full-time employment at NIH for each year of scholarship support.

Interested students should apply if they:

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

This is a special opportunity for special students.

For more information, contact

NIH/OD/OIR/OLRS
UGSP
7550 Wisconsin Avenue, Room 604
Bethesda, MD 20892-9121

Phone: 800-528-7689
Fax: 301-402-8098
e-mail: ugsp@nih.gov
TTY: 1-888-352-3001
<http://ugsp.info.nih.gov>



**St. Jude Children's
Research Hospital**

ALSAC • Danny Thomas, Founder

Postdoctoral Position In Developmental Biology

Department of Genetics St. Jude Children's Research Hospital

Postdoctoral position is immediately available to study the role of homeobox genes during murine central nervous system development. Particular interest is directed toward understanding the mechanism of action of the *Prox1* (Oliver et al., MOD 44, 3-16, 1993) gene in this process and during cell differentiation. The position is ideal for someone with a biological background, who has recently obtained a Ph.D. and/or MD with laboratory experience, and who would like to pursue training in developmental biology.

St. Jude provides an ideal research environment with strong and highly interactive research programs in biochemistry, developmental neurobiology, experimental oncology, genetics, immunology, molecular pharmacology, structural biology and tumor cell biology. Major common facilities are available including those for generation of transgenic mice.

Interested candidates should send a Curriculum Vitae and names of three references to: Guillermo Oliver, Ph.D., Department of Genetics, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38105. USA. AA/EOE.



CHAIR AND PROFESSOR OF BIOLOGY

Applications are invited for the reopened search for the position of Chair and Professor of the Department of Biology, College of Arts and Sciences, at East Carolina University. ECU is the third largest member of the University of North Carolina system and will soon be reclassified as a Doctoral II University. Our department of 34 faculty and 14 staff is strongly committed to excellence in teaching and research. We enroll over 400 undergraduate majors in Biology and Biochemistry and 85 graduate students for the M.S. degrees in Biology and Molecular Biology/Biotechnology. There are active research programs in coastal ecology, animal physiology, evolutionary biology, and molecular biology of vertebrates and prokaryotes.

Ph.D. degree, administrative experience, and demonstrated excellence in teaching and research in the liberal arts tradition are required. Submit letter describing leadership and management style, C.V., and contact information for at least three current references. Review of applications will begin 20 August 1997. Official transcripts are required upon employment. Address applications to: **Professor Carson W. Bays, Chair of the Biology Search Committee, College of Arts and Sciences, East Carolina University, Greenville, NC 27858-4353, baysc@mail.ecu.edu.**

An Equal Opportunity/Affirmative Action University. Accommodates individuals with disabilities. Applicants must comply with the Immigration Reform and Control Act.



Monterey Bay Aquarium Research Institute

Founded in 1987 by the late David Packard, MBARI is a non-profit, private oceanographic research institute, uniquely dedicated to the development of state-of-the-art equipment, instrumentation, systems, and methods for scientific research in the deep waters of the ocean. Located in Moss Landing, CA, the heart of the nation's largest marine sanctuary, MBARI places a balanced emphasis on science and engineering, with established programs in remotely operated vehicle (ROV) control technology, ocean physics, chemistry, geology, and biology, as well as information management, acoustics, and ocean instrumentation research and development. MBARI recently received delivery of its new SWATH Research vessel, the Western Flyer, and anticipates the near-future deployment of a technologically advanced ROV, Tiburon, taking unique research capabilities to depths of 4,000 meters. Additionally, MBARI fosters positive collaborative efforts with its sister institute, the Monterey Bay Aquarium, in research, education, and public information. MBARI offers a unique working environment for a productive, detail-oriented team player who is intrigued by the application of technology to ocean science.

For a glimpse of our current activities and employment opportunities, please visit our home page on the world wide web at <http://www.mbri.org>.

EOE
MBARI Welcomes Diversity

the future happens here first



Bioscience

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 and business to produce research that delivers results. Join our research-based enterprise as we discover important new medical therapies and create a future of industry firsts.

Postdoctoral Fellow

Use your molecular and biochemical techniques to study pathogenesis of fibrosis, focusing on the expression and characterization of proteases and other factors mediating collagen deposition and degradation. You will need a PhD and 2-3 years' molecular biology/protein biochemistry experience, including highly developed analytical skills and strong written and verbal communication skills. Experience with mammalian and/or bacterial protein expression, purification and characterization preferred.

Located in the San Francisco Bay Area—close to Stanford University and near scores of biotechnology companies—Roche Bioscience offers competitive salaries and a benefits package which includes relocation assistance, plus a unique environment that rewards new ideas and courageous decision-making. If you would like to explore our opportunities firsthand, apply today by sending your resume to: Roche Bioscience, Job Code SCI0620KH, 3401 Hillview Avenue, Palo Alto, CA 94304. Fax 415/424-8159. As an equal opportunity employer, we are committed to workforce diversity.

You may also see us on the WWW at: <http://www.roche.com/bioscience>.

INTERFACE TO INNOVATION

Network your way to breakthrough technology and world-class experts.

SmithKline Beecham, a world leader in pharmaceutical research, is presently seeking an individual to provide our R&D group with world-class Advanced Computing and Knowledge Management technology and expertise by identifying, tracking and working with outside experts, institutions and technologies.

Asst./Assoc. Director, External Collaborations

The selected individual will establish strong working relationships with consultants, advisors, Centers of Excellence, government agencies and information resources in strategic technologies through internet and intranet use, attendance at seminars, consulting contacts, group technology transfer sessions, collaborative agreements and joint grant proposals; and manage external collaborations and business processes.

Qualified candidates will have an advanced degree in the life or chemical sciences, computer science or information technology and possess experience in both research and information technology fields. Strong computer, logistical, management and communication skills are essential, as is the ability to work well independently. The individual must also possess the potential to establish significant contacts in the IT, scientific, biotech and pharmaceutical communities and have an understanding of R&D business processes.

Located in a state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers a competitive compensation/benefits/relocation package and a stimulating work environment. Qualified candidates should forward resume and salary requirements to: SmithKline Beecham Pharmaceuticals, Job Code A7-0201, PO Box 2646, Bala Cynwyd, PA 19004. **Indicating Job Code is essential.** For more information on SmithKline Beecham, visit our Web site at <http://www.sb.com>. We are an Equal Opportunity Employer, M/F/D/V.



SmithKline Beecham
Pharmaceuticals

Challenging the natural limits.

Tenure Track Faculty Positions Institute for Human Gene Therapy University of Pennsylvania Health System

Tenure-track positions are available in the School of Medicine at the Assistant and Associate Professor level. Appointments are made in one of the basic science or clinical departments at Penn while resources are provided through the Institute for Human Gene Therapy. Investigators interested in fundamental biological processes broadly relevant to eventual development of successful gene therapy are encouraged to apply. Areas of interest for recruitment are listed below:

Immunology of Gene Therapy

- Activation of T cells
- Cancer Immunology
- Host-virus pathogenesis

Lung airway biology and inflammation

Cell and molecular biology of muscle development

Animal model of human diseases

Molecular virology relevant to vectors

Cell cycle and signal transduction relevant to cancer

Applicants should have D.V.M., M.D., and/or Ph.D. with at least one postdoctoral fellowship.

Interested individuals should send their CV, along with 3 references, to:

James M. Wilson, M.D., Ph.D.
Director, Institute for Human
Gene Therapy
Room 204 Wistar Institute
3601 Spruce Street
Philadelphia, PA 19104-4268

Email: wisnia@mail.med.upenn.edu

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Employer. We encourage minority and
women candidates.

Getting there first

At CuraGen we are inventing technology and being the first to use it for a comprehensive understanding of gene function. We have openings for excellent scientists who share our vision.

Functional Genomics

Research Scientist: cDNA/genomic library construction, model systems including yeast, massively parallel biology, Ph.D. with post-doctoral experience preferred.

Project Leader: 5+ years of experience as a PI characterizing gene function through genomics and model systems.

Please send a CV and 3 letters of reference to apply. CuraGen's benefits include opportunities for equity participation in the fastest-growing private genomics firm. EOE/AA. Visit our homepage for a complete list of positions:

www.curagen.com



CuraGen Corporation
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We are a leading pharmaceutical company with modern research facilities located in Montreal's West Island. Currently, we have an exciting opening for a:

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As a potential successor to the current head of department of Pharmacology, this is a challenging opportunity for an experienced pharmacologist with extensive knowledge of *in vivo* experimentation.

Reporting to the Senior Director and Head of Pharmacology, you will be responsible for coordinating, leading and developing several groups of researchers involved in our research programs. You will be responsible for developing existing, and initiating new animal models of human disease.

As our successful candidate, you have a Ph.D. in the biological sciences, and a minimum of 8 to 10 years' postdoctoral experience in the field of inflammatory or related diseases. A primary criteria for hiring will be scientific excellence as evidenced by an extensive publication record.

We offer an excellent salary and benefits package, including a non-contributory pension plan and major medical and dental coverage, as well as opportunities for personal growth within a dynamic and progressive organization. For more information on Merck and Co., visit our website at <http://www.merck.com>. If you are interested in this position, please send your curriculum vitae in full confidence to:

**Human Resources, Merck Frosst Canada Inc., P.O. Box 1005,
Pointe-Claire – Dorval, Quebec H9R 4P8.**

Preference will be given to Canadian citizens or to individuals with Canadian Landed Immigrant status. We are committed to diversity in our workforce and offer a smoke-free environment.

We thank all candidates for their interest in Merck Frosst; however, only those under consideration will be contacted. Unfortunately, we are unable to handle telephone calls and request that you refrain from calling either to inquire about the status of your c.v. or this job search.



MERCK FROSST

Research Associate

The Stanford Human Genome Center is seeking a Research Associate to work with our production sequencing group. The goal of this sub-project is to sequence several million base pairs of human DNA, located in regions of the human genome involved in inherited epilepsy, liver cancer and several other inherited diseases. You will oversee and coordinate the sequencing group with attention to both scientific and logistical issues. A Ph.D. in Biochemistry, Molecular Biology or a related field is required and post-doctoral experience or employment is preferred. You must also have extensive molecular biology experience (sequencing, PCR troubleshooting, cloning) or experience that combines molecular biology with bioinformatics (sequencing and sequence analysis). Knowledge of UNIX, Internet tools, databases and Macintosh applications is a plus.

Please send curriculum vita and names/contact information for three references to: Dr. R.M. Myers, Stanford Human Genome Center, Stanford University School of Medicine, Stanford, CA 94305-5120 or e-mail to: myers@shgc.stanford.edu. AA/EOE/M/F/V/D

**STANFORD
UNIVERSITY**



Chemistry

Supelco, Inc., a leading manufacturer of chromatography supplies, has immediate openings in our Liquid Separation Research and Development area.

CLINICAL CHEMIST

Responsibilities include method development and sample preparation for clinical applications. You will also work with clinical laboratories and pharmaceutical companies to develop optimized HPLC methods for clinical samples. Requirements include a Ph.D. or equivalent in Biochemistry or analytical chemistry, and 2 years of clinical industry experience. Position #10067

PROTEIN CHEMIST

Responsibilities include developing applications on FPLC and HPLC columns and expanding Supelco's product line of columns and accessories for biochemistry. Work will be based on continuous interaction with Supelco customers, particularly biochemists who analyze proteins, peptides, and amino acids in the pharmaceutical and biotechnology industries and academic institutions. Requirements include a Ph.D. in Biochemistry along with 5 years industrial experience in analyzing, isolating or purifying biomolecules by liquid chromatography and other methods. Position #10075

Supelco, Inc. is a Sigma-Aldrich Company located in scenic central Pennsylvania. We are ISO 9001 registered. We offer excellent benefits, competitive pay and a modern work facility. To apply, please send resume to:

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SUPELCO

POSITIONS OPEN

ASSOCIATE DEAN FOR RESEARCH EMORY UNIVERSITY SCHOOL OF MEDICINE

Emory University School of Medicine seeks an outstanding, visionary academic research leader in the health professions to provide overall administration for research in the School and to enhance the research endeavors of the faculty. This is a crucially important position in one of the fastest-growing research programs in the country. The Associate Dean for Research reports directly to the Dean and will work cooperatively with leaders in the University and the Health Sciences Center. The role includes accountability for all aspects of research planning, development, and implementation in the School, including implementation of the School's strategic plan for research.

The minimum qualifications for this position include: an earned doctorate in an academic biomedical discipline; demonstrated commitment to excellence in scholarship; demonstrated leadership in research; commitment to a collegial environment; ability to develop and implement priorities for research, enhance program project and center grant applications; develop multi- and interdisciplinary research programs; evidence of ability to mentor junior and senior faculty in research; ability to interact productively with industry, governmental agencies, and donors; and ability to assist faculty and technology transfer office in intellectual property matters.

Applications and inquiries should include a curriculum vitae and be directed to: **Thomas J. Lawley, M.D., Dean, Emory University School of Medicine, Woodruff Health Sciences Center Administration Building, 1440 Clifton Road, N.E., Atlanta, GA 30322.** The search will remain open until the position is filled.

Emory University is an Equal Opportunity/Affirmative Action Employer.

DIRECTOR

The University of Nebraska Medical Center has initiated a search for the combined position of Director of the Eppley Institute for Research in Cancer and the NCI Designated UNMC/Eppley Cancer Center. The Eppley Institute is an academic unit at UNMC with approximately 24 tenured and/or tenure-leading faculty and more than 130 total personnel. The Director of the Eppley Institute is at the same level as a dean and reports directly to the Chancellor of UNMC. The Cancer Center, with over 130 members, combines the basic research at Eppley and the other departments at UNMC with the clinical cancer research for the Medical Center. The successful candidate should hold a Ph.D. or M.D. degree, have an ongoing strong basic research program, have demonstrated leadership abilities, and be able to work with a large and diverse group of basic and clinical scientists.

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

James O. Armitage, M.D.
Chairperson, Search Committee
University of Nebraska Medical Center
Chancellor's Office
600 South 42nd Street
Omaha, NE 68198-6605

The University of Nebraska Medical Center is an Equal Opportunity Employer.

ASSISTANT/ASSOCIATE PROFESSOR

The Center for Cell Signaling at the University of Virginia seeks to add an established faculty member to complement Center research programs on molecular mechanisms of intracellular signal transduction and nucleocytoplasmic transport. This individual is expected to have a record of research productivity and grant support. The University provides an outstanding scientific environment with a variety of core facilities, research centers, and graduate training programs. The Center operates as a separate unit in new laboratory space, and Center faculty have tenure-track academic appointments in departments in the School of Medicine. Additional information is available at the website: <http://www.med.virginia.edu/inter-dis/signaling/celsig00.html>.

Applications will be handled in confidence on a continuing basis starting June, 1997. Please send a curriculum vitae, including a list of publications and grant support for the past five years, to: **Cell Signaling Committee, David L. Brantigan, Chair, Box #577, Health Sciences Center University of Virginia, Charlottesville, VA 22908.** The University of Virginia is an Equal Opportunity/Affirmative Action Employer. Applications from women and underrepresented minorities are especially encouraged.

POSITIONS OPEN

FACULTY POSITION IN CANCER EPIDEMIOLOGY

The Division of Public Health Sciences of the Fred Hutchinson Cancer Research Center invites applications for an epidemiologist faculty position at the **ASSISTANT MEMBER** level (equivalent of assistant professor at a university). The candidate should have a Ph.D. in epidemiology or an M.D. plus master's level training in epidemiology, or equivalent degree(s). The candidate should have interest and at least two years of experience in studies of the etiology and outcome of breast cancer. Priority will be given to applicants who have previously conducted population-based interdisciplinary investigations in collaboration with clinical- and laboratory-based scientists aimed at elucidating environmental, genetic, and molecular factors of etiologic and prognostic significance. Preference will also be given to individuals who have conducted large-scale family studies to investigate gene-environment interactions. Resources available include laboratory facilities and existing population-based studies that involved collection of biological samples.

The Fred Hutchinson Cancer Research Center is a comprehensive cancer center with large and active research programs in epidemiology, cancer prevention, and biostatistics. A joint appointment in the University of Washington School of Public Health and Community Medicine's Epidemiology Department as a Research Assistant Professor is possible, depending on interests and qualifications. This would involve advising individual students on thesis or dissertation research.

Please send applications, including curriculum vitae, a letter describing research interests, and the names of four references by August 15, 1997, to:

David B. Thomas, M.D., Dr.P.H. (Search Chair)
Program in Epidemiology
Division of Public Health Sciences
Fred Hutchinson Cancer Research Center
1100 Fairview Avenue North - MP-474
P.O. Box 19024
Seattle, Washington 98109-1024

The Fred Hutchinson Cancer Research Center and the University of Washington are Equal Opportunity/Affirmative Action Employers. Both institutions are building culturally diverse faculties and strongly encourage applications from female and minority candidates.

DIRECTOR FOR RESEARCH AND TECHNOLOGY HEART AND LUNG INSTITUTE Southeastern Location

Our client, a nationally renowned Heart and Lung Institute located in a highly desirable southeastern city, is seeking a Director for Research and Technology. The Director of Research and Technology will guide, manage and promote the collaborative research activities of the Heart and Lung Institute. The Director will work with the faculty of a nearby university and other researchers to enhance the level and volume of cardiovascular research; facilitate the initiation and completion of quality research projects; promote and support the acquisition and maintenance of quality extramural funding; promote and support the publication of abstracts and papers; and be responsible for identifying new research opportunities and directions.

Requirements include a Ph.D. with cardiology or cardiovascular surgery research background and a track record for doing and/or managing basic, applied, or trial research in cardiology or cardiovascular surgery. Areas of focus at the institute include basic and applied research, device and clinical trials, database research, outcomes research, industry liaisons, and editorial support.

Please submit your curriculum vitae to: **Allen Kupchik, Franklin Allen Consultants, Ltd., 401 Franklin Avenue, Garden City, NY 11530.**

RESEARCH ASSISTANT/ ASSOCIATE PROFESSOR

The University of Illinois, Section of Cardiology invites applications for a non-tenure research faculty position at the Assistant/Associate level. We seek an outstanding researcher with several years of experience in the area of molecular biology of cardiac hypertrophy. Duties include independent and collaborative research. Address inquiries along with current curriculum vitae to: **Sharon Gaik, Department of Medicine, The University of Illinois at Chicago, 840 South Wood (M/C 787), Chicago, IL 60612.**

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

POSITIONS OPEN

AMERICAN UNIVERSITY OF BEIRUT FACULTY OF MEDICINE AND MEDICAL CENTER

The Faculty of Medicine and Medical Center of the American University of Beirut, Beirut, Lebanon is seeking Academic Staff at the level of **ASSISTANT PROFESSOR, ASSOCIATE**, or **PROFESSOR** in Laboratory Medicine. Applicants and nominees should have strong knowledge of medical and molecular genetics with expertise in modern molecular biology and mutation detection techniques. The applicant would ideally be a current Director of a Molecular Diagnostics laboratory or trained to assume such directorship.

Degree requirement: M.D., Ph.D., or M.D./Ph.D. with at least four years of postdoctoral training in human molecular genetics.

The role of the Director would be to set up and interpret all diagnostic and prognostic studies that require the above techniques and their applications to genetic disorders, oncology, and microbiology. In addition, the Director is expected to train and daily supervise medical technologists, graduate students, and fellows to implement these assays on a routine and research basis. The Director will also be responsible to set up, implement, and continuously oversee quality control and quality assurance programs for the clinical molecular diagnosis laboratory.

For confidential consideration, please submit your curriculum vitae, salary requirements, and names and addresses of references by September 31, 1997 to:

Samir Najjar, M.D.
Dean, Faculty of Medicine
American University of Beirut
850 Third Avenue, 18th Floor
New York, NY 10022-6297

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

U.S. passports are presently invalid for travel to, in, or through Lebanon and for residence in Lebanon by order of the Department of State, and therefore, applications from individuals who would travel to or reside in Lebanon on a U.S. passport cannot at this time be considered.

COGNITIVE NEUROSCIENTIST UNIVERSITY OF WASHINGTON

Applications are invited for a joint position of **ASSISTANT or ASSOCIATE PROFESSOR** in the Department of Physiology and Biophysics and Core Staff of the Regional Primate Research Center. Candidates should have postdoctoral experience with neuroscience research involving primates and be working in the general field of cognitive neuroscience. Areas of research interest include mechanisms of learning and memory, perception, emotion, and higher cognitive functions. We seek a candidate who can establish a strong neuroscience research program involving primates, and whose interests would complement those of current faculty.

Applications and nominations should be submitted before September 30, 1997. Send curriculum vitae, several representative reprints, the names of four professional references, and a concise statement of research interests and goals to: **Dr. Eberhard Fetz, Chair, Search Committee for Cognitive Neuroscientist, Department of Physiology and Biophysics, University of Washington, Seattle, WA 98195-7290.**

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

An exceptional opportunity exists for a board-certified psychiatrist to be the **ASSOCIATE CHIEF OF PSYCHIATRY** for the newly integrated Mental Health and Behavioral Sciences Services between Minneapolis/St. Cloud Veterans Affairs Medical Centers. Incumbent will be stationed at St. Cloud, MN, which is 65 miles northwest of the twin cities of Minneapolis and St. Paul, and will serve as the Medical Director for Mental Health and Behavioral Sciences. Incumbent will receive an academic appointment with the University of Minnesota School of Medicine at the appropriate level. Research and teaching opportunities are available. We are looking for an individual who has leadership experience and an interest in research. Candidates may apply by sending their curriculum vitae to: **Patricia Barth, Personnel Management Specialist, VA Medical Center, 4801 8th Street North, St. Cloud, MN 56303.** You may call the following persons to discuss the assignment: **Dr. James Lukach, Chief of Staff, VA Medical Center, St. Cloud, MN at 320-255-6317 or Dr. Joseph Westermeyer, Chief of Psychiatry, VA Medical Center, Minneapolis, MN at 612-725-2000, ext. 3997.**

FACULTY POSITION Cell and Molecular Biology

The Department of Biology at Carthage College invites applications for a renewable position in cell and molecular biology. Carthage College is a four-year liberal arts college located on the shore of Lake Michigan midway between Chicago and Milwaukee. The Department is well equipped for state of the art teaching and research. The successful candidate will have a strong background in experimental biology and a commitment to teaching at the undergraduate level. Responsibilities will require teaching molecular techniques for the solution of problems in cell biology and promotion of student involvement in research projects. This position requires a willingness to pursue external funding. Rank will be determined by qualifications of the successful applicant. Submit current curriculum vitae, transcripts, and three letters of reference to: **Dr. Mark R. Snavelly, Chairperson, Division of Natural Sciences, Carthage College, Kenosha, WI 53140.** You may fax your application materials to Dr. Snavelly at 414-551-6208, or send via email to snavelly@carthage.edu.

Files will be reviewed until the position is filled. The start date for this position is August 15, 1997.

Boehringer Ingelheim (BI) is a global pharmaceutical company, employing more than 3000 employees in R&D worldwide. For our research facility in Vienna, Austria, we are opening a new position for a:

Scientist Bioinformatics

The successful candidate will work in a highly motivated interdisciplinary team embarking on a wide range of technologies including proteomics, genomics, and molecular biology to identify and validate novel targets for therapeutic interventions. The principal responsibilities of the successful candidate will be the implementation and maintenance of bioinformatics resources and their integration into an overall R&D information strategy. He/she will also coordinate and specify technical alternatives to meet bioinformatics needs for BI R&D Vienna and serve as a liaison officer between BI and external partners in the field of bioinformatics (industrial and nonindustrial).

Applicants must have a background in life science and modern information technology, especially databases. He/she has to be capable and willing to solve day-to-day technical problems. Excellent communication skills including a good command of the English language are required. Experience in state-of-the-art computational sequence analysis tools, plus software development using C++/JAVA, would be valuable, but is not mandatory.

For further information, please contact **K. K. Wilgenbus**, email: wilgenbu@bender.co.at; tel. no.: 0043-1-80105-489.

Applicants should send their full application forms in English, attaching a full CV and names and phone no. of two referees to:

**BENDER + CO Ges mbH c/o Mrs. S. Fröhlich,
Dr. Boehringer-Gasse 5-11, A-1121 Vienna, Austria**

CHRISTCHURCH, NEW ZEALAND UNIVERSITY OF CANTERBURY

Lecturer or Senior Lecturer in Zoology (Genetics/Molecular Biology)

Applications are invited for a tenured position, as above, in the subject area of genetics/molecular biology in the Department of Zoology. The minimum qualification on appointment is the Ph.D. degree or equivalent, but candidates with postdoctoral experience are likely to be preferred. Applicants with records of substantial published research may be considered for a Senior Lectureship (comparable to an Associate Professorship). In addition to having a strong grounding in molecular biology and genetics of animals, applicants with teaching and research interests in molecular evolution, population/conservation genetics, development genetics, or cellular molecular biology are encouraged to apply. The appointee can expect to contribute to courses in cellular and molecular biology and genetics at the undergraduate level, and to teach a postgraduate course in their area of specialisation. He or she will be required to develop an active programme of research and to supervise postgraduate students.

The salary for Senior Lecturers is on a scale from NZ\$58,000 to NZ\$66,000 (bar) and from NZ\$69,000 to NZ\$73,000 and for Lecturers is on a scale from NZ\$45,000 to NZ\$55,000 per annum.

Academic enquiries only should be made to Dr Frank Sin, Co-ordinator of Cellular and Molecular Biology, Fax 64 3-364 2024, or Email: sgene@zool.canterbury.ac.nz. The University's World Wide Web address is:

<http://www.regy.canterbury.ac.nz/home.html>.

Conditions of Appointment and further particulars will be airmailed on request to:

staffing.acad.appts@regy.canterbury.ac.nz.

Applications, quoting Position No. ZO52, close on 29 August 1997 and must be airmailed to:

The Registrar, Attention Staffing Section,
University of Canterbury, Private Bag 4800,
Christchurch, New Zealand.

The University has a policy of equality of opportunity in employment.



UNIVERSITY OF MANCHESTER SCHOOL OF BIOLOGICAL SCIENCES

Post-Doctoral Position in Structural Biology

Applications are invited for a 3-year post to join a team engaged in structural studies of collagen fibrils and their role in animal development and tissue repair. Collagen fibrils are the basis of the mechanical properties of bone, cornea, skin and tendon and are fundamental to the shape and form of these tissues (for review see Kadler et al. (1996) *Biochemical Journal* 316:1-11; Danielson et al. (1997) *J. Cell Biol.* 136: 729-743). The work is generously supported by a programme grant to Dr Karl Kadler (in the form of a Senior Research Fellowship) in the Wellcome Trust Centre for Cell-Matrix Research in the School of Biological Sciences.

The exciting aim of this post is to determine the 3-dimensional structure of collagen fibrils and associated macromolecules. The approach is to use electron cryo-transmission electron microscopy. This is an exciting new research area which will give the successful candidate the opportunity to develop his/her career in structural biology. Relevant expertise in structural biology and electron microscopy is desirable but mostly we are looking for a talented and motivated person to join our 15-member team of biochemists, molecular biologists and structural biologists which comprises postdoctoral associates, postgraduate students and research technicians.

The salary for this position, which is available immediately, is at level 2 of the Wellcome Trust's pay scale (approx. £22,700 per annum including Wellcome increment).

Applicants should hold, or will soon be acquiring, a PhD in a biological science, mathematics, or physics subject. Applicants with less traditional backgrounds but having relevant experience are also encouraged to apply.

Informal enquiries to Dr Kadler, Tel: (+44) 161 275 5086, Fax: (+44) 161 275 5082, email: Karl.Kadler@man.ac.uk

Application forms and further particulars available from the Office of the Director of Personnel, The University of Manchester, Oxford Road, Manchester, M13 9PL, UK. Tel +44-161-275-2028, Minicom +44-161-275-7889, Fax +44-161-275-2221, email Personnel@man.ac.uk

Closing date for applications 14 July 1997. Please quote ref: 314/97.

As an Equal Opportunities Employer, The University of Manchester welcomes applications from suitably qualified people from all sections of the community regardless of race, religion, gender, or disability.



POSITIONS OPEN

ASSISTANT PROFESSOR (TWO) PEDIATRIC IMMUNOLOGY AND GENETICS

Applications for two tenure-accruing or research track Assistant Professors at Louisiana State University Medical Center in New Orleans are invited by the newly founded Research Institute for Children. The Institute is a joint venture between the Children's Hospital and Louisiana State University School of Medicine. Ongoing study topics in immunology include the natural history, prediction and prevention of immunologically mediated (type 1) diabetes, islet cell transplantation, and the genetics of autoimmune endocrine and skin diseases. Study topics in genetics include pathogenesis, prediction and prevention of immunologically mediated (type 1) diabetes, islet cell transplantation and the genetics of autoimmune endocrine and skin diseases. The Institute currently occupies some 10,000 square feet of newly refurbished and well-equipped laboratory space, while construction of the definitive facility will begin within a few months. Applicants must have Ph.D., M.D., or equivalent degree in immunobiology. Expertise and training in the investigation of clinical and experimental cellular immunology will be preferred for one position, and expertise in the investigation of clinical and experimental murine genetics will be preferred for the second position. The successful applicant will be appointed in pediatrics as well as a basic science department at the LSU School of Medicine. Salary and benefits will be commensurate with experience and training. Please send a résumé with list of references by September 15, 1997 to: Dr. Noel Maclaren, Department of Pediatrics, LSU School of Medicine, 1542 Tulane Avenue, New Orleans, LA 70112. *LSUMC is an Affirmative Action/Equal Opportunity Employer.*

AMERICAN UNIVERSITY OF BEIRUT—BEIRUT, LEBANON TEACHING OVERSEAS

The Department of Biochemistry at the American University of Beirut invites applications for the full-time position of ASSISTANT/ASSOCIATE PROFESSOR to (1) teach molecular biology to medicine and graduate students, (2) establish an internationally-fundable research program in molecular biology, and (3) participate in interdisciplinary projects and seminars with colleagues in the school.

The candidate must have outstanding research accomplishments and extensive teaching experience in biochemistry with special emphasis on molecular biology. Please submit research plans, three letters of professional reference, and curriculum vitae by September 30, 1997 to:

Samir S. Najjar, M.D.
Dean, Faculty of Medicine and Medical Center
American University of Beirut
850 Third Avenue, 18th Floor
New York, NY 10022

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

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REEVE-IRVINE ENDOWED CHAIR IN SPINAL CORD INJURY RESEARCH

The University of California, Irvine, College of Medicine is seeking qualified applicants for an endowed Chair in Spinal Cord Injury Research at the level of ASSISTANT, ASSOCIATE, or FULL PROFESSOR. We are seeking candidates with demonstrated interest, experience, and accomplishment in studies of central nervous system damage and/or tissue repair and the potential for making substantial contributions to understanding and facilitating mechanisms of functional recovery following traumatic spinal cord injury. The successful candidate would be expected to establish a vigorous federally-funded research program. UCI offers the opportunity to participate in graduate and postdoctoral training programs and collaborative research with a large community of neuroscientists working in fields of neuronal development, plasticity, and repair. The position would entail a tenure-track appointment, substantial start-up discretionary funds, and a yearly research endowment. The appointment could be made in any College of Medicine department. Applicants should send their curriculum vitae and a statement of interest to the chair of the search committee: Christine Gall, Ph.D., Department of Anatomy, University of California, Irvine, CA 92697-1275. *The University of California is an Equal Opportunity Employer.*

POSITIONS OPEN

WEST VIRGINIA UNIVERSITY INSTITUTIONAL BIOSAFETY OFFICER

West Virginia University (WVU), a land-grant, Carnegie Division I Research University with multiple campuses, is seeking an Institutional Biosafety Officer (BSO). This is an upper-level administrative position reporting to the Associate Vice President for Health Sciences.

Minimum requirements for the position include a Master's degree in microbiology, biochemistry, or molecular biology and relevant experience in the area of biosafety. The applicant should have excellent communication skills and the ability to work with faculty, research personnel, students, maintenance workers, and governmental agencies. A working knowledge of applicable regulatory standards is desirable.

The successful applicant will help to oversee research involving biohazardous materials and recombinant DNA at WVU. The BSO will be responsible for insuring that appropriate regulations (Federal and State) are met in the conduct of research at WVU. The BSO will also conduct training sessions on various aspects of biosafety, aid researchers in developing protocols for the conduct of research involving biohazards, work with physical plant personnel to insure that laboratory facilities meet required standards, and conduct periodic inspections of laboratories to insure that they continue to meet the appropriate guidelines covering the research conducted therein. The BSO will also be responsible for the management of the shipping of biohazardous materials to and from WVU.

Review of applications will begin July 15, 1997 and will continue until the position is filled. Applicants should send résumé and the names, addresses, and telephone numbers of three references to: David Yelton, Ph.D., Chair, Search Committee, Department of Microbiology and Immunology, P.O. Box 9177, Morgantown, WV 26506-9177.

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

DEPARTMENT OF PHARMACOLOGY, TOXICOLOGY AND THERAPEUTICS UNIVERSITY OF KANSAS MEDICAL CENTER

Applicants are sought for a full-time, tenure-track faculty position at the level of ASSISTANT or ASSOCIATE PROFESSOR. Candidates must have a Ph.D. or M.D. degree, postdoctoral experience, and a record of research productivity. Particular emphasis is placed on recruiting a scientist interested in determining molecular mechanisms by which drugs/chemicals modulate biological systems. Experience with molecular techniques and an interest in employing transgenic and knockout technologies would be beneficial. Areas of research include but are not limited to: toxicology, neurobiology, pharmacology and cancer biology. Application material, including a curriculum vitae and the names of three references, should be sent to: S. J. Enna, Ph.D., Chair, Department of Pharmacology, Toxicology and Therapeutics, University of Kansas Medical School, 3901 Rainbow Boulevard, Kansas City, KS 66160-7417. *The University of Kansas is an Affirmative Action/Equal Opportunity Employer.*

INSTRUCTOR POSITION PROTEIN CRYSTALLOGRAPHY HARVARD MEDICAL SCHOOL

New junior faculty position in X-ray crystallography and structural biology is available immediately at the Beth Israel Deaconess Medical Center and Harvard Medical School. Ongoing projects include crystal structure analysis of HIV-1 related proteins and human transcription regulatory proteins. Experience in protein crystallization and X-ray crystallography is required.

Send curriculum vitae and three reference letters to: Drs. John A. A. Ladias and Jerome E. Groopman, Department of Medicine, Beth Israel Deaconess Medical Center, Harvard Institutes of Medicine, Room 354, 4 Blackfan Circle, Boston, MA 02115. FAX: 617-975-5241; e-mail: jladias@west.bidmc.harvard.edu.

ASSISTANT SCHOLAR/SCIENTIST (research faculty) position is available in the laboratory of Dr. T. A. Cross at the National High Magnetic Field Laboratory. A biochemical NMR spectroscopist is sought to conduct research both independently and within this research group. In addition, this scientist will help manage Dr. Cross's research effort. A Ph.D. and postdoctoral experience is required. Send curriculum vitae, research interests and plans, and three letters of reference to: Dr. T. A. Cross, NHMFL, 1800 East Paul Dirac Drive, Tallahassee, FL 32310. *The State of Florida is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

CLINICAL SCIENTIST (Biomedical Engineer) for company in the development, manufacturing, and sales of diagnostic imaging equipment in northeastern Ohio. Job duties: research and design of imaging and NMR (Nuclear Magnetic Resonance) related tests to provide quality and baseline evaluation of sequence and hardware performance and problem solving tools in order to enhance the quality and reproducibility of systems; design, implementation, and verification of sequences and sequence software related to engineering and clinical science projects for time-of-flight MRA (Magnetic Resonance Angiography) and blood flow measurements; develop and optimize imaging techniques within the limits of the NMR system to meet the requirements of imaging partners and market technology in order to enhance the quality of the product; support the conference presentations; make decisions and recommendations that have impact on software and pulse sequence development activities. Tools used: IDL, UNIX shell programming, C programming, HTML programming. Must have M.S. in biomedical engineering or physical science and one year of experience in job duties or one year of experience in time-of-flight magnetic resonance angiography and pulse sequence development on whole-body high-field MRI equipment, designing and fabricating a flow system model for imaging experiments, using MATLAB or IDL or similar Image/Signal Processing software to process data, UNIX, and C programming. Experience may be gained before, during, or after degree. 40 hours per week, 8:00am-5:00pm, Monday through Friday, \$42,230.00 per year. Send two résumés and cover letters (no calls) to: ES Sp Prgms, REF# 2658J, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

HEALTH SCIENTIST MINE SAFETY AND HEALTH ADMINISTRATION (MSHA) U.S. Department of Labor

MSHA is seeking candidates for a GS-601-14 Health Scientist position. The Agency conducts a variety of programs to reduce the unique occupational hazards in the nation's mining and milling operations. Incumbent will provide key scientific expertise to MSHA's Office of Standards, Regulations, and Variances regarding the following: (1) scientific and technology transfer, (2) science quality assessment, (3) science policy development and review, and (4) occupational health hazard and risk assessment. Candidates must possess the requisite education (doctoral level or equivalent) or combinations of graduate-level education and responsible work experience as provided in the Office of Personnel Management Minimum Qualification Standard for GS-601 Health Scientist positions. Backgrounds in occupational health science are preferred. Normal starting salary is \$64,555 plus the full range of Federal government employee benefits. *U.S. citizenship required.* For complete vacancy information please contact: Human Resources Division, MSHA, 4015 Wilson Boulevard, Arlington, VA 22203-1984. Telephone: 703-235-1352. Information is also available on the internet at: <http://www.dol.gov>. Reference Vacancy Announcement #MSHA-97-12. Applications or résumés including relevant experience and transcripts must be postmarked NLT July 7, 1997. *An Equal Opportunity Employer.*

MRS/MRI RESEARCH SCIENTIST

The National Institute for Occupational Safety and Health (NIOSH), Health Effects Laboratory Division (HELD), has an immediate opening for a chemist or physicist skilled in magnetic resonance spectroscopy (MRS) and magnetic resonance imaging (MRI) with application to biochemical and biological research. Candidates should have an M.S. or Ph.D. degree and extensive experience in nuclear magnetic resonance spectroscopy including MRS of solids, the capability to use MRI for animal model toxicology studies, and the ability to immediately assume responsibility for operation of a 7-Tesla pulsed multi-nuclear MRS with magic-angle spinning capability and with micro- and mini-imaging capabilities. Experience in biological research applications of MRS or MRI is highly desirable. Salary range is \$37-69K; benefits packages available. For application information, contact: NIOSH, HELD/EAB/MBT, 1095 Willowdale Road, Morgantown, WV 26505. Permanent positions are announced on the CDC homepage at <http://www.cdc.gov>. *U.S. citizenship required for permanent positions.* This position may be filled as a temporary appointment (two years, initially). *CDC/NIOSH is an Equal Opportunity Employer.*



FACULTY APPOINTMENTS
DEPARTMENT OF CHEMISTRY
NATIONAL UNIVERSITY OF SINGAPORE
<http://www.science.nus.sg/~chem/>

Applications are invited for **faculty appointments** in the **Department of Chemistry**. Candidates should possess Ph.D. degree or its equivalent and have proven ability in research with postdoctoral experience in any of the following areas:

Analytical Chemistry (analytical instrumentation with applications to biological systems)
Chemical Biology (biological organic/inorganic chemistry)
Electrochemistry (dynamic electrochemistry and fuel cells)
Food Chemistry (chemical analysis of food)
Inorganic Chemistry (main group chemistry; multinuclear/multidimensional NMR spectroscopy)
Laser Spectroscopy (ultrashort time-resolved spectroscopy)
Polymer Chemistry (functional polymers, kinetics and mechanisms, structure and properties)

Appointees must have the ability to build active research programmes, and an enthusiasm and interest in student learning. Appointments are on normal 3-year contracts with the possibility of tenure track. Visiting appointments for one or two years will also be considered.

Gross annual emoluments, which are internationally competitive, range as follows:

Lecturer	S\$58,900-74,300
Senior Lecturer	S\$67,940-138,090
Associate Professor	S\$122,460-170,100

(The current exchange rate is approximately: US\$1=S\$1.45; 1 British Pound=S\$2.30)

In addition, a 13th month Annual Allowance (of one months' salary) and an Annual Variable Component (of normally 2 months' salary) may be payable at year end, under the flexible wage system, to staff on normal contracts. The commencing salary will depend on the candidate's qualifications and experience.

We operate on a hybrid British/American system. The equivalence of the above positions in the American system would be Assistant, Associate, and Full Professor. The Full Professor in our system is equivalent to the British Chair.

Leave and medical benefits will be provided. Other benefits may include : provident fund benefits or an end-of-contract gratuity, a settling-in allowance, subsidized housing, education allowance for up to three children subject to a maximum of S\$16,425 per annum per child, passage assistance, baggage allowance for the transportation of personal effects to Singapore, vehicle loans and housing loans at attractive interest rates, sabbatical leave with financial support for tenure staff, and annual overseas conference leave and grant after one year of service. Staff members may undertake consultation work, subject to the approval of the University, and retain consultation fees up to a maximum of 60% of their gross annual emoluments in a calendar year.

All academic staff will be given a networked personal computer with access to a Cray supercomputer, UNIX hosts, departmental laser printers, a wide spectrum of software, on-line library catalogue, CD-ROM database, Video-on-Demand, INtv and Internet. The Department is well-equipped with sophisticated instruments including a Bruker ACF 300, Bruker AMX 500 NMR spectrometers, and some Siemens Single Crystal X-ray Diffractometers. It has about 40 faculty members, very active in research, and is one of the strongest research chemistry Departments in Asia.

Please send your curriculum vitae by fax or e-mail to: **Prof. Soo-Y. Lee, Head, Department of Chemistry, National University of Singapore, Kent Ridge, S.119260, Singapore.**

Fax: (65)7791691 Tel: (65)7722658

E-mail: chmhead@nus.edu.sg

Closing date of application: 31 October 1997

POSITIONS OPEN

CURATORIAL/RESEARCH ASSOCIATE IN ICHTHYOLOGY AND HERPETOLOGY Cornell University

The Section of Ecology and Systematics at Cornell University invites applications for a curatorial/research associate position in ichthyology and herpetology, available beginning October 1997. The successful candidate will be responsible for the management of the Ichthyology and Herpetology Collections and expected to develop an active research program in ichthyology or herpetology. A Ph.D. in ichthyology, herpetology, or related discipline is required. Expertise in ichthyology, curatorial practices, and data management are essential. Knowledge of herps is highly desirable.

Applicants should submit a curriculum vitae, a statement detailing curatorial experience, and a statement of current and future research interests. Applicants should also arrange to have three letters of recommendation sent to: Dr. Amy McCune, Chair, Curatorial Search Committee, Section of Ecology and Systematics, Cornell University, Corson Hall, Ithaca, NY 14853-2701. Please include names, telephone numbers, and e-mail addresses of referees with application materials. We will begin reviewing applications on August 15 and continue until a suitable candidate is found.

Cornell University is an Equal Opportunity/Affirmative Action Employer. Applications from women and minorities are encouraged.

MONTEREY BAY AQUARIUM SEA OTTER PROGRAM MANAGER

The Monterey Bay Aquarium is seeking to fill the position of Sea Otter Research and Conservation Program Manager. Responsibilities include developing a long-range strategic plan and annual goals and budget, supervising stranding program and science staff, integrating the program with other aquarium programs, and nurturing and developing partnerships with outside agencies and institutions. The successful candidate must have a bachelor's degree or higher in the life sciences with broad knowledge of wildlife, rehabilitation and management and behavioral science, well-developed leadership and communication skills, and demonstrated skills in experimental design, data interpretation, and technical publication. Interested applicants please send résumé, cover letter, and three letters of recommendation to: Monterey Bay Aquarium, 886 Cannery Row, Monterey, CA 93940, Attn: Human Resources. Application deadline: August 31, 1997. Equal Opportunity Employer/Committed to Diversity.

BIO-INFORMATION SYSTEMS MANAGER DEPARTMENT OF CELL BIOLOGY HARVARD MEDICAL SCHOOL

Facilitate cell biology research by developing effective use of information technology in the department, which has over 200 members. Provide training and assistance; design and implement solutions for Windows and Macs. Manage Netware file systems, multiple servers and databases. Will be trained on Netware/WWW servers, digital imaging, multiprotocol networks, and relational databases.

The successful candidate will have an advanced degree in molecular/cell biology or biochemistry and two years of relevant experience. Excellent communication and teaching skills; strong initiative to solve problems independently and work as a team member. Send résumé, publications and names of three references to: Robert Amelio, Office of Human Resources, Harvard Medical School, 25 Shattuck Street A-010, Boston, MA 02115-6092. Harvard Medical School is an Equal Opportunity/Affirmative Action Employer.

MOLECULAR BIOLOGIST/BIOCHEMIST

(1) RESEARCH ASSOCIATE PROFESSOR to study transcription factors in hormone action and aging. Postdoctoral experience in DNA-protein interaction and cell transfection is required. Knowledge of DNA software and database programs will be useful. (2) POSTDOCTORAL FELLOW to work on purification, characterization, and cloning of novel transcription factors. Experience in protein/enzyme purification is required. Send curriculum vitae and names of three referees to: Arun K. Roy, Ph.D., Professor of Cellular and Structural Biology, The University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284-7762. The University of Texas Health Science Center at San Antonio is an Equal Employment Opportunity/Affirmative Action Employer.

POSITIONS OPEN

UNIVERSITY OF PENNSYLVANIA POSTDOCTORAL POSITION (Bacterial Pathogenesis, Membrane Biochemistry)

A postdoctoral position is available in the Department of Microbiology, University of Pennsylvania School of Medicine. Research in the laboratory of Dr. Howard Goldfine is focused on the cell biology of two *Listeria monocytogenes* phospholipases, which participate in escape from a phagosome and cell-to-cell spread. Candidates should have a Ph.D. or equivalent degree in a relevant field of research: cell biology, microbiology, or membrane biochemistry. Applicants should submit a curriculum vitae, summary of research accomplishments, and the names of three referees to: Dr. Howard Goldfine, Department of Microbiology, University of Pennsylvania School of Medicine, Philadelphia, PA 19104-6076. For further information see our website: <http://www.med.upenn.edu/micro/>.

POSTDOCTORAL POSITION

Postdoctoral position available immediately for a candidate with a background in cellular and/or molecular biology to focus on the development of gene transfer vectors for the gene therapy of hematopoietic stem cell disorders such as thalassemia, sickle-cell anemia, and other blood disorders. Please send applications including curriculum vitae and names of three references to: Dr. George F. Atweh, Division of Hematology, Box 1079, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029. FAX: 212-369-8379.

POSTDOCTORAL POSITION available immediately to study the molecular events following arterial grafting. Work will focus on mRNA differential display to identify altered gene expression with subsequent sequencing, cloning and targeting of genes and gene products to prevent smooth muscle proliferation, and matrix production following prosthetic grafting. Results will be applied in developing new prosthetic vascular grafts. A strong background in molecular techniques and commitment to training clinical scientists required. Send curriculum vitae to: William C. Quist, M.D., Division of Vascular Surgery, 110 Francis Street, Suite 5-B, Boston, MA 02115.

CLINICAL CHEMISTRY POSTDOCTORAL FELLOWSHIPS at Mayo Clinic. Seeking applicants for two-year ComACC-approved fellowship directed toward qualified individuals (Ph.D. or M.D. required) pursuing careers in clinical chemistry. Individuals completing the program are eligible for certification by the American Board of Clinical Chemistry. Applications on file by October 31, 1997, will be considered for appointment beginning in July, 1998. Contact: Mary F. Burritt, Ph.D., Division of Clinical Biochemistry & Immunology, Mayo Clinic, Rochester, MN 55905, for more information. Mayo Foundation is an Affirmative Action and Equal Opportunity Employer and Educator.

POSTDOCTORAL POSITION available to study the effects of pollinator behavior and fitness components on the evolution of Louisiana iris species and their hybrids. The successful candidate will be experienced in fieldwork, plant reproductive biology and skilled in statistical techniques. Start date December 1997. Send a curriculum vitae, a brief statement of research interests, and three letters of recommendation by August 15, 1997 to: Dr. Mike Arnold, Department of Genetics, University of Georgia, Athens, GA 30602; e-mail: arnold@dogwood.botany.uga.edu.

NEUROSCIENCE

A grant-funded POSTDOCTORAL POSITION is available immediately to use patch-clamp methods to study opiate receptor-modulated ion channels in dissociated neurons. Ph.D. is required; electrophysiology experience is preferred. Send curriculum vitae with research experience and names and telephone numbers of three references to: Jonathan E. Freedman, Ph.D., 211 Mugar Building, Northeastern University, Boston, MA 02115. Equal Opportunity Employer.

CARNEGIE MELLON POSTDOCTORAL opportunity to address treatment of uncertainty in integrated assessment of global change. Require Ph.D., knowledge of science of global change, and good policy analytic and modeling skills. Résumé and samples of work to: G. Morgan, Department of Engineering and Public Policy, Carnegie Mellon, Pittsburgh, PA 15213.

POSITIONS OPEN

POSTDOCTORAL POSITIONS

Positions available (Ph.D. or M.D.) for research training in experimental hematology and vascular biology in an NIH-sponsored program at the Cardeza Foundation, Thomas Jefferson University. Areas of interest include: molecular and cellular aspects of angiogenesis, gene expression by vascular cells, biology of the platelet and endothelial GpIb complexes, megakaryocytic development and gene expression, oxygen-regulated gene expression, role of lipid-binding proteins in thrombosis, and bone marrow transplantation immunology. U.S. citizenship or permanent residency required. Please send curriculum vitae and three reference letters to: Dr. Sander S. Shapiro, Cardeza Foundation for Hematologic Research, 1015 Walnut Street, Philadelphia, PA 19107-5099, or e-mail: sananto1@jeflin.tju.edu. Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP. The Section on Neuroendocrine Immunology and Behavior at the National Institute of Mental Health is seeking a candidate with experience in molecular biology, immunology and/or neurobiology to pursue studies in the mechanisms and role of neuroimmune interactions in inflammatory disease susceptibility and associated behavioral responses. These studies involve animal models and/or applications to human subjects, and include molecular genetics and molecular mechanisms of neuroimmune interactions. Candidates must have less than five years of postdoctoral experience. Send curriculum vitae/bibliography and three letters of reference to: Ester M. Sternberg, M.D., Chief, Section of Neuroendocrine Immunology and Behavior, NIMH, Building 10, Room 2D-46, 10 Center Drive, Bethesda, MD 20892-1284. E-mail: ems@codon.nih.gov. NIH is an Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE POSITION is available immediately for NICHD-supported studies of cellular and molecular mechanisms involved in the long-term neurological functional alterations caused by perinatal hypoxia-ischemia. Studies will emphasize effects of perinatal hypoxia-ischemia on expression of the glutamatergic and the nitric oxide synthase systems. Individuals with expertise in immunohistochemistry, *in situ* hybridization, and RT-PCR are especially encouraged to apply. Please send a brief statement of research interests, curriculum vitae, and names and addresses of three references to: Z. Cai/P. Rhodes, Division of Newborn Medicine, Department of Pediatrics, University of Mississippi Medical Center, Jackson, MS 39216. FAX: 601-984-5266; e-mail: zcaip@ped.umsmed.edu. UMC is an Equal Opportunity Employer, Minorities/Females/Disabled/Veterans.

POSTDOCTORAL POSITION IN MOLECULAR NEUROBIOLOGY available immediately to study expression of the calcium-dependent protein kinase CaM kinase I and its role in signal transduction in the nervous system (*Advances in Pharmacology*, 36:251, 1996; *Synapse*, 20:75, 1995; *Journal of Biological Chemistry*, 268:26512, 1993). Approaches include heterologous expression of CaM kinase I promoter constructs in cell culture, overexpression of CaM kinase I in cultured neuronal cell lines and development of knockout mice lacking the CaM kinase I protein for *in vivo* experiments. Ph.D. with experience in molecular biology, cell culture, and biochemistry preferred. Send curriculum vitae and contact information for three references to: Dr. Marina Picciotto, Department of Psychiatry, Yale University, 34 Park Street, 3rd Floor Research, New Haven, CT 06508.

POSTDOCTORAL POSITION IN MOLECULAR BIOLOGY is available immediately to study molecular mechanisms of cementoblast and osteoblast differentiation. Expertise in molecular biology techniques is essential. Send curriculum vitae and names of three references to: Dr. Moon-Il Cho, SUNY at Buffalo, School of Dental Medicine, Department of Oral Biology, B10 Foster Hall, Buffalo, NY 14214-3092. FAX: 716-829-3942; e-mail: micho@sdm.buffalo.edu. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study the biophysical and pharmacological properties of brain stem neurons involved in oral-motor pattern generation *in vitro*. Experience with cellular electrophysiological techniques required. Send or e-mail curriculum vitae to: Scott H. Chandler, Department of Physiological Science, UCLA, 2851 Slichter Hall, Los Angeles, CA 90045. E-mail: schandler@physci.ucla.edu.

Geneva Biomedical Research Institute

Glaxo Wellcome Research and Development S.A.

The Geneva Biomedical Research Institute is a state-of-the-art-centre of scientific excellence. Its research is directed towards the discovery of novel molecular mechanisms that can be used as drug targets to treat serious diseases. An outstanding opportunity has arisen for a

Postdoctoral Fellow

Biology of ATP ligand-gated ion channels (P2X)

The candidate should have experience in standard molecular biology techniques. This project will study the function of P2X receptors using transgenic mice. Previous experience in immunology or cell biology will be an advantage.

Informal enquiries can be directed to **Dr. Gary Buell** (gb15879@ggr.co.uk; Phone: +41 22 706 96 66; Fax: +41 22 706 69 65).

The Geneva Biomedical Research Institute is part of the Glaxo Wellcome group, one of the world's most successful healthcare companies which has an outstanding reputation for the quality of both its research and products.

If you are interested, please send your curriculum vitae with a list of publications and the names of three referees to: **Personnel Department, Geneva Biomedical Research Institute, Glaxo Wellcome Research and Development S.A., 14, chemin des AuiX, 1228 Plan-les-Ouates/Geneva, Switzerland.**

SYMPOSIUMS

43rd Rachford Lectures
September 15 and 16, 1997

Transcriptional Control of Embryogenesis

An International Symposium
Children's Hospital Medical Center
Cincinnati, Ohio

Sponsored by

Perinatal Research Institute and Program of Excellence in Molecular Biology of the Heart and Lung, Children's Hospital Medical Center, Cincinnati, Ohio, and University of Cincinnati College of Medicine

Faculty:

Robert Costa, Ph.D.
University of Illinois at Chicago
Charles Epstein, M.D.
University of California, San Francisco
Michael Green, M.D., Ph.D.
University of Mass. Medical Center
Rudolph Grosschedl, Ph.D.
University of California, San Francisco
Nancy Jenkins, Ph.D.
Frederick Cancer Center and Development Facility
Michael Levine, Ph.D.
University of California, Berkeley
Donal Luse, Ph.D.
Cleveland Clinic Foundation
Jun Ma, Ph.D.
University of Cincinnati
Gail Martin, Ph.D.
University of California, San Francisco
Jeffrey Robbins, Ph.D.
University of Cincinnati
Heiner Westphal, M.D.
National Institutes of Health

Abstracts (5 1/4" W X 6 3/4" H) for poster presentation may be submitted by registered participants. Details will be included with registration materials. Please submit abstracts before August 1.

For hotel information or to register, contact:
Shirley Courtney
Division of Endocrinology
Children's Hospital Medical Center
3333 Burnet Ave.
Cincinnati, OH 45229-3039
Phone: 513-636-4209
Fax: 513-636-7486

Registration deadline: August 1
Registration fee:
Students and trainees \$75;
Faculty \$100



CELL SIGNALING AND TUMOR ANGIOGENESIS

September 11-14, 1997

Sponsored by:

W. Alton Jones Cell Science Center, Inc.

Organizing Committee:

Thomas Maciag, J. Denry Sato, Martin Tenniswood

Topics include: Developmental biology of microvascular endothelial cells; Integrin signaling in angiogenesis; Angiogenic receptor signaling; Regulation of angiogenesis and therapeutic approaches; Potential cooperative receptors in angiogenesis.

Keynote Address: Judah Folkman

SPEAKERS

Kari Alitalo • Liliana Attisano • Robert Auerbach
David Cheresh • Elisabetta Dejana • Chuxia Deng
Napoleone Ferrara • Susan Fisher • Mark Ginsberg
Jan Kitajewski • Thomas Maciag • Joseph Madri
Wallace L. McKeehan • Michael O'Reilly • Thomas Quertermous • Daniel Rifkin • Jean E. Schwarzbauer
Elizabeth Tournier-Lasserre • Gerry Weinmaster
Jörg Wilting • Sonyang Zhou

Registration forms may be obtained from: The Organizing Committee, W. Alton Jones Cell Science Center, 10 Old Barn Road, Lake Placid, NY 12946
Tel (518) 523-1252 Fax (518) 523-1849
Email: voliver@cell-science.org

POSITIONS OPEN

POSTDOCTORAL POSITIONS: Available for studies in various aspects of cancer research and toxicology in the Center in Molecular Toxicology through the Departments of Biochemistry, Cell Biology, Chemistry, Medicine, and Pathology. Areas of investigation relating to toxicology and carcinogenesis are: 1) enzymatic oxidation and conjugation, 2) oxidative damage, 3) DNA damage and mutagenesis, 4) regulation of gene expression, and 5) neurotoxicology. Center faculty include Drs. Richard N. Armstrong, Raymond F. Burk, Raymond N. DuBois, Doyle G. Graham, F. Peter Guengerich, Thomas M. Harris, Lawrence J. Marnett, Timothy J. Meredith, Jennifer A. Pietenpol, Michael P. Stone, William M. Valentine, and Michael R. Waterman. Salaries are negotiable. Applicants should submit curriculum vitae and three letters of recommendation to: Dr. F. Peter Guengerich, Director, Center in Molecular Toxicology, Vanderbilt University, School of Medicine, Nashville, TN 37232-0146. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE IMMUNOLOGIST/PARASITOLOGIST (2B5867)

The USDA, Agricultural Research Service, Parasite Biology and Epidemiology Laboratory, Beltsville, Maryland is recruiting for a Postdoctoral Research Associate. We seek a recent recipient of a doctoral degree in parasitology, immunology, or related area to study immunity to neoplasia and toxoplasmosis in livestock. Initial appointee will be hired for up to two years. Salary is \$38,330. Submit applications and enquiries to: Dr. J. P. Dubey, USDA/ARS, Livestock and Poultry Sciences Institute, Parasite Biology and Epidemiology Laboratory, Building 1040, Room 103, BARC-East, 10300 Baltimore Avenue, Beltsville, MD 20705, Telephone: 301-504-8128, FAX: 301-504-9222, e-mail: jdubey@ggpl.arsusda.gov. ARS is an Equal Opportunity Employer.

POSTDOCTORAL POSITION IMMUNOLOGY/CELLULAR IMMUNITY

Applicants with an M.D., Ph.D., or equivalent degree are invited to apply for a full-time position at The Research Institute for Children in New Orleans, Louisiana. This appointment will be in the Department of Pediatrics at the LSU School of Medicine and will begin on September 1, 1997. Strong background in experimental immunology is expected, preferably with experience in both humans and mice. Ongoing studies involve human and murine autoimmunity and transplantation immunity, especially referable to diabetes mellitus and related diseases. Please send a résumé with list of references as soon as possible to: Dr. Noel Maclaren, Director, The Research Institute for Children, Children's Hospital, 200 Henry Clay Avenue, New Orleans, LA 70118. LSUMC is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study structure/function relationships and the impact of post-translational modifications on human hnRNP proteins. Experience in biophysical techniques (e.g., UV cross-linking, fluorescence, CD, analytical centrifugation, light scattering), protein purification/chemistry, and molecular biology would be desirable. Send curriculum vitae to: Ken Williams, Department of Molecular Biophysics and Biochemistry, Yale University, 333 Cedar Street, New Haven, CT 06520-8024; e-mail: kenneth.williams@yale.edu. Yale University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION IN IMMUNOLOGY available to work on NIH-funded studies investigating the ocular immunology of acute and latent herpes simplex virus infections. Solid background in immunology essential. Experience in viral immunology is desirable. Send curriculum vitae and names, addresses, and telephone numbers of three references to: Dr. Steven L. Wechsler, Ophthalmology, Research, Davis Building, Room 5069, Cedars-Sinai Research Institute, Affiliate of UCLA School of Medicine, 8700 Beverly Boulevard, Los Angeles, CA 90048-1869, or e-mail: wechsler@csmc.edu.

A POSTDOCTORAL POSITION available September 1, 1997 to investigate molecular mechanisms of carcinogenesis, metastasis formation, and MHC class I gene expression. Expertise in molecular biology is essential. Please send a curriculum vitae and three references to: Dr. Eli Gorelik, University of Pittsburgh Cancer Institute, Biomedical Science Tower, Room W954, Pittsburgh, PA 15213. FAX: 412-624-7736.

POSITIONS OPEN

POSTDOCTORAL POSITIONS— THE UNIVERSITY OF TEXAS AT DALLAS

The Molecular and Cell Biology Department at the University of Texas at Dallas has openings for postdoctoral positions in the following laboratories:

Rockford Draper: Biochemical analysis of membrane traffic in mammalian cells.

Donald M. Gray: Thermodynamic and CD spectral properties of antisense nucleic acids.

Ernie Hannig: Genetic and biochemical analysis of protein synthesis initiation factors [*EMBO J.*, 15:6311].

Larry Reitzer: Bacterial gene expression and metabolism; analysis of sequenced genomes.

Candidates should have a strong background in biochemistry and/or molecular biology. Please send résumé, statement of research experience, and names of three references to the appropriate faculty member at: The University of Texas at Dallas, Department of Molecular and Cell Biology, FO 3.1, P.O. Box 830688, Richardson, TX 75083-0688. Webpage: <http://www.utdallas.edu/dept/biology>. UT Dallas is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION TO STUDY MOLECULAR BIOLOGY OF p53 AND GENE THERAPY OF CANCER

Applications are invited from recent or pending graduates for a postdoctoral position in a laboratory involved in understanding the molecular biology of the tumor suppressor p53. The laboratory has also started investigating gene therapy of cancer. Salary is negotiable. Individuals with expertise in recombinant DNA technology and mammalian cell culture systems are especially encouraged to apply. Send complete curriculum vitae and arrange for three letters of reference to be sent directly to: Sumitra Deb, Ph.D., Associate Professor, Department of Microbiology, University of Texas Health Science Center, 7703 Floyd Curl Drive, San Antonio, TX 78284. FAX: 210-567-6612, e-mail: deb@uthscsa.edu. The University of Texas Health Science Center at San Antonio is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available in the characterization of integration site selection of retroviruses and retroviruslike elements. Ty3 is a retroviruslike element which integrates specifically upstream of genes transcribed by polymerase III (*Science*, 267:1488). This system is being studied to facilitate the design of position-specific retrovirus gene therapy vectors. Applicants must be U.S. citizens recently awarded the Ph.D. degree. Extensive experience with yeast molecular genetics, biochemistry and/or virology required. Application and three references should be sent to: Dr. Suzanne Sandmeyer, Chair, Department of Biological Chemistry, Molecular Sciences I, D240, College of Medicine, University of California, Irvine, CA 92697-1700. Inquiries may be addressed by e-mail to: sbsandme@uci.edu. University of California, Irvine is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS available immediately to study death signaling induced by tumor necrosis factor and molecular mechanisms by which vascular endothelial cell growth factor induces angiogenesis associated with cancer progression. Experience in molecular biology and/or signal transduction required. Send curriculum vitae, and names, addresses, telephone and FAX numbers of three references to: Dr. David Donner, Walther Oncology Center, Indiana University School of Medicine, 975 West Walnut Street, IB 501, Indianapolis, IN 46202. FAX: 317-274-7592; e-mail: ddonner@champion.iupui.edu.

POSTDOCTORAL POSITION UNIVERSITY OF PENNSYLVANIA

Immediate opportunity available for a highly motivated Ph.D. or M.D. with an interest in hematopoietic cell biology. Two- to three-year position investigating phospholipid signaling. Experience in molecular biology required. Send curriculum vitae and the names of three references to: Dr. Charles S. Abrams, Division of Hematology-Oncology, 422 Curie Boulevard, #1005, Philadelphia, PA 19104, or FAX: 215-662-7617. Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITIONS TRANSCRIPTIONAL REGULATION OF LIVER DEVELOPMENT University of Pittsburgh

POSTDOCTORAL POSITIONS are available to study the transcription factors that regulate liver development and the long-distance locus control mechanisms that regulate the albumin and alpha-fetoprotein genes. Applicants should have a Ph.D. and experience in molecular cloning and the molecular biology of transcription factors, or equivalent experience in development or liver cell biology. Our laboratory is part of a group that specializes in liver cell and molecular biology. The positions can provide both training and collaborative opportunities. Please send a curriculum vitae and the names of three references to: Joseph Locker, University of Pittsburgh, Department of Pathology, BST S405, Pittsburgh, PA 15261. Telephone: 412-648-8253; FAX: 412-383-7969; e-mail: loc@med.pitt.edu. The University of Pittsburgh is an Affirmative Action, Equal Opportunity Employer.

The Henry M. Jackson Foundation for the Advancement of Military Medicine has two (2) **POSTDOCTORAL FELLOW** positions available immediately in the Immune Cell Biology Program, Naval Medical Research Institute, Bethesda, MD. Duties and responsibilities are as follows: (1) Position PL2970220—Study the molecular mechanisms involved in the differentiation and functions of professional antigen presenting cells; (2) Position PL2970221—Examine the role of CD28-mediated costimulation in a variety of *in vivo* murine model systems.

Applicants should have recently completed a Ph.D. or equivalent degree. Experience in hematology/molecular biology for position PL2970220 and cellular immunology for position PL2970221 is required. Send résumé to: HMF-HR Department (Ref. Position number), 1401 Rockville Pike, Suite 600, Rockville, MD 20852, or e-mail: hr@mail.hjf.org. Affirmative Action/Equal Employment Opportunity.

POSTDOCTORAL POSITIONS— IMMUNOPATHOGENESIS

Postdoctoral positions to study immunopathogenesis of infectious and autoimmune diseases. Current studies include cytokine regulation of innate immunity, *in vivo* effector functions in the CNS and liver, cytokine and sex hormone regulation of APC activity, antigen processing, and CTL memory. Experience in immunology, autoimmune disease, or viral pathogenesis essential. Projects will join active collaborations with Drs. G. Dennert, C. Bergmann, D. R. Hinton, and M.M.C. Lai. Send curriculum vitae, and names of three references to: Dr. Stephen Stohlman, Departments of Neurology and Molecular Microbiology and Immunology, USC School of Medicine, MCII 142, 1333 San Pablo Street, Los Angeles, CA 90033; FAX: 213-225-2369; e-mail: cbergman@hsc.usc.edu. Equal Opportunity Employer.

AUDITORY NEUROSCIENCE POSTDOCTORAL POSITION

Structure/function research on synaptic organization, membrane properties, ion channels, and neural connectivity involved in sensory information processing. Experimental methods include systems and brain slice physiology; infrared, confocal, low-light video, and electron microscopy; 3D reconstruction; and immunocytochemistry. Experience with whole cell recording is preferred. Please send curriculum vitae, research interests, and names of three references to: Douglas Oliver, Ph.D., Department of Anatomy, University of Connecticut Health Center, Farmington, CT 06030-3405.

POSTDOCTORAL AND PREDOCTORAL POSITIONS are currently available at the University of Kentucky to study mechanisms of lipid- and/or cytokine-mediated cell injury to endothelial cells or spinal cord neurons. Strong background in cellular/molecular biology is required. Please submit a curriculum vitae and the names and telephone numbers of three references to: Dr. Michal Toborek, University of Kentucky Medical Center, Department of Surgery/Neurosurgery, Lexington, KY 40536, USA. FAX: 606-323-1093, e-mail: mjtobo00@pop.uky.edu.

POSTDOCTORAL POSITION to study nuclear-mitochondrial interactions. Expertise in biochemistry, cell and molecular biology required. Send curriculum vitae and names/telephone numbers of three references to: Carlos T. Moraes, Ph.D., Department of Neurology, University of Miami, 1501 Northwest 9th Avenue, Miami, FL 33136; e-mail: cmoraes@mednet.med.miami.edu.

DIVISION of BIOLOGICAL SCIENCES CHAIR OF NATURAL HISTORY

Applications are invited for the Chair of Natural History, established in 1767, which will become vacant in October 1997 on the retirement of Professor Aubrey Manning. The post will be held in the Institute of Cell, Animal and Population Biology of the Division of Biological Sciences.

Research in the Institute spans a broad area of animal biology, with particular strengths in immunology, genetics, parasitology, evolution and animal behaviour and in interactions between these areas. All parts of the Division of Biological Sciences were graded 5 in the recent Research Assessment Exercise.

The successful candidate will be expected to develop a strong programme of research, to provide strong leadership in the teaching aspects of 'whole animal' biology (behaviour, ecology, taxonomy, physiology, developmental biology, neurobiology or cognate areas). It is expected that a supporting lectureship post will also be available for appointment.

Please quote ref: 796369/SC

Further information may be obtained by contacting Professor W G Hill, FRS, Head of the Division of Biological Sciences (Tel: 0131 650 5525; email: w.g.hill@ed.ac.uk; Fax: 0131 650 6556) or Professor R M Maizels, Head Designate of the Institute of Cell, Animal and Population Biology (Tel: 0131 650 5511; email: r.maizels@ed.ac.uk; Fax: 0131 650 6564).

Further particulars including details of the application procedure should be obtained from

**THE PERSONNEL DEPARTMENT,
THE UNIVERSITY OF EDINBURGH,
1 ROXBURGH STREET, EDINBURGH EH8 9TB
TEL: 0131 650 2511 (24 hour answering service).**

<http://www.admin.ed.ac.uk/personnel/recruit.htm>

Closing date: 12 September 1997



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Molecular Biologist/Biochemist

To strengthen our antibacterial/antifungal group within our Business Group Pharma in Wuppertal, Germany, we are seeking a molecular biologist/biochemist who will be engaged in the discovery of novel therapeutics.

Our profile

Bayer is one of the leading companies in anti-infective research. (For more details, refer to <http://www.bayer.com>)

Your task

You will contribute to the identification and characterization of novel targets, the development of high-throughput assays, mode of action studies, and the characterization of lead structures.

Your profile

You should have a Ph.D. or an M.D. degree and ideally postdoctoral experience. You are familiar with biochemical and molecular biological techniques and have experience with the functional characterization of novel genes. A strong commitment to work in an interdisciplinary team is necessary. You should be under 35 years old, fluent in English and German, and you should be able to relocate.

For further information, please do not hesitate to contact **Dr. Wolfgang Schönfeld, Anti-infective Research Department**, e-mail: wolfgang.schoenfeld.ws@bayer-ag.de.

Your application

If your background and personal experience fits to this profile, please send your complete application including ref.-no. 295 to:

Bayer AG
Personnelmarketing
Frau Redmer
Hauptstraße 119
51368 Leverkusen
Germany



UNIVERSITY OF COPENHAGEN



Institute of Molecular Biology
(Faculty of Science)

Full Professorship in Protein Structure and Function

The post of Professor at the Department of Protein Chemistry will be open during the Spring of 1998. The position is tenured and the chosen candidate is expected to participate in the university teaching programme at all levels.

Applicants should have a strong record of achievement in internationally recognized basic research in protein structure/function relationships with experience in crystallographic and/or spectroscopic methods. A background in protein folding, protein-protein, protein-nucleic acid, and/or protein-membrane interactions will be an advantage. The successful applicant is expected to lead a research group of international standing and to obtain external research funding.

For the full text of the announcement of the position in English, including further information and specifications for applications, please contact: Head of the Institute of Molecular Biology, Jørgen Olsen by fax no. +45 35 32 21 28 or E-mail: jols@mermaid.molbio.ku.dk. The full text of the announcement can also be seen on the Institute's Homepage: <http://www.molbio.ku.dk/>.

The deadline for receipt of the application and supplemental material is October, 1, 1997 at 12.00 am.

UNIVERSITY OF COPENHAGEN

AWARD

CAROL NACHMAN AWARD FOR RHEUMATOLOGY 1998 WIESBADEN, GERMANY

This international prize will be awarded annually for excellent researches in the field of rheumatology. It is endowed with

DM 75,000

Submission of work may be made up to October 31, 1997.

Further information is available from:

Kuratorium 'Carol Nachman Preis'
c/o Kurbetriebe der Landeshauptstadt
Wiesbaden, Kurhaus
Kurhausplatz
65189 Wiesbaden/Germany

KUWAIT UNIVERSITY

Pre-clinical and Clinical Appointments:

Applications are invited for the following appointments in the Faculty of Medicine:

ANATOMY:

Assistant/Associate/Professor

- Human Gross Anatomy
- Applied Anatomy
- Radiological Anatomy
- Neuro-anatomy
- Microscopic or Developmental Anatomy

Applicants should hold an MD/PhD or equivalent degrees. Minimum 2-3 years of postdoctoral training in the field of anatomical disciplines. Candidates are expected to establish an excellent, vigorous, independent research program. Excellent teaching skills are essential. For higher ranks, proven leadership capabilities, distinguished records in teaching and research, and directing postgraduate programs are required.

BIOCHEMISTRY:

Assistant/Associate/Professor

- Nucleic Acid Specialist(s)
- Protein Biochemist(s)
- Membrane Biochemist(s)
- Endocrinology-oriented Biochemist

Applicants should hold a PhD or equivalent, have published research in the field and have experience in teaching undergraduates and preferably medical students. Professors should have at least 14 years of experience, 4 as an Associate Professor or equivalent. Associate Professors should have at least 9 years experience, 4 as an Assistant Professor or equivalent.

MEDICINE:

Associate Prof./Professor

- Clinical Hematology

Applicant must have a recognized postgraduate qualification in Internal Medicine (such as American/Canadian Board certification, MRCP, MD, etc.) and subspecialty qualification in Clinical Hematology (such as American/Canadian Board certification, DM, MD, etc.). The applicant will be attached to the major University hospital serving general hematological problems but no oncological practice.

Associate Prof./Professor

- Infectious Diseases

Applicant must have a recognized postgraduate qualification in Internal Medicine (such as American/Canadian Board certification, MRCP, MD, etc.) and subspecialty qualification in Infectious Diseases (such as American/Canadian Board certification, DM, MD, etc.). The applicant will be attached to the major University hospital.

MICROBIOLOGY:

Assistant Professor

- Clinical Microbiology

Applicants must be medically qualified and holders of higher diploma degree (e.g. MRCPPath or equivalent). Possession of additional qualifications like an MD or PhD will be an added advantage. The Department of Microbiology is very active with strong commitments to teaching at both the undergraduate and graduate levels, original research efforts and clinical services in the affiliated teaching hospitals.

Assistant/Associate/Professor

- Clinical Virology

PhD qualification is required, preferably with MRCPPath. The candidate must have teaching experience at undergraduate/postgraduate levels and strong research background.

Assistant/Associate/Professor

- Clinical Immunology

Applicants must have MD/PhD with a professional qualification such as MRCPPath or Academic Board. Candidates should be experienced in the field of Clinical Immunology.

OBSTETRICS & GYNECOLOGY:

Assistant/Associate/Professor

- Reproductive Endocrinology
- Immunology and Infertility
- Fetal and Maternal Medicine
- Endoscopic Surgery
- Gynecologic Urology/Oncology
- Family Medicine

Applicants must have a qualification such as the American or Canadian Board certification or the MRCOG and must be a subspecialist in Obstetrics and Gynecology in any of the above areas.

Applicants for the post of Professor must have been involved in undergraduate medical student teaching for at least 8 years, have published at least 10 full-length academic papers, and be conducting ongoing research in the area of subspecialization. Experience in administration is an advantage.

Candidates for the post of Associate Professor must have taught undergraduate medical students in an academic health institution for at least four years. In addition, they should have published at least 5 full-length academic papers and be conducting ongoing research in the area of subspecialization.

For the post of Assistant Professor, the applicant should show evidence of involvement in undergraduate teaching and research in the chosen area of subspecialization. Publications in cited journals will be an advantage.

Faculty of Medicine Health Science Centre

PATHOLOGY:

Assistant/Associate Professor • Hematology

Applicants should possess a bachelor's degree in Medicine and Surgery from a recognized university, a recognized postgraduate qualification (MD, PhD, MRCPPath, American Specialty Board) and academic and professional experience in general Hematology.

Expertise in Molecular Hematology in the field of Hemato-oncology, as evidenced by published research work in peer reviewed journals in these relevant fields of hematology is desirable.

Associate Prof./Professor • Applied Cell Biology and Immunopathology

Applicants should possess a Master's degree in Life Sciences (MSc/MS in Life Sciences or Bachelor's degree in Medicine and Surgery from a recognized university), a PhD/DSc in a specialized field relating to cellular and molecular immunology and an impressive record of consistent postdoctoral research for at least 10 years after PhD/DSc as evidenced by published research work in peer reviewed journals.

Professor • Pathology (special experience in Renal Pathology)

Applicants should possess a bachelor's degree in Medicine and Surgery from a recognized university, a recognized postgraduate qualification (MD, PhD, MRCPPath, American Specialty Board) and at least 15 years experience in academic and research pathology with particular expertise in interpretation of renal biopsies and research in renal diseases.

PEDIATRICS:

Assistant/Associate/Professor • Biochemistry

The candidate must have a PhD in Biochemistry or analytical chemistry from a reputable institution and at least 2 years postdoctoral experience in the use of GCMS, LCMS, HPLC, FPLC, etc.

We are looking for a young, energetic, research-oriented person who can develop independent research in the field of inborn errors of metabolism. Experience in the use of GCMS for identification of organic compounds in body fluids will be an advantage.

Assistant/Associate/Professor • Pediatric Neurology • Pediatric Endocrinology • Pediatric Critical/Intensive Care

Applicants must be specialist pediatricians holding the American or Canadian Board or MRCP (UK) in Pediatrics (or equivalent). In addition they must have spent 2 years or more in the appropriate subspecialty in a recognized institution.

PHARMACOLOGY & TOXICOLOGY:

Applicants for the posts stated below should have experience in teaching pharmacology at the undergraduate and/or postgraduate levels in addition to showing evidence of productivity in their respective areas of research.

Assistant/Associate Professor • Molecular Pharmacologist

Preference will be given to applicants who have established research interests in molecular pharmacology of the CNS.

Assistant/Associate Professor • Cardiovascular Pharmacologist

Preference will be given to applicants who have established interests in molecular aspects of any area of cardiovascular pharmacology.

Assistant/Associate Professor • Clinical Toxicologist/Pharmacologist

Applicants should have experience in therapeutic drug monitoring and analytical methodology in clinical pharmacology and toxicology. Preference will be given to candidates with research interests in clinical and experimental toxicology.

BENEFITS:

Benefits include: conference attendance, gratuity, housing/housing allowance, free medical treatment in Kuwait, 60 days paid annual leave, free annual round-trip air tickets to country of citizenship or permanent residence for self and family (up to three dependent children), baggage and freight allowance, education fees in Kuwait for a maximum of three children from elementary to high school, no taxation, currency transferable without restriction.

METHOD OF APPLICATION:

Send a curriculum vitae, which should include qualifications with dates, career history with dates, teaching experience, research accomplishments and, where appropriate, clinical experience, along with a copy of the relevant pages of one's passport to:

**THE VICE DEAN OF ADMINISTRATION
(RECRUITMENT OFFICE)
FACULTY OF MEDICINE
KUWAIT UNIVERSITY
P.O. BOX 24923
SAFAT 13110
KUWAIT
FAX: 5318454**

Applications should arrive NO LATER THAN OCTOBER 31, 1997.

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An opportunity is currently available for a research investigator to join a multi-disciplinary team focused on the discovery of novel oncology therapeutics. The successful candidate will provide expertise and experimental support including the conceiving, designing and conducting of experiments.

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SEARLE

RESEARCH ASSISTANT TRANSGENIC MOUSE FACILITY

Memorial Sloan-Kettering Cancer Center, the nation's #1 cancer care and research center, seeks applicants for a research assistant/technologist position in the Transgenic Mouse Facility.

The research assistant's responsibilities include egg injection for the production of transgenic mice, ES cell injection into blastocysts for the generation of chimeric mice, and cryopreservation of embryos. Successful applicants will have a Bachelor's degree and three to five years of research experience in genetics, embryology, and/or molecular biology.

We offer a competitive salary and comprehensive benefits, including 100% tuition reimbursement. Please submit CV and two letters of recommendation by July 15, 1997, to: **Dr. Elizabeth Lacy, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, Box 86, New York, NY 10021; FAX: 212-639-2861. EOE/AA**



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Assistant Professor Position

**Department of Microbiology and
Molecular Genetics
Harvard Medical School and
Molecular Medicine Unit
Beth Israel Deaconess Medical Center**

Applications for a tenure-track position at the Assistant Professor level are sought. The successful candidate will hold the Ph.D. and/or M.D. degrees, and have completed a minimum of two years of postdoctoral training. Applicants will be expected to establish independently funded research focused on a basic problem of cellular and molecular biology and to participate in the currently existing teaching programs. Generous start-up funds and some ongoing support will be provided. The Molecular Medicine Unit faculty currently investigate protein translocation and targeting, cell-cell interactions in embryogenesis, signal transduction, and ion homeostasis. Candidates should send CVs and names of three references to:

**Sergei Sokol, Ph.D.
Faculty Search Committee
Molecular Medicine Unit
Beth Israel Deaconess Medical Center
East Campus, RW663
330 Brookline Avenue
Boston, MA 02215**

The Beth Israel Hospital is an Equal Opportunity employer.

GLOBAL CAREER OPPORTUNITIES

Department of Physics

Lecturer/Senior Lecturer/Reader Solid State NMR

Applications are invited for the above position tenable from 1 October 1997 or as soon as possible thereafter. The department is excellently equipped for Solid State NMR research with a 600 MHz wide bore spectrometer soon to be delivered (one of the first in Europe) and several lower field superconducting systems together with a wide range of fully multinuclear solids probes.

Preference will be given to applicants who have an established record of research in Solid State NMR and the potential to become a leading researcher in the field. You will be expected to develop a research programme that augments the current research activities. For appointment at the more senior levels a demonstrated ability to attract funding is required and potential for interaction with industry would be an advantage.

A commitment to excellence in teaching and a willingness to undertake a normal administrative load is also expected. Professor R Dupree (01203 523403) is available for informal enquiries.

Application forms and further particulars can be obtained from the Personnel Office, University of Warwick, Coventry CV4 7AL (tel: 01203 523627; e-mail: b.g.ward@admin.warwick.ac.uk) or from the Web page <http://unwww.warwick.ac.uk/services/publicity/jobs/> Please quote reference 45/A/96. Closing date for applications is 4 July 1997.

**UNIVERSITY OF
WARWICK**

**University of Pennsylvania
Institute for Human Gene Therapy
Postdoctoral Training in Gene Therapy
of Cystic Fibrosis and Genetic Diseases**

Three postdoctoral positions supported by a training grant from the National Institute for Diabetes and Digestive and Kidney Diseases are available beginning July 1, 1997. Participating investigators are James M. Wilson, M.D., Ph.D., Director (cystic fibrosis, familial hypercholesterolemia, ornithine transcarbamylase deficiency), Steven Raper, M.D., Co-Director (diabetes, liver-directed gene transfer), Mark L. Batshaw, M.D. (ornithine transcarbamylase deficiency), Jean Bennett, Ph.D., M.D. (retinitis pigmentosa), Lewis Chodosh, M.D., Ph.D., (genetic basis of breast cancer), Kenneth Fischbeck, M.D. (triplet-repeat neuromuscular disorders), Kevin Foksett, Ph.D. (ion channel biology, cystic fibrosis transmembrane receptor), Mark Haskins, V.M.D., Ph.D. (lysosomal storage diseases), Paula Henthorn, Ph.D. (x-linked severe combined immunodeficiency), Katherine High, M.D. (hemophilia), Haig Kazazian, M.D. (hemophilia, thalassemia), William Kerr, Ph.D. (Gaucher's disease, stem cell biology), Stanton Segal, M.D. (hereditary galactosemia), William Skach, M.D. (protein folding of cystic fibrosis transmembrane receptor), Dwight Stambolian, M.D., Ph.D. (genetic basis of cataracts), Hansell Stedman, M.D. (Duchenne muscular dystrophy), H. Lee Sweeney, Ph.D. (muscular dystrophy), Peter Traber, M.D. (genetically-based intestinal disorders), John Wolfe, V.M.D., Ph.D. (mucopolysaccharoidoses), Marc Yudkoff, M.D. (amino acidopathies).

Applicants must hold a Ph.D. and/or M.D. and must be citizens or permanent residents of the United States. Send a curriculum vitae, statement of research interest, and the names of three references to:

**Ms. Mary Rayner
The Institute for Human Gene Therapy
University of Pennsylvania
409 Stellar-Chance Labs
422 Curle Boulevard
Philadelphia, PA 19104-6100.**



**Postdoctoral position in molecular
mechanisms of carcinogenesis in ataxia
telangiectasia**

A postdoctoral position is available to investigate the role of ATM in lymphomagenesis and signal transduction. ATM (the product of the gene mutated in the human syndrome ataxia telangiectasia) is a critical component required for the normal cellular response to a variety of agents that compromise genomic integrity. Mice deficient for ATM are characterized by a pronounced propensity to develop lymphomas. Using these mice we will investigate the underlying processes that contribute to lymphoma formation in the absence of ATM.

This postdoctoral position would be ideally suited to someone with a strong molecular biology background who has recently obtained a Ph.D. and/or M.D.

The research environment at St. Jude Children's Research Hospital is outstanding and offers state of the art training and facilities for all aspects of molecular biology. To be considered for this position please send a C.V. and three letters of reference to **Peter McKinnon, Ph.D., Department of Genetics, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101. E-mail: peter.mckinnon@stjude.org**

AA/EOE

Incyte Pharmaceuticals, Inc., is a leader in the design, development and marketing of genomic database products, software tools and related services. Our database products integrate bioinformatics software with both proprietary and publicly available genetic information to create information-based tools used by pharmaceutical and biotechnology companies in drug discovery and development.

**Scientific Programmer/
Sr. Scientific Programmer**

You will develop large scale Unix based DNA sequence analysis software packages. Requires a strong background in scientific computation and proven skills with Unix and RDBMS programming (C, Perl, SQL). C++ and Java programming skills, and previous exposure to DNA sequence analysis and bioinformatics desired. Positions available at both levels. Minimum requirements are a BS in science or engineering with at least 2 years of Unix software development experience. Contractors may be considered for some positions. REF: 847, 852

**Intranet GUI/
Database Programmers**

You will build interfaces to DNA sequence databases and data analysis tools. Requires demonstrated knowledge of HTML, CGI, Java/AWK, Perl, C and SQL. Background in biology or chemistry a strong plus. Minimum requirements are a BS in science or engineering with at least 3 years of commercial software development experience. Contractors may be considered for some positions. REF: 854, 831

Bioinformatics Scientists

You will need a broad background in sequence analysis algorithms, tools and databases. Strong Unix programming skills and appropriate algorithms and mathematics background required. Candidate should have a Ph.D. in science or engineering (or equivalent experience) and at least 3 years of work specifically in bioinformatics. REF: BSC

**Bioinformatics Research
Assistants/Associates**

You will provide data processing, data analysis and quality control support for large DNA sequence databases. Requires working knowledge of molecular biology and genetics, good command-line Unix skills, some exposure to DNA sequence analysis methods and strong communication and organizational skills. BS in science or engineering and appropriate experience required. REF: 848, 849, 857, 853

**Research Associate /
Research Assistants**

MS/BS Level Biologists with strong analytical skills to provide data quality control for Incyte database products. Ability to work independently and a strong background in cell and molecular biology required. Genomics field experience and familiarity with sequence search tools highly desirable. Internet-based molecular biology tools and user-level UNIX skills also desired. REF: 857, 858.

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**Postdoctoral Fellowship
Neuroscience and Aging Institute
Loyola University Chicago
Stritch School of Medicine**

The Neuroscience and Aging Institute of Loyola University Chicago has an immediate opening for a postdoctoral fellowship position. Recent recipients of a Ph.D. and/or M.D. degree seeking further training in neuroscience are encouraged to apply. Stipend includes a salary of \$25,000 in the first year, \$26,000 in the second year, plus \$8,000 in additional funding for supplies and travel each year. Liberal benefits included.

Successful applicants will select a mentor from among the more than 70 members of the Neuroscience and Aging Institute and its Division for Research on Drugs of Abuse. These members include faculty from the Departments of Cell Biology, Neurobiology and Anatomy, Molecular and Cellular Biochemistry, Neurological Surgery, Neurology, Pharmacology, Physiology, and Psychiatry, and also from the Parly Hearing Institute and the Hines VA Hospital. A listing of Neuroscience faculty and their particular research interests is available upon request.

Areas of research focus include: **neurodegenerative diseases, neurodevelopment, neuroendocrinology/neuroimmunology, neuroregeneration/neuroplasticity, neurotoxicity, neurotransmitter/neuropeptide receptor systems, and sensory neuroscience.**

Candidates should promptly forward a letter of interest, including future research interests and career goals and curriculum vitae, and arrange for 3 letters of reference to be sent to:

Neuroscience and Aging Institute Fellowships Committee, c/o Paula Griffin-Arnold, Building 117, Room 29, Loyola University Medical Center, 2160 South First Avenue, Maywood, Illinois 60153. (708) 216-6755. Fax: (708) 216-6823. E-mail address pgriffi@luc.edu.

Information must be received and file completed by July 31, 1997. Deadline for application is firm.

Please visit our homepage on the www at: <http://www.meddean.luc.edu/lumen/DeptWebs/nsai/index.htm>

Loyola University Chicago employs without regard to race, color, age, sex, national or ethnic origin, or religion, and is an equal opportunity employer. Qualified persons are not subject to discrimination on the basis of handicap.



Assistant/Associate Professor

The Department of Pharmaceutical Sciences, College of Pharmacy at St. John's University, is currently expanding its faculty and seeks to fill a tenure-track position at Assistant/Associate Professor level, in toxicology. Applicants must possess a Ph.D. in environmental toxicology/analytical toxicology. Responsibilities include teaching undergraduate and graduate courses as well as conducting an active research program in his/her area of specialization.

The Department possesses excellent facilities and all the necessary support services for research. The College provides a supportive environment for scientists beginning their career in basic research.

Application letter with curriculum vitae, statement of research interests and names of three references should be sent to:

**Dr. S. William Zito, Professor and Chair
Department of Pharmaceutical Sciences
St. John's University
8000 Utopia Parkway
Jamaica, NY 11439**

St. John's is an Equal Opportunity Employer and encourages applications from women and minorities.

HARVARD MEDICAL SCHOOL DEPARTMENT OF DERMATOLOGY

The Department of Dermatology, Harvard Medical School is accepting applications for clinical research postdoctoral fellowship positions and for entry-level faculty positions. Basic research fellowship opportunities exist within the Wellman Laboratories of Photomedicine and the Harvard/MGH Cutaneous Biology Research Center at Massachusetts General Hospital, as well as at our Dermatology Research Laboratories at Brigham and Women's Hospital, including the Harvard Skin Disease Research Center.

The Department is a recipient of an NIH Training Grant which provides salary support for two years of directed laboratory research. Funds are currently available for July 1, 1998. We will aid interested candidates in identifying mentors and projects within the department. *Candidates must be U.S. citizens or permanent residents of the U.S.* Interested candidates should send a letter of inquiry specifying research interests and CV by November 15, 1997.

We also offer clinical fellowship programs in laser, dermatologic surgery, and clinical trials. These programs begin on July 1st of each year, and some require completion of residency training in dermatology. We are also currently accepting applications for our Residency Training Program beginning July 1, 1999. The application deadline for this program is November 15, 1997. Interested candidates should call or write for an application.

The Department of Dermatology, Harvard Medical School is a joint multi-institutional teaching and training program with cooperative clinical and research activities at the Beth Israel Deaconess Medical Center, Brigham and Women's Hospital, Children's Hospital Medical Center, Cambridge Hospital, Massachusetts General Hospital, Lahey Clinic, and Brockton/W. Roxbury VA medical Centers. *We are an Equal Opportunity/Affirmative Action Employer. Minorities, women, handicapped, and veterans are encouraged to apply.*

Interested candidates should send a letter of inquiry and CV to: **Howard P. Baden, M.D., Department of Dermatology, Bartlett 616, Massachusetts General Hospital, 55 Fruit Street, Boston, MA 02114, (617-726-5254).**

Third Wave Technologies, Inc., a leading biotechnology company, is pioneering the development of novel tools for research and clinical DNA and RNA diagnostic applications. Third Wave is actively seeking applicants experienced in molecular diagnostics and/or sample processing for the following positions:

Scientists - Ph.D. with 0-3 years of postdoctoral experience or M.S. with 5+ years; skilled in molecular biology with a concentration in infectious disease and/or cancer. Knowledge of PCR, DNA sequencing, or DNA detection and quantitation techniques preferred.

Assay Development Scientists/Senior Scientists - Ph.D. with 3+ years of postdoctoral and/or related industrial experience. Skilled in DNA/RNA assay optimization, immunoassay, or development of infectious disease/cancer diagnostics. Knowledge of PCR, DNA sequencing, or DNA detection and quantitation techniques preferred.

Associate Scientists - B.S. or M.S. in biochemistry, microbiology, or molecular biology with 1-5 years of academic or industrial laboratory experience with emphasis in molecular biology research. Previous experience in PCR, DNA/RNA extraction, DNA cloning and DNA sequencing (automated or manual) is preferred.

Technical Service Scientists - B.S. or equivalent in the technical or scientific field with a minimum of 5+ years of experience. Responsible for providing technical direction and support to customers on operation and maintenance of company products. Serves as a customer contact and support for distributors and alliance partners in performing workshops and training in-house and at outside sites. Strong written and oral communication skills a must. This position requires extensive travel.

Please send resume to the attention of **Human Resources/TWT, 2800 S. Fish Hatchery Road, Madison, WI 53711. Fax: (608) 273-6989.** No phone calls please.

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POSITIONS OPEN

POSTDOCTORAL POSITION TRANSCRIPTIONAL CONTROL OF CARDIOVASCULAR DEVELOPMENT

A postdoctoral position is available to study the transcriptional regulatory programs that control heart and vascular development. Current areas of investigation include the function of the GATA-4/5/6 subfamily of transcription factors in cardiovascular development (*Genes and Dev.*, 11:1048; *Dev. Biol.*, 177:309; *Mol. Cell Biol.*, 14:7517) and identification of transcription factors that control vascular smooth muscle cell specification and differentiation (*Mol. Cell Biol.*, 17:2266; *J. Biol. Chem.*, 270:13460). Requirements include a Ph.D. and/or M.D. and experience in molecular and cell biology. Please send curriculum vitae with the names of three references to: Michael S. Parmacek, M.D., Department of Medicine/Molecular Cardiology, MC 6088, Room G-611, University of Chicago, 5841 South Maryland Avenue, Chicago, IL 60637. FAX: 773-702-2681, e-mail: parmacek@medicine.bsd.uchicago.edu. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION to examine soil microbial diversity and microbial selection as related to 2,4-D transport and sorption. Multidisciplinary work involving soil microbiology, chemistry, and physics. Required: Ph.D. in microbiology, soil microbiology, or other appropriate background. Preferred: experienced in extraction of DNA from soil, PCR, cloning, and sequencing. Salary commensurate with experience. Screening begins July 15, 1997. Send curriculum vitae and three letters of recommendation to: Dr. Tim McDermott, Department of Plant, Soil, and Environmental Sciences, P.O. Box 173120, Montana State University, Bozeman, MT 59717-3120; e-mail: timmcd@terra.oscs.montana.edu. Americans with Disabilities Act/Affirmative Action/Equal Opportunity/Veterans Preference.

POSTDOCTORAL RESEARCH

The Department of Neurosciences, University of California, San Diego, seeks a qualified Ph.D. or M.D. for a postdoctoral position in the pharmacological therapy of experimental stroke. Fellow will perform studies using animal models of stroke to investigate new therapeutics and mechanisms of injury. The position requires a background in pharmacology and the ability to perform animal surgery. Knowledge of histology, statistics, and behavioral testing are also desirable. Send curriculum vitae with statement of research interests, reprints, and three letters of recommendation to: Mark Bowes, Ph.D., Department of Neurosciences 0624, UCSD, La Jolla, CA 92093-0624; e-mail: mbowes@ucsd.edu.

WASHINGTON UNIVERSITY SCHOOL OF MEDICINE POSTDOCTORAL POSITION

Available immediately utilizing murine transgenic models to study the molecular and genetic mechanisms of human neurodegenerative disease (PNAS, 93:14030, 1996; *Hum. Mol. Gen.*, 5:1989, 1996; *J. Biol. Chem.*, 272:9221, 1997). Experience with transgenic technology and molecular biology required. Send curriculum vitae and references to: Dr. Jonathan D. Gitlin, Washington University School of Medicine, St. Louis Children's Hospital, 1 Children's Place, St. Louis, MO 63110; e-mail: gitlin@kids1.wustl.edu. Washington University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION in molecular biology to study the regulation of voltage-gated currents during development of sensory and ganglion cells of the inner ear. Our goal is to determine how growth factors regulate ion channel expression *in vitro* and *in vivo*. Experience with cDNA library screening, sequencing, and RT-PCR necessary. Send curriculum vitae to: Bernd Sokolowski, Ph.D., University of South Florida, Department of Surgery MDC 16, 12901 Bruce B. Downs Boulevard, Tampa, FL 33612. FAX: 813-974-2669, e-mail: bsokolow@com1.med.usf.edu.

POSTDOCTORAL POSITION available immediately to study function and regulation of protein kinase C isozymes in prostate cancer. Background in molecular or cell biology required. Send curriculum vitae and names of two references to: C. Thomas Powell, Ph.D., Urologic Oncology Research Laboratory, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, Box 334, New York, NY 10021. FAX: 212-717-3053; e-mail: powell@mskcc.org. MSKCC is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

TWO POSTDOCTORAL POSITIONS AVAILABLE: NEUROBIOLOGY OF SYNAPTIC PLASTICITY

Two postdoctoral positions are available immediately to study 1) the cellular mechanisms of synaptic plasticity in the cerebellum using *in vivo* slice, or 2) the functional roles of calcium-calmodulin kinase II (CaM-KII) in synaptic function and plasticity. The first project involves the use of sharp electrode and patch-clamp recordings to study the cellular and molecular mechanisms of synaptic plasticity in the cerebellar cortex and cerebellar nuclei. This project will complement ongoing studies of cerebellar-mediated motor learning. Experience with *in vivo* electrophysiology is highly desirable. The second project involves the use of molecular and cellular biology to investigate the mechanisms regulating the activation and subcellular distribution of CaM-KII in neurons. Experience in areas of the structure-function and kinetic analysis of enzymes and/or confocal microscopy is highly desirable.

Applicants must be U.S. citizens or permanent residents. For cerebellar slice project contact: Dr. Michael Mauk, Telephone: 713-500-5619, FAX: 713-500-0621, e-mail: mmauk@nba19.med.uth.tmc.edu. For CaM-KII project contact: Dr. Neal Waxham, Telephone: 713-500-5621, FAX: 713-500-0621, e-mail: nwaxham@nba19.med.uth.tmc.edu.

POSTDOCTORAL POSITIONS: Molecular mechanisms of signal transduction in apoptosis and neurodegeneration, role of reactive oxygen species (ROS) in aging. A multi-investigator program focused on cellular, biochemical, and molecular biological studies of signal transduction in apoptosis and of ROS effects on protein structure and function. Several positions available. Dr. Rick Dobrowsky: Ceramide-initiated signal transduction and apoptosis. Dr. Erik Floor: Mechanisms of oxidative stress in the brain (oxidation patterns of major brain proteins). Dr. Mary Michaelis: Oxidative modification of neuronal Ca-ATPase and Na/Ca exchangers and molecular biology of calcium transport proteins. Dr. Elias Michaelis: Molecular biology of glutamate receptors, calcium-initiated signal transduction in neurons, and mechanisms of neurodegeneration. Send curriculum vitae and addresses and telephone numbers of three references to: Anette Lundsgaarde, University of Kansas, Higuichi Biosciences Center, 2099 Constant Avenue, Lawrence, KS 66047. Telephone: 913-864-5183. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL ASSOCIATE position available at the Fox Chase Cancer Center, one of only four independent Comprehensive Cancer Centers designated by the National Cancer Institute. Background in molecular and cell biology required. Please send curriculum vitae and names and addresses of three references to: Harold Frucht, M.D., c/o Human Resources Department, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. Equal Opportunity Employer.

ANNOUNCEMENT

ANALYSIS OF NEURAL DATA WORKGROUP AT THE MARINE BIOLOGICAL LABORATORY Woods Hole, MA August 17-30, 1997

Topics this year concern multivariate time series: Point processes (e.g., spike trains); continuous processes (e.g., optical imaging, fMRI, MEG, vocalizations); mixed processes (e.g., spike sorting, transfer functions). 25 participants: experimentalists and theorists, senior and junior. Limited tutorial lectures will be supplemented by discussion sessions and active collaborations among participants. Computational facilities will be provided. Organizers: D. Kleinfeld (UCSD) and P. P. Mitra (Caltech/Bell Labs). Supported by: NIH-NIMH, NIA, NIAAA, NICHD/NCRR, NIDCD, NIDA, and NINDS.

Send curriculum vitae and cover letter addressing why you wish to attend the workgroup and justified request for financial aid to: Jean Ange, Room 1D-467, Bell Labs, Lucent Technologies, 700 Mountain Avenue, Murray Hill, NJ 07974. FAX: 908-582-4702, e-mail: jba@bell-labs.com. Students and postdoctorals should submit a reference letter. Participation fee: \$200. Application deadline: 3 July 1997. Notification: 11 July. Additional information: at <http://sdphln.ucsd.edu/research/neurodata>.

POSITIONS OPEN

POSTDOCTORAL POSITIONS

Novel retinoid signaling, Dr. J. Buck; Nitric oxide and cell signaling, Dr. S. Gross; Vitamin A and cancer treatment, Dr. L. Gudas; Analgesic Pharmacology, Dr. C. Inturrisi; Neural signaling/myocardial ischemia, Dr. R. Levi; Genetic analysis of adenyl cyclases, Dr. L. Levin; Clinical pharmacology/gossypol, Dr. M. Reidenberg; Dioxin, CYP1A and cell signaling, Dr. A. Rifkind; Developmental/opioid pharmacology, Dr. H. Szeto; Genetic animal models/CNS disease, Dr. M. Toth.

Ms. Conti, Cornell University Medical College, 1300 York Avenue, New York, NY 10021, Telephone: 212-746-6250, FAX: 212-746-8858. Equal Opportunity Employer.

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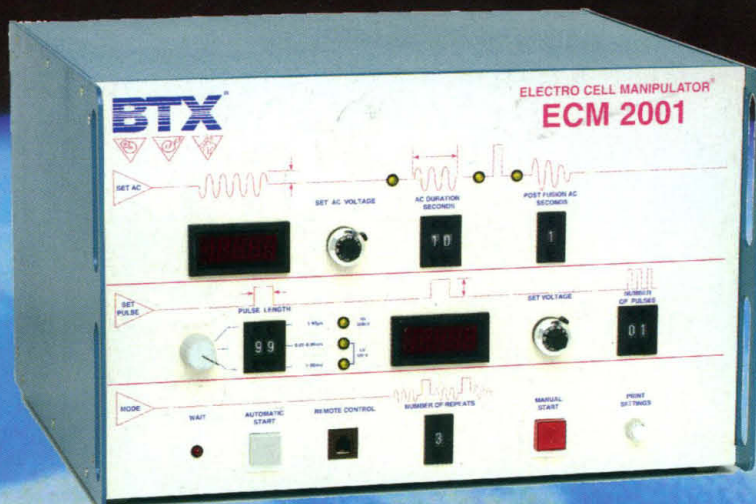
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¹ANALYTICAL BIOCHEMISTRY, vol. 208: 1-9 (1993). "Preparation of Nuclear Transplant Embryos by Electroporation"; Robl, J.M. et al.

²JOURNAL OF IMMUNOLOGICAL METHODS, vol. 187: 1-7, (1995). "A Rapid Non-Selective Method to Generate Quadromas by Microelectrofusion"; Y. Cao, T. Vinayagamoorthy, A.A. Noujaim, M.R. Suresh.

³MOLECULAR BIOTECHNOLOGY, vol. 3: 181-189 (1995). "Rapid Optimization of Electroporation Conditions for Plant Cells, Protoplasts, and Pollen"; Saunders J.A. et al

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1. Soares, et al. (1994) *Proc. Nat. Acad. Sci.* 91 9228-9232.

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