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For MEETINGS AND ANNOUNCEMENTS display advertisements, see page 1608.

LINE CLASSIFIED ADVERTISEMENTS

How to Submit a Line Classified Ad:

Submit double-spaced typewritten copy. Do not include any abbreviations. SCIENCE will edit and typeset ads according to SCIENCE guidelines. Include billing information and desired publication date. Available categories: Positions Open, Meetings, Announcements, Courses and Training, Services. SCIENCE cannot provide proofs of typeset line ads. Line advertisements are not commissionable.

Estimates: SCIENCE will provide a cost estimate for line ads. This is an approximate cost only. Allow for variation between estimated lines and actual typeset lines and resulting final cost. Purchase orders must allow for some degree of flexibility and/or adjustment.

For line advertising deadlines, call Eric Banks. Telephone: (202) 326-6555; FAX: (202) 289-6742. Email: science_classifieds@aaas.org

Credit Cards: SCIENCE accepts American Express, MasterCard and VISA. Discount does not apply to credit cards.

Cancellations: Deadline for cancellation is Tuesday, 10 days prior to issue date.

Discounts: A 3% cash discount is granted to all prepaid ads.

Ads from Outside the U.S.: A discount of \$30 will be offered to advertisers making payment in U.S. dollars by checks drawn on U.S. banks. Contact Debbie Cummings. Telephone: +44(0) 1223 302067; FAX: +44(0) 1223 576208.

SCIENCE Professional Network: Unless otherwise instructed, every classified advertisement submitted for publication in SCIENCE is automatically posted on SCIENCE's on-line classified advertising service, SCIENCE Professional Network, at no additional charge.

www.sciencemag.org

Mail, FAX or Email materials to:

SCIENCE Classified Advertising
1200 New York Avenue, N.W., Room 911
Washington, DC 20005
FAX: 202-289-6742

Email: science_classifieds@aaas.org (please include your telephone number in Email)

SCIENCE reserves the right, at its discretion, to edit or decline to publish advertisements submitted to it.

POSITIONS OPEN

FACULTY POSITIONS BIOCHEMISTRY AND MOLECULAR BIOLOGY

Applications are invited for tenure-track faculty positions in the Department of Biochemistry at the rank of Assistant Professor. Candidates with excellent training and accomplishments at the postdoctoral level in eukaryotic molecular biology will be considered.

For one of the positions, we are seeking an exceptional candidate who employs innovative approaches to investigate fundamental problems in plant biochemistry and molecular biology. For the other positions, all research areas of eukaryotic biochemistry and molecular biology will be considered, but preference will be given to individuals with expertise in the application of biophysical approaches to problems related to macromolecular structure, function, or assembly of complexes.

The successful candidates will be active participants in the teaching programs of the department, which include undergraduate, graduate, and medical curricula. A significant part of the evaluation of faculty candidates will be the perceived effectiveness of the candidate as a teacher.

Competitive start-up funds and excellent laboratory space will be provided. University-wide support facilities include antibody production, peptide and DNA synthesis and sequencing, mass spectrometry, macromolecular NMR analyses, and the computing center. The life science research community at Purdue numbers well over 100 investigators actively engaged in all aspects of modern biological research.

Curriculum vitae, the names and addresses of three individuals who can supply letters of reference, and a two-page summary of research interests are required for an application. The screening of applications will commence immediately and will continue until the positions are filled.

Biochemistry Search Committee
Department of Biochemistry
Purdue University
West Lafayette, IN 47907-1153 USA

Purdue University is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION—MICROBIOLOGIST

The Department of Food Science and Human Nutrition at Michigan State University invites applications for a tenure-track, 12-month appointment at the **ASSISTANT PROFESSOR** level (70% research and 30% teaching). The candidate will be expected to develop a vigorous, externally funded microbiology program with a major focus in dairy foods. Research areas include, but are not limited to, molecular genetics of lactic acid bacteria and dairy starter cultures, bacteriocins, probiotic cultures, and food safety. A Ph.D. in microbiology, dairy or food science, or a closely related field is required. Postdoctoral or industrial experience is highly desirable. Application deadline is July 30, 1997 or until position is filled. Position is available immediately. Submit résumé, transcripts, summary of experience, representative publication, one to two pages of research interests statement, and three letters of recommendation to:

Dr. Zey Ustunol, Chair, Search Committee
Department of Food Science & Human Nutrition
Michigan State University
136 GM Trout FSHN Building
East Lansing, MI 48824
Telephone: 517-355-0285; FAX: 517-353-1633
Email: ustunol@pilot.msu.edu

Michigan State University is an Affirmative Action/Equal Opportunity Institution.

The Division of Human Genetics of the Children's Hospital Research Foundation seeks M.D.'s, Ph.D.'s or M.D./Ph.D.'s with established research programs to join an expanding Program in Human/Medical Genetics to facilitate and promote interdisciplinary research in gene-influenced traits. Emphasis on quantitative molecular approaches to disease/trait gene identification for heritable disorders and the development of supporting core facilities. **ASSISTANT**, and **ASSOCIATE/FULL PROFESSOR** positions available. Academic rank will be determined by candidate's credentials and experience. Excellent start-up support. Send curriculum vitae and three letters of support to: **Gregory A. Grabowski, M.D., Director, Division and Program in Human Genetics, Children's Hospital Medical Center (CHMC), 3333 Burnet Avenue, Cincinnati, OH 45229-3039. CHMC is an Affirmative Action/Equal Opportunity Institution. Women and minorities are encouraged to apply.**

POSITIONS OPEN

PROFESSOR/HEAD DEPARTMENT OF AGRONOMY

Administer instruction, research, extension, and international programs; represent the department to the college, university, state, agricultural clientele, and funding agencies; and promote professional development of departmental students, staff, and faculty. Ph.D. in crop, soil, range, or weed science, or a closely related field; demonstrated effective leadership and communication skills; and national recognition in instruction, research, or extension required. Eligible for tenure at the full professor level. Administrative experience is desirable. Additional information regarding the position, department, university, and community may be obtained at the Agronomy Department's homepage: <http://www.ksu.edu/agronomy>. Submit letter of application, including a statement of leadership and administrative philosophy; complete curriculum vitae; and names, addresses, and telephone numbers of five referees by August 1, 1997. Address applications, nominations, and inquiries to: **Dr. Bill Schaapagh, Dean of Agriculture's Office, 114 Waters Hall, Kansas State University, Manhattan, KS 66506-4008; Telephone: 913-532-6147; FAX: 913-532-6563; Email: scha0035@ksu.edu. Kansas State University is an Affirmative Action/Equal Opportunity Employer and actively seeks diversity among its employees.**

DEVELOPMENTAL GENETICS/ GENE TARGETING UNIVERSITY OF KANSAS MEDICAL CENTER

The Department of Molecular and Integrative Physiology is seeking to fill a **TENURE-TRACK FACULTY POSITION** with an outstanding individual utilizing gene targeting strategies to investigate important biological problems. Applicants should possess a Ph.D. or M.D. degree and significant postdoctoral training. The successful candidate will have an opportunity to participate in strong interactive programs in neuroscience, reproductive and developmental biology, and cancer research. Please send: (i) a statement of future research plans, (ii) curriculum vitae, and (iii) three letters of recommendation to: **Chair, Faculty Search Committee, Department of Molecular and Integrative Physiology, University of Kansas Medical Center, 3901 Rainbow Boulevard, Kansas City, KS 66160.** Applications will be reviewed as soon as they are received and will be accepted until August 1, 1997 or until the position is filled. *An Equal Opportunity/Affirmative Action Employer.*

ECOLOGIST FACULTY POSITION

The Department of Biological Sciences, Fordham University, invites applicants whose research interests include plant-animal interactions or terrestrial plant ecology for a tenure-track position at the **ASSISTANT PROFESSOR** level, beginning January 1998. We seek individuals who will establish a vigorous, independently funded research program, and supervise doctoral and masters students at Fordham's biological field station, the Louis Calder Center, Armonk, New York. Teaching at the undergraduate and graduate levels is expected. A Ph.D. is required and postdoctoral experience is preferred. Applicants should submit curriculum vitae, brief statement of research and teaching interests, and names and telephone numbers of three references to: **Dr. Berish Y. Rubin, Ecologist Search Committee, c/o Louis Calder Center, Fordham University, Box K, Armonk, NY 10504.** Closing date is August 15, 1997. *Fordham University is an Equal Opportunity/Affirmative Action Employer.*

MOLECULAR BIOLOGIST

The Department of Experimental Radiation Oncology at the University of Texas M. D. Anderson Cancer Center is accepting applications for a faculty position at the **ASSISTANT PROFESSOR** level. We are seeking a scientist with a record of independent research emphasizing molecular aspects related to radiation biology/oncology. The ideal candidate should have experience in either signal transduction, growth regulation, or cell cycle control. Interested applicants should send a description of research interests, curriculum vitae, and the names of at least three references to: **Luka Milas, M.D., Ph.D., Professor and Chairman, Department of Experimental Radiation Oncology, Box 66, U. T. M. D. Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, TX 77030.**

The University of Texas M. D. Anderson Cancer Center is an Equal Opportunity/Affirmative Action Employer. Smoke-free environment. Women in minority categories are encouraged to apply.



The path to discovery and innovation

Globally active, research-driven, responsible:

From the first commercial synthesis of vitamins to the birth of biotechnology, Roche has been at the forefront of biomedical knowledge throughout the 20th century. Now we're committed to pioneering the path to discovery into the 21st.

Roche scientists in the past have been involved in notable medical contributions including: an important digitalis preparation that has kept millions of hearts beating; early treatments for diabetes and Parkinson's disease; the fermentation process that led to the introduction of penicillin; the first effective treatment for tuberculosis, which all but wiped out the disease; discovery of the benzodiazepines, which revolutionized the treatment of anxiety, sleep disorders and other neurological problems; and groundbreaking work in biotechnology, leading to the development of recombinant interferon.

Today's Roche scientists have helped us lead the way in the treatment and diagnosis of HIV and related diseases. They're moving forward into fields such as transplant rejection, leading the effort to understand the mechanisms that cause obesity, cancer and autoimmune diseases and searching for new approaches, such as genomics, that will shift our focus from disease management to disease prevention.

But there's still a long way to go on the path to discovery and innovation. Despite the progress of the 20th century, only a third of the roughly 30,000 known human diseases can be treated effectively, and Roche scientists are studying many of them. Their rigorous and relentless pursuit of biomedical *innovation* is both the foundation of our reputation and the strategic key to our future success. And the *creative talent* and *ingenuity* of our scientists are what drive us toward our ultimate goal - *effective treatments that extend and enhance people's lives.*



Roche

Bioinformatics Opportunities

City of Hope National Medical Center, a state-of-the-art clinical cancer research institute 10 miles east of Pasadena, CA, has the following opportunities available.

Director, Biomedical Informatics

This exciting position will help lead the way in developing an Integrated Research Repository linked to an electronic medical record system. You will actively participate in the Integrated Advanced Information Management System (IAIMS) Grant at the City of Hope. The selected candidate will help establish basic science computing resources and consult with researchers to provide access to, maintenance of, and training in sophisticated scientific software. He/she will also design customized software applications to assist researchers in specialized areas, and integrate new and existing information systems as needed. Ph.D. in Biomedical Informatics, Molecular Biology, Computational Biology, Statistical Genetics or a related field. Minimum of 3+ years experience in Biomedical Informatics, and specialized training in computer systems and database design and integration, or equivalent experience is required. **Code: HR/Biadir**

Bioinformatics Specialist

Opportunity to participate in research of academic molecular genetics lab and support clinical and research informatics needs of the Division of Human Genetics. Degree in Computer Science or related field, experience in relational databases (SQL), Web site development and C/C++ are required. **Code: HR/Biosp**

We offer competitive salaries and excellent benefits. Please send resume with salary requirements to: (Insert appropriate code), 1500 E. Duarte Rd., Duarte, CA 91010. Fax (818) 301-8448. www.cityofhope.org



City of Hope

POSTDOCTORAL ECOPHYSIOLOGY - PROCESS MODELER

Westvaco, a major manufacturer of pulp, paper and specialty chemicals, has a postdoctoral position available for a maximum of two years in the Biometrics Center at the Forest Science Laboratory located in Summerville, SC. The objective of the position is to identify and initiate development of the model structure(s) best suited for integrating process-level forestry research results to predict forest stand functioning and forest productivity. Detailed research related to the genetic basis of plant growth, plant responses to their environment, and soil-environment and soil-process effects on nutrient availability are ongoing. The incumbent will work closely with a team of biometrics, genetics, soil science, and ecophysiology researchers to incorporate their results into the selected process model(s). By the end of the two-year period, the incumbent will be expected to recommend appropriate process models and identify further research needs for the selected model(s).

Requirements: Ph.D. in ecology, ecophysiology or plant physiology with proficiency in math, statistics, and computer programming required. In addition, the candidate should have demonstrated experience in developing and using physiologically-based process models, and excellent oral and written communication skills.

Salary: Commensurate with experience and training.

Closing Date: July 25, 1997 or until a suitable candidate is found.

Interested parties should send a letter of intent, resume, college transcripts, and a list of references to:

Ms. C.L. McCord
Westvaco Forest Science Laboratory
P.O. Box 1950
Summerville, SC 29484

For enquiries, call (803)851-4733 or email:
clmccor@westvaco.com

Westvaco is an equal opportunity employer, M/F.



POSTDOCTORAL POSITIONS

BIOLOGIC STUDIES OF PROSTATE CANCER

The Mayo Clinic Cancer Center has funded several new postdoctoral fellowship positions to characterize biochemical, molecular genetic, and molecular cytogenetic alterations important for the initiation and progression of prostate carcinoma. The selected candidates will be appointed for one or two years. Several faculty members will serve as sponsors including: Donald J. Tindall, Ph.D: Biology of androgen resistance and novel markers of prostate cancer progression; Charles Y. F. Young, Ph.D: Biology of the hGK genes; Robert B. Jenkins, M.D: Molecular cytogenetic studies of prostate cancer; Stephen N. Thibodeau, Ph.D: Molecular genetic and linkage studies of prostate cancer. Strong backgrounds in biochemistry, molecular genetics and/or molecular cytogenetics are desirable. Applicants should mail/fax their curriculum vitae and the names and Fax numbers of three qualified references to:

Mr. Michael Pfenning, Research Services
Mayo Clinic
200 First Street SW
Rochester, MN 55905
Fax 507/284-1772

Applications will be accepted until July 30, 1997.
Mayo Foundation is an affirmative action and equal opportunity educator and employer.

N E X t r a n

RESEARCH SCIENTISTS AND ASSOCIATES

NEXTRAN, an established leader in xenotransplantation research and an affiliate of Baxter International, Inc., has several positions available at our Princeton, NJ, location.

Candidates for the Research Scientist position must have a Ph.D. in biochemistry with 3+ years of postdoctoral experience. Must be creative and able to work independently. Management experience required.

The successful candidate will join a multidisciplinary group to lead a project developing new novel therapeutics in xenotransplantation.

Candidates for Research Associate must have a B.S. or M.S. with 2+ years of experience in molecular biology. Supervisory experience a plus. QA/QC GLP experience and good organization skills required.

The successful candidate will be a hands-on supervisor in our lab.

The Clinical Research Associate position requires a life science or nursing degree with the ability to observe and report on surgeries. You must be detail-oriented and have good organization skills. Some travel is required.

NEXTRAN offers an excellent working environment along with competitive compensation and benefits. Please submit your resume indicating the position you are applying for and your salary requirements to the Human Resources Manager:

NEXTRAN
303B College Road East
Princeton, NJ 08540

Aspire to Make a Difference

Pharmacia & Upjohn is among the world's largest pharmaceutical companies employing over 30,000 people around the globe. We are research-based and pharmaceutically-oriented working in areas such as Oncology and Infectious, Metabolic, Inflammatory and Central Nervous System Diseases. In each of these areas our objective is the same: to help people live longer and fuller lives. We provide career opportunities for individuals who want to make a difference through their work. If you're one of them, contact us.

Medicinal Chemists, Scientists and Associates

As a member of our Medicinal Chemistry group, you will work closely with colleagues in combinatorial chemistry, biology, biochemistry, pharmacology and computational chemistry in a challenging interdisciplinary environment. You will conduct the design, synthesis, purification and characterization of novel small molecules directed toward the development of therapeutic agents. Candidates should have a B.S./M.S. degree in chemistry with a strong concentration in synthetic organic chemistry, or a Ph.D. in synthetic organic chemistry and a documented record to support their creativity, problem solving skills and research excellence. Ph.D. candidates refer to Position #970178; M.S./B.S. refer to Position #970182.

Combinatorial Chemists, Scientists and Associates

Working within our Medicinal Chemistry group, you will conduct research in the development and application of combinatorial chemistry technology to the drug discovery process. The research will employ state-of-the-art methods for high throughput robotic synthesis and purification, data management, and modern methods of instrumental analysis for the identification and characterization of compounds. Candidates should have a B.S./M.S. degree in organic chemistry, preferably with documented research experience, or a Ph.D. in synthetic organic chemistry. Experience in combinatorial chemistry methodology is required. Responsibilities include supervising and training associates in the laboratory as well as training other medicinal chemists in the application of combinatorial chemistry to their research. Ph.D. candidates refer to Position #960547; M.S./B.S., refer to Position #970191.

Macromolecular Crystallography Scientist

Working within the Macromolecular Crystallography group, you will conduct research requiring knowledge and experimental experience in molecular biology, protein biochemistry and physical chemistry. Primary responsibilities include the evaluation of constructs and expression systems and the isolation of well-characterized proteins of high level of purity for crystallization experiments and NMR spectroscopy. You will help create successful strategies for specific macromolecule targets for structural determination to advance the structure-based drug design. Candidates should have a Ph.D. in chemistry, biochemistry or molecular biology with significant laboratory experience under research conditions. Knowledge and experience with production, purification, crystallization, and X-ray data collection of macromolecules are required. Refer to Position #970175.

Macromolecular Crystallography Associate

Your primary responsibilities include conducting a variety of macromolecular crystallization experiments and collection and processing of single crystal data. You will work with the supervisory scientist to expand the existing repertoire of crystallization methodology, to assist in the development of alternative crystallization strategies for specific macromolecule targets. Experience in protein purification, enzymology, molecular biology or biophysics is desirable. Candidates should have a B.S./M.S. in biochemistry, with minimum of 2-3 years directly related laboratory experience or equivalent; experience with crystallization of macromolecules is required. Refer to Position #970179.

Process Research and Development Scientists and Associates

As a member of a Process Chemistry group, you will work as part of a team to support the drug discovery process and develop the chemistry required for commercialization of pharmaceutical compounds. Candidates should have a B.S./M.S. degree with a strong concentration in organic chemistry, or a Ph.D. in synthetic organic chemistry with extensive experience in separation, purification and modern analytical techniques (HPLC, GC, NMR, IR, MS). Ph.D. candidates refer to Position # 960287; M.S./B.S., refer to Position #970039.

Analytical Chemistry Scientists

As part of a team comprising Discovery, Preparations, Process Development and Analytical Chemists, you will develop the analytical tools and methods needed to support the synthesis and registration of new drug products and commercial chemical sales products. Candidates should have a Ph.D. and a strong background in organic and analytical chemistry. Refer to Position # 970145.

Mass Spectrometry Associates

As a member of a Mass Spectrometry group, you will be responsible for the analysis of a variety of compounds using mass spectrometry. Candidates should have a B.S./M.S. degree in chemistry or biochemistry with a strong background in mass spectrometry. Refer to position #970183.

At Pharmacia & Upjohn you can make a difference. Not only for the sake of your career, but also for the millions of people around the world whose lives will be enhanced by the solutions you help us provide. Pharmacia & Upjohn offers competitive salaries and benefits. These positions are based in our Kalamazoo, MI location.



Pharmacia & Upjohn

For confidential consideration please send your resume to: Pharmacia & Upjohn, (Corresponding Position # from above), Recruiting, 5045-88-81, 7000 Portage Road, Kalamazoo, MI 49001. Or you may e-mail your resume (no attachments, please) to: recruit@am.pnu.com. We are an equal opportunity employer with a commitment to workplace diversity.

PROGRAM OF EXCELLENCE IN MOLECULAR BIOLOGY OF THE HEART AND LUNG

Special Postdoctoral Positions

The University of Cincinnati Program of Excellence in Molecular Biology of the Heart and Lung, funded by the National Heart, Lung, and Blood Institute of NIH, has as its goal the application of molecular genetic approaches to study heart and lung function. The Program is open to Ph.D.s or M.D.s with training in molecular biology who wish to apply their skills to significant problems of heart or lung, or to individuals with strong backgrounds in heart and lung who wish to develop molecular tools for continued study of these problems. We are particularly interested in recruiting women and minorities to the Program. Stipends begin at \$31,000 per year with benefits. The faculty and their interests are described below. The Program is limited to U.S. citizens and permanent residents.

Jerry B. Lingrel—Na, K-ATPase gene regulation, knockout and replacement studies and structure-function studies. Role of transcription factors in early lung and erythroid development

Jeffrey Whitsett—Molecular biology of lung development of lung specific gene expression

Paul Rosevear—Elucidation of structure/function relationships in the cardiac troponin complex using multidimensional NMR techniques

Gary Shull—Role of ion-transport proteins in cardiac function and control of arterial blood pressure using gene targeting technology

Jeffrey Robbins—Targeted modification of the cardiac contractile proteins and growth and developmental control of cardiac muscle

Steven Potter—Manipulating genes important in heart and lung development by insertional mutagenesis and targeted modification in ES cells

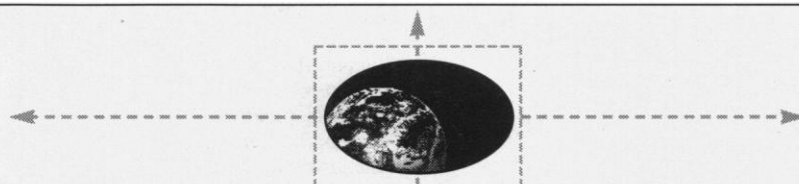
Thomas Doetschman—Role of growth and differentiation factors in the development and function of heart and lung using targeted gene modification in the mouse

Anil Menon—The genetics of human cardiovascular disease

Stephen Liggett—Molecular biology, pharmacology and structure/function of cardiopulmonary adrenergic receptors

Applicants should submit a C.V. and the names of three references to **Jerry B. Lingrel, Ph.D., Director, Program of Excellence in Molecular Biology, Department of Molecular Genetics, Biochemistry, and Microbiology, University of Cincinnati, College of Medicine, 231 Bethesda Avenue, Cincinnati, Ohio 45267-0524.**

Affirmative Action/Equal Opportunity Employer



We're redefining the way the
world looks at life sciences.

We're the new life sciences company at Monsanto.
**Director, Research and Development, Life Sciences
INDIA**

We're even more focused on the future. That's why our entire organization is dedicated to the pursuit of the life sciences: agriculture, pharmaceuticals, food and nutrition. These are areas which we believe will directly impact the future of the planet. Now, we can continuously address the needs and demands of our ever-increasing population. While the world's resources may be finite, our vision for its future is not.

Our life sciences organization is expanding research and development efforts to other parts of the world with the ultimate objective of establishing fully integrated research capabilities on a global basis. We have created a position for a Research Director in India who will establish and lead what will become a premier technology organization. The Director will have both scientific and administrative responsibilities including identifying and accessing new technologies, initiating collaborative research, attracting the best and brightest scientists, and integrating R&D activities in India with the global research organization.

We are seeking a PhD scientist with at least 10 years of experience in industry/academia with a proven record of innovation and broad exposure to the life sciences disciplines such as molecular biology, biotechnology, chemistry/biochemistry and genomics; a visionary and creative individual who can set direction and lead the nascent organization to achieve great heights. Local contacts in academia and industry, along with the knowledge and skills to interact with government and regulatory bodies, are essential requirements. Experience in agricultural sciences, business development and the regulatory approval process are highly desirable.

We offer a very competitive salary and benefits package. For consideration, please send your resume and salary history to: **The Monsanto Company, Attn: Staffing, 800 N. Lindbergh Blvd., Mail Zone: E2NA, St. Louis, MO 63167. Fax: 314/694-7807. Visit our website at <http://www.monsanto.com> EEO/AA Employer M/F/D/V.**

Monsanto

FACULTY POSITION

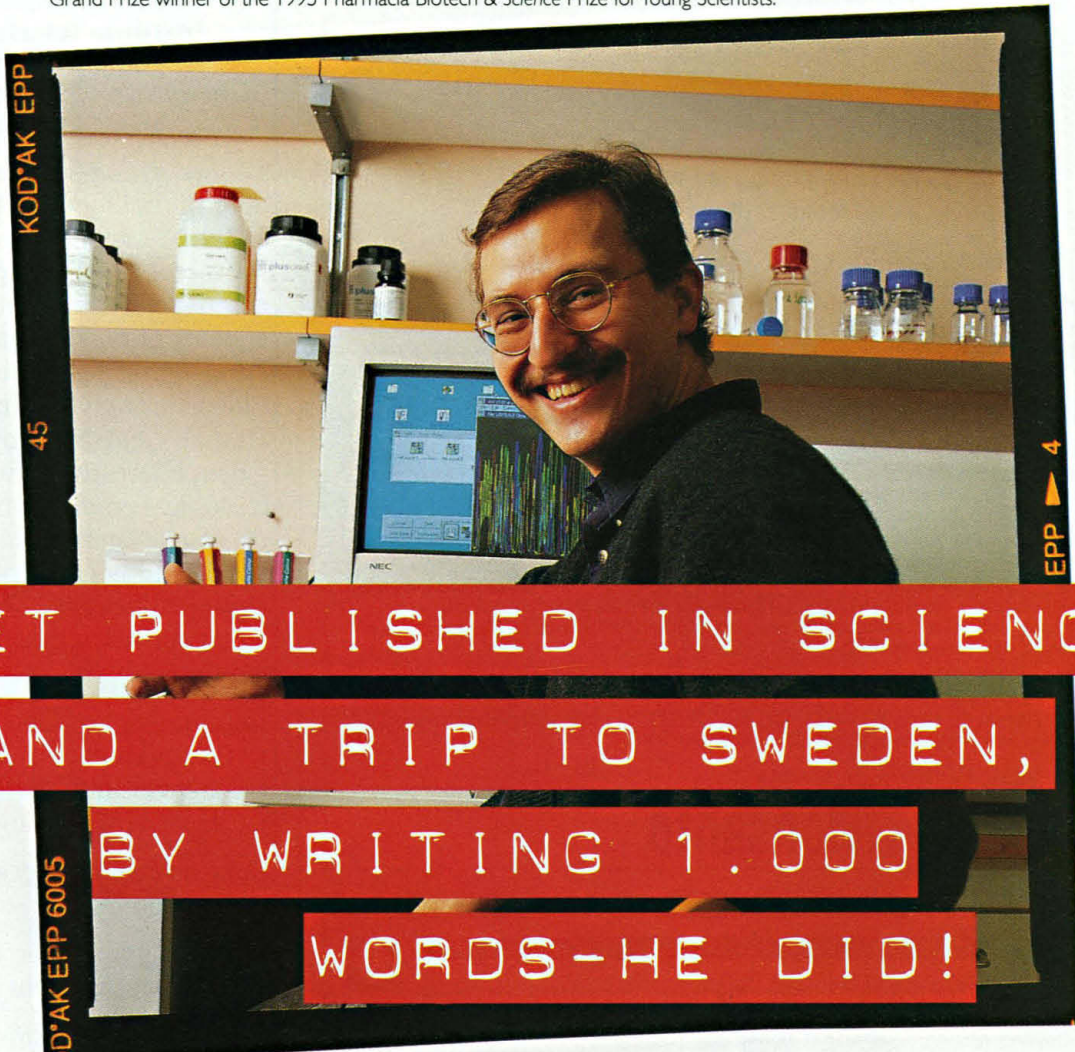
The Department of Molecular Genetics & Microbiology in the School of Medicine at the State University at Stony Brook invites applications for a tenured position at the level of Associate Professor or Professor in the fields of viral oncogenesis or viral pathogenesis/cancer genetics. A clear cancer focus is preferred and may include expertise in viral models for human cancers, genetic mechanisms underlying tumor initiation and progression, apoptosis, signal transduction, and cell cycle regulation. Successful candidate will join an exciting research environment with opportunities to interact with basic and clinical investigators in Cancer Biology and Infectious Disease within the department, in the Health Sciences Center and at the nearby Cold Spring Harbor and Brookhaven Laboratories. Will have access to state of the art research facilities in Stony Brook's new Center for Molecular Medicine or the new Cancer Center, full salary support (twelve month, state-funded) and a competitive recruitment package. Commitment to graduate and medical student education required.

Applications should include a curriculum vitae, a short statement of research plans, and the names of at least three references to Dr. Carol Carter, Chair, Search Committee, Department of Molecular Genetics and Microbiology, c/o Mrs. Connie Rafferty, Life Sciences Building, SUNY Stony Brook, Stony Brook, New York 11794-5222. An AA/EO employer

**STONY
BROOK**
STATE UNIVERSITY OF NEW YORK

Dr. Michael Hengartner, a staff member at Cold Spring Harbor Laboratory in New York, was the first Grand Prize winner of the 1995 Pharmacia Biotech & Science Prize for Young Scientists.

PHIL MALLON



GET PUBLISHED IN SCIENCE
AND A TRIP TO SWEDEN,
BY WRITING 1.000
WORDS—HE DID!

(OH YEAH, AND \$20.000)

If you're a recent Ph.D. graduate whose thesis work was in molecular biology, we'd like to congratulate you. We'd also like to give you a little recognition for a job well done. All you have to do is enter an essay based on your graduate thesis to the 1997 Pharmacia Biotech & Science Prize for Young Scientists.

Your essay will be reviewed by a panel of distinguished scientists—who will then select one Grand Prize winner and up to seven other winners. The Grand Prize winner will receive the rewards mentioned above; all other winners will receive \$5,000 each and a free trip to Sweden to attend the award ceremony.

CALL FOR ENTRIES

To be eligible, you must have received your Ph.D. between 1 January and 31 December 1996. Your thesis work must have

been in the field of molecular biology. To enter, you must submit a 1,000 word essay that describes your thesis work and places it in perspective with regard to the field of molecular biology. The essay may be submitted in either English, French, German, Spanish, Japanese, or Chinese (Mandarin).

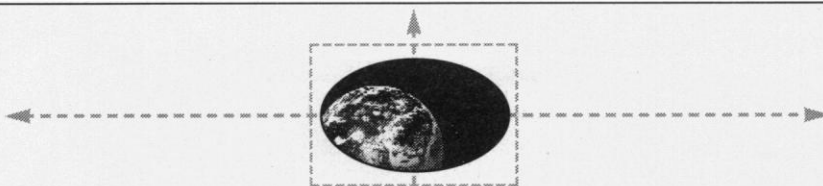
The closing date for entries is 30 June 1997. All prizes will be presented in Sweden in December 1997. Full details and the required entry form can be obtained from:

- 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>

Pharmacia
Biotech & SCIENCE
Prize for
Young Scientists
IN MOLECULAR BIOLOGY 1997

The Award Committee
Pharmacia Biotech & Science Prize for Young Scientists

Enquiries from Europe – Science International, 14 George IV Street, Cambridge, CB2 1HH, UK. Tel: +44 1223 302067, Fax: +44 1223 302068
Enquiries from USA and other regions – Science, 1200 New York Avenue, NW, Washington, DC 20005 USA. Tel: 202-326-6504, Fax: 202-289-7562



**We're redefining the way the
world looks at life sciences.**

We're the new life sciences company at Monsanto.

We're even more focused on the future. That's why our entire organization, from agricultural biotechnology to pharmaceuticals to food ingredients, is dedicated to life sciences. These are areas that can directly impact our future. Now, we can continuously answer the questions, needs and demands of our ever-changing planet. After all, the world's resources are finite, but our vision for its future is not.

Protein Crystallography in Agricultural Biotechnology

In this new position, you will work on Discovery Projects with multidisciplinary teams of Agricultural Scientists and with other Protein Crystallographers, NMR Spectroscopists and Molecular Modelers. State-of-the-art x-ray facilities are available for protein structure determination in St. Louis and excellent opportunities for synchrotron data collection at the Advanced Photon Source will soon be available to us.

Qualified candidates will have a PhD or significant postdoctoral training in Protein Crystallography. To apply for this position, candidates should have skills in all aspects of protein crystallography including crystallization, data collection, structure solution by multiple isomorphous replacement methods, model building and refinement. Individuals with experience in diffraction data measurement using synchrotron radiation are encouraged to apply. Experience in molecular modeling, recombinant DNA methods, protein purification or protein engineering would also be desirable.

We offer a competitive compensation and benefits package. For consideration, please send/fax a CV and names of three references to: **The Monsanto Company, Attn.: Wm. Stallings, 700 Chesterfield Parkway North, Mail Zone BB4K, St. Louis, MO 63198. Fax: 314/737-7425 or email: wcstal@monsanto.com** Visit our website at <http://www.monsanto.com> EEO/AA Employer M/F/D/V.

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

ALSAC • Danny Thomas, Founder

POSTDOCTORAL POSITION IN MOLECULAR ONCOGENESIS

**St. Jude Children's Research Hospital
Departments of Pathology and Tumor Cell Biology**

NIH funded postdoctoral positions are available immediately to investigate the role of the AML1/CBFB transcription factor complex in normal hematopoiesis and leukemia. Studies will focus on defining the biologic function of AML1 in the establishment of fetal liver-derived hematopoiesis, and on investigating the mechanisms responsible for cellular transformation by the t(8;21) and t(12;21)- encoded AML1 chimeric products. These studies will be performed in a highly interactive environment that is housed in a state-of-the-art facility. Qualified candidates should possess either a Ph.D. and/or M.D. and have prior experience in molecular biology. Interested applicants should send their curriculum vitae and the names, addresses and phone numbers of three references to:

Dr. James R. Downing, Department of Pathology, St. Jude Children's Research Hospital, Dept. SCI530/PD-MO, 332 N. Lauderdale, Memphis, TN 38105. Fax: 901-495-2381. E-mail: jtm.downing@stjude.org.

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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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If you see the impossible as a challenge to overcome ... rather than a reality to accept ... then we invite you to join us in one of these positions:

Sequencing Production Coordinator

Coordinate the activities of a 10+ member production team responsible for DNA template preparation, sequencing reaction assembly and pooling, electrophoresis and data capture, data analysis and process troubleshooting. This individual will serve as the interface between gene discovery groups and the sequencing module, manage the sequencing module's production queue, contribute to the design of software and automation systems for process improvements and work closely with quality control in validation and troubleshooting efforts. BS/MS in Molecular Biology, Biochemistry, Biology, Microbiology or Genetics and 5+ years' fluorescent sequencing experience, accompanied with strong sequencing chemistry troubleshooting skills, familiarity with UNIX and Mac platforms, databases and liquid handling robots. **Job Code: 0697-SCH**

BIOINFORMATICS Senior Software Engineer

Develop rapid capture, display and analysis systems for new high-volume experimental data (transcriptional and protein expression profiles). Create scientific SW toolkit; integrate data with advanced querying/analysis capabilities. Work on a team; strengths in several of the following: OO design and programming; relational and OO databases; GUI programming; distributed computing and systems; and/or algorithm design and applied statistics. **Job Code: 0697-SSWJ**

SCIENTISTS

Biological Resource Development

The successful candidate will be responsible for using molecular genetic approaches to create recombinant secondary metabolite-encoding genes for heterologous expression in fungi. Requires familiarity with broad range of molecular techniques. Familiarity with fungal systems, biocombinatorial drug discovery, and microbial secondary metabolism is a plus. Ph.D. in Biological Sciences and at least 2 years' relevant post doctoral experience are required. **Job Code: 0697-SSBF**

Biological Technology

Work with a team to develop RNA profiling technologies and to apply them to disease biology and drug development. The successful candidate will have a Ph.D. in molecular biology or a related field plus two or more years post-doctoral research experience. **Job Code: 0697-SSK**

Fermentation/Drug Source

The successful candidate will oversee the fermentation program in support of drug screening and will develop additional tools for classifying the drug source. Will interact with natural product chemists to improve efficiency of drug discovery. Familiarity with small- and large-scale fermentation, mycology, and molecular phylogenetics is required. Molecular genetic skills a plus. Ph.D. in Biological Sciences and relevant academic or industrial experience are required. **Job Code: 0697-SSFF**

Assay Development

Responsibilities will include development of high-throughput screens and follow-up assays for drug discovery. Candidate will work with gene discovery groups on the selection of cell-based or biochemical assay approaches in a number of therapeutic areas including obesity, atherosclerosis, cancer, CNS, antibacterials and antifungals. Candidate will be responsible for developing novel screening methodologies. Supervise production and testing of assay reagents. Write SOPs and scientific publications. Ph.D. in Biochemistry, Molecular Biology or Cell Biology and 2-5 years' experience including post doctoral research are required. **Job Code: 0697-SSAF**

Postdoctoral - Biological Technology

A 2 or 3 year opportunity to apply high-throughput gene expression analysis to the molecular mechanisms of disease. The successful candidate will have a Ph.D. in molecular biology or a related field. **Job Code: 0697-SPSK**

Associate Scientist Mouse Genetics

Use classical genetic mapping and positional cloning technologies in rodent models of disease for human disease gene discovery. Physiology experience needed to enhance group's expertise in mouse genetics, and molecular biology. Additional experience in mouse genetics and molecular biology a plus. Ph.D. and 1-2 years' post-doc experience required. **Job Code: 0697-SMGJ**

Postdoctoral - Yeast Genetics

This fellow will utilize yeast genetics and DNA microarray transcriptional profiling technologies including Affymetrix chips to characterize and discover drugs and genes related to disease. Strong background in molecular biology, RNA manipulation and yeast genetics. A Ph.D. in yeast genetics and molecular biology is required. **Job Code: 0697-SPSYK**

Make it possible. Send or fax your resume, indicating Job Code, to Human Resources, Millennium Pharmaceuticals, Inc., 640 Memorial Drive Cambridge, MA 02139 - 4815, Fax: (617)225-0884.



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Obesity Research Scientists & BS/MS Scientists

Our Obesity research group is currently seeking scientists with a Ph.D. or equivalent in Cell Biology, Molecular Biology or related field. At least 2 years' postdoctoral experience in neurobiology related to appetite control or in nuclear hormone receptors or mechanisms controlling energy expenditure, body fat or fat cell differentiation would be advantageous. **Job Code: 2149**

We are also seeking BS/MS Laboratory Scientists to conduct research in our obesity group. Laboratory research experience, especially in the area described above would be a definite advantage. Knowledge and experience with in vivo, tissue culture, biochemical and molecular biology techniques are desired. **Job Code: 2150**

BS/MS Scientist Inflammation/Biology

Our Inflammation Biology Department is looking for a scientist to assess effects of novel anti-inflammatory agents on cytokine production in vitro and in vivo. BS/MS or the equivalent in biological sciences with 1-3 years' lab experience, with a particular interest in arthritis and in vivo pharmacology required. **Job Code: 2151**



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KNOWLEDGE IS POWERFUL MEDICINE

The Discovery Research Component of Elanco Animal Health Research and Development, a division of Eli Lilly and Company, has an immediate opening for a Postdoctoral Fellow. The successful candidate will be part of an interdisciplinary approach to study the immunopathophysiology (e.g. cytokine activity, dynamics of effector cell phenotype and function) of enteric infections on growth and performance in poultry. The candidate should have formal training in either parasitology, immunology, or molecular biology with strong desire to broaden their skills in the other disciplines. We are seeking a highly motivated individual who possesses excellent oral and written communication skills.



St. Jude Children's Research Hospital

ALSAC • Danny Thomas, Founder

An NCI-funded postdoctoral position is available to participate in studies on signal transduction pathways activated by G-protein coupled neuropeptide receptors in astrocytic brain tumors. The role of substance P and bombesin-like neuropeptide receptors in enhancing the proliferation of brain tumor derived cells is being investigated using biochemical, pharmacological, and molecular approaches (see Luo, W., Sharif, T. R., and Sharif, M. *Cancer Research* 56: 4983-4991, 1996). Candidates should have a strong research experience and preferably a recent Ph.D. in Molecular Biology, Cell Biology, Neuroscience, or related fields. Strong interest in astrocytic brain tumor biology and research is a plus.

St. Jude Children's Research Hospital (Danny Thomas, Founder) is an outstanding research center for biomedical research and provides an exceptional environment for scientific achievement and career development. Send a letter of interest, curriculum vitae and names of three references to: **Dr. Mohammed Sharif, Dept. of Molecular Pharmacology, St. Jude Children's Research Hospital, 332 N. Lauderdale, Memphis, TN 38105. Fax: (901) 521-1668.**

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MetaMorphix, Inc. is a fast growing biopharmaceutical company focused on the discovery, development and commercialization of pharmaceutical proteins as new therapies for the repair and regeneration of human organs and tissues. The Company's core technology is the discovery, characterization and development of products based on growth and differentiation factors (GDF's), a novel family of genetically related protein factors which function to regulate the development and repair of different tissues and organs throughout the body. MetaMorphix expects to identify therapeutic candidates for development and commercialization. Several GDF's have already shown promising activity and could result in products to treat neuromuscular disorders, muscle wasting diseases, liver diseases, female infertility and reproductive disorders.

MetaMorphix was formed in 1995 as a joint venture between The Johns Hopkins University School of Medicine and Genetics Institute, Inc., both leaders in the discovery and development of GDF's and related growth factors. The success of the venture has resulted in the discovery of 25 of the 33 currently known forms of GDF.

MetaMorphix is now staffing for its new laboratory facilities at the University of Maryland Baltimore Campus Technology Center and has openings for Research Managers, Senior Research Scientists, Research Scientists and Research Associates.

Manager, External Collaborations; Histology & Animal Physiology Scientist

A Ph.D. in Animal Physiology or Animal Science or a DVM with 6-10 years of research experience beyond the advanced degree. The position will be responsible for establishing university contracts, negotiating and setting up collaborations, as well as bench level research activities. The candidate will have had experience with developing animal models in one or more of the following: muscle wasting or neuromuscular models; reproduction and infertility; or models of liver regeneration. In addition, the successful candidate will have a strong background in histology and histomorphometric methods. The successful candidate will also hire and supervise histology technicians. (Position AP).

Senior Research Scientists - Molecular Biology

Ph.D. in Molecular Biology with 4-8 years of post Ph.D. experience including 1-3 years as a post doctoral fellow and 2-6 years as bench level researcher at a biotechnology company. The candidates should have experience with microinjection methods, cloning and expression and methods for developing transgenic animals. Experience with supervising technical staff is highly desired. (Position MB).

Senior Research Scientists - Protein Chemistry/Analytical Chemistry

Ph.D. in Biochemistry or Analytical Chemistry with 4-8 years of post Ph.D. experience, including 1-3 years as a post doctoral fellow and 2-6 years in a biotechnology company. Experience with characterizing protein structure and analytical assay development is essential. In addition, it is highly desirable that the candidate have experience with protein purification methods. The successful candidates will be required to hire and supervise laboratory's technical staff. (Position PC).

Research Scientists - Cell/Receptor Biology

Ph.D. in Cell Biology or Biochemistry with 3-4 years of post doctoral experience. The candidates will have experience with developing cell based assays, receptor binding assays and receptor cloning. The candidates should have experience with developing skeletal muscle cell culture assays to measure proliferation and differentiation. (Position CB).

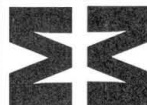
Research Scientists - Immunology

Ph.D. in Immunology with 3-4 years of post doctoral experience. The candidates will have experience with developing and characterizing polyclonal and monoclonal antibodies, quantitative immunoassays, *in vitro* neutralization assays and immunohistochemistry methods. (Position I).

Research Associates - Biology

MS or BS degree in a biological science and 2-3 years of bench level laboratory experience. Candidates should have experience in any of the following fields: cell biology, receptor biology, molecular biology, immunology, protein chemistry or physiology. (Position RA).

At MetaMorphix, there is an entrepreneurial environment offering excellent opportunities for outstanding scientists to flourish. If interested and qualified, send cover letter and resume (indicating appropriate position code) to:



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BIOINFORMATICS ENGINEER

This position offers you the responsibility of designing and implementing sequence analysis and gene selection strategy for large-scale resequencing and expression monitoring programs. You'll collaborate with scientists in molecular biology and chip design to identify, characterize, select and prepare sequences for inclusion in DNA chip designs. We will entrust you with setting up mirror sites, sequence formatting, and selecting and integrating algorithms for clustering, alignment, filtering and characterization. Requires an MS/BS in Biology, Computer Science, Mathematics or Statistics supported by experience in the analysis of biological sequence data and familiarity with the principles of biochemistry and molecular biology. Additional experience in software development (with emphasis on integration of existing tools) is necessary; experience with existing public sequence analysis tools is desirable. You must have good communication skills and work well in a multidisciplinary environment applying your strong problem-solving skills and biological insight into the analysis of complex data. Job Code MC00

DATABASE SOFTWARE ENGINEER

Here's the chance to build a new database from the ground up and enter the exciting field of bioinformatics. Working alongside an interdisciplinary team of research scientists and engineers, you will design and develop database software to manage the information flow in a complex data environment integrating experimental results, patient data, analysis tools, and external databases. A degree in CS/EE (prefer MSc or BSc and up to 3 years of experience) and technical expertise in database development and user-interface development are essential. Familiarity with bioinformatics and molecular biology and data analysis experience would be assets. Job Code DM170

STAFF SCIENTIST

Working closely with our interdisciplinary team of engineers and scientists, you will develop and validate new integrated sample-preparation systems. This will include modifying and optimizing enzyme-based sample-preparation protocols for integrated DNA diagnostic systems. You will also evaluate assay performance by quantifying RNA, DNA and enzyme activity and test the effects of materials, volume and ambient exposure on these reactions. Your PhD in Molecular Biology, Bioengineering, Physical Chemistry, Chemical Engineering or related field should be supported by 2+ years' hands-on laboratory experience and a working knowledge of molecular biology protocols; familiarity with in vitro diagnostic systems a plus. Excellent communication and documentation skills a must. Job Code RA37

Offering a small company atmosphere with big scientific potential, Affymetrix provides attractive salaries, comprehensive benefits, and the exhilarating synergy of our world-class multidisciplinary team. For consideration, please mail or fax your resume indicating Job Code of interest to: Affymetrix, Human Resources, 3380 Central Expressway, Santa Clara, CA 95051; Fax (408) 481-0422; or visit us at www.affymetrix.com. We are an equal opportunity employer.



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Letters of inquiry should include: curriculum vitae, statement of research interests, list of publications, and names of three references. (Predoctoral programs are in conjunction with the University of Maine and Yale University.) To apply or request further information, contact: **Suzanne Serreze, The Jackson Laboratory, 600 Main St., Bar Harbor, ME 04609-1500. Phone: 207/288-6420; FAX: 207/288-6079; email: sbs@jax.org; website: <http://www.jax.org>. EE/AA Employer.**

PRODUCTION ASSOCIATES

Stratagene, a leader in the development and manufacture of molecular biology research products in La Jolla (San Diego), is seeking experienced Production Associates. Responsibilities for these 2 positions include quality control, process development, and troubleshooting kits and proteins pertaining to both molecular and cell biology. Requires a BS/BA in Molecular Biology or Biochemistry and at least 4-7 years' experience. Manufacturing experience preferred.

Stratagene offers a rewarding work environment in beautiful La Jolla, a competitive salary and excellent benefits. Send resume to: **STRATAGENE, 11011 N. Torrey Pines Rd., La Jolla, CA 92037, Attn: Professional Staffing/Reqs. 32028-97R/32029-97R. Drug and alcohol testing required. AA/EOE.**



STRATAGENE®



The USDA, Agricultural Research Service (ARS), Center for Medical, Agricultural, and Veterinary Entomology, Gainesville, Florida is seeking two **RESEARCH ENTOMOLOGISTS**, GS-0414-11/12. Salary is commensurate with experience (GS-11: \$37,507-\$48,761 per annum; GS-12: \$44,953-\$58,442 per annum). *Candidates must be U.S. citizens.*

Announcement Number ARS-D7S-0128 - The position involves planning and conducting experiments, evaluating and interpreting data, and reporting the findings of research as part of a highly-technical team research program designed to develop new, effective, environmentally acceptable technologies and strategies for proactively managing lepidopterous insects attacking field and vegetable crops using insect pheromones and other semiochemicals. In addition to the basic educational requirements, applicants must demonstrate: 1) Ability to conduct research and report research findings; 2) Skill in experimental design and use of statistics for basic and applied research; 3) Knowledge of insect behavior, ecology, and population dynamics; 4) Knowledge of integrated pest management systems in horticultural, field, or vegetable crops; and 5) Skill in designing and conducting laboratory and field assays to isolate and identify pheromones and other chemicals that mediate sexual feeding or host-finding behavior of Lepidoptera. For more information on the research program contact: **Dr. Everett R. Mitchell, Telephone: 352-374-5710. Email: emitchell@gainesville.usda.ufl.edu.**

Announcement Number ARS-D7S-0129 - The position involves planning and conducting experiments, evaluating and interpreting data, and reporting the findings of research as part of a highly technical team research program designed to develop new, effective technologies and strategies for detection of insect pests of stored products. In addition to the basic educational requirements, applicants must demonstrate: 1) Ability to conduct research and report research findings; 2) Knowledge of insect behavior and ecology; 3) Skill in the use of experimental design, statistics and computer analysis; 4) Knowledge of practices and requirements for protection of postharvest commodities from damage by stored product insects; 5) Knowledge of biological assays of volatile attractants and practical application of semiochemicals to monitor populations of insect pests. For more information on the research program contact: **Dr. Herbert Oberlander, Telephone: 352-374-5700. Email: hoerberlander@gainesville.usda.ufl.edu.**

For information on application procedures/forms and a copy of the vacancy announcement, contact Carroll Godfrey, Telephone: 352-374-5861. Applications submitted in response to this advertisement must include announcement number, must be postmarked by July 21, 1997, and mailed to: **USDA, ARS, HRD, Southern Operations Branch, 6305 Ivy Lane, Room 348, Greenbelt, MD 20770-1435. USDA/ARS is an Equal Opportunity Employer.**

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■ Candidate will head a Biologics Pilot Plant and will lead a team of scientists in process evaluation and manufacturing scale-up for plasma derived biologic products. The Pilot Plant is also used for the manufacture of final product lots for human clinical trials and coordination of this activity is necessary to maintain cGMP conditions. Process development work will focus on unit operations such as chromatography and membrane separations. Interactions with other Technology groups, Process Engineering and Process Transfer will be required. We require a Ph.D. in Biochemistry, Chemical Engineering or related field with a minimum of eight years of experience in the pharmaceutical or biotechnology industries. Relevant experience in protein purification and working knowledge of protein chemistry are essential. Familiarity with scale-up of protein separation techniques such as chromatography and ultrafiltration is needed. Prior work experience should include supervision of others in the context of a process development team. The candidate must have an understanding of GLP and GMP conditions. Strong communications skills are required. **Response Code 97-02.**

PROCESS DEVELOPMENT SCIENTIST/SR PROCESS DEVELOPMENT SCIENTIST

■ The incumbent will be a member of the Process Engineering Group of the Technology Department and will contribute to the development of new purification processes for plasma proteins. The process optimization work will center around unit operations such as chromatography, membrane separation and filtration. Major focuses will be the scale-up from macro-bench to pilot-scale and beyond. The incumbent will interface with project engineering and play a major role in the realization of new processes. We require a Ph.D./MS degree in Chemical Engineering, with a minimum of four years experience in process development or manufacturing in the pharmaceutical or biotechnology industries. Working knowledge in protein chemistry as well as experience in project engineering is preferred. **Response Code 97-85.**

■ ...and there's one more fact. If you're ready to join us, there's no better time than now. For immediate consideration, please forward your resume (**indicating response code**) including salary history to: **RF/Human Resources, Bayer Corporation, Pharmaceutical Division, P.O. Box 507, Clayton, NC 27520.** No agencies or phone calls please. For more information on Bayer, search:

<http://www.careermosaic.com/cml/bayer/>

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FACULTY POSITION

THE SCHEPENS EYE RESEARCH INSTITUTE HARVARD MEDICAL SCHOOL

The Schepens Eye Research Institute, an affiliate of Harvard Medical School, seeks well-qualified (M.D., M.D./Ph.D. or Ph. D.) applicants for a position at the advanced Assistant or Associate Professor level to develop a basic research program in molecular biology and genetics of retinal development (preferably mammalian), with potential relevance to retinal transplantation. Resources and newly renovated laboratory space for this program are provided by a generous gift that has enabled the creation of the Minda DeGunzburg Retinal Transplantation Center. Candidates should have experience at the faculty level in creating, sustaining and supporting an independent research program. The successful candidate should have an expertise in areas such as differentiation, proliferation or programmed death of developing retina; regulation of signal transduction and gene expression in retinal development; microenvironmental factors that promote or modify retinal development. Candidates are expected to establish their own independent research programs, and to develop substantive collaborations with other members of the Retinal Transplantation Center, as well as with Institute scientists currently working on retinal development and pathobiology, to be active in training of pre- and post-doctoral fellows, and to participate as a member of the Harvard Medical School faculty.

Applicants should send their curriculum vitae, a statement of research interests, and the names of three references by September 30, 1997 to:

***J. Wayne Streilein, M.D.
President and Director of Research
Professor of Ophthalmology and Dermatology
Harvard Medical School
20 Staniford St.
Boston, MA 02114***

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Please submit: resume or CV, copies of transcripts, accomplishments and publications, a list of honors, awards and invitations to: **USDA, ARS, HRD (REDS), 6305 Ivy Ln, Rm 114, Greenbelt, MD 20770.**

<i>OCCUPATION</i>	<i>LOCATION</i>	<i>SPECIALIZATION</i>
Agricultural Engineer	Stoneville, MS	Lint cleaning machinery
	Stoneville, MS	Aerial pest control
Research Chemist	Beltsville, MD	Techniques for inspection/grading
	Clay Center, NE	Waste utilization
	Clay Center, NE	Biological engineering
	Beltsville, MD	Organic components in food
	Philadelphia, PA	Modification of fatty acids
	Oxford, MS	Phytotoxin/antimicrobial compounds
	New Orleans, LA	Cellulosic materials production
	New Orleans, LA	Allergenicity of peanut proteins
	Clay Center, NE	Genome mapping in livestock
	Logan, UT	Plant toxins and immune systems
	Peoria, IL	Protein modification
	Peoria, IL	Carbohydrate processing
	Peoria, IL	Molecular modeling
	Corvallis, OR	Fruit flavor characterization

Ph.D. preferred. U.S. citizenship is required. Indicate the position(s) in which you are interested. The person selected would be expected to develop a research program in the area of specialization. More information about ARS is available at <http://www.ars.usda.gov> on the ARS Home Page.

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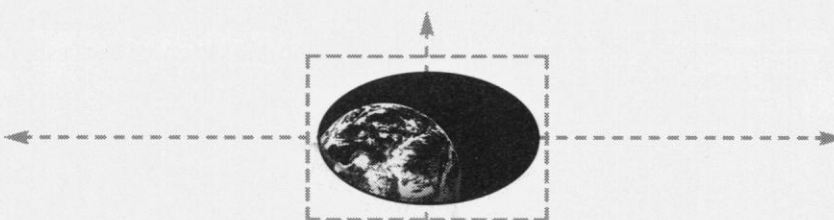
Requirements include a PhD in Biochemistry, Cell Biology, or related field with 2+ years experience or equivalent. Must have a broad background and experience with a number of systems. Work in collaborative efforts a plus.

Requirements for MS/BS position include a background in Biochemistry or related field with 2+ years experience or equivalent. Persons with experience in high throughput screening are preferred.

Our location, in Wilmington, DE, offers an attractive lifestyle with easy access to all the cultural, academic and recreational activities of the Eastern Seaboard. The DuPont Merck Pharmaceutical Company can offer you an excellent compensation and benefits package. To be considered, please forward your resume, indicating position of interest, to: Human Resources-EG/LD, The DuPont Merck Pharmaceutical Company, Experimental Station, 400/2413, P.O. Box 80400, Wilmington, DE 19880-0400. An equal opportunity employer M/F/D/V.

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IMMUNOASSAY DEVELOPMENT SPECIALIST (PhD)

The successful candidate will be responsible for the development of new immunochemical techniques used for the characterization of gene expression in genetically modified plants. Qualified candidates should possess a PhD in a biological science which is closely allied with immunology or biochemistry and at least five years of experience in the diagnostics industry. A strong background in immunoassay development (ELISA, lateral flow, fluorescence, RIA) is required. The selected candidate will have excellent interpersonal and organizational skills; and a demonstrated ability to lead a diverse team of highly motivated professionals. **Job Code: IDS**

ANALYTICAL BIOCHEMIST (PhD)

The successful candidate will be responsible for the development and application of analytical methods for the characterization of proteins and small molecules expressed/produced in genetically modified plants. The responsibilities include all aspects for characterization and quantitation of proteins including protein sequencing, peptide analysis, densitometric procedures, enzyme assays, HPLC and protein MS and NMR. Experience with methods for protein purification and immunological-base protein assays is highly desirable. A background in the isolation, derivatization and identification of small molecules will be an advantage. The position requires a PhD in Biochemistry or a related discipline with 2-3 years of biochemical research experience in analytical protein biochemistry. The selected candidate will have strong interpersonal, oral, and written communication skills and the ability to thrive in a dynamic team-based work environment. Knowledge of GLP and/or GMP is highly desirable. Familiarity with FDA guidelines for protein isolation and characterization will also be an advantage. **Job Code: AB**

PLANT MOLECULAR BIOLOGIST (BS/MS)

The successful candidate will develop new diagnostic skills and techniques designed to characterize the molecular genetic events required for the production of genetically modified plants. This position requires a BS or MS scientist with superb plant molecular biology skills. Specific responsibilities include: plasmid and genomic DNA isolation, analysis of DNA using restriction enzymes, gel electrophoresis, Southern blot analysis, DNA probe construction, PCR and cloning. Knowledge of word processing, spreadsheet and DNA analysis software is essential. Experience with RFLPs, AFLPs, and marker-assisted plant breeding; and knowledge of good laboratory practices (GLP) will be an advantage. The ability to work in a team-based environment and effective communication skills are essential. **Job Code: PMB**

PROTEIN BIOCHEMIST (BS/MS)

The successful candidate will be responsible for all aspects of the protein safety evaluation of agricultural biotech products. The responsibilities include microbial fermentation, large/small scale protein purification, enzyme assays, Western blot analysis, study protocol development, data presentation and report writing. The position requires a BS or MS in the biological sciences and 2-3 years of biological research experience in microbial fermentation, protein isolation and purification, FPLC, enzyme assay development, etc. The selected candidate should have good analytical, interpersonal and communication skills. Knowledge of GLP will be an advantage. **Job Code: PB**

There's only one thing more diverse than Monsanto's global business units - our talented group of professionals. To join them in a unique environment that's specifically designed for communication and innovation, please fax, mail or e-mail your resume to: **The Monsanto Company, Attn: Ms. Diana L. Kester, Job Code: (please select), 700 Chesterfield Parkway North, Mail Zone: GG4K, St. Louis, MO 63198. Fax: 314-737-6189 or Email: dlkest@monsanto.com** Visit our website at <http://www.monsanto.com> EEO/AA Employer M/F/D/V.

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POSITIONS OPEN

ASSISTANT PROFESSOR OF MICROBIOLOGY UNIVERSITY OF PENNSYLVANIA

The Department of Pathobiology, Laboratory of Microbiology and Immunology, in the School of Veterinary Medicine, University of Pennsylvania (PENN) is seeking an outstanding scientist for a tenure-track faculty position, preferably at the ASSISTANT PROFESSOR level. The candidate must have a Ph.D. or a combined Ph.D./V.M.D./M.D. degree and extensive postdoctoral training. The successful candidate is expected to develop a high-quality, independent research program in basic viral-host or bacterial-host interactions funded by extramural support. The School of Veterinary Medicine is located on the same campus as the Schools of Medicine and Dental Medicine as well as undergraduate departments of the University and as the nearby Wistar Institute. The PENN campus thus offers opportunities for collaborative research in many areas of infectious disease. The successful candidate will be expected to participate in the teaching program of the school. Faculty in many biomedical areas are involved in a well-established integrated program of graduate student and postdoctoral training. Applicants should send a letter that includes a statement of research interests, curriculum vitae and bibliography. The candidate should also include a list of three referees and arrange to have letters of recommendation sent directly to the Chair of the Search Committee. The completed application should be received by July 15, 1997 and should be sent to:

Dr. Roselyn J. Eisenberg
Professor of Microbiology and Chair of the Search Committee
Laboratory of Microbiology and Immunology
School of Veterinary Medicine
4010 Locust Street
Philadelphia, PA 19104-6002

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

WAYNE STATE UNIVERSITY SCHOOL OF MEDICINE ASSOCIATE/FULL PROFESSOR

The Departments of Physiology and of Psychiatry and Behavioral Neurosciences have an opening for a joint appointment at the rank of ASSOCIATE/FULL PROFESSOR with tenure. We are seeking candidates with an established research record on the cellular/molecular basis of synaptic transmission, to complement a growing inter-departmental neuroscience group. The successful candidate will be expected to continue a strong, extramurally-funded, research program and assume some teaching responsibilities within the Medical School. Laboratory space will be located in Gordon H. Scott Hall which houses basic research for the Medical School, including Physiology and Psychiatry and Behavioral Neurosciences. Significant space and a generous start-up package will be available to the successful candidate. Review of applications will begin July 1, 1997 and will continue until a suitable candidate is recruited. Applicants should send a curriculum vitae, research plan, and the names of three references to: **Dr. Dixon Woodbury, Search Committee Chair, Department of Physiology, Wayne State University, 540 East Canfield, Detroit, MI 48201.** *Wayne State University—People working together for quality service. All buildings, structures and vehicles at WSU are smoke-free. WSU is an Equal Opportunity/Affirmative Action Employer.*

MICROBIAL ECOLOGY

The Department of Microbiology, University of Ulsan seeks candidates for a full-time faculty position at the ASSISTANT PROFESSOR level, available September 1997. Applicants should have a Ph.D., postdoctoral experience, expertise in microbial ecology. Applications should include curriculum vitae, list of publications, two letters of recommendation, academic records and a residential certificate. Send all materials to: **Recruit Committee, University of Ulsan, Ulsan, Kyongnam 680-749, Korea.** Deadline for application: June 17, 1997. For further information, Telephone: 82-522-259-2008.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR INDUSTRIAL PHARMACY Campbell University School of Pharmacy

The Department of Pharmaceutical Sciences at Campbell University School of Pharmacy invites applications for a twelve-month position in industrial pharmacy. The successful candidate should have a Ph.D. in pharmaceutical sciences or related discipline and experience in the pharmaceutical industry. A one-year postdoctoral training in a related area is preferred but not required. The primary responsibilities include teaching industrial pharmacy to undergraduate B.S. Pharmaceutical Sciences students, and assisting in teaching pharmaceuticals laboratory and possibly other courses to Doctor of Pharmacy students. In addition, the successful candidate will be expected to establish a research program within the School of Pharmacy. Opportunities are available and encouraged for collaboration with the basic sciences and clinical faculty.

Campbell University School of Pharmacy was founded in 1986. The School offers an entry-level Pharm.D. and B.S. in Pharmaceutical Sciences degrees. The greater Raleigh area is considered one of the top regions in the United States for quality family living.

This position is available immediately and is open only to citizens or permanent residents of the United States. Please submit a letter of interest, a curriculum vitae, and the names and addresses of three references to:

Dr. Emanuel J. Diliberto, Jr.
Chair, Pharmaceutical Sciences Department
Campbell University
School of Pharmacy
P.O. Box 1090
Buies Creek, NC 27506
Telephone: 910-893-1696
FAX: 910-893-1697

Campbell University is an Equal Opportunity Employer.

PLANT TRANSFORMATION BIOLOGIST KANSAS STATE UNIVERSITY

ASSISTANT PROFESSOR; Tenure-track, 90% research, 10% teaching. Establish a strong, extramurally funded research program in crop plant transformation, with an emphasis on wheat; participate in Center activities, including broad interdepartmental collaborative research; develop and teach a course in a related area; advise graduate students. Qualifications: Ph.D. in a plant science or related area; research experience in plant transformation, preferably cereal crops; demonstrated excellence in research; ability and desire to teach and to guide graduate students and postdoctoral fellows. Relevant postdoctoral experience preferred. Twelve-month position, available February 1, 1998, in the Department of Plant Pathology and affiliated with the Plant Biotechnology Center (established in 1996; Center designation is pending approval from the Board of Regents).

Send application, including transcripts, résumé, copies of relevant publications, and a summary of research interests, and have three letters of reference sent, to: **Fred W. Schwenk, Head, Department of Plant Pathology, Throckmorton Hall, Kansas State University, Manhattan, KS 66506-5502. Email: fws@plantpath.ksu.edu.** See also: <http://www.ksu.edu/plantpath/plantbiotech>. Applications will be reviewed beginning October 1, 1997. *Kansas State University is an Equal Opportunity/Affirmative Action Employer.*

FULL-TIME TENURE-TRACK position in the Wildlife Department; requires a Ph.D. or near completion, with demonstrated expertise in wildlife biology and management, waterfowl ecology and management, and wildlife management techniques. Successful college teaching preferred. Successful candidate will teach courses in waterfowl ecology and management, wildlife management techniques, and other courses as assigned. Rank and salary dependent on candidate's qualifications and experience. Starting date may be 12 January or 15 August 1998, depending on candidate's availability. Submit curriculum vitae, transcripts of academic work, three letters of recommendation, and any other pertinent materials to: **Richard G. Botzler, Department of Wildlife, Humboldt State University, Arcata, CA 95521-8299. Telephone: 707-826-3953. FAX: 707-826-4060. Email: rgb2@axe.humboldt.edu.** Closing date is 1 September 1997, or until position filled. *Humboldt State University is an Equal Opportunity, Affirmative Action, Title 9 Employer.*

POSITIONS OPEN

MASS SPECTROMETRY UNIVERSITY OF COLORADO HEALTH SCIENCES CENTER SCHOOL OF PHARMACY

The Department of Pharmaceutical Sciences invites applications for a tenure-track faculty position at the level of ASSISTANT PROFESSOR from individuals with a Ph.D. degree and a strong background in mass spectrometry. The successful candidate will be expected to establish an extramurally funded research program utilizing modern LC/MS/MS technology, and to collaborate with the University of Colorado Cancer Center Experimental Therapeutics program in studies of the pharmacokinetics of novel anticancer agents. Experience in quantitative LC/MS analysis, pharmacokinetics, and drug metabolism is essential. Teaching responsibilities will include pharmacokinetics at the undergraduate level and special topics within the pharmaceutical sciences and toxicology graduate programs. Send letter of interest, curriculum vitae, and contact information for three references to: **Dr. David Ross, Professor and Chair, Mass Spectrometry Search, Department of Pharmaceutical Sciences, School of Pharmacy, University of Colorado Health Sciences Center, 4200 East Ninth Avenue—C238, Denver, CO 80262.**

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

ASSISTANT PROFESSOR MOLECULAR PHARMACOLOGY

The Department of Pharmacology, University of Missouri-Columbia, invites applications for a tenure-track position. Candidates should demonstrate potential for independent research in any of the following areas: structure, function and regulation of neurotransmitter, hormone, and growth factor receptors; membrane transport proteins and ion channels; or molecular mechanisms of transmembrane signaling. The successful candidate will be expected to establish an externally funded research program and to participate in teaching graduate and medical students. Please send curriculum vitae, a one-page description of research plans, and arrange for three letters of reference to be sent by August 1, 1997, to: **Dr. Hyun Dju Kim, Professor and Chairman, Department of Pharmacology, University of Missouri-Columbia, M517B Medical Sciences Building, Columbia, MO 65212, or by Email: donna_taylor-stearns@mucmail.missouri.edu. FAX: 573-844-4558.** *An Equal Opportunity/Affirmative Action Employer complying with 1990 ADA guidelines.*

DIRECTOR, VASCULAR BIOLOGY INITIATIVE

Albert Einstein College of Medicine/Montefiore Medical Center

A position is available to lead a new multidisciplinary AECOM vascular biology initiative. The successful applicant will recruit additional faculty and develop a program to investigate fundamental questions in vascular growth and function. Evidence of successful competition for extramural funds is required; generous start-up packages and lab space are available. The primary appointment will be in the Department of Medicine, with secondary appointments in related disciplines. Please forward curriculum vitae to: **J. Anthony Ware, M.D., Chief, Cardiovascular Division, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Forchheimer Building-G42, Bronx, NY 10461. Telephone: 718-430-3087; FAX: 718-430-8989.** *An Equal Opportunity Employer.*

The Division of Human Genetics of the Children's Hospital Research Foundation seeks a Ph.D. ASSISTANT PROFESSOR to join an expanding Program in Human/Medical Genetics. Molecular genetics, transgenic/knockout mouse, enzymology and/or protein biochemistry expertise required. Send curriculum vitae and three letters of support to: **Gregory A. Grabowski, M.D., Director, Division and Program in Human Genetics, Children's Hospital Medical Center (CHMC), 3333 Burnet Avenue, Cincinnati, OH 45229-3039.** *CHMC is an Affirmative Action/Equal Opportunity Institution. Women and minorities are encouraged to apply.*

**Tenure Track Position
Assistant Professor Equivalent
Molecular Human Carcinogenesis
Laboratory of Human Carcinogenesis
Division of Basic Sciences**

A tenure-track position is available for a Ph.D., M.D., or M.D./Ph.D. scientist to develop an independent research program investigating the molecular carcinogenesis of human lung, liver, or esophageal cancer. Candidates should have extensive experience and a record of scientific accomplishment in the functional analyses of cellular and viral genes involved in the neoplastic transformation of human cells. Expertise in both cellular and molecular biology is required. Experience in protein chemistry also is desirable. Candidates should have a substantial number of quality, peer-review published reports; and invited presentations at national and international conferences. Support by a technician, a doctoral fellow, and resources to equip a laboratory will be provided to the successful candidate. A two-page statement of research interests and goals should be submitted in addition to three letters of recommendation and a curriculum vitae to: **Mr. Patrick Miller, National Cancer Institute, NIH, 41 Library Drive, MSC 5055, Room A206, Bethesda, MD 20852, (301) 496-3667.** Applications must be received within one month of this announcement. *The National Cancer Institute is an Equal Opportunity Employer. Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, religion, gender, national origin, politics, marital status, physical or mental disability, age, sexual orientation, or membership or nonmembership in an employee organization.*

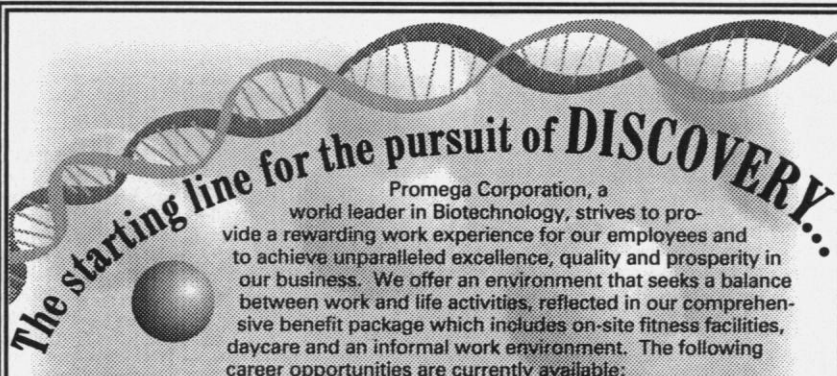
**INSTRUCTIONAL
SPECIALIST**

The Department of Molecular Genetics & Microbiology at the State University at Stony Brook invites applications for a permanent position at the level of University Instructional Specialist. The Specialist will be responsible for teaching undergraduates microbiology, supervising departmental central laboratory facilities, ensuring the safe and efficient operation of all physical facilities, and coordinating the submission of proposals for funds to rehabilitate laboratory facilities and purchase new pieces of equipment. A Ph.D. in a biological science is required. Closing date for receipt of application is July 30, 1997.

Send applications to Dr. Janet Hearing, Chair, Search Committee, Department of Molecular Genetics and Microbiology, c/o Janet Youngblood, Life Sciences Building, SUNY Stony Brook, Stony Brook, New York 11794-5222.

An AA/EO employer.

**STONY
BROOK**
STATE UNIVERSITY OF NEW YORK



The starting line for the pursuit of DISCOVERY...

Promega Corporation, a world leader in Biotechnology, strives to provide a rewarding work experience for our employees and to achieve unparalleled excellence, quality and prosperity in our business. We offer an environment that seeks a balance between work and life activities, reflected in our comprehensive benefit package which includes on-site fitness facilities, daycare and an informal work environment. The following career opportunities are currently available:

SENIOR PRODUCTION SCIENTIST - PROTEIN PURIFICATION

This position performs all duties necessary for the production of antibody products for inventory, and participates in transferring new antibody products and technologies from R&D to production. Qualifications include a Ph.D. or equivalent; experience with immunohistochemistry and immunocytochemistry; a background in immunology or a related field; and extensive experience (2-3 years) with relevant applications including ELISA, Western Blot, Dot Blot and the purification and characterization of polyclonal and monoclonal antibodies. A strong interest in producing commercial antibody products is mandatory. Additionally, candidates should possess great attention to detail, excellent communication skills, the desire and ability to work as part of a team and the ability to use computer equipment. **Job Code: 12104MK.**

PRODUCTION SCIENTIST - PROTEIN PURIFICATION

This individual conducts quality testing for products and performs enzyme purifications. Requirements include a minimum of a BS in Biotechnology, Biochemistry or a related field; 2+ years of manufacturing/industrial experience with enzymes using analytical and preparative scale column chromatographic separations; a proven interest in enzyme purification; attention to detail and good communication skills (especially written); the desire and ability to work as part of a team; and computer proficiency. A background in process and assay automation and 2+ years of experience with protein chemistry analytical techniques is preferred. **Job Code: 12100MK.**

SENIOR PRODUCTION SCIENTIST - CELL BIOLOGY

The qualified candidate will be responsible for the manufacturing and quality testing of components/kits as well as supporting the technology transfer process with the cell regulation and neurobiology product lines. Qualified candidates must have a BS/MS/Ph.D. degree in Molecular Biology, Microbiology, Biochemistry or related field; and outstanding tissue culture, organizational and multi-tasking skills. An extensive background in at least 2 of the following areas is also necessary: ELISAs; Growth factor assays; Transfection; Apoptosis. A minimum of 3-4 years of industrial experience in manufacturing, R&D, or QA is preferred. **Job Code: 12104LM.**

PRODUCTION SCIENTIST - NUCLEIC ACID CHEMISTRY

This position manufactures and quality tests components/kits as well as supports new product transfer in the nucleic acid purification and sequencing product areas. The qualified individual should possess a BS/MS degree in Molecular Biology, Microbiology, Biochemistry or a related field; 4+ years in a manufacturing position within a related area; experience in using solid and solution phase extraction methods for DNA and RNA; a background in the manufacture or use of systems for automated sequencing or extraction/purification of nucleic acids; laboratory experience in nucleic acid purification, sequencing and a working knowledge of molecular biology techniques; a background in performing radioisotope-based assays; and computer proficiency (or a willingness to learn) to track inventory and to use applicable programs. Knowledge of automated robotics systems and fluorescent sequencing as well as familiarity with TQM, SPC, cGMPs or ISO9000 is preferred. **Job Code: 12100CY.**

SENIOR R&D SCIENTIST-MAMMALIAN EXPRESSION

The chosen individual will develop products in the area of mammalian expression vectors and systems. A Ph.D. or equivalent in Molecular Biology or related field is required. Three plus years' laboratory experience including mammalian expression vectors, transcription regulation and analysis; and tissue culture, transfection, and nucleic acid manipulations is also required. The candidate will have 2+ years' in a project leadership position and should possess excellent written and verbal communication as well as presentation skills. **Job Code: 11104ES.**

For confidential consideration, please mail or e-mail your CV with salary requirements, indicating the JOB CODE of interest, to: **Promega Corporation, P.O. Box 7879, Madison, WI 53707-7879. E-mail: hr@promega.com.** To find out about other opportunities at Promega please call our **Career Opportunities Line at (800) 356-9526 option 9** or visit our website at **www.promega.com. EOE**



Promega

POSITIONS OPEN

ILLINOIS COLLEGE OF OPTOMETRY BASIC SCIENCE FACULTY POSITION ASSISTANT PROFESSOR

The Illinois College of Optometry invites applications for a full-time faculty position at the assistant professor level in the Department of Basic and Health Sciences with emphasis in one or more of the following areas: biochemistry, cell physiology, immunology, pharmacology, or physiology. This position will be available August 1, 1997. A Ph.D. in the relevant discipline is required. An O.D./Ph.D. is preferred. The primary responsibilities are teaching the basic sciences to optometry students and conducting a research program.

O.D. candidates must be graduates of an accredited school or college of optometry and be eligible for state licensure in Illinois, and could reduce their research commitment with clinical teaching.

Applicants should possess significant classroom teaching experience, the ability to interact with other faculty in the clinical environment, and a strong desire to establish an independent research program. Rank and salary will be commensurate with experience. A letter of intent, a current curriculum vitae, and the names and addresses of three professional references should be submitted by June 20, 1997 to:

Laura Rounce
Director of Human Resources
Illinois College of Optometry
3241 South Michigan Avenue
Chicago, IL 60615

The Illinois College of Optometry is an Equal Opportunity Employer.

Applications are invited for a tenure-track position at the **ASSISTANT PROFESSOR** level. Applicants should have two or more years of postdoctoral experience and should have the potential for establishing an active, externally funded research program. Interest and excellence in teaching are expected. The Stanley S. Scott Cancer Center, the Molecular and Human Genetics Center, the Neuroscience Center, and the Alcohol and Drug Abuse Center are integral components of the University. The professional schools of the Medical Center include those of Allied Health, Dentistry, Graduate Studies, Medicine, and Nursing. The Department can be visited through our home page at: <http://www.lsumc.edu/campus/bioc/>. Interested individuals should send a curriculum vitae with a bibliography, a short (three page) summary of planned research, and the names and addresses of three references to the following: **Robert Roskoski, Jr., Fred G. Brazda Professor and Head, Department of Biochemistry and Molecular Biology, Louisiana State University Medical Center, 1100 Florida Avenue, New Orleans, LA 70019-2799.** *LSUMC is an Equal Employment Opportunity/Affirmative Action Employer.*

RESEARCH ASSOCIATE/LABORATORY MANAGER POSITION available August 1997 to perform research on the role of oxidative stress and antioxidants in human disease. The successful candidate will have a Ph.D. in biochemistry or related field with at least three years of postdoctoral experience, a strong publication record and experience in cell culture, lipid and lipoprotein isolation and analysis, and HPLC. Responsibilities include training and supervision of laboratory personnel, management of laboratory operation and cell culture facilities, and development of grants. Send curriculum vitae, summary of research experience and interests, and names and telephone numbers of three references to: **Dr. Balz Frei, Director, Linus Pauling Institute, Oregon State University, 571 Weniger Hall, Corvallis, OR 97331-6512. Telephone: 541-737-5075; FAX: 541-737-5077.** *Oregon State University is an Affirmative Action/Equal Employment Opportunity Employer and has a policy of being responsive to dual-career needs.*

BIOINFORMATICS-SYSTEMS ANALYST: Requirements: B.S. in computer/information science or equivalent. Four years experience in database design, data modeling, data integration in a UNIX environment; Competent in World Wide Web and MS Windows applications design; prior experience with Sybase/Oracle or similar relational database management systems; familiarity with C++ and Java; background in biological sciences highly desired. **American Type Culture Collection, 12301 Parklawn Drive, Rockville, MD 20852, Attn: Human Resources.** For more information see: <http://www.atcc.org/>.

POSITIONS OPEN



**Agricultural
Research
Service** **United States
Department of
Agriculture**

ARS is seeking a **RESEARCH PLANT PATHOLOGIST/HORTICULTURIST** GS-0434-11/12 in the Molecular Plant Pathology Laboratory, Plant Sciences Institute, Beltsville Agricultural Research Center, in Beltsville, MD. Salary is commensurate with experience (GS-11: \$38,330-\$49,831 per annum; GS-12: \$45,939-\$59,725). The position involves planning and conducting independent and cooperative research on genetic modification for the improvement of important horticultural crops, especially sugarbeets. In addition to education and/or experience requirements, applicants must demonstrate the following basic knowledge, skills, and abilities: 1) knowledge of the principles, methods, techniques and procedures of molecular plant pathology and horticulture, and 2) ability to design, plan, and conduct research and publish results. The following selective placement factors must be addressed: 1) ability to design and construct genes for expression in horticultural crop plants using molecular techniques including molecular genetic transformation, gene cloning, DNA sequencing, and protein purification and characterization, 2) skill in investigating molecular mechanisms of disease resistance in plants, and 3) knowledge of plant cell and tissue culture techniques. For information on the research program, contact **Dr. Robert E. Davis at 301-504-5745.** To obtain application procedures/forms and a copy of the vacancy announcement, call **301-344-4638.** Applicants should follow the instructions in the vacancy announcement. Applications in response to this advertisement should be marked **ARS-D7B-114/B-7-22.**

USDA is an Equal Opportunity Employer

COORDINATOR OF CLINICAL RESEARCH.

The University of Nebraska Medical Center College of Dentistry is seeking a Coordinator of Clinical Research to direct programs in the new Center for Dental Research. A clinical research addition will be completed in 1997 which will house four clinical operatories, two clinical support laboratories, a data analysis center, reception area, and seminar and office space. In addition, nearly 9,000 square feet of renovated basic science laboratories will be available for clinical interactions. Applicants should be highly motivated, independent, and well-trained in research design, statistics, clinical trials and outcomes research, expanding patient data bases, teaching one basic statistics course, and developing industrial interest and support in the Center for Dental Research. D.D.S. and Ph.D. degrees would be desirable. The position is open immediately, and applications will be considered as they are received. Rank and salary will be commensurate with qualifications and experience. Please submit letter of interest and curriculum vitae to: **Dr. Richard Reinhardt, Director of Research, UNMC College of Dentistry, P.O. Box 830740, Lincoln, NE 68583-0740.** *Affirmative Action/Equal Opportunity Employer, Women, Minorities and the Disabled are Encouraged to Apply.*

The Division of Human Genetics of the Children's Hospital Research Foundation seeks an **ABMG-CERTIFIED ACADEMIC M.D.**, or M.D./Ph.D. with an established research/clinical expertise in complex genetic traits. Graduate and/or Fellow (Resident) training experience highly desirable. Will join an expanding Program in Human/Medical Genetics in developing interdisciplinary clinical/clinical research programs in complex genetic traits and training. Academic rank will be determined by candidate's credentials and experience. Excellent start-up support. Send curriculum vitae and three letters of support to: **Gregory A. Grabowski, M.D., Director, Division and Program in Human Genetics, Children's Hospital Medical Center (CHMC), 3333 Burnet Avenue, Cincinnati, OH 45229-3039.** *CHMC is an Affirmative Action/Equal Opportunity Institution. Women and minorities are encouraged to apply.*

POSTDOCTORAL POSITION available to study the neural control of food intake and weight regulation in nonhuman primates, using *in vivo* physiological recording methods, neurochemical approaches, and molecular biological techniques. A background in neuroscience is preferable. Send curriculum vitae and names of three references to: **Judy L. Cameron, Ph.D., Oregon Regional Primate Research Center, 505 NW 185th Avenue, Beaverton, OR 97006. FAX: 503-690-5633.**

POSITIONS OPEN

MICROBIOLOGIST/MOLECULAR BIOLOGIST—Appointment to begin August 1997. Salary \$28,000-32,000. Closing date: June 25, 1997. For details write: **Carol Young, Office of Human Resources, State University of New York, College of Agriculture and Technology, Cobleskill, NY 12043.** *An Affirmative Action/Equal Employment Opportunity Employer.*

MACAULAY LAND USE RESEARCH INSTITUTE PLANT SCIENCE GROUP Root Physiologist/Biochemist (Band 6 or Band 5)

Applications are invited for a senior position to study the impact of carbon partitioning at the whole-plant level on root exudation and rhizosphere carbon flow from grasses. This research will be part of a coordinated programme studying soil-plant-animal interactions involving two soil chemists, a soil microbiologist, and a plant ecophysiologicalist. The successful candidate will be expected to work as part of the team as well as developing significant collaborative links outwith the Institute. This core-funded post will be for three years in the first instance but may lead to permanent employment. A permanent post could be available for an outstanding candidate immediately.

A Ph.D. in plant physiology/biochemistry, soil-plant relationships, or plant nutrition and an interest in plant root systems is required, along with a minimum of two years of directly relevant research experience for Band 6 or four years experience for Band 5.

Starting salary, depending upon qualifications and experience, will normally be within the range—Band 5 £17,317-£23,954 per annum (performance related to a maximum of £30,9510), Band 6 £13,951-£19,425 per annum (performance related to a maximum of £24,900).

MLURI receives funding from the Scottish Office Agriculture, Environment and Fisheries Department.

Further particulars and application forms can be obtained from: **Personnel Administration, The Macaulay Land Use Research Institute, Craigiebuckler, Aberdeen, UK, AB15 8QH, Telephone: 01224-318611, FAX: 01224-311556, Email: e.cockburn@mluri.sari.ac.uk** to whom completed application forms must be returned by 30 June 1997. For informal enquiries about the post contact: **Dr. P. Millard (Head of Plant Science Group)** at the above telephone or FAX numbers or Email: **p.millard@mluri.sari.ac.uk.** Quote Ref. MA2/97.

There is a non-contributory superannuation scheme and MLURI is an Equal Opportunities Employer.

DIRECTOR OF RESEARCH SAFETY/EFFICACY TESTING

Liberty Research, Inc. provides contract research services to the companion animal health industry. We are seeking a talented and energetic individual who will play a major role in the growth and development of the company. This position requires a graduate degree in either toxicology or a related field with experience in safety and efficacy testing. Liberty offers a competitive salary, incentive pay, a 401K plan, and health insurance. Please apply in writing, enclosing your curriculum vitae/résumé, to: **Dr. Brian E. Johnson, Vice President of Research, Liberty Research, Inc., P.O. Box 107, Waverly, NY 14892-0107.**

POSTDOCTORAL POSITION available immediately to study macromolecular translocation across the nuclear pore complex using single molecule light microscopy. A Ph.D. in biophysics, biochemistry or a related field is preferred, but cell or molecular biologists interested in learning state of the art microscopy will also be considered. Please send curriculum vitae and three letters of reference to: **Drs. Laura I. Davis and Jeff Gelles, Rosenstiel Center MS 029, Brandeis University, Waltham, MA 02254.**

POSTDOCTORAL POSITION available after July 1, 1997 to construct a computational neural network model of multisensory integration in the superior colliculus. Background in systems neuroscience and experience in computer programming preferred. Send curriculum vitae, summary of relevant experience, and three letters of reference to: **Dr. Thomas J. Anastasio, University of Illinois, Beckman Institute, 405 North Mathews Avenue, Urbana, IL 61801; FAX: 217-244-5180; Email: tstanis@uiuc.edu.**



Project Ingenhousz

Arizona State University is inaugurating Project Ingenhousz, a University-wide project designed to enhance long-term interdisciplinary research and education in the rapidly developing field of light-driven biological and chemical processes and to promote the application of this knowledge to problems in science and engineering. Basic and applied interdisciplinary research on light-driven reactions such as photosynthesis holds great promise and offers broad impact in diverse areas such as the development of novel light-driven technologies and the optimal use of solar energy. This is particularly relevant in view of limitations in energy and food sources and of increasing CO₂ and pollution levels. Capitalizing on its leading position in photosynthesis and related fields, Arizona State University is poised to expand and broaden this area of excellence through a University-wide initiative.

Senior Faculty Positions: As one of the first steps in this process, applications are now being accepted for three senior-level tenured faculty appointments. These faculty will play leading roles in expanding the scope and depth of light-mediated biological and chemical interdisciplinary research at Arizona State University. These faculty are expected to have vigorous, highly visible research programs and to help collaboratively define and develop novel and imaginative research fields in this area. Some of these fields include light-mediated aspects of: Molecular Electronics, Biomolecular Devices, Biotechnology, Bioremediation and Biomedical Research. Joint research endeavors with industry are welcomed. Appointments will be made in Departments most suitable for the successful candidates.

Postdoctoral Fellowships: To catalyze interactive research between groups in engineering, the chemical and life sciences, and industry, applications are also being solicited from Ph.D.-level scientists and engineers to fill approximately 6-10 postdoctoral research associate positions. Successful candidates will work on collaborative projects involving two or more interdisciplinary research groups. The initial appointments will be 1.5-2 years. Appointments may be extended when warranted. Examples of projects are available on the web site specified below.

Industrial Liaison Position: Project Ingenhousz is expected to lead to the development of extensive collaborations between the basic and applied sciences and industry. To aid in this process, we are accepting applications for an administrative professional (industry liaison). The successful applicant is expected to have academic and industrial experience in a field related to the project and/or to have extensive industrial experience and a keen interest in science.

Web site: Additional information regarding Project Ingenhousz and requirements for these positions are available at the following URL: <http://photoscience.la.asu.edu/photosyn/Ingenhousz>.

Application Procedure: Applicants must send a letter, a detailed curriculum vitae, and a list of the names, addresses and telephone numbers of three professional references to: **Patrick J. Burkhart, Office of the Senior Vice President and Provost, Arizona State University, PO Box 873403, Tempe, AZ 85287-3403.** First screening of these applications will begin July 1, 1997.

ASU is an equal opportunity/affirmative action employer.



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

ALSAC • Danny Thomas, Founder

Postdoctoral Positions in Neurosciences

The Department of Developmental Neurobiology at St. Jude Children's Research Hospital (SJCRH), which is dedicated to the investigation of fundamental questions in contemporary neurobiology, currently has several openings in three research groups for postdoctoral fellows specializing in **neuroanatomy** and/or **developmental neurobiology**. These groups are:

Tom Curran, PhD- We are currently analyzing the molecular basis of mammalian neuronal development using several mutant mouse strains as models. Several projects in the laboratory address the role of Reelin, the gene disrupted in Reeler mice, in the formation of the nervous system. Candidates should have a background in neurosciences and an interest in molecular mechanisms of normal and abnormal development.

James I. Morgan, PhD- This laboratory has developed strains of transgenic and knockout mice that can be used to study neuronal regeneration and axonal sprouting. A postdoctoral position exists for someone interested in using these animals to elucidate the molecular and cellular processes that underlie regenerative responses in the nervous system. The ideal candidate will have training in contemporary neuroanatomical and neurosurgical techniques and have a research background in neuroregeneration/degeneration.

Richard J. Smeyne, PhD- A postdoctoral position is available to examine the cellular and molecular mechanisms underlying the pathogenesis of idiopathic Parkinson's disease. This work primarily uses the MPTP model of PD but also takes advantage of novel transgenic/knockout models of this and other human neurodegenerative disease. The ideal candidate for this position will have significant experience in neuroanatomical techniques such as tissue processing and sectioning (paraffin and frozen), morphometry, immunohistochemistry, in situ hybridization and animal husbandry. Experience in primary cell culture would be useful but is not necessary. This position also offers significant training opportunities in molecular biology using techniques such as PCR identification of genetic polymorphisms, gene cloning and exon trapping.

The Department of Developmental Neurobiology has all the facilities required in a modern neuroscience environment and the St. Jude campus provides a state-of-the-art scientific infrastructure that includes new custom-designed laboratories and core facilities for molecular biology, peptide and protein chemistry, genomics and transgenic/knockout technology. The research tower presently houses approximately 300 doctoral level scientists who provide a rich and interactive scientific environment. In addition, the Department is fostering strong intellectual and collaborative ties with neuroscientists and neurologists at the University of Tennessee Medical School.

Applicants should send a CV and arrange for 3 letters of recommendation to be directed to the individual PIs listed above at the following address: **St. Jude Children's Research Hospital, Department of Developmental Neurobiology, 332 N. Lauderdale, Memphis, TN 38105.** When submitting your resume, please use Dept. Code: **SCI 530/PD-DN**

SJCRH is an equal opportunity employment/affirmative action employer.

POSITIONS OPEN

BIOINFORMATICS

GENE LOGIC INC. is a leading biotechnology company pioneering the discovery of novel genes and transcription factors involved in complex disease processes. We have immediate openings for highly motivated scientists to support our expanding high-throughput gene expression analysis and DNA sequencing efforts.

Successful candidate should have B.S./M.S. in computer science or molecular biology. Ph.D. candidates preferred. Looking for experienced programmers in bioinformatics or biologists with DNA sequence analysis experience. Programmers must possess working knowledge in user interface design, experience in C, C++, and UNIX in a scientific environment, and experience with bioinformatics tools such as FASTA, BLAST, etc.

The company offers a comprehensive employment package including a highly competitive compensation and benefit plan, stock options and a challenging, team-oriented environment. For prompt confidential consideration, please send your résumé to: GENE LOGIC, INC., Attn: Human Resources, 10150 Old Columbia Road, Columbia, MD 21046; FAX: 410-309-3111; Email: hr@genelogic.com.

Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIPS are available immediately at the Fels Institute for Cancer Research and Molecular Biology at Temple University. These positions are for one or two years under the sponsorship of the following faculty members: E. Premkumar Reddy, David E. Ash, Raghu S. Athwal, Charles Grubmeyer, Marc F. Hansen, Earl E. Henderson, Barbara Hoffman, Dan A. Liebermann, Prabhakar D. Lotlikar, Elizabeth Moran, Ronald A. Pieringer, Chris D. Platoucas, Thomas J. Rogers, Carmen A. Sapienza, Dianne R. Soprano, Kenneth J. Soprano, Robert J. Suhadolnik, Peter M. C. Wong. For more information about their research interests please visit our website: www.temple.edu/fels or contact us at the address below. Successful candidates will be funded through a training grant awarded by the National Institutes of Health; thus applicants should be citizens or nationals of the United States or permanent residents. Interested individuals are requested to send a curriculum vitae, a summary of training interests, and three names of references to: Catherine Nimchuk, Fels Institute, Temple University School of Medicine, 3307 North Broad Street, Philadelphia, PA 19140. Temple is an Equal Opportunity Employer.

POSTDOCTORAL FELLOW THE UNIVERSITY OF IOWA Department of Neurology

Laboratory of Molecular and Cellular Neuroscience

Postdoctoral fellowship position is available to study molecular mechanisms of CAG triplet repeat neurodegenerative diseases, in particular Machado-Joseph disease, employing both transgenic and *in vitro* models of polyglutamine-mediated neurotoxicity. Candidates should have a recent Ph.D. degree and experience in cell and molecular biology. Send curriculum vitae, summary of research interests, and the names of three references to: Henry L. Paulson, M.D., Ph.D., Department of Neurology, University of Iowa College of Medicine, Iowa City, IA 52242.

POSTDOCTORAL POSITION ENVIRONMENTAL MICROBIOLOGY

Position immediately available for Ph.D. to investigate molecular biology of anaerobic degradation of aromatic hydrocarbons. Candidate must have a strong background in prokaryotic molecular biology and genetics. Send curriculum vitae, statements of interest and research experience, along with names and addresses of three references to: Dr. Alfred M. Spormann, Environmental Engineering and Science, Department of Civil Engineering, Stanford University, Stanford, CA 94305-4020 or Email: spormann@stanford.edu.

A **POSTDOCTORAL POSITION** is available in avian transgenesis to target expression of proteins in the oviduct. Strong background in molecular biology and vertebrate transgenesis preferred, but individuals experienced in using molecular genetic techniques to solve problems in molecular, cell, or developmental biology are encouraged to apply. Send curriculum vitae with references to: Robert Ivarie, Genetics Department, University of Georgia, Athens, GA 30602-7223.

POSITIONS OPEN

Two **POSTDOCTORAL POSITIONS** available to study the role of DNA repair in cancer and aging. One position will focus on mechanisms of DNA repair pertinent to the biology of breast cancer. The other will examine alterations in DNA repair and transcription in models of cellular senescence. Broad experience in molecular biology required. Applicants must have less than five years of postdoctoral experience. Please send curriculum vitae and three letters of reference to: Michele K. Evans, M.D., Laboratory of Molecular Genetics, National Institute on Aging, National Institutes of Health, Mail Box 01, 4940 Eastern Avenue, Baltimore, MD 21224; FAX: 410-558-8157; Email: me42v@nih.gov.

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DEPARTMENT OF PSYCHIATRY POSTDOCTORAL POSITIONS MOLECULAR NEUROSCIENCE

Two postdoctoral positions are available immediately in the Department of Psychiatry at the Mount Sinai School of Medicine. The laboratory studies the mechanisms of inflammation in Alzheimer's disease and brain aging at the level of gene expression using both *in vivo* and *in vitro* model systems. Candidates with molecular biological, neuroanatomical, and cell culture expertise are strongly encouraged to apply for these positions.

Qualified candidates should forward curriculum vitae and the names of three references to: Giulio Maria Pasinetti, M.D., Ph.D., Department of Psychiatry, The Mount Sinai School of Medicine, One Gustave L. Levy Place, Box 1229, New York, NY 10029-6574; Telephone: 212-241-5579. The Mount Sinai Medical Center is an Equal Opportunity Employer. We foster diversity in the workplace.

Two **POSTDOCTORAL POSITIONS** available August 1997 to study the roles of oxidative stress and antioxidants in atherosclerosis and vascular cell function related to lipoprotein oxidation, intracellular signaling, and adhesion molecule expression. The successful candidates will have a Ph.D. in biochemistry or a related field with a strong publication record and experience in cell culture, HPLC, and molecular biology techniques and/or animal studies. Send curriculum vitae, summary of research experience, and names and telephone numbers of three references to: Dr. Balz Frei, Director, Linus Pauling Institute, Oregon State University, 571 Weniger Hall, Corvallis, OR 97331-6512. Telephone: 541-737-5075; FAX: 541-737-5077. Oregon State University is an Affirmative Action/Equal Employment Opportunity Employer and has a policy of being responsive to dual-career needs.

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Immediate Openings: Physiology, pharmacology, anatomy, microbiology, biochemistry, pathology, histology. Stipend of \$1,200 USD per month, plus tuition package through completion of medical degree. All positions on Saba, a small Dutch island near St. Maarten. Clean, crime-free, English-speaking. Write: Dr. David Fredrick, P.O. Box 386, Gardner, MA 01440. Telephone: 508-630-5122; Email: saba@tiac.net. Webpage: www.saba.org.

POSTDOCTORAL POSITION available in the Cystic Fibrosis Center at Case Western Reserve University to study the molecular mechanisms that regulate transport processes in secretory epithelium affected by cystic fibrosis. Applicants must be permanent residents or U.S. citizens. Send résumé and names of three references to: Lucindia R. Marino, M.D.; FAX: 216-368-4223; Email: lrn3@cwru.edu; or mail to: L.R. Marino, Cystic Fibrosis Center at Case Western Reserve University, 8th Floor BRB, 2109 Adelbert Road, Cleveland, OH 44106.

POSTDOCTORAL POSITION IN MYCOBACTERIA

A postdoctoral position is immediately available to study mechanisms of drug resistance in *M. tuberculosis*. The candidate should have a Ph.D. in microbiology or biochemistry. Please send curriculum vitae to: Dr. Ying Zhang, MMI, Johns Hopkins School of Hygiene, 615 North Wolfe Street, Baltimore, MD 21205. FAX: 410-955-0105; Email: yizhang@phnet.sph.jhu.edu.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE IN ECOLOGICAL/EVOLUTIONARY MOLECULAR BIOLOGY Mountain Research Center Montana State University, Bozeman

Collaborate on genetic aspects of research addressing questions about gene flow and morphological change in response to climate change; Ph.D. in molecular biology or related field; experience in DNA bench work; demonstrated excellence in research required. Prefer experience with ancient DNA and/or computational approaches. \$29,000 per year, at least one year duration. Submit curriculum vitae, three letters of reference, reprints of relevant publications, and letter explaining research interests and relevance to this position to: Molecular Biology Postdoctoral Committee, Mountain Research Center, Box 173490, Montana State University, Bozeman, MT 59717-3490. Screening begins June 20, 1997. Website: www.mrc.montana.edu for details. Americans with Disabilities Act/Equal Opportunity/Affirmative Action/Veterans Preference.

POSTDOCTORAL POSITION: Robison Family Fellowship in Cancer (Chrono)Biology. Available immediately to study the mechanisms by which circadian and mammalian reproductive cycles affect: 1) Breast cancer metastatic potential following resection (contact Dr. William Hruschsky, Email: hhruschsky.william_m+@albany.va.gov); 2) The toxic therapeutic ratio of fluoropyrimidine antimetabolites (contact Dr. Patricia Wood, Email: wood.patricia_a+@albany.va.gov). Candidates should have experience in molecular and cellular biology, biochemical techniques, and animal tumor models. Send résumé, names of three references, detailed statement of interests and goals to: c/o Stratton VA Medical Center (111-C), 113 Holland Avenue, Albany, NY 12208; FAX: 518-462-0626.

POSTDOCTORAL POSITION UNIVERSITY OF CALIFORNIA, LOS ANGELES

Postdoctoral position available immediately to study the molecular and cellular physiology of Ca-dependent K channels. Molecular biology, biochemical, immunocytochemical, and electrophysiological techniques are used to unravel the mechanisms of channel function, their coupling to cell-signaling pathways, and how sexual hormones and aging affect their expression. Ph.D. in physiology, physics, biochemistry, or molecular biology. Preferred background: electrophysiology and modeling of channel function. Send curriculum vitae and three references to: Dr. L. Toro, UCLA, Department of Anesthesiology, Box 951778, BH-612 CHS, Los Angeles, CA 90095-1778.

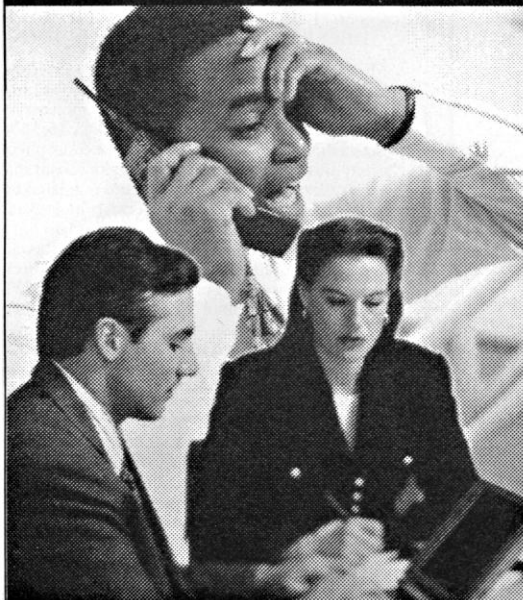
POSTDOCTORAL POSITION available immediately to study the effects of simulated microgravity on the growth, differentiation and transplantation of murine neural stem cells. Candidates (zero to two years of postdoctoral experience) preferred with expertise in one or more of the following areas: molecular biology, cell culture, and small animal surgery. Forward curriculum vitae and names of two references to either: William Schwartz, M.D., Department of Neurology, or Todd Savarese, Ph.D., Cancer Center, University of Massachusetts Medical Center, 55 Lake Avenue North, Worcester, MA 01655.

POSTDOCTORAL FELLOWSHIPS IN MOLECULAR NEUROBIOLOGY University of Maryland School of Medicine

Seeking postdoctoral fellows experienced in cell and molecular biology to study the organization, regulation and targeting of proteins in the membranes of nerve and muscle. Please send inquiries, including your résumé, to: W. R. Randall and R. J. Bloch, Department of Pharmacology, 655 West Baltimore Street, Baltimore, MD 21201 or, preferably, Email: rjbwrr@umabnet.ab.umd.edu.

POSTDOCTORAL POSITION available immediately to study the neurobiological mechanisms of long-term potentiation (LTP) of *Aplysia* synapses. Ph.D. required. Applicants should have experience with one or more of the following techniques: whole-cell/intracellular electrophysiological recording; *in vitro* cell culturing; fluorescent imaging of calcium signals. Send curriculum vitae and three letters of reference to: David L. Glanzman, Ph.D., Department of Physiological Science, UCLA, Los Angeles, CA 90095-1568. FAX: 310-825-6616; Email: dglanzman@physci.ucla.edu.

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Pew

Latin American Fellows Program in the Biomedical Sciences

A Program of The Pew Charitable Trusts

The Pew Charitable Trusts, one of the United States' largest private foundations, is sponsoring a program to provide support for young scientists from Latin America for post-doctoral training in the United States. Ten Fellows will be selected in 1998. An award of \$40,000 will be provided as a salary stipend for the fellow during the period of training (2 years) and will be administered by the sponsoring U.S. institution. The sponsoring institution is expected to supplement the stipend with at least \$5,000 a year and provide medical benefits for the fellow. Following the two year fellowship, the Program will issue an additional \$35,000 award to the sponsoring institution to purchase equipment and supplies for the fellow to establish a laboratory in his or her home country.

Applicants must have held a Ph.D. and/or M.D. degrees, or equivalent, for no more than five years as of July 1, 1998. Applicants must not have had any previous postdoctoral training outside of their home country as of October 1, 1997. Applicants are not required to have a commitment of a position and laboratory space after the fellowship. However, applicants must submit a written statement of intent to return to Latin America. Fellows must have a confirmed position and laboratory space in their home country by the end of the fellowship in order to obtain the \$35,000 portion of the award.

Fellows will be selected on the basis of their promise as outstanding investigators, as well as the scientific merit of their research proposal, their record of training and how well their interests coincide with laboratory of their sponsor in the United States. If potential applicants need assistance with the identification of an appropriate sponsoring laboratory in the United States, they may contact the Program Office. The program will accept applications from Mexico, Central and South America. Applications may be obtained from the Regional Committee Chairperson for your country listed or from our website at <http://futurehealth.ucsf.edu/pewlatin.html>. The application deadline is October 1, 1997. Winners will be notified in April 1998 and the fellowship should begin no later than August 1998.

ARGENTINA

Isreal Algranati,
Instituto de Investigaciones Bioquimicas,
Fundacion Campomar,
Av. Patricia Argentinas 435,
1405 Buenos Aires, Argentina
Tel: 863-4018 Fax: 865-2246
e-mail: algra@iris.iib.uba.ar

BRASIL

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MEXICO

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e-mail: archiga@servidor.unam.mx

ALL OTHER COUNTRIES

Silvia Montano,
The Pew Latin American
Fellows Program,
1388 Sutter Street, Suite 805,
San Francisco, CA 94109
Tel: 415-476-5116 Fax: 415-476-4113
e-mail: montano@itsa.ucsf.edu

POSITIONS OPEN

POSTDOCTORAL POSITIONS at the University of Wisconsin-Madison. Two positions are available immediately to study mechanisms of FGF receptor signaling or syndecan-mediated cell adhesion/signaling. Contact: **Dr. Alan C. Rapraeger, Department of Pathology, University of Wisconsin, Madison, WI 53706. Email: acraprae@facstaff.wisc.edu.**

GEORGIA INSTITUTE OF TECHNOLOGY PARKER H. PETIT INSTITUTE FOR BIOENGINEERING AND BIOSCIENCE

A **POSTDOCTORAL POSITION** is available for studies in tissue engineering. Areas of interest include tissue-engineered cartilage, cardiovascular substitutes, and encapsulated secretory cells. Candidates should have a strong interest in tissue engineering, significant experience in cell culture technology, and be willing to work in an interdisciplinary environment and interact with both engineers and life scientists. A background in biomaterials, cell biology, or small animal surgery techniques is desirable but not essential. Please send curriculum vitae and names, addresses, and telephone numbers of three references to: **Professor R. M. Nerem, Director, Parker H. Petit Institute for Bioengineering and Bioscience, Georgia Institute of Technology, Atlanta, GA 30332-0363. The Georgia Institute of Technology is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITIONS INSTITUTE FOR HUMAN GENE THERAPY Department of Molecular and Cellular Engineering University of Pennsylvania Health System

Positions available for postdoctoral fellows in the laboratory of **Dr. James M. Wilson** to study pathogenesis of inherited diseases, stem cell biology in non-hematopoietic tissue, molecular virology of adenovirus and adeno-associated virus, and immunology of gene therapy. Please forward curriculum vitae and the names of three references to:

**Dr. 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**

POSTDOCTORAL/RESEARCH ASSOCIATE MOLECULAR VIROLOGY/LENTIVIRUS PATHOGENESIS

A position in molecular virology is available for studies exploring the construction and expression of replication competent viral vectors that express foreign genes. Applicants must have a DVM/Ph.D. or Ph.D. in virology or related area. Experience in classical and molecular virology including cloning and transfection of lentiviruses is preferred. Position is available immediately. Applications will be reviewed until position is filled. Send cover letter, curriculum vitae and three letters of reference to: **Andrés de la Concha, Texas A&M University Research Center, 7887 US Highway 87 North, San Angelo, TX 76901 USA. Telephone: 915-653-4576; FAX: 915-658-4364.**

POSTDOCTORAL POSITION immediately available to study 1) cerebral vasoregulation by pH and 2) regulation of cell volume. NIH training grant position for Ph.D./M.D. experienced in electrophysiology and/or fluorometric measurement of ion concentrations. *U.S. citizens/permanent residents* send curriculum vitae, statement of interest, reprints, names and addresses of references to: **M. Apkon, M.D., Ph.D., Department of Pediatrics, Yale University, Box 208064, New Haven, CT 06520. Affirmative Action/Equal Opportunity Employer. Minority/female applicants encouraged.**

POSTDOCTORAL POSITION available immediately to study oxidative stress and cytoskeletal disruption in rat spinal cord injury. Candidates should have a Ph.D. in biochemistry, pharmacology, or neuroscience and research experience in free radicals, glutamate excitotoxicity, or cytoskeletal disruption. *U.S. citizen or permanent resident preferred.* Send a letter of interest, curriculum vitae and three references to: **Dr. Joe E. Springer, Department of Anatomy and Neurobiology, University of Kentucky Medical Center, 800 Rose Street, Lexington, KY 40536-0084. Email: jspring@pop.uky.edu. Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS PRINCETON UNIVERSITY

Postdoctoral positions are available to study molecular and neural mechanisms of learning and behavior in mice using a variety of modern techniques including our newly established brain sub-region- and cell type-specific gene knockout method (see reference: *Cell*, 87:1317-1326; 87:1327-1338; and 87:1339-1349, 1996). We seek talented and highly motivated applicants with a Ph.D. or M.D. degree with solid training in one of the following areas: Biochemical and molecular biology (experience with 2-D gel, two-hybrid system, differential or subtractive screening is a plus), transgenic/gene knockout, slice electrophysiology, or animal learning behavior. Please send curriculum vitae, summary of research experience, and three references to: **L. Egloff, Department of Molecular Biology, Princeton University, Princeton, NJ 08544, USA. Princeton University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITIONS TRAINING PROGRAM IN SIGNAL TRANSDUCTION AND CANCER Robert H. Lurie Cancer Center

Postdoctoral positions (one year renewable) available for study and training with investigators interacting in an NCI funded training grant, "Signal Transduction and Cancer." Trainees will have the opportunity to study mechanisms by which hormones, neurotransmitters, growth factors, receptors, and ion-channels control cell fate, differentiation, transformation, metastasis, and growth. *Applicants must be U.S. citizens or permanent residents and must have received a Ph.D. in the biological sciences in the last two years.* Send curriculum vitae, two letters of reference (with telephone numbers), and a statement of research interests to: **Robin Leikin, Ph.D., Robert H. Lurie Cancer Center, Northwestern University, 303 East Chicago Avenue, Chicago, IL 60611. FAX: 312-908-1372.**

Northwestern University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS available immediately in NIH-funded projects investigating the regulated expression of type I and III collagen genes during skeletal development. Our laboratory recently discovered unusual alternative transcripts of these genes that are expressed predominantly in cartilage and prechondrogenic mesenchyme (*J. Biol. Chem.*, 269:16443-16448; *J. Biol. Chem.*, 271:25233-25239; *Dev. Dynamics*, 206:146-158), and we are currently exploring both their function and the molecular mechanisms regulating their production. Candidates with a strong background in molecular biology may send curriculum vitae and names of three references to: **Dr. Sherrill L. Adams, University of PA, School of Dental Medicine, Department of Biochemistry, 4010 Locust Street, Philadelphia, PA 19104-6002; or FAX: 215-898-3695 or Email: sherri@biochem.dental.upenn.edu. University of Pennsylvania is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION: Projects include transcriptional regulation of gut hormone gene expression, basic helix loop helix proteins, differentiation of intestinal and pancreatic endocrine cells using transgenic mice (*PNAS*, 94:3560, 1997; *Development*, 122:1157, 1996). Must have experience in molecular biology and/or developmental biology. Submit curriculum vitae and names of three references to: **Andrew B. Leiter, M.D., Ph.D., Gastroenterology Division #218, New England Medical Center, 750 Washington Street, Boston, MA 02111; Email: andy.leiter@es.nemc.org. U.S. citizenship or permanent residency required. Minority applications encouraged. Equal Opportunity Employer.**

SENIOR POSTDOCTORAL FELLOWSHIP opening for Ph.D. in molecular biology. Successful candidate will have completed some training in gene therapy. Requirements include experience in viral and nonviral vector for *in vivo* gene transfer and gene transfer techniques in mammalian cells, good publications record, good writing skills. Salary and benefits competitive; possible long-term position. Send résumé, cover letter and the names of three references to: **Ms. C. Farrell, Loma Linda University, P.O. Box 7210, Loma Linda, CA 92354.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS available to study the mechanisms of DNA repair and transcription coupled DNA repair in relation to aging. Please send curriculum vitae and three letters of reference to: **Vilhelm A. Bohr, M.D., Ph.D., Chief Laboratory of Molecular Genetics, National Institute on Aging, National Institutes of Health, Box 1, 4940 Eastern Avenue, Baltimore, MD 21224. FAX: 410-558-8158; Email: vbohr@nih.gov. NIH is an Equal Opportunity Employer.**

POSTDOCTORAL POSITION DEPARTMENT OF HUMAN GENETICS

Mount Sinai School of Medicine has a position available immediately to investigate the functions of thyroid hormone receptors in the developing auditory system, brain and endocrine system (see *EMBO.J.*, 15:3006; *Nat. Genet.*, 13:354, 1996). The project concerns phenotypic characterization of receptor-deficient knockout mice and the identification of novel target genes regulated by these receptors. Experience with molecular biology and/or transgenic mice is desirable but not essential.

Interested individuals are encouraged to forward curriculum vitae and the names and addresses of three references to: **Dr. Douglas Forrest, Department of Human Genetics, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. Informal inquiries can contact: 212-241-1539 or Email: dforrest@msvax.mssm.edu. An Equal Opportunity Employer. We foster diversity in the workplace.**

POSTDOCTORAL/RESEARCH POSITIONS: H.M.S. FACULTY APPOINTMENT. Laboratory for the Study of Skeletal Disorders and Rehabilitation, Children's Hospital Boston, and Harvard Medical School. Positions to investigate: 1) regulatory mechanisms of skeletal tissue specific gene expression; 2) tumor biology of malignancies found in skeletal tissues. Two years of experience in molecular biology and *in situ* hybridization needed and/or experience in virology and *in vitro* gene expression. Ability to work independently and with other members of the laboratory. Potential for further faculty development. Send curriculum vitae, copies of relevant publications, and three references to: **Dr. Louis C. Gerstenfeld, Laboratory for the Study of Skeletal Disorders and Rehabilitation, Enders Building, Children's Hospital, 300 Longwood Avenue, Boston, MA 02115.**

POSTDOCTORAL POSITION IN BEHAVIORAL NEUROPHYSIOLOGY

Position at the University of Minnesota available immediately to study the cortical control of force output in primary and nonprimary motor areas in the monkey. The work will focus on the relations between neural activity and continuous force output under different load conditions (viscosity, inertia, and stiffness). Experience with extracellular neural recording in the monkey desirable but not essential. Please send curriculum vitae and the names and telephone numbers of three references to: **Dr. James Ashe, Brain Sciences Center (11B), VAMC, Minneapolis, MN 55417; Email: ashe@maroon.tc.umn.edu. An Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS—NIH-funded training in mycology. Research areas include: molecular studies of *Candida albicans*, molecular taxonomy of medically important fungi, and hypovirulence in *Cryptosporidia parvula*. Fellows can also be trained in diagnostic mycology and/or participate in an industrial apprenticeship in anti-infectives. For information please contact: **Richard Calderone, Department of Microbiology and Immunology, Georgetown University School of Medicine, 312 SE Med-Dent Building, Washington, DC 20007, USA. Telephone: 202-687-1137; FAX: 202-687-1800; Email: rcalde01@gumedlib.dml.georgetown.edu. Georgetown University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available immediately to study the role of cytokine genetic polymorphisms in chronic inflammatory disease. The successful candidate will have experience in molecular biology, immunology and/or genetics. Please submit curriculum vitae and two letters of recommendation to: **Fabio Cominelli, M.D., Ph.D., Chief, Division of Gastroenterology and Hepatology, Box 10013, University of Virginia Health Sciences Center, Charlottesville, VA 22906-0013.**

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We are seeking individuals who are highly skilled and experienced for our open positions in our Pharmaceutical Project Management component of Lilly Research Labs. The primary job responsibility in these positions is to lead cross-functional teams in the development and implementation of plans for preclinical and early clinical investigation of pharmaceuticals. Therefore, experience in effectively leading teams of scientists and technical experts is essential. Experience and/or training in the use of project management tools and techniques is required. Applicants should have a minimum of a Bachelor's degree in a scientific discipline with advanced degree(s) preferable and at least 5 years experience in pharmaceutical project management.

For prompt consideration, please send resume and cover letter suitable for scanning to: Eli Lilly and Company, Attn: Deborah Hildebrand, Dept. PM597, US Recruiting and Staffing, Lilly Corporate Center, Indianapolis, IN 46285.



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NEUROSCIENCE

COME TO NIH AND HELP SHAPE THE FUTURE

The National Institute of Neurological Disorders and Stroke, located in Bethesda, MD, is seeking a **Health Scientist Administrator** or **Medical Officer** to serve as a Scientific Review Administrator. The person holding this position will be responsible for selecting reviewers and conducting review meetings for Program Project and Clinical Research Center grants, clinical trials, and other research of particular relevance to the mission of NINDS. Successful applicants must possess a Ph.D. or M.D. (or equivalent degrees) with postdoctoral research experience, have peer-reviewed publications, and have relevant research administration experience.

The full vacancy announcement may be obtained by fax (dial 1-800-728-5627 and request document #5047) or from the NINDS web site (<http://www.ninds.nih.gov/pmb/Joblist.htm>).

This is a civil service position at a salary range of \$54,629 to \$88,396 commensurate with experience. Physicians may be eligible for a Physician's Comparability Allowance. U.S. citizenship is required.

Applicants should submit a letter of application with a brief description of career interests, along with a curriculum vitae and bibliography, to: **Mr. Luis Arvelo**, NINDS Personnel Office, Building 31, Room 8A23, 31 Center Drive, MSC 2540, Bethesda, MD 20892-2540; telephone (301) 496-6334. You may fax your application to (301) 480-0383. Applications must be postmarked by **July 28, 1997**. Refer to vacancy announcement # NS-97-35.

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Our work on the Human Genome Project has put us on the cutting edge of discoveries that will change the way the world lives. We are currently seeking the following scientists to join our interdisciplinary teams:

Postdoctoral Fellow Positions

Two research positions in functional genomics are available immediately in the Human Genome Center at Lawrence Berkeley National Lab. Both positions require a Ph.D. in genetics, molecular biology, biochemistry or a related field.

One research fellow will join a team of investigators developing methods to identify novel human genes encoding membrane and secreted proteins. Requires a strong background in mammalian genetics and cell culture. (Job #LSD5200)

The second position requires a recent Ph.D. who will coordinate the annotation of human sequence using newly developed and existing genefinding and annotation tools. You will perform research on protein motif analysis and methods for genome comparison. (Job #LSD5201)

Successful candidates will be highly motivated individuals with experience in molecular biology and computation. Strong communication skills and a desire to work as part of multidisciplinary discovery teams are essential.

Production Sequencing Group Leader

Oversee supervisors and staff engaged in production activities for the Genome Project. You will direct the application of modern high-tech manufacturing techniques, collaborate with others to develop new biological processes, automated devices and software for possible use, and determine resource requirements for the production operation. Requires comprehensive experience in managing manufacturing operations, particularly in a high-throughput setting, and demonstrated ability to function in a dynamic start-up environment and manage a large production staff. Excellent supervisory, organizational and communication skills are essential. Prefer a BS or equivalent in Biology, Chemistry, Life Sciences or related area and background in a biotechnology or pharmaceutical production environment. (Job #LSD5062)

Informatics Research Group Leader

Oversee the development of state-of-the-art information systems and applications. You will supervise the systems development staff and establish a formal software development process. Requires extensive experience managing software development teams and processes which integrate applications and systems. You must be proficient in Web applications, Java, RDBMS development, perl, C/C++, GUI developers, UNIX systems and database administration. Excellent supervisory, organizational, analytical, communication and time management skills are essential. Prefer a BS in software engineering or equivalent and experience in biotechnology or pharmaceuticals. (Job #LSD5075)

To apply, please forward your resume or CV, indicating Job#, and for Ph.D. positions, a summary of research experience and the names of three references, to: Ernest Orlando Lawrence Berkeley National Laboratory, Staffing Office, Job#____, One Cyclotron Road, MS 938A, Berkeley, CA 94720. E-mail: Employment@LBL.gov. Berkeley Lab is an equal opportunity employer committed to the development of a diverse workforce.



**UNITED STATES FOOD AND
DRUG ADMINISTRATION**

SCIENTISTS

THE CENTER FOR DRUG EVALUATION AND RESEARCH (CDER) IS SEEKING TO RECRUIT SCIENTISTS AS DRUG APPLICATION REVIEWERS AT FDA'S HEADQUARTERS LOCATION IN ROCKVILLE MARYLAND. POSITIONS ARE IN THE FOLLOWING DISCIPLINES:

*** CONSUMER SAFETY OFFICER * CHEMIST *
PHARMACOLOGIST * TOXICOLOGIST AND MICRO/BIOLOGIST ***

The Center for Drug Evaluation and Research promotes, protects and enhances the health of the public through the review and evaluation of new drugs prior to their release for use in commerce. This review is accomplished by multidisciplinary scientific teams. These teams evaluate studies submitted by manufactures in support of New Drug Applications (NDAs) and Investigational New Drug Applications (INDs). They evaluate the quality and adequacy of the manufactures' tests, determine the validity of drug safety and efficacy claims, write reviews of application data, and evaluate marketed events on approved drugs.

QUALIFICATIONS: Specific course work in the field of study and directly related professional experience is required. For the chemist, pharmacologist, toxicologist and micro/biologist positions, a doctorate degree in the discipline and experience in the research, development and manufacture of pharmaceuticals are highly desired. Candidates for Civil Service or Commissioned Corps appointments must be U.S. citizens. Candidates for Staff Fellowships may be either U.S. citizens or permanent resident aliens. Graduates of foreign colleges/universities must show proof of U.S. education equivalency certification.

SALARY: Civil Service salary range for GS-11 through GS-13 is \$38,330 to \$71,017, plus an excellent benefits package and flexible work schedule. Salary, benefits and level of responsibility are commensurate with education and experience. Positions may also be filled by appointment in the U.S. Public Health Service, Commissioned Corps with commensurate salary and benefits.

HOW TO APPLY: Submit curriculum vitae to:

DHHS/Food and Drug Administration
7520 Standish Place, MPN1, Room 225, HFD-64
Rockville, Maryland 20855
Attn: Recruitment Staff (SRC 97012)
FAX #(301) 827-2860

AN EQUAL OPPORTUNITY EMPLOYER AND A SMOKE FREE ENVIRONMENT

Research Faculty Position in Cell Morphology Institute for Human Gene Therapy Department of Molecular and Cellular Engineering University of Pennsylvania Health System

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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research associate III/ research scientist I

Applying your broad-based molecular biology techniques to current research projects, you will characterize and identify novel targets in inflammation and immune-based diseases. You will also design expression systems suitable for large-scale production of recombinant active enzymes. We require a BS/MS degree with 5+ years' relevant experience or a Ph.D. with 0-2 years' postdoctoral experience demonstrating molecular biology and protein biochemistry skills with an emphasis on signal transduction cascades. Must have experience conducting genomics/protein database searches. Excellent written and verbal communication skills, basic computer proficiency, and the ability to work in a team environment are required.

Located in the San Francisco Bay Area, Roche Bioscience offers a highly attractive salary, bonus plans, a full benefits package, including 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 SCIO606LY, 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>.

PUT YOUR CAREER ON THE FAST TRACK

Principal Scientist

Transgenic Animal Science

Principal Scientist—to manage molecular biology, transgenic, and gene targeting research projects. PhD in molecular biology or related field plus 2-5 years post-doctoral experience developing transgenic and gene targeted animal models a must. Industry experience preferred. Excellent oral and written communication skills and the ability to work in a team environment are essential.

Research Associates

Must have a BS in biology with 5+ years of industry experience and the ability to work independently

Molecular Biology—extensive experience in gene cloning and gene manipulation, and proficiency in all methods of gene expression analysis a must.

Cell Culture—will maintain embryonic fibroblasts and embryonic stem cells, and execute a designed gene targeting protocol.

Animal Science—must be familiar with the operation of a transgenic animal facility and the breeding and maintenance of transgenic animal lines.

Chrysalis DNX Transgenic Sciences is an established industry leader, providing a full range of contract research services to the biomedical research community. We also offer an excellent work environment together with a competitive compensation package. To join us in the fast lane of transgenics research, send CV with salary history to: 575 Route 28, Raritan, NJ 08869, or fax to: (908)722-6677. EOE.



BUILD ON OUR RESEARCH EXCELLENCE

DATABASE INFORMATICS: BIOLOGISTS

Professional positions are available in the Mouse Genome Informatics Program at The Jackson Laboratory with the Mouse Genome Database, Gene Expression Resource and Tumor Biology Database for the laboratory mouse. Successful applicants will be primarily responsible for data acquisition and database maintenance, including literature searching, evaluating and analyzing data to be incorporated into the databases and interacting with research laboratories to facilitate electronic data contributions. In addition, they will participate in database and interface design work, through input into database content and display concepts. Applicants should be versed in developmental, cellular or molecular biology. Knowledge of mammalian genetics a plus. Other desirable attributes include writing/communication skills and experience using computers. M.S. degree in Life Sciences required.

The Jackson Laboratory, located on the coast of Maine on the fringe of Acadia National Park, is a world renowned center and resource for mammalian biology and genetics.

Qualified candidates should send resume to:

The Jackson Laboratory
Attn: Harold R. Wheeler
Employment Manager
600 Main Street
Bar Harbor, ME 04609
207/288-6100
jobs@jax.org
The Jackson Laboratory is an
Equal Opportunity/Affirmative
Action Employer

The Jackson Laboratory



DIRECTOR, DIVISION OF FUNDAMENTAL NEUROSCIENCE AND DEVELOPMENTAL DISORDERS

The National Institute of Neurological Disorders and Stroke (NINDS), located in Bethesda, MD, is seeking someone to direct the Division of Fundamental Neuroscience and Developmental Disorders. The person holding this position will provide executive direction and scientific leadership in the planning and administration of a nationwide extramural program for the broad support of fundamental research in the neurosciences and in developmental disorders through research grants and training grants, and contracts for research development and information dissemination. This highly diversified division aims at the acquisition of fundamental new knowledge along a broad front relevant to more than 600 neurological disorders and also has primary responsibility for those disorders related to development.

The ideal candidate has demonstrated scientific leadership and management of a basic or clinical neuroscience research program of national and international standing. M.D., Ph.D., or comparable experience and training in one of the biological, behavioral, and/or biomedical sciences is required. This is a civil service position in the Senior Executive Service (SES) with an annual salary ranging from the ES-1 to the ES-6 (currently \$103,897 to \$123,100). Physicians may be additionally eligible for a Physician's Comparability Allowance of up to \$20,000 per year.

Applications must be postmarked by July 15, 1997. Applicants are required to submit a bibliography and curriculum vitae, resume or any other written format which addresses the requirements indicated in this announcement to:

Mr. Glenn Hartzoge, National Institutes of Health, NINDS Personnel Office, Building 31, Room 8A23, 31 Center Drive, MSC 2540, Bethesda, MD 20892-2540, or you may fax your application to (301) 496-2818.

Applicants are encouraged to obtain information concerning the position description and qualification requirements by contacting Mr. Hartzoge at (301) 496-6334.

For additional information on the NINDS, please visit our website. The NINDS internet address is: <http://www.ninds.nih.gov> and NIH senior job opportunities can be accessed at: <http://helix.nih.gov:8001/>.

National Institutes of Health

Department of Health and Human Services

NIH is an Equal Opportunity Employer.

State University of New York at Buffalo Dean of the School of Pharmacy

The School of Pharmacy, State University of New York at Buffalo, seeks an innovative, energetic individual for the position of Dean. The Dean, who reports to the University Provost, will serve as chief academic and administrative officer of the School of Pharmacy. This individual will assume a leadership role in continuing the interdisciplinary activities and collaborative efforts with business, government, health-related organizations, and the other departments and programs of the University. Qualifications: Minimum qualifications for the position include (1) successful administrative experience which demonstrates strong visionary and organizational skills, personnel and finance management experience, and strong interpersonal skills; (2) a distinguished record of academic and scholarly achievement; (3) an earned doctorate in a relevant field; (4) qualifications for an academic appointment with tenure at the rank of professor. Applications and Nominations: A letter of applicant or nomination, a current Curriculum vitae and the names, addresses, E-mail, Fax, and telephone numbers of three references are requested. Review of applications will begin June 15, 1997 and continue until the position is filled. The intended starting date is January 1, 1998. Applications should be sent to: **Dean of Pharmacy Search Committee, c/o Dr. Barry S. Eckert, Dean, School of Health Related Professions University of Buffalo, 435 Kimball Tower, Buffalo, NY 14214, email: beckert@ubmedc.buffalo.edu.** *The State University of New York at Buffalo is an Affirmative Action, Equal Opportunity Employer. Applications from women and minorities are encouraged.*

Senior Director, Gene Therapy San Francisco Bay Area

ALZA Corporation, headquartered in Palo Alto, California, is a leader in the development and commercialization of innovative pharmaceutical products using advanced drug delivery technologies to add medical and economic value to drug therapies. Our continued success has created a unique & exciting opportunity for an experienced, take-charge professional to provide guidance & leadership as we begin to formulate corporate strategies that will have a significant impact on the future success of the gene therapies.

Working with a number of gene therapy companies, ALZA has begun early feasibility studies to evaluate how ALZA's drug delivery systems may serve as a platform for the delivery of genes to the body. The Senior Director, Gene Therapy will manage a group of five scientists and external collaborators to develop unique formulation and drug delivery systems to enhance vector/gene transfer. The successful candidate will ultimately determine the best way to formulate and execute ALZA's strategy in gene therapy. The position requires a combination of advanced education and proven expertise in molecular & cell biology and viral or nonviral vector systems. Candidates must also possess 5+ years' senior management experience with a gene therapy company.

In addition to attractive compensation and benefits, we offer a rare opportunity to collaborate with a diverse group of dedicated and skillful professionals in a cooperative, challenging environment. Please send resume and cover letter to the address below, or call our Job Hotline at (415) 494-5319. *ALZA is proud to be an Equal Opportunity Employer and welcomes applications from minorities & persons with disabilities.*

ALZA Corporation
HR Dept., Job# SC0606-DM
950 Page Mill Rd
P.O. Box 10950
Palo Alto, CA 94303-0802
Fax: (415) 494-5656
TDD: (415) 494-5003
www.alza.com





Human Genome Sciences, Inc.

Dedicated To Discovery For Health

Director, Pharmacology

Reporting to the Senior VP, Research and Development, the Director of Pharmacology will be responsible for approximately 30 Ph.D.s and research associates, including a core histology group and animal facility. In this capacity, the successful candidate will select potential novel therapeutic human proteins and the pharmacological data to support taking such proteins to clinical trials. Familiarity with animal models of tissue repair, inflammation and vascular disorders is desirable.

The selected candidate will possess a Ph.D. and/or M.D. degree and 7+ years of pharmaceutical drug discovery experience, with a particular focus on therapeutic proteins as potential drugs. Demonstrated experience in molecular biology, biochemistry and pharmacology, as well as specific experience in relevant small animal models, is essential. Outstanding technical skills and management skills are necessary. **Job Code CR16**

Director, Regulatory Affairs

Reporting to the VP, Clinical and Medical Affairs, the Director of Regulatory Affairs will be responsible for all aspects of the regulatory process for the therapeutic proteins HGS will be developing as drugs. The selected candidate will be responsible for all interactions with the FDA from pre-IND meetings to PLA submissions, will be a key member of the project teams for each drug, and will need to work effectively with the scientists, clinical, and marketing professionals.

The selected candidate will possess a Pharm.D., Ph.D., and/or M.D. and 5+ years of regulatory experience. Experience with CBER, particularly relating to the regulatory issues surrounding therapeutic proteins as drugs, is preferred. U.S. registration experience a must; foreign regulatory experience would be a definite plus. Effective presentation skills and outstanding interpersonal skills are essential. **Job Code CR26**

Associate Director, Gene Discovery

The successful candidate will participate in the management of HGS's high throughput DNA sequencing facility. Responsibilities will include the development of new technologies which augment the gene discovery process at HGS. It is expected that this individual will be involved in the management and coordination of HGS's collaborative efforts with its corporate partners.

This position requires a Ph.D. in the biological sciences with 4 or more years of postgraduate experience. Preference will be given to individuals with experience in DNA sequencing, automation, robotics and bioinformatics. **Job Code PD66**

HGS offers a comprehensive benefits package including educational reimbursement, subsidized health club membership, and 401(k) plan with employer match. Look for us on the Internet at <http://www.hgsi.com> or send/fax your resume to **Human Resources Department, Human Genome Sciences, Job Code #**_____, 9410 Key West Avenue, Rockville, MD 20850. Fax: (301) 309-1845. EOE, M/F/D/V.

Novo Nordisk Biotech, Inc. Bioinformatics Scientist

Novo Nordisk Biotech, Inc., located in Davis, California, is a wholly-owned Research and Development subsidiary of Novo Nordisk A/S. Novo Nordisk Biotech, Inc. is focused on the cloning, expression, mutagenesis, and characterization of industrial enzymes.

We are searching for a highly motivated scientist who will enthusiastically interact with an interdisciplinary team of molecular biologists and protein biochemists in the acquisition and implementation of hardware and software tools for the search and analysis of genomic and biological data from both internal and external sources. The successful candidate must have broad biological knowledge and must be an experienced user of bioinformatics tools. In addition, the candidate will play a key role in using/developing tools for protein profiling and motif analyses, as well as in assisting users in identifying methods relevant to bioinformatics analyses and search strategies.

The position requires a Ph.D. degree or B.S./M.S. degree (with 5 years of relevant experience) in computer science or biological science. The successful candidate will also have three or more years of experience specifically in networking, database administration and integration, client-server technology in a UNIX-Mac/Windows environment, shell programming, proficiency with a variety of basic search programs (BLAST, FASTA, etc.), as well as HTML and related web technologies.

If you are interested in working in a vibrant environment with the world's leading producer of industrial enzymes and meet the qualifications outlined above, please send your C.V. with a list of three references to: **Novo Nordisk Biotech, Inc., Job BSP, Department of Human Resources, 1445 Drew Avenue, Davis, CA 95616**, or send your C.V. via internet to: bioinfo@nnbt.com.

Novo Nordisk A/S is the world's largest producer of industrial enzymes, the world leader in the manufacture of insulin and other diabetes health care products, as well as other pharmaceuticals. Headquartered in Denmark, Novo Nordisk A/S has operating facilities in over 50 countries worldwide.



Novo Nordisk

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FOURTH ANNUAL REPORT OF MIZUTANI FOUNDATION FOR GLYCOSCIENCE

Research Grants Awarded in 1997 *

Last year, Mizutani Foundation for Glycoscience received 165 research grant applications from 28 countries. After careful evaluation for scientific merit, potentiality and feasibility, the foundation approved 22 projects and awarded a total of ¥100,000,000 to them plus one project that had been approved for two years in the previous year. The grantees for the 1997 fiscal year are (in alphabetical order):

1. Clausen, Henrik; University of Copenhagen, Denmark; "Pathobiology of polypeptide GalNAc-transferase, GalNAc-T3"
2. Ferguson, Michael A.; University of Dundee Medical Sciences Institute, UK; "Biosynthesis of novel mucin oligosaccharides in *Trypanosoma cruzi*"
3. Futerman, Anthony H.; The Weizmann Institute of Science, Israel; "The role of glycosphingolipids in regulating neuronal growth"
4. Gleeson, Paul A.; Monash University Medical School, Australia; "Protein sorting and biogenesis of Golgi membranes in higher and lower eukaryotes"
5. Hahn, Michael G.; University of Georgia, USA; "Purification and cloning of glucan elicitor-binding proteins from soybean"
6. Hakomori, Sen-itiroh; Pacific Northwest Research Foundation, USA; "The role of poly-LacNAc gangliosides in selectin-dependent adhesion of leukocytes"
7. Hascall, Vincent C.; Cleveland Clinic Foundation, USA; "FACE methods to quantitate fluorotagged chondroitinase digest products"
8. Hirabayashi, Yoshio; The Institute of Physical and Chemical Research (RIKEN), Japan; "Functional analysis of sphingoglycolipids"
9. Jiménez-Barbero, Jesús; Consejo Superior de Investigaciones Científicas, Spain; "NMR studies of substrates and inhibitors within glycosidases active sites"
10. Kiessling, Laura L.; University of Wisconsin-Madison, USA; "A combinatorial approach to the synthesis of selectin ligands"
11. Newburg, David S.; E. K. Shriver Center for Mental Retardation, USA; "Oligosaccharide structure essential for inhibiting ST transmembrane signaling"
12. Parodi, Armando J.; Instituto de Investigaciones Bioquímicas Fundación Campomar, Argentina; "Significance of galactofuranose residues in pathogenic protozoa virulence"
13. Roth, Jürgen; University of Zürich, Switzerland; "Structure-function analyses of a poly alpha 2,8 deaminoneuraminic acid bearing kidney glycoprotein"
14. Sasaki, Ryuzo; Kyoto University, Japan; "Glycosylation of a cytokine for the central nervous system-specific function"
15. Smith, George M.; The University of Texas Southwestern Medical Center, USA; "Effect of chondroitin sulfate proteoglycan production on axonal regeneration"
16. Stern, Robert; University of California San Francisco School of Medicine, USA; "CD44-mediated uptake and hyaluronidase digestion of hyaluronan"
17. Sugahara, Kazuyuki; Kobe Pharmaceutical University, Japan; "Biosynthetic mechanism of chondroitin sulfate polymerization"
18. Schwartz, Nancy B.; The University of Chicago, USA; "Regulation of sulfate activation, translocation and transfer"***
19. Takashima, Akira; The University of Texas Southwestern Medical Center, USA; "Roles of carbohydrates in dendritic cell-dependent T cell activation"
20. Thornhill, William B.; Mount Sinai School of Medicine, USA; "Glycosylation and ion channel function"
21. Wang, Peng George; University of Miami, USA; "Design and synthesis of protein O-glycosylation inhibitors"
22. Yu, Robert K.; Virginia Commonwealth University, USA; "Antiganglioside antibodies in motoneuron disease"
23. van Meer, Gerrit; University of Amsterdam, The Netherlands; "Glycosphingolipid translocation by multidrug resistance P-glycoproteins?"

* This and other related subjects may also be found in the internet: <http://mizutanifdn.or.jp>.

** Approved for two years in the previous year.

Mizutani Foundation for Glycoscience: Sen-i Kaikan, 3-1-11 Nihonbashi-boncho, Chuo-ku, Tokyo, Japan.

Fax: 81-3-3246-1265; Phone: 81-3-3246-0224; Email: info@mizutanifdn.or.jp

Associate Director, Exploration R&D

Strategic Post

Nutritional Healthcare

SmithKline Beecham is Europe's leading consumer healthcare company, with annual sales in excess of £2billion. Its R&D operations have recently undergone significant transformation to establish centres of scientific excellence. These will provide world-class R&D services to ensure that the company continues to take the lead in innovative consumer healthcare product development.

This new post is a high-profile position focusing on strategic product development. Reporting to the Director & Category Head responsible for worldwide nutritional healthcare R&D, you will work closely with UK and international commercial colleagues to identify healthcare benefits deliverable either through the development of existing product lines or the creation of new products.

Through developing effective liaisons with both internal company and academic researchers in the nutritional healthcare field, you will identify innovative product development strategies, research the background behind

ideas, and identify the technologies and formulations required to convert those ideas into action.

The post calls for an experienced nutritional healthcare professional who has an in-depth understanding of biochemistry and physiology, combined with the ability to communicate effectively on a science-to-science basis – and to mentor colleagues within the R&D environment.



SmithKline Beecham

The successful candidate will have been educated to PhD level and will have extensive experience of R&D Project Management within the consumer healthcare industry. He or she will also possess a sound understanding of business and brand strategy.

The position is based in Coleford, Gloucestershire, and will command a superior salary and exceptional benefits package, commensurate with its level of importance to the company. Assistance with relocation expenses is available if required. Scope exists for significant career progression to Director level and beyond.

Please write to **Bill Steggals** in strict confidence enclosing your up-to-date a CV, or 'phone to discuss the post further.

**Talentmark Search and Selection, King House,
5-11 Westbourne Grove, London W2 4UA.
Phone: 0171-229 2266. Fax: 0171-229 3549.
E-mail: Bill_Steggals@Talentmark.com**



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NRC-CNRC

NRC is a dynamic, nationwide R&D organization committed to helping Canada realize its potential as an innovative and competitive nation. Our strengths are: outstanding people, core science and engineering expertise and information, research programs focused on key technologies and technology diffusion. Combining our strengths with those of industrial and academic partners, we foster Canada's emerging national system of innovation.

You can make a difference at NRC!

Institute for Biological Sciences Immunochimistry Program

Applications are invited to join our established Immunochimistry Program in the Institute for Biological Sciences of the National Research Council of Canada. The research activities of the Immunochimistry Program are primarily directed towards a molecular level understanding of the role of glycoconjugates in human diseases. The Program brings together a large multi-disciplinary team with a focus on the design of novel vaccines, diagnostics and immunotherapeutic reagents. Group activities include the study of bacterial pathogenesis, cell adhesion, vaccine design studies and recombinant novel antibody research. Our research team collaborates with major research centres around the world and has strong interactions with industrial partners.

The following opportunities are currently available at the Research Associate level for recent Ph.D. graduates:

Cellular Immunology

You will work towards delineating the role of cellular immunity induced by vaccines against various disease states. Research activities will include elucidating the role of T cells and cytokines aimed at improving cellular immune responses to various vaccine candidates.

Mucosal Immunology

As part of a dynamic interdisciplinary team, you will participate in an innovative vaccine delivery program aimed at maximizing mucosal immune responses. Research activities will include animal model studies in the testing of liposome-based antigen delivery vehicles.

Animal Physiology

As a member of the vaccine delivery research team, you will investigate the use and mechanism of novel liposome formulations to deliver pharmaceuticals via the oral route. The pharmacokinetics and metabolic fate of the liposomes will be investigated *in vivo*.

Molecular Pathogenesis

You will participate in a vigorous infectious diseases research program leading to the development of immunological intervention strategies. Research activities will include mapping of the adherence-binding domain of pathogenic bacteria, the study of the virulence factors through their gene isolation and specific mutations, and the epithelial cytokine responses to fimbriated bacteria.

Applicants must have obtained a Ph.D. within the past five years in immunology, cell biology, animal physiology, molecular biology or microbiology and demonstrate a strong record of research in the field of study. The NRC offers excellent research facilities and technical support and the opportunity to work within a large focused group having varied scientific backgrounds. NRC offers a competitive salary and benefit package.

Only short-listed candidates will be contacted and provided with an application package for the Research Associateships Program. You will be expected to arrange for three written references to be sent to the Institute.

Preference will be given to Canadian citizens and permanent residents. As an employer who values diversity in its workforce, we encourage candidates to self-identify as members of the following designated groups: women, visible minorities, aboriginal people and persons with disabilities.

For more information, you may wish to consult the IBS home page: <http://gold.sao.nrc.ca/ibs> or visit the NRC Employment Opportunities at http://www.nrc.ca/corpserv/oempl_e.html

To explore any of these positions, please submit a curriculum vitae and your date of availability, by June 27, 1997 to: **Kim MacLellan, Human Resources Branch, Institute for Biological Sciences, National Research Council of Canada, Montreal Road, Building M-54, Ottawa, Ontario, Canada K1A 0R6.**

Vous pouvez obtenir ces renseignements en français.



National Research
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THE NEW YORK ACADEMY OF MEDICINE

1997 Basic Science Symposium: Synaptic Transmission

September 9-10, 1997, 1216 Fifth Avenue, New York, NY 10029

September 9, 1997:

AM Session

Opening Address: Rodolfo Llinas, M.D., Ph.D.

- "Biophysics of Neurotransmitter Release at Synapses in Xenopus Nerve-Muscle Cultures": Alan Grinnell, Ph.D.
- "Vesicle Transport and Synaptic Transmission": James E. Rothman, Ph.D.
- "The Synapsins: Dual Function Neuronal Phosphoproteins": Paul Greengard, Ph.D.

PM Session

- "Exocytosis of Synaptic Vesicles": Reinhard Jahn, Ph.D.
- "Molecular Mechanisms in Synaptic Vesicle Membrane Reuptake": Pietro V. DeCamilli, M.D.
- "Genes, Synapses and Long Term Memory": Eric R. Kandel, M.D.
- "Modulation of Neurotransmitter Actions": Floyd E. Bloom, M.D.

September 10, 1997:

AM Session

- "Post-Synaptic Receptors": Jean-Pierre Changeux, M.D.
- "Quantal Release at Central Synapses: Morpho-Functional Correlations and the One-Vesicle Hypothesis": Heri Korn, M.D., D.Sc.
- "Integration of Fast and Slow Synaptic Transmission": Sten Grillner, M.D., Ph.D.

Admission Fee: \$75/General Admission

\$65/New York Academy Fellows

\$60/Students and Research Fellows

Advance Registration Required

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The New York Academy of Medicine

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email: cmconnell@nyam.org

GLOBAL CAREER OPPORTUNITIES

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Molecular Neurobiologist

A molecular neurobiologist is sought to head new laboratory within a vigorous neurobiology program studying neural stem cells and the regulation of neural development, regeneration and apoptosis. Excellent opportunities exist for collaboration with the closely linked molecular developmental biology program.

Molecular Geneticist

New team studying disease susceptibility genes seeks a talented investigator, preferably with a strong interest in technical innovation. Unique opportunities include an expanding bioinformatics program and ready access to high throughput mapping and sequencing through the newly established Australian Genome Research Facility.

The Hall Institute is associated with the University of Melbourne and the Royal Melbourne Hospital. Other major programs include cancer, hematology, immunology, autoimmunity and parasitology. The Institute has a stimulating intellectual environment, a strong tradition in collaborative research, a large graduate program and state-of-art technological support, including computer science, flow cytometry, mouse husbandry and mouse genome modification.

Further information regarding the positions and current relevant programs is available on our homepage: <http://www.wehi.edu.au>. Applications, including a full CV, a brief description of research accomplishments and future research goals, and details of three professional referees, should be forwarded to the Director:



Professor Suzanne Cory PhD FAA FRS
The Walter and Eliza Hall Institute of Medical Research
PO Royal Melbourne Hospital
Victoria 3050, AUSTRALIA
Fax 61 3 9345 2508

POSITIONS OPEN

POSTDOCTORAL POSITION UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER AT DALLAS

The Department of Biochemistry at the University of Texas Southwestern Medical Center is offering a postdoctoral position in the use of insertional mutagenesis strategies to create and screen large libraries of somatic cell mutants in order to identify genes important for regulating intracellular protein traffic. This project is designed to develop techniques that will be required to rapidly assign function to genes identified through the genome projects. Ph.D. or M.D./Ph.D. degree required along with prior experience in cell culture, gene transfer techniques and cell biology. Experience with fluorescence activated cell sorting would be helpful. Send curriculum vitae and names and telephone numbers of three references to: **Dr. Michael G. Roth, Department of Biochemistry, U.T. Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9038. Email: mroth@biochem.swmed.edu.** The University of Texas Southwestern Medical Center is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are encouraged to apply.

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POSTDOCTORAL POSITION available immediately to study protein kinase regulation of mammalian Na/H exchangers and interaction with associated proteins (PNAS, 94:3010, 1997). Candidates with a strong background in molecular, cellular biology or physiology are desired. *Eligibility for an NIH training grant is required.* Send curriculum vitae and two letters of reference to: **Dr. C. Chris Yun, GI Division, Johns Hopkins School of Medicine, 918 Ross, 720 Rutland Avenue, Baltimore, MD 21205; FAX: 410-955-9677; Email: cyun@welchlink.welch.jhu.edu.**

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POSTDOCTORAL POSITION funded by the NIH available immediately to study nuclear-mitochondrial interactions and the molecular pathogenesis of mtDNA mutations. Expertise in biochemistry, cell and molecular biology required. Send curriculum vitae and name/telephone number of three references to: **Carlos T. Moraes, Ph.D., Department of Neurology, University of Miami, 1501 Northwest 9th Avenue, Miami, FL 33136; Email: emoraes@mednet.med.miami.edu.**

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POSTDOCTORAL POSITIONS available to study (i) reaction mechanisms of B₁₂ enzymes and (ii) mammalian gene regulation by B₁₂. For the first, experience with proteins is required and with spectroscopy/kinetics/synthesis is desirable. For the second position, experience with tissue culture and/or molecular biology techniques is required. Send curriculum vitae and three letters of reference to: **Dr. Ruma Banerjee, Biochemistry Department, University of Nebraska, Lincoln, NE 68588-0664. Email: rbanerje@unlinfo2.unl.edu.** The University of Nebraska is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS available immediately for the study of membrane channels and receptors in developing retina. *Applicants must be U.S. citizens or permanent residents and have previous experience in retinal research, molecular biology, and/or patch-clamp from slices.* Send curriculum vitae with names of three references to: **X. Yang and/or G. L. Fain, Jules Stein Eye Institute, 100 Stein Plaza, UCLA School of Medicine, Los Angeles, CA 90095-0819.**

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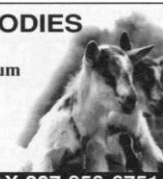
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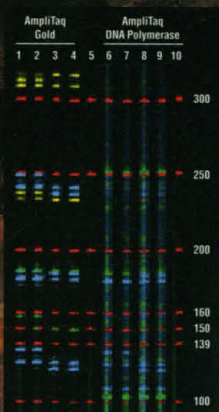
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