

no one is immune to being first.

Ask Christine Jacobs.

As the 1997 prize winner, she discovered that being published in *Science*, winning US\$20,000, a free trip to Stockholm and appearing in this ad can be quite a shot in the arm.

If you are a recent Ph.D. graduate in the field of molecular biology, you are eligible to enter the 1998 Amersham Pharmacia Biotech & Science Prize for Young Scientists. Just send us an essay based on your graduate thesis, and we'll take it from there.

What's in it for you.

The grand prize is US\$20,000 with an additional seven runners-up winning US\$5,000 and being announced in *Science*. The winning essay will be published in full. The award ceremony will be held in Sweden in early December. The Grand Prize winner will feature in next year's Amersham Pharmacia Biotech & Science Prize for Young Scientists advertisement. As an additional bonus, all winners and finalists receive a free subscription to *Science*.

Call for entries.

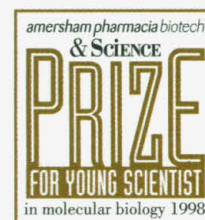
To be eligible, you must have received your Ph.D. between January 1 and December 31, 1997. Your thesis has to be in the field of molecular biology and submitted to us in the form of a 1,000-word essay which describes your work and places it in perspective with regard to the field of molecular biology. The essay can be written in English, French, German, Spanish, Japanese or Chinese (Mandarin).



Christine Jacobs discovered the mechanism that bacteria use to defend themselves against antibiotics.

The closing date is June 15, 1998. All prizes will be presented in Sweden in December 1998. Full details, and the required entry form can be collected from:

- * the administrator of the award committee at the address below
- * from the *Science* homepage at <http://www.aaas.org/science/prize.htm>
- * from the Amersham Pharmacia Biotech homepage at <http://www.apbiotech.com>



Amersham Pharmacia Biotech and Science Young Scientist Prize Selection Committee

Enquiries in Europe should be addressed to: Science International Thomas House 14 George IV Street Cambridge CB2 1HH UK
Tel: +44 1223 302067. Fax: +44 1223 302 068

Enquiries in the United States and other regions should be addressed to: Science 1200 New York Avenue, N.W., Room #1053 Washington, DC 20005 USA
Tel: +1 202 236 6553. Fax: +1 202 289 7562

Circle No. 51 on Readers' Service Card

DISPLAY CLASSIFIED ADVERTISEMENTS

Call for rate and deadline information on display classified advertisements.

E-mail: science_displayads@aaas.org

Bren Peters
Recruitment Display Advertising
Telephone: (202) 326-6541
FAX: (202) 289-6742
E-mail: science_displayads@aaas.org

Gabrielle Boguslawski
Recruitment Advertising Sales Manager
Telephone: (718) 491-1607
FAX: (202) 289-6742

Debbie Cummings
European Recruitment Advertising
Telephone: +44 (0) 1223 302067
FAX: +44 (0) 1223 576208
E-mail: european_ads@science-int.co.uk

LINE CLASSIFIED ADVERTISEMENTS

How to Submit a Line Classified Ad:

Send your ad text to: e-mail: science_classifieds@aaas.org; fax: (202) 289-6742. You must include your telephone number, billing address, and purchase order number in your e-mail or fax. Do not bold, italicize, or abbreviate any words. SCIENCE will edit and typeset ads according to SCIENCE style. **SCIENCE cannot provide proofs of typeset line ads.** Available categories: Positions Open, Meetings, Announcements, and Courses and Training. Line advertisements are not commissionable.

Estimates: SCIENCE will provide a cost estimate for line ads. **This is an approximate cost only.** Purchase orders must allow for variation between estimated lines and actual typeset lines and resulting final cost.

For line advertising deadlines, call Eric Banks, Telephone: (202) 326-6555; or Troy Benitez, Telephone: (202) 326-6740; FAX: (202) 289-6742. E-mail: 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, all classified advertisements submitted for publication in SCIENCE are automatically posted on SCIENCE's online classified advertising service, SCIENCE Professional Network, at no additional charge.
www.sciencemag.org

Mail, FAX or E-mail materials to:
SCIENCE Classified Advertising
1200 New York Avenue, N.W., Room 911
Washington, DC 20005
FAX: 202-289-6742
E-mail: science_classifieds@aaas.org (please include your telephone number in e-mail)

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

POSITIONS OPEN

FACULTY APPOINTMENTS IMMUNOLOGY AND INFECTIOUS DISEASE at the Trudeau Institute Saranac Lake, New York

The Trudeau Institute is recruiting several new faculty in the areas of immunity to infectious disease and basic immunology, including studies in murine models of infectious disease; virology; cellular and molecular studies of host-pathogen interactions; mouse molecular genetics; signal transduction; chemokines; and lymphocyte adhesion, trafficking, and homing.

The Institute is building new laboratory space for this expansion. The Institute offers competitive start-up packages, affordable on-campus housing, excellent laboratory space, extensive core facilities, including an affordable mouse facility, and the opportunity to collaborate with faculty working at the interface between basic immunology and infectious disease.

Please send applications or inquiries for further information to: **Faculty Search Committee, Trudeau Institute, P.O. Box 59, Saranac Lake, NY 12983. FAX: 518-891-5126; e-mail: dutton@northnet.org; website: trudeauinstitute.org.**

Applications should be received by July 31, 1998. The Trudeau Institute is an Equal Opportunity Employer.

ASSOCIATE/FULL PROFESSOR OF PEDIATRICS University of Pittsburgh School of Medicine

The Division of Hematology/Oncology at the Children's Hospital of Pittsburgh (CHP) is seeking applications from individuals for a tenure-track position as Associate Professor or Professor of pediatrics. To complement our existing strengths, we are especially interested in individuals with a primary research focus in the areas of signal transduction in hematopoietic cells, molecular oncology, and the molecular basis of hematopoietic cell differentiation or apoptosis. The ideal applicant for this position should possess a Ph.D. and/or M.D., demonstrate a long-standing record of scientific productivity and external funding, and show evidence of success in the training of graduate students and Postdoctoral Fellows. CHP has committed substantial start-up funds for this position as well as space in the Rangos Research Center, a state-of-the-art laboratory facility located in the heart of the University of Pittsburgh Medical Center. A highly competitive salary will be commensurate with the candidate's level of appointment. Secondary appointments in an appropriate basic science department at the University of Pittsburgh and the University of Pittsburgh Cancer Institute can be arranged.

Children's Hospital of Pittsburgh ranks among the top five independent children's hospitals in the nation in terms of peer-reviewed grant support. Numerous ongoing collaborations involve faculty at the University of Pittsburgh as well as nearby Carnegie-Mellon University. Applicants should send a full curriculum vitae, a brief statement of current research and future plans, and the names of three individuals who can provide recommendations to: **Edward V. Prochownik, M.D., Ph.D., The Paul C. Gaffney Professor of Pediatrics, Division of Hematology/Oncology, Children's Hospital of Pittsburgh, 3705 Fifth Avenue, Pittsburgh, PA 15213.** The University of Pittsburgh is an Equal Opportunity Employer.

ANATOMY AND PHYSIOLOGY INSTRUCTOR

The University of Southern Mississippi, Department of Biological Sciences, invites applications for a full-time Instructor position to begin August 1998 or January 1999. Primary teaching responsibilities include human anatomy and physiology, and comparative anatomy. Applicants must have at least an M.S. degree and a strong commitment to excellence in teaching. Interested candidates should submit a letter of application containing a statement of teaching experience and philosophy that reflect innovative and progressive approaches to undergraduate education, a curriculum vitae, and names of three professional references to: **Dr. Shiao Wang, The University of Southern Mississippi, Box 5018, Hattiesburg, MS 39406-5018.** Application deadline is June 19, 1998. Affirmative Action/Equal Opportunity Employer/ADA Institution.

POSITIONS OPEN

DIRECTOR GRADUATE PROGRAMS IN BIOMEDICAL SCIENCE Saint Louis University Medical School

Saint Louis University, a Catholic Jesuit Institution dedicated to education, research, and health care, is seeking applicants for a full-time Director for a new interdisciplinary graduate studies program in biomedical sciences at Saint Louis University Medical School. Beginning in 1998, admission to all Ph.D. graduate programs in the medical school will be through the Graduate Programs in Biomedical Science. This program is designed to provide graduate students with a strong foundation in all biomedical sciences during the first year of graduate training. The Director, with an Administrative Assistant, will be responsible for managing student recruiting and admissions, implementing first-year courses, administering the budget, maintaining program records, and will also serve as advisor and liaison for first-year graduate students and oversight committees. The Director will be a member of the Dean's staff of the School of Medicine, and have responsibilities to the Executive, Curriculum, and Admission Committees of the program.

Candidates for this position should have a Ph.D. in one of the biomedical sciences, previous experience in research and in graduate student training, and administrative expertise. The position requires skills in communication and interpersonal relationships, as well as organizational and supervisory skills.

Applicants should submit a letter of interest, detailed curriculum vitae including description of relevant experience, and three letters of recommendation to:

Dr. Thomas Westfall
Chairman of the Search Committee
Graduate Programs in Biomedical Sciences
Department of Pharmacological and
Physiological Science
Saint Louis University School of Medicine
1402 South Grand Boulevard
St. Louis, MO 63104-1004

To learn more about Saint Louis University School of Medicine graduate training in the biomedical sciences, visit our website: <http://www.slu.edu/colleges/med/>.

Saint Louis University is an Affirmative Action/Equal Opportunity Employer.

UNIVERSITY OF FLORIDA

Seeks to fill the **MARCIA WHITNEY SCHOTT EMINENT SCHOLAR CHAIR** and **CHIEF** of the Division of Clinical Immunology, Rheumatology, and Allergy in the Department of Medicine. A Physician Investigator with M.D. degree, Board certification in internal medicine and rheumatology, and a well-established research program who can direct the research training grant in rheumatology is being sought. Existing program is well balanced in respect to providing excellent clinical care and performing both basic and clinical research. Qualified candidates should possess the abilities to lead and develop programs in research, education, and health care delivery. This is a tenure-track position. Salary and benefits commensurate with experience. Recruiting deadline: July 1, 1998. Anticipated starting date: January 1, 1999. Please submit curriculum vitae and other information to: **Dr. Edward R. Block, Research Service (151), VA Medical Center, Gainesville, FL 32608-1197.** An Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION

Tenure-track **ASSISTANT** or **ASSOCIATE PROFESSOR** position, to begin spring 1999. Required: Ph.D., M.D., or equivalent with postdoctoral training. Preferences: candidates that are (1) capable of developing an independent research program in cellular, molecular, or genetic aspects of vertebrate neural development that complements existing department interests and (2) trained to teach graduate and medical students in developmental neurobiology, histology, and/or gross anatomy. Send curriculum vitae, research goals statement, and names of three references to: **Faculty Search Committee, Department of Neurosciences, University of New Mexico School of Medicine, Albuquerque, NM 87131-5223** by August 1, 1998. Website: <http://www.unm.edu/~neurohsc>. Applicants must be eligible to work in the United States. UNM is an Equal Opportunity/Affirmative Action Employer.

Molecular Virologist

Merck Research Laboratories in West Point, Pennsylvania, a world leader in biological and pharmaceutical research, has an immediate opening for a **Molecular Virologist** to support our Live Virus Vaccine Development.

The successful candidate should have a diverse scientific background with extensive experience in state-of-the-art technologies in biochemistry, molecular biology, virology and immunology, with a strong emphasis on assay development and validation. The candidate will be expected to solve problems independently, possess excellent communication skills and work effectively in a team environment.

This position requires a BS/MS, or equivalent, in Biochemistry, Molecular Biology, Virology or a related discipline. Computer knowledge and familiarity with GMP/GLP is preferred.

Excellent salary and benefit programs accompany this position at our modern research facility located 25 miles northwest of Philadelphia. Please send *curriculum vitae* with cover letter and the names of three references to: **Ad # B-160, Merck & Co., Inc., MRL Human Resources, WP42-2, P.O. Box 4, West Point, PA 19486.** Only candidates considered for interviews will receive responses. We are an Equal Opportunity Employer, Principals only, M/F/D/V.



<http://www.merck.com>

Postdoctoral Fellow

Postdoctoral fellowship is available in the Protein Structure Section in the Macromolecular Structure Laboratory, under **Dr. A. Wlodawer**. The research focuses on crystallographic studies of retroviral proteins, chemokines and chemokine receptors, and other proteins important for the understanding of cancer and AIDS.

Experience with macromolecular crystallography, molecular biology, and/or biochemistry is desirable. More information about the MSL and its research programs may be found at their website: <http://nmrweb.ncifcrf.gov/abl>.

The ABL-Basic Research Program at the NCI-Frederick Cancer Research and Development Center is located in Frederick, MD (45 miles north of Washington, D.C.), and offers a full complement of benefits, competitive postdoctoral stipends, and an excellent work environment. To apply, please send a curriculum vitae, an introductory letter containing a brief description of research experience, and contact information for three references to: **Dr. Alexander Wlodawer c/o Human Resources Dept.-SC, ABL-Basic Research Program, NCI-FCRDC, P.O. Box B, Bldg. 428, Frederick, MD 21702.** An Equal Opportunity/Affirmative Action Employer.



POSTDOCTORAL TRAINING AT FOX CHASE

Fox Chase Cancer Center in Philadelphia is seeking postdoctoral fellows with Ph.D. or M.D. degrees (or equivalent) to join a research program in cancer pharmacology. Positions are available for our NIH Training Grant* with the following principal investigators:

- James Gallo, Ph.D. - Therapeutics of brain tumors; drug/gene delivery; pharmacodynamics.
- Jenny Glusker, D.Phil. - Crystallography, molecular mechanisms of enzyme: substrate interactions.
- Thomas Hamilton, Ph.D. - Chemotherapy of ovarian cancer.
- Gary D. Kruh, M.D., Ph.D. - Transporters and drug resistance; signal transduction; tumor suppressor proteins.
- Yoshiro Matsumoto, Ph.D. - Mechanisms of DNA repair; cellular responses to DNA damage.
- Maureen Murphy, Ph.D. - p53 in apoptosis; transcriptional repression by p53.
- Robert Ozols, M.D., Ph.D. - New drug development; combination chemotherapy.
- Charles D. Smith, Ph.D. - Preclinical development of novel anticancer agents.
- Kenneth D. Tew, Ph.D., D.Sc. - Glutathione metabolism and drug resistance, Antimitotic drugs.
- Louis Weiner, M.D. - Antibody engineering; use of antibody-derived proteins in cancer therapy.

*Applications for NIH Training Grants are restricted to U.S. Citizens and Permanent Residents (Green Card).

To apply, please send CV to:

FOX CHASE
CANCER CENTER

Ms. Patricia Kraus
Fox Chase Cancer Center
Department of Pharmacology
7701 Burholme Avenue
Philadelphia, PA 19111
Phone: (215) 728-3137
Fax: (215) 728-4333
E-mail: kd_tew@fccc.edu

Fox Chase Cancer Center is an Affirmative Action/Equal Opportunity Employer

Eunice Kennedy Shriver Center
for Mental Retardation, Inc.

POST-DOCTORAL POSITION

Post-Doctoral position in developmental neuroscience available immediately for projects on the mammalian visual system. The research focuses on retinoic acid-related processes in normal eye and brain development and on several aspects of developmental defects and diseases of the visual system. The work involves cell-biological, biochemical and molecular-biological techniques. Recent graduates with a strong interest in developmental neurobiology and training in the above-mentioned techniques should send a letter of application with curriculum vitae and names of three references to: **Ursula Dräger, Eunice Kennedy Shriver Center for Mental Retardation, Inc., 200 Trapelo Road, Waltham, MA 02254.**

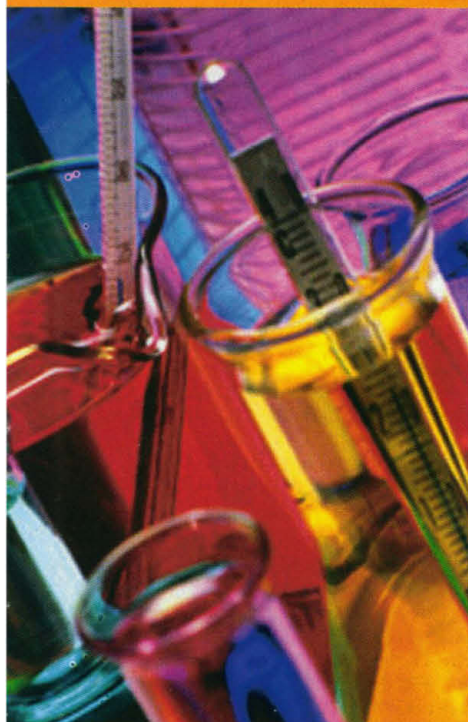
Visit our web site at
<http://www.shriver.org>



**EUNICE KENNEDY
SHRIVER CENTER**

The Shriver Center is an Affirmative
Action/Equal Opportunity Employer.

Scientists



Discover the extraordinary benefits of living in one of the nations' most vibrant metro areas. See for yourself why the Triangle was ranked the 5th best city in the country by Fortune magazine for working and raising a family. And why Novartis is number one in the world for careers in the life sciences.



Scientific careers come **full circle** in the **Triangle**

Novartis Agribusiness Biotechnology Research, Inc. (NABRI), a Novartis Group Company formed from the merger of Ciba and Sandoz, has become the natural habitat of some of the world's brightest scientific professionals. Located in the heart of North Carolina's Research Triangle Park, our diverse scientific teams have access to a wealth of resources, enabling them to apply tomorrow's technology toward addressing today's critical research issues.

Molecular Biologist #745

As an integral member of our Insect Control department, you will be responsible for cloning novel insecticidal genes for expression in transgenic plants.

To qualify, you must have a PhD in biochemistry, biophysics or molecular biology, OR an MS degree with 3+ years experience, with demonstrated proficiency in cloning, sequencing and analysis of gene expression in heterologous systems. Excellent analytical, problem-solving and organizational abilities are required, as are strong communication and interpersonal skills.

Biochemist #9835

You will be responsible for assisting in the development and optimization of biochemical assays in support of the Herbicide Discovery Project.

To qualify, you must have a BS/MS in biochemistry and 2-5 years of hands-on laboratory experience. Background involving HPLC, GC, MS, CD, FPLC, UV-vs and/or fluorescence is necessary, as is expertise in assay development and high-throughput screening. Candidate should be capable of performing follow-through assays and mechanistic studies on hits, as well

as proposing new screening strategies and novel assay formats. Familiarity with enzyme kinetics, including software for kinetic analysis, is preferred. Position requires excellent analytical, problem-solving and communication skills.

Microbial Geneticist #9834

As an active member of our Fungicides Group, your responsibilities will include cloning and modifying bacterial and fungal genes and conducting experiments toward understanding biological mechanisms of antifungal metabolites, biological disease control and rhizosphere colonization by bacteria. You will also conduct experiments on plants to measure and assess the ability of bacterial strains to control plant pathogens.

To qualify, you must have an MS degree in microbiology, genetics or plant pathology and research experience using molecular genetic techniques, such as Southern/Northern hybridizations, gene cloning, PCR and DNA manipulation. A BS degree with 5+ years experience is an acceptable substitute. Analytical, problem-solving, computer, and communication skills are also required.

Novartis offers a competitive salary commensurate with qualifications and experience, a comprehensive benefits package, and an environment conducive to professional achievement. Qualified candidates should forward a resume and cover letter to: Position #____, Novartis Agribusiness Biotechnology Research, Inc., P.O. Box 12257, Research Triangle Park, NC 27709-2257; or email (ASCII format) to: biotech.jobs@cp.novartis.com (indicate Position #____ in the subject area) Principles only. We are an Equal Opportunity Employer M/F/D/V.

PENNSTATE



College of Medicine

POSTDOCTORAL FELLOW POSITIONS G PROTEIN SIGNALING, REGULATION AND FUNCTION

Two postdoctoral positions are available in the Laboratory of Dr. Janet D. Robishaw to study the regulation or function of diverse G protein γ subunits (see J. Biol. Chem. 270, 21765, 1995; and J. Biol. Chem. 272, 26040, 1997). For studies on gene regulation, the successful candidate will have experience in promoter analysis of G protein γ subunits that have been implicated in tumor progression of metastasis, with emphasis on use of transgenic animals. For studies on function, the successful candidate will have experience in molecular biology and/or signal transduction of G protein $\beta\gamma$ subunits, with emphasis on use of anti-sense or ribozyme approaches.

An additional position is available to study the G protein-coupled receptor signaling pathways controlling growth in rat cardiac myocytes (see Eur. J. Pharm. 339, 77, 1997). The successful candidate will have experience in molecular biology and/or signal transduction of G protein-coupled receptors, including the preparation and culture of rat cardiac myocytes.

The Weis Center for Research in Danville, PA is part of the Penn State College of Medicine, providing modern research facilities for 90 faculty and research personnel. The center is located on the campus of Penn State Geisinger Health System in Danville, PA. This is a pleasant semi-rural living environment with convenient access to the major metropolitan areas of New York and Baltimore.

Interested individuals should send their curriculum vitae and the names of three references to:

Mrs. Barbara A. Brown
Administrative Assistant
Henry Hood Research Program (JDR)
Sigfried and Janet Weis Center for Research
100 North Academy Avenue
Box SCI
Danville, PA 17822-2601

For your health, the Weis Center for Research of The Pennsylvania State University is a smoke-free campus. AA/EOE

Faculty Position in Molecular Genetics of Cancer Lombardi Cancer Center at Georgetown University

The Lombardi Cancer Center, an NCI-designated Comprehensive Cancer Center at Georgetown University, has an opening for a cancer molecular geneticist at the Assistant or Associate Professor level. Qualified applicants should have experience conducting research in the molecular genetics of familial cancer, including the identification and characterization of tumor suppressor genes, genotype-phenotype correlations, molecular diagnostics, and histopathobiology of familial cancers.

The successful applicant will collaborate as a member of a multidisciplinary Cancer Genetics Program and have access to a resource of DNA and tissue from hereditary cancer families, as well as a state-of-the-art molecular diagnostics facility. Minimum requirements include an M.D. or Ph.D. in genetics, molecular biology, or a related field, and evidence of independent research capability based on publications and extramural funding.

Interested applicants should send a letter addressing their qualifications and interests, a curriculum vitae, and a list of three references to: **Caryn Lerman, Ph.D., Director, Cancer Genetics, Lombardi Cancer Center, Georgetown University Medical Center, 2233 Wisconsin Avenue, Suite 317, Washington, D.C. 20007-4104. Fax: 202-687-0820.**

**Georgetown University Medical
Center**

Faculty Position in Biomedical Engineering UNIVERSITY OF MEMPHIS

The Department of Biomedical Engineering has a tenure-track faculty position available for immediate appointment. An experienced faculty member is being sought for the position at the level of Assistant or Associate Professor to work in the areas of biomedical sensors and analytical chemistry. This individual should have postdoctoral training and at least 5 years experience in developing electrochemical analytical sensors for inorganic and organic analytes. She/He will join a newly formed research group concerned with biomedical sensors and their application. The applicant should be able to work on the development of miniature chemical sensors based upon microelectronic technology. Experience with interfacing sensor chemistry and microelectronic devices will be important in this position, and the faculty member should be familiar with biomedical applications of these devices. A significant publication record, as well as the potential to attract independent research funding, is an important consideration for this position. The faculty member will be expected to collaborate with other faculty in the BME Program and the local medical community. The faculty member will also be expected to develop and teach new courses in the biomedical sensing and analytical instrumentation area.

Interested applicants should send a CV, a summary of their research plans, and three letters of reference to:

Vincent T. Turitto, Chair
Department of Biomedical Engineering
The University of Memphis
Memphis, TN 38152

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



The Division of Life Sciences in the College of Letters and Science at UCLA

announces a search for a distinguished scholar and educator to assume the position of Chair of the former Department of Biology (to be renamed the Department of Organismic Biology, Ecology, and Evolution). We seek a mid-career or senior-level scientist with a distinguished record of productivity, a strong desire to maintain an active research program, and a commitment to undergraduate education. The department has 23 faculty, with strengths ranging from cellular to evolutionary biology of both plants and animals. The new Chair will be expected to define and participate in the expansion of this faculty over the next several years, in accord with its existing strengths. Resources within the department include the Marine Science Center, the Mildred E. Mathias Botanical Garden, the Donald E. Dickey Collection of Birds and Mammals, and Stunt Ranch Reserve (in the UC National Reserves System). Significant interactions outside the department occur with the Center for the Study of Evolution and the Origin of Life and the newly created Institute of the Environment. The Division already has in place a strong administrative structure to assist the Chair in day-to-day operation of the Department, freeing him or her to maintain a strong research program.

Individuals interested in this position should send their curriculum vitae and names of three potential referees by September 1, 1998, to: **Chair, Evolutionary Biologist Search Committee, 621 South Circle Drive, University of California, Los Angeles, CA 90095-1606, USA.**



Enhancing lives through oncology innovations

Hoechst Marion Roussel, a world leader in pharmaceutical based healthcare, is dedicated to extending and enhancing human life through discovery, development and manufacture of innovative products. Additional dedicated resources have created career opportunities within our expanding Oncology Disease Group at our U.S. Strategic Research Center in Bridgewater, N.J.

Group Leader Signal Transduction Research

Senior Ph.D. Scientist responsible for originating Signal Transduction research projects and overseeing the daily performance of a group of 8-10 scientists (Ph.D./MS/BS)

Requirements:

- Ph.D. in Cell Biology, Molecular Biology, Biochemistry or recognized equivalent
- Minimum 4 years pharmaceutical industry experience (beyond post-doc), including managerial and supervisory background
- Specific experience in signal transduction pathways directly relevant to anti-cancer drug discovery
- Significant record of Scientific Publication
- Excellent written and verbal communication skills

Group Leader Tumor Biology

Senior Ph.D. Scientist responsible for organizing and leading a Tumor Biology group of 8 Scientists (Ph.D./MS/BS). This role includes pre-clinical testing of drug candidates and support of compound progression through early clinical trials.

Requirements:

- Ph.D. or DVM/Ph.D in Pharmacology, Pathology or recognized equivalent field
- Minimum of 4 years experience (industry experience preferred) in tumor model use for drug testing including experience with human tumor xenografts in nude and scid mice
- Hands-on experience with tumor pathology, immunohistochemistry, and, in situ hybridization.
- Experience with in vivo models of angiogenesis, tumor model development, and tumor cell culture is highly desirable
- Published record of accomplishment in drug testing and development
- Excellent verbal and written communication skills

MS Enzymologists/Protein Biochemists

You will be part of a team responsible for cloning and expression of novel target proteins for use in high throughput chemical library screening and complete in vitro evaluation of chemical hits.

Requirements include an MS in Biochemistry, Molecular Biology or recognized equivalent discipline with a minimum of two years relevant, hands-on experience with protein purification and characterization, enzyme kinetics and inhibition, assay development, tissue culture, protein expression and general molecular biology techniques. Familiarity with protein structure/function studies and protein:protein interaction techniques including immunoprecipitation and yeast two-hybrid technology is desirable. Experience in cell cycle and/or apoptosis is preferred.

MS Molecular Biologists/Biochemists

We are seeking MS Molecular Biologists or Biochemists for positions in the areas indicated below:

Assay Development

Degree as above with a minimum of 2 years of experience to support adaption of assays for novel molecular/biochemical targets to high throughput chemical library screening. Experience with receptor, enzyme and cell-based assays and a demonstrated ability to successfully develop assays to an automated format is highly desirable. Experience with Biomek 2000 or similar robotic work stations preferred.

Angiogenesis Research

Degree as above with a minimum of 2 years of demonstrated success in cloning and expression, plus experience is one or more of the following areas: assay development, compound screening and evaluation, protein:protein interaction techniques. Experience in Oncology or Angiogenesis research preferred. ability to work in a flexible, team-oriented environment is essential.

Attracting and retaining top talent is a high priority at Hoechst Marion Roussel. That is why we offer one of the most outstanding and comprehensive compensation and benefits packages in the pharmaceutical industry. Our total rewards package includes competitive compensation and bonus programs, flexible medical and dental plans, tuition assistance, income protection plans, and generous retirement plans that have been cited as the best in the industry. For consideration or mail your resume (suitable for scanning) including salary history/requirements, to: **Staffing Manager, D-103H, Ref#1998BW0013, Hoechst Marion Roussel, Routes 202-206, P.O. Box 6800, Bridgewater, New Jersey 08807-0800, U.S.A., or e-mail: jobs@hmri.com.** For additional company information, we invite you to visit our website: **www.hmri.com**. An affirmative action employer M/F/D/V.

Hoechst Marion Roussel

Hoechst

Hoechst Marion Roussel
The Pharmaceutical Company of Hoechst

Pfizer Central Research is a technology driven R&D organization that is focused on delivering innovative products to meet customer needs. We invite you to explore challenging opportunities for professional growth in our Animal Health Organization, where we strive to be the driving force in the Animal Health market.

The Search
For Cures
Begins With
A Search For
The Best.

Project Management (2 Positions)

We have two exciting opportunities available in Animal Health Central Research for experienced candidates who will play a leadership role in our global project teams in exploratory and full product development. The successful candidate will work in multi-disciplinary teams that are responsible for establishing proof of concept and executing development programs leading to worldwide registration and launch of animal health medicinal products. These individuals will be expected to participate in developing and implementing creative strategies and tactics that integrate the elements critical to product registration.

DVM or Ph.D. in chemical, biological, pharmaceutical or veterinary sciences, with a minimum of 3-5 years' experience in research development with multi-disciplinary project teams, or MS Degree or equivalent with 10 years' experience in related project management required. Must possess strong motivation to coordinate multi-function teams, demonstrated leadership qualities, and excellent organizational and interpersonal skills with superior written and verbal communication skills essential. Knowledge of drug development and registration process desirable. Competence in standard computer software including, MS Word, MS Project, MS Excel, MS PowerPoint also required.

We offer an excellent compensation package, comprehensive flexible benefits and generous relocation support. For immediate consideration, please forward your resume to: **Employee Resources, Pfizer Inc, Central Research Division, Job Code #2643, Eastern Point Road, Groton, CT 06340.** For more information on career opportunities available at Pfizer, please visit our Web site: <http://www.pfizer.com>. We are an equal opportunity employer dedicated to diversity M/F/D/V.



We're part of the cure.

SYMPOSIUM



4th National Symposium BASIC ASPECTS OF IMMUNOLOGY

21-23 October, 1998

BETHESDA, MARYLAND

COMPLEMENT

Una S. Ryan, *Chair*
Henry C. Marsh
Andrea J. Tenner
Anne Nicholson-Weller
Michael Carroll

CYTOKINES AND CHEMOKINES

Abul K. Abbas, *Chair*
Thomas Schall
Paul Rothman
Jeffrey Browning

NK CELLS

Eric O. Long, *Chair*
David H. Raulet
Lewis L. Lanier
Christine A. Biron

TOLERANCE

Polly Matzinger, *Chair*
Wendy Havran
Albert S. Bendelac
Howard L. Weiner

TRANSPLANTATION

Carl H. June, *Chair*
Hugh Auchincloss
Jeff A. Bluestone
Allan D. Kirk
Charles G. Orosz
Kathryn J. Wood

FEATURED SPEAKER: Ellen S. Vitetta

For information, tel: 202-782-0002; fax: 202-782-0721
EM: symposium@wrair-emh1.army.mil
<http://wrair-www.army.mil/symposia/dmbsym.htm>

CONFERENCE

Molecular Strategies in Biological Evolution

A New York Academy of Sciences Conference

June 27-29, 1998

The Rockefeller University, New York City

Conference Chairs

Lynn Helena Caporale (Consultant, New York City)
Werner Arber (University of Basel, Switzerland)

This conference will address molecular strategies by which lineages of organisms respond to changes in their environment and explore the idea that organisms have evolved the ability to modulate the rate, location, and extent of genetic variation. Jumps in efficiency, made possible by development of novel evolutionary strategies, could fuel rapid, saltatory, expansion of species into novel niches as each innovation evolves. Uncovering the genomic strategies used by pathogens and tumors will expedite the discovery of new therapeutic strategies.

Speakers: Stephen Benkovic; John Drake; Thomas Kunkel; Joshua Lederberg; David Prescott; Monica Riley; Lynn Ripley; Chris Sander; James Shapiro and many other prominent investigators.

For further information, contact:

Science and Technology Meetings
New York Academy of Sciences
2 E. 63rd St., New York, NY 10021
T: 212.838.0230, ext. 324
F: 212.838.5640



E: conference@nyas.org
W: <http://www.nyas.org>

RESEARCH SCIENTISTS

Ciphergen Biosystems is currently expanding its U.S. operations and looking for ambitious, commercially minded Ph.D. biochemists/biologists with excellent communication skills and proven problem solving abilities, at the following locations: Seattle, San Francisco Bay Area, San Diego, Chicago, Indianapolis, St. Louis, Boston, Pennsylvania, New Jersey, New York, Washington, D.C., Research Triangle Park in North Carolina, and Austin, TX.

Preferably you will have experience in cell biology, including gene expression and protein purification. Expertise with one or more of the following endeavors is highly desirable:

- **Receptor - ligand interactions**
- **Molecular immunology/virology**
- **Protein biochemistry**
- **Immunoassay development**

Your role will involve working alongside our clients' scientists, in both industry and academia, developing new protocols, and rapidly solving important biological problems using Ciphergen's proprietary SELDI ProteinChip array technology.

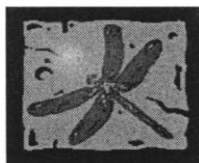
As well as being a talented research scientist, capable of strong analytical thinking and creativity, you will need good leadership and interactive skills as well as the ability to communicate effectively at all levels.

We offer an excellent compensation package, including stock options. Please visit our website at www.ciphergen.com and send your résumé to:

Ciphergen Biosystems, Inc.
Attn: Human Resources
490 San Antonio Road
Palo Alto, CA 94306

Or e-mail résumé to
cv@ciphergen.com

EOE



Ciphergen

Postdoctoral Training Opportunities The Center for Agricultural Biotechnology University of Maryland Biotechnology Institute

The Center for Agricultural Biotechnology (CAB) is one of four interdisciplinary research centers of the University of Maryland Biotechnology Institute. Housed in the new Plant Sciences Building on the University of Maryland College Park campus, CAB's location facilitates scientific interactions with University of Maryland and Johns Hopkins faculty, as well as governmental scientists (NIH, USDA, NIST). Investigators also benefit from collaborations with scientists from the dynamic and expanding commercial biotechnology sector in Maryland.

Postdoctoral positions are available throughout CAB. Applicants should possess the requisite background in molecular biology, virology, genetics, plant biology, modeling, or polymer chemistry appropriate to the specific laboratory. Additional information is available at the CAB website (www.umbi.umd.edu/~cab) or by e-mail to a principle investigator.

Plant-Microbe Interactions

Engineering hypoviruses for purposes of understanding and managing fungal virulence using the Chestnut blight fungus as a model system. These studies extend to signal transduction pathways underlying fungal pathogenesis.

Donald Nuss (nuss@umbi.umd.edu)

Studying how a highly conserved class of DNA-binding factors governs plant target gene expression in response to hormone and defense cues.

Jonathan Arias (arias@umbi.umd.edu)

Investigating the molecular mechanisms involved in virus-plant interactions. Areas of study include the role of virus structure in mediating host resistance and the development of methods to understand and improve pathogen-derived resistance strategies.

James Culver (jc216@umail.umd.edu)

Identifying factors with critical functions in plant defenses against pathogen attack. Genetic analysis using an *Arabidopsis* model system has resulted in identification of numerous plant genes affecting disease resistance and characterization of genes encoding factors involved in regulation of defense responses.

Jane Glazebrook (glazebro@umbi.umd.edu)

Poultry Viruses and Vaccines

Reverse genetics system for birnavirus using synthetic transcripts derived from cloned cDNA. This system is used to study the molecular basis of viral pathogenesis and virulence and for production of recombinant vaccines.

Vikram Vakharia (vakharia@umbi.umd.edu)

Insect Biotechnology

Steroid regulation of development. *Drosophila* is used as a model system to determine the genetic mechanisms underlying hormone-activated programmed cell death and cell differentiation.

Eric Baehrecke (baehreck@umbi.umd.edu)

Novel insect germline transformation vectors using the *Hermes* element from *Musca domestica* and related elements from other insects. Studies will investigate the regulatory mechanism governing movement of these elements in heterologous cellular environments.

David O'Brochta (obrochta@umbi.umd.edu)

Bioprocess Engineering

Developing new techniques for efficient synthesis of recombinant proteins in *E. coli*, insect cells, and insect larvae. New molecular tools (e.g., differential display) are used to analyze expression patterns in order to optimize synthesis in host cells and intact insects using a variety of modeling techniques.

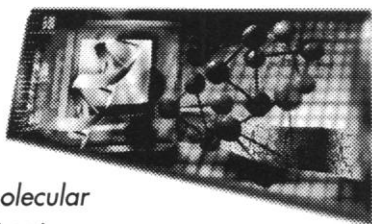
William Bentley (bentley@eng.umd.edu)

Developing technologies for producing and enzymatically modifying the natural polymer, chitosan. Studies of the fundamental properties of modified chitosans using NMR and IR analysis are complemented by partnerships with state and commercial initiatives to facilitate the entry of chitosan into large-volume markets.

Gregory Payne (payne@umbi.umd.edu)

Contact specific faculty, c/o Center for Agricultural Biotechnology,
5115 Plant Sciences Building, University of Maryland,
College Park, MD 20742-4450.

Affirmative Action/Equal Opportunity Employer.



Working at the molecular level to conquer, treat, and prevent debilitating diseases.

DRUG DISCOVERY RESEARCH AT SCHERING-PLOUGH

At Schering-Plough Research Institute, scientists are discovering innovative therapeutic agents that challenge humankind's most debilitating diseases. If you want to be on the cutting edge of pharmaceutical discovery, we now have exceptional positions for Molecular Modelers.

SENIOR SCIENTISTS *Computational Chemistry*

We seek talented Molecular Modelers to join our expanding Computational Chemistry group. Members of this group work closely with synthetic, structural and biophysical chemists to discover molecules for advancement as drug candidates. The Structural Chemistry Department has been especially productive in providing experimental data in numerous drug discovery projects. Recently, Structural and Computational Chemistry have played key roles in advancing drug candidates including one in clinical trials as an anti-cancer agent.

Successful candidates will possess a PhD in Chemistry, Biophysics or a related discipline and 0-6+ years of experience. Background must include experience in at least one of the following areas: structure-based drug design, QSAR, analysis of large chemical libraries and high throughput screening data, design of focused libraries, docking/scoring of ligands, free energy perturbation methods and homology modeling. Strong communication and programming skills along with the ability to work well in multidisciplinary teams are essential.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to send a resume and cover letter, referencing Dept. CC-SC-SW, to: Schering-Plough Research Institute, MS #1255, 2015 Galloping Hill Road, Kenilworth, NJ 07033-0539. We are an equal opportunity employer. *We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.*

To find out more about us, visit our website at <http://www.sp-research.com>.



**Schering-Plough
Research Institute**

Using Science for Human Advantage



CONTRACT BONE BIOLOGY-SCIENTIFIC EXPERTISE

SKELETECH is a unique contract research organization that is focused on providing in-depth expertise in preclinical bone biology for pharmaceutical, biotechnology, and medical device companies that are engaged in the discovery and development of drugs and devices for musculoskeletal diseases.

To fulfill this mission, SKELETECH'S Bone Biology Group is recruiting Ph.D.-level scientists with proven track records in bone and connective tissue research. At SKELETECH you will work with a team of committed bone biologists and play an active role in the development and direction of SKELETECH'S bone biology programs. Opportunities exist in the areas of osteoporosis, osteoarthritis, orthopaedics, and tissue engineering. Candidates should have at least 3 years of postdoctoral experience in an applicable field of bone research and documented expertise in musculoskeletal disease models.

Located in Kirkland, Washington, SKELETECH is situated in the midst of the beautiful Puget Sound Region of the Pacific Northwest. SKELETECH offers a highly competitive salary and benefits package, equity participation, and excellent opportunities for career development. Qualified candidates should submit their CV and the names of 3 references to:

Human Resources

SKELETECH, Inc.

12026 115th Ave. N.E.

Kirkland, WA 98034

Or e-mail to: jobs@skeletech.com

www.skeletech.com

Staff Fellow **Opportunities at FDA**

FDA, Center for Biologics Evaluation and Research, Office of Blood Research and Review, Division of Transfusion Transmitted Diseases, Lab of Immunochemistry has immediate openings for two postdoctoral fellows (1 Senior, 1 Staff).

Senior Staff Fellow—Applications are invited from candidates with a strong background in virology and immunology to study mechanisms of HTLV pathogenesis and HTLV antibody responses. Candidates must have a Ph.D. and/or M.D., with less than five years of postdoctoral experience.

Staff Fellow—Applications are invited from candidates with a strong background in bacterial molecular genetics and nucleic acid-based diagnostics to study bacterial contaminants of blood and blood products. Candidates must have either a Ph.D. and/or an M.D. and less than 3 years of postdoctoral experience.

Other duties for both positions: involve scientific review of Investigational New Drug Applications (INDs), Investigational Device Exemption Applications (IDEs), Product License Applications (PLAs) and Amendments, Premarket Approvals (PMAs), Premarket Notifications (510Ks), for immunodiagnostic devices developed for screening of blood and blood products.

Requirements: *Candidates must be U.S. citizens.* Candidates must have completed all requirements from an accredited institution for a doctoral or medical degree.

Salary range: (based on experience)

Senior Staff Fellow—\$39,270 to \$101,142—**Medical Officer**—\$64,349 to \$101,142.

Staff Fellow—\$32,457 to \$85,978—**Medical Officer**—\$43,929 to \$90,426

Location: Laboratories are located on the National Institutes of Health campus in Bethesda, MD. Candidates should send a current curriculum vitae, bibliography, statement of research interest, and names of 3 references to: **FDA/CBER, 1401 Rockville Pike, Suite 200 N, HFM-123 (BL), Rockville, MD 20852-1448.**

FDA has an Equal Opportunity Employer and has a smoke-free environment.



**National Institute of
Arthritis & Musculoskeletal
& Skin Diseases**

**HEALTH SCIENCE ADMINISTRATOR
OR MEDICAL OFFICER**

The National Institute of Arthritis and Musculoskeletal and Skin Diseases, Bethesda, MD, invites applications for the position of Health Science Administrator (General) or Medical Officer (General); salary range currently is \$55,969 – \$85,978 per annum. The salary may vary depending on the individual's qualifications and the appointment mechanism utilized.

Manages a portfolio of research grants in the area of arthritis and other rheumatic diseases. Working with research and research training proposals, utilizes subject-matter expertise to provide advice and significant technical leadership to grantees and professional staff regarding the research aspects of grants; reviews and analyzes them to determine their probable results and importance to program development; recommends funding; and identifies trends and recommends areas of future need/expansion.

Applicants must possess an M.D., Ph.D., or equivalent in medical or related health sciences, plus subsequent medical/health research experience that demonstrates the following: (1) Professional knowledge of the principles, theories, and practices applicable to one or more of the scientific fields within the broad mission of the NIAMS Rheumatic Diseases Branch (e.g., immunology; inflammation; relevant biochemistry and immunogenetics; systemic rheumatic illnesses such as rheumatoid arthritis, systemic lupus erythematosus, and scleroderma; metabolic and degenerative diseases such as osteoarthritis; infectious causes of arthritis; related pharmacology; related rehabilitation medicine; and clinical trials). (2) Knowledge of Federal grant and contract procedures, and/or related administrative management processes. (3) Ability to meet and interact with scientific and health care professional personnel and members of the lay community. (4) Ability to write clearly, logically, and persuasively on complex scientific topics for diverse scientific and nonscientific audiences.

Submit an application in the format of your choice, including CV or résumé, and bibliography. The Vacancy Announcement, AM-98-0259, which provides more detailed information, may be obtained by calling (301) 496-0436. You can retrieve this information via fax by calling (301) 594-2953 or 1-800-782-JOBS; the fax ID # is 1620. The announcement closes June 15, 1998. Please mail applications to **NIAMS Personnel Office, Building 31, Room 4C13, 31 Center Drive, MSC 2350, Bethesda, MD 20892-2350**. Applications must be postmarked by June 15, 1998.

NIH is an Equal Opportunity Employer.



**Postdoctoral Positions Available
National Institute on Deafness and
Other Communication Disorders**

Candidates must have a Ph.D. and/or M.D. with five or fewer years of relevant postdoctoral experience. Fax or e-mail a curriculum vitae, bibliography, description of your research interests, and names and addresses of three references to the NIDCD scientist(s) indicated for areas of interest.

Section on Auditory Mechanics, Laboratory of Cellular Biology (LCB): mathematical modeling of the mechanics of the cochlea. **Richard Chadwick, Ph.D., fax: 301-480-0827, chadwick@helix.nih.gov.**

Section on Biophysics, LCB: membrane functions of the outer hair cell. Experience in patch clamping desirable. **Kuni Iwasa, Ph.D., fax: 301-480-0827, iwasa@nih.gov.**

Section on Signal Transduction, LCB: the molecular interactions of G-proteins with receptors and effector enzymes and identification of signaling mechanism(s) of the chemical senses. **John Northup, Ph.D., fax: 301-480-8019, drjohn@codon.nih.gov.**

Section on Experimental Immunology, Laboratory of Immunology: development of vaccines against otitis media caused by nontypeable *Haemophilus influenzae* and *Moraxella catarrhalis*. Experience in immunology, animal models, and molecular pathogenesis desirable. **Xin-Xing Gu, M.D., fax: 301-402-4200, xgu@pop.nidcd.nih.gov.**

Section on Genetics of Human Communication, Laboratory of Molecular Biology (LMB): genetic linkage studies and positional cloning of human genes involved in communication and chemosensory disorders. Focus is on stuttering, variation in smell and taste, and auditory pitch disorders. **Dennis Drayna, Ph.D., fax: 301-480-8019, ddrayna@pop.nidcd.nih.gov.**

Section on G-Protein Coupled Receptors, LMB: structure and function of genes involved in chemosensation. **James Battey, M.D., Ph.D., fax: 301-402-1590, batteyj@ms.nidcd.nih.gov.**

Section on Molecular Neurobiology, LMB: odorant receptor gene function and molecular mechanisms underlying the development of the olfactory system. Strong background in molecular biology required. **Susan Sullivan, Ph.D. fax: 301-480-8019, ssullivan@pop.nidcd.nih.gov.**

Section on Sensory Cell Regeneration and Development, LMB: identification and characterization of genes important in patterning of the inner ear. Strong background in molecular biology required. Experience in creating transgenic mice or gene targeting preferred. **Doris Wu, Ph.D., fax: 301-402-3470, dwu@pop.nidcd.nih.gov.**

Section on Murine Genetics, Laboratory of Molecular Genetics (LMG): genetics and biology of hearing defects in mice using the mouse model. Experience in development and function of the mammalian inner ear desirable. **Konrad Noben-Trauth, Ph.D., fax: 301-402-5354, kntrauth@pop.nidcd.nih.gov.**

Section on Human Genetics, LMG: genetic linkage studies, positional and functional cloning and developmental analyses of genes crucial for auditory function. **Thomas B. Friedman, Ph.D., fax: 301-402-5354, tfriedman@pop.nidcd.nih.gov.**

Section on Neurotransmitter Receptor Biology, Laboratory of Neurochemistry: molecular mechanisms underlying auditory system function with emphasis on neurotransmission and neuromodulation. **Robert J. Wenthold, Ph.D., fax: 301-480-2324, wenthold@pop.nidcd.nih.gov.**

Tumor Biology Section, Head and Neck Surgery Branch: identification, transcriptional control and expression of inflammatory injury response genes and their function in pathogenesis of neoplasms of upper aerodigestive tract. Experience in molecular cloning, plasmid and viral vector construction, and transcriptional control desirable. **Carter Van Waes, M.D., Ph.D., fax: 301-402-1140, cvanwaes@pop.nidcd.nih.gov.**

Voice and Speech Section, Voice, Speech and Language Branch: acute and chronic effects of peripheral sensory injury/dysfunction on central laryngeal motor control for voice and swallowing. Experience in integrative systems using neurophysiological and/or neuroanatomical techniques sought. **Christy Ludlow, Ph.D., fax: 301-480-0803, cludlow@pop.nidcd.nih.gov.**

<http://www.nih.gov/nidcd/intramural/index.htm>

NIH is an Equal Opportunity Employer.

Inspired by the Challenge. Dedicated to the Solution.

Gilead is an independent biopharmaceutical company that seeks to provide accelerated treatment solutions for patients and the people who care for them. We discover, develop and commercialize proprietary therapeutics for important viral diseases, including a currently marketed product, VISTIDE® (cidofovir injection), for the treatment of CMV retinitis, a sight-threatening viral infection in patients with AIDS. In addition, we are developing products to treat diseases caused by HIV, hepatitis B virus and influenza virus.

RESEARCH SCIENTIST Drug Delivery & Metabolism

We will rely on you to design and perform *in vitro* metabolism and transport studies using tissue preparations, purified enzymes and cultured cells. In addition, you will develop novel *in vitro* methods for rapid evaluation of potential drug candidates, as well as design and conduct *in vitro* preclinical studies. The selected candidate will possess a PhD in Biochemistry, Pharmaceutical Sciences, or Analytical Chemistry along with 2-4 years related experience. Demonstrated skills in cell culture, HPLC, pharmacokinetics, enzyme purification and kinetics are essential. Proficiency with Word, Excel, graphics and statistical analysis is a must.

At Gilead, we are committed to developing important treatments for a wide range of viral diseases, from influenza to AIDS. As you will discover, we are as committed to opportunity as we are to scientific achievement. Interested candidates should send a resume to: Human Resources, Job # SCI-125, Gilead Sciences, Inc., 333 Lakeside Drive, Foster City, CA 94404, fax (650) 573-4800. Visit our website at www.gilead.com to learn more about our current opportunities. We are proud to be an equal opportunity employer.

GILEAD
S C I E N C E S

POSTDOCTORAL POSITION IN IMMUNOLOGY

ST. JUDE CHILDREN'S RESEARCH HOSPITAL

St. Jude Children's Research Hospital offers an excellent research environment with state-of-the-art facilities. The Immunology Department, chaired by Dr. Peter Doherty, consists of eight faculty and 50 support staff. A position is available immediately in Dr. Dario Vignali's laboratory for an enthusiastic, hard-working individual to work in one of the following areas:

- T cell receptor recognition and immunogenicity (Immunity 7:387, 1997)
- TCR:CD3 structure, assembly and signal transduction

Qualified candidate should have a PhD and/or MD, a solid understanding of basic immunology, and practical experience in molecular biology, cellular immunology or biochemistry.

For additional information, please visit our web site at:

www.stjude.org



**St. Jude Children's
Research Hospital**
ALSAC • Danny Thomas, Founder

Please send a CV with the names of three references (postal and E-mail addresses, telephone and FAX numbers) and an outline of your past accomplishments and future career aspirations to:

Dr. Dario Vignali
Department of
Immunology
St. Jude Children's
Research Hospital
332 N. Lauderdale
Memphis, TN 38105
Tel: 901-495-2332
FAX: 901-495-3107

Affirmative Action/
Equal Opportunity Employer

Career Supplement Features

These advertising supplements feature research disciplines and topics that offer exciting opportunities for professional growth for scientists.

Advertisers will reach a targeted audience in addition to having your recruitment message featured in these special sections.

Look for these advertising supplements publishing in SCIENCE.

Issue date

Advertising Supplement
Advertising reservation deadline

26 June
Scientists with Disabilities
9 June

17 July
West Coast Careers
30 June

14 August
Careers for BS & MS Scientists
28 July

2 October
European Careers
15 September

16 October
Hot Careers
29 September

20 November
Diversity in the Scientific Workforce
2 November

For advertising information, please contact:

U.S.: Gabrielle Boguslawski
Tel: (718) 491-1607

Fax: (202) 289-6742

E-Mail: science_displayads@aaas.org

Europe: Debbie Cummings

Tel: +44 (0) 1223 302067

Fax: +44 (0) 1223 516208

E-Mail: european_ads@science-int.co.uk

Japan: Mashy Yoshikawa

Tel: (+81) 33235-5691

Fax: (+81) 3 3235-5852

Australia: Keith Sandell

Tel: (+61) 02 922-2977

Fax: (+61) 02 922-1100

SCIENCE
www.sciencemag.org

Phased Innovation Awards for Technology Development

Applications are solicited for the development of:

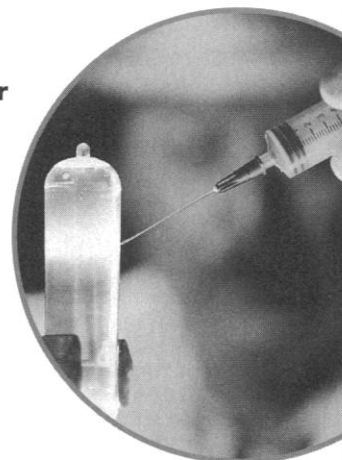
Innovative Technologies for the Molecular Analysis of Cancer

The program features:

- Rapid review of applications
- Expedited transition of successful technology research to an expanded development phase
- Flexible budget levels

Technologies of interest include those that are suitable for *in vitro*, *in situ*, or *in vivo* (e.g. imaging) analysis of:

- Alterations and instabilities in genomic DNA
- Expression of genes and gene products
- Cellular localization, post-translational modification, and function of proteins
- Major signal transduction networks involved in cancer



For complete information on this new program: Visit our Web site or call us at 301/496-1550

www.nih.gov/grants/guide/pa-files/PA-98-067.html

Small businesses are encouraged to consider a parallel announcement at: www.nih.gov/grants/guide/pa-files/PA-98-066.html

DIRECTOR, DIVISION OF BLOOD DISEASES AND RESOURCES National Heart, Lung, and Blood Institute National Institutes of Health

The National Heart, Lung, and Blood Institute (NHLBI), National Institutes of Health, located in Bethesda, MD, is seeking an individual with experience in developing and managing major programs of research grants, fellowships, training grants, and research contracts and providing scientific and managerial evaluation of program accomplishment to direct the NHLBI's blood diseases and resources program. In addition, the person holding this position will have a special responsibility in regard to the Institute's AIDS research program in that he or she serves as the coordinator for the NHLBI's total effort (heart, lung, and blood) related to this disease.

This is a civil service position in the Senior Executive Service with an annual salary ranging from ES-1 (\$106,412) to ES-6 (\$125,900). Candidates may be eligible for relocation or other bonuses. The applicant must possess a Doctor of Medicine or Doctor of Osteopathy degree from a school in the United States or Canada approved by a recognized accrediting body in the year of the applicant's graduation. [A Doctor of Medicine or equivalent degree from a foreign medical school that provided education and medical knowledge substantially equivalent to accredited schools in the United States may be demonstrated by permanent certification by the Educational Commission for Foreign Medical Graduates (ECFMG) (or a fifth pathway certificate for Americans who completed premedical education in the United States and graduate education in a foreign country).] Applicants must also possess professional experience at the senior level, and should provide information on Knowledge, Skills, and Abilities (KSAs) for the following: 1) Experience in designing, developing, and directing broad research programs in one or more of the hematologic areas recognized as part of the NHLBI mandate in this field, e.g. Thrombosis and Hemostasis, Cellular Hematology, Sickle Cell Disease, Bone Marrow Transplantation, Transfusion Medicine, and AIDS; 2) Knowledge of fiscal and human resources management sufficient to obtain and maintain funding to support program goals and maximize workforce effectiveness and productivity; 3) Ability and scientific stature sufficient to advise the Director and senior executive staff within and outside the NHLBI on issues affecting the Blood Diseases and Blood Resources Program.

For additional information, contact Chris Tart at (301) 496-6477. To apply for this position, submit a curriculum vitae, bibliography and the names, addresses and telephone numbers of four professional references by July 1, 1998 to: Chris Tart, National Heart, Lung, and Blood Institute, National Institutes of Health, Building 31, Room 5A28, 31 Center Drive, MSC 2484, Bethesda, MD 20892-2484. NIH is an Equal Opportunity Employer.

HEALTH SCIENTIST ADMINISTRATOR National Institute on Aging National Institutes of Health

The Neuroscience and Neuropsychology of Aging Program is seeking a Health Scientist Administrator, GS-601-13/14 (\$54,629 to \$83,922) as the Program Director to develop and administer an extramural research program on neuroepidemiology, which includes studies of prevalence, incidence, and risk factors for Alzheimer's disease and other dementias of aging. The incumbent will develop the program, define its long-range goals, and contact and encourage scientists with appropriate expertise and interest to develop and submit research proposals. **Research experience in epidemiology is required. Research in aging-related neurodegenerative diseases such as Alzheimer's disease is preferred.** U.S. citizenship is required. For information call, 1-800-728-5627, ID#1222. Send C.V., resume, or the Optional Application for Federal Employment (OF-612) to:

CHRISTINE HARTZ, NIA PERSONNEL OFFICE, BUILDING 31, ROOM 2C02, 31 CENTER DRIVE, MSC 2292, BETHESDA, MD 20892-2292, (301) 496-5460, BY AUGUST 31, 1998.

NIH is an Equal Opportunity Employer

TRAINING OPPORTUNITIES IN CANCER RESEARCH

Case Western Reserve University • University Hospitals of Cleveland
NCL IRELAND CANCER CENTER
 CCC A Comprehensive Cancer Center Designated by the National Cancer Institute

Applications are invited for NIH-funded fellowship training programs

TRANSLATIONAL RESEARCH ONCOLOGY TRAINING PROGRAM

- Opportunity for MD and MD/PhD physician-scientists to obtain research experience that links laboratory investigations to cancer-patient care.
- Two-year fellowship program includes mentored independent research and didactic teaching.
- Research activities are in four ongoing programs of translational research: *Mechanism-Based Therapeutics* (Leaders: J. Willson, S. Remick); *Cancer Population Genetics* (Leaders: S. Markowitz, K. Stange); *Hematopoiesis/Stem Cell Biology* (Leader: S. Gerson); *Tumor Immunology/Immunotherapy* (Leader: K. Cooper).

RESEARCH ONCOLOGY TRAINING PROGRAM

- Opportunity for MD, MD/PhD, and PhD trainees to prepare for careers in cancer research.
- Two-year fellowship program integrates training of physician-scientists and basic scientists, applying multidisciplinary approaches to fundamental problems in oncology.
- Program provides trainees with active research experience using basic modern techniques of molecular biology, biochemistry, cell biology, and immunology.

For more information about these programs, please contact

Clark W. Distelhorst, M.D., Training Program Director
 Attn: Joan L. Toner, Training Grants Manager, WRN 5065
 Ireland Cancer Center

11100 Euclid Avenue • Cleveland, Ohio 44106-5065

Phone 216/844-8797 E-Mail cancer@po.cwru.edu

Applications from women and underrepresented minorities are encouraged.

PENNSTATE



College of Medicine

POSTDOCTORAL FELLOW AND ASSISTANT PROFESSOR CARDIAC CELL GROWTH COLLEGE OF MEDICINE

Positions available to investigate the molecular control of cardiac cellular growth in the Laboratory of Dr. Kenneth M. Baker. The successful candidate should have a Ph.D. and/or M.D., and a strong background in molecular and cellular biology and biochemistry with commensurate experience.

The Weis Center for Research in Danville, PA is part of the Penn State College of Medicine, and provides modern research facilities. This location is a pleasant, semi-rural living environment, with convenient access to the metropolitan areas of New York, Baltimore, and Washington, D.C.

Interested individuals should send their curriculum vitae and the names of three references to:

Mrs. Barbara A. Brown
 Administrative Assistant
 Henry Hood Research Program (KMB)
 Sigfried and Janet Weis Center for Research
 100 North Academy Avenue
 Danville, PA 17822-2601

For your health, the Weis Center for Research of The Pennsylvania State University is a smoke-free campus. AA/EOE

Synergy of Science

Formed from a merger of Prizm Pharmaceuticals and Matrigen, Selective Genetics is developing site-specific gene therapeutics and DNA devices to promote tissue repair and regeneration. Our strong intellectual property position covers molecular and physical approaches to selectively deliver therapeutic genes to target cells. We are looking for individuals who have the ability to imagine and execute innovative solutions to difficult problems. We invite you to join a company that welcomes ideas, breakthroughs and creative thinking.

- **Analytical Methods Development** – develop analytical methods for biochemical characterization of proteins and viral/non-viral gene vectors. Requires 3-5 years' experience, strong HPLC skills, working knowledge of QC and cGMP, and a Ph.D. in Biochemistry. (CODE/SCA)
- **Formulation** – perform preformulation experiments to characterize transgene therapy candidates, monitor stability of complex drugs (protein, virus, protein-DNA), and investigate drug delivery systems. Requires 3+ years' experience, and an M.S. or Ph.D. in Biophysical/Pharmaceutical Chemistry or a related field. (CODE/SCF)

Please send/fax your resume to: Code (see above)
 Selective Genetics, Inc., 11035 Roselle St., San Diego,
 CA 92121; Fax (619) 625-0050. EOE.



SelectiveGenetics
 GENE THERAPEUTICS

www.selectivegenetics.com

MAYO FOUNDATION Postdoctoral Positions



Biochemists and molecular biologists with a Ph.D. are invited to apply for postdoctoral positions at Mayo Foundation in Rochester, Minnesota, where a newly equipped, 1,200 sq. ft. laboratory is being established in the Department of Biochemistry and Molecular Biology. Research is supported by extensive core facilities, including DNA and protein sequencing, protein purification, oligo synthesis, FACScan, confocal laser microscopy and transgenic mouse facilities. Funding sufficient for an initial group of 4-5 persons has been provided by Mayo Foundation. Salaries or supplements to scholarships can be provided. Positions are available beginning September 1998.

The main focus of the laboratory is signaling related to the activation of ETS transcription factors. Specific projects include (see also: *Mol. Cell. Biol.* 16:1550-1556, 1996; *Nature* 383:22-23, 1996; *EMBO J.* 16:1620-1627, 1997):

1. Signaling pathways targeting the ETS transcription factors ER81.
2. Identification of ER81 target genes and interaction partners.
3. Transgenic mouse model for Ewing's sarcoma (EWS-ER81 fusion).
4. Analysis of the coactivators and acetyltransferases CBP/p300.
5. Identification and characterization of mammalian histidine kinases.

If you want to join a highly motivated, team-oriented research group, please contact me or forward your curriculum vitae and three letters of recommendation to my present work address.

Ralf Janknecht, Ph.D.

The Salk Institute, MBVL
 10010 North Torrey Pines Road
 LaJolla, CA 92037 USA

Tel: (+1) 619-453-4100 ext. 1470

Fax: (+1) 619-457-4765

E-mail: jrjanknecht@aim.salk.edu

Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.

POSTDOCTORAL FELLOWSHIPS VIROLOGY, IMMUNOLOGY, AND MOLECULAR BIOLOGY OF HUMAN NEUROPSYCHIATRIC DISEASES

The Theodore and Vada Stanley Foundation has established a novel laboratory and training program in Molecular Neurobiology and Virology at the Johns Hopkins University School of Medicine under the direction of Robert H. Yolken, M.D. Fellowships will include full salary support plus research and travel expenses for three years. Methods employed in the Stanley Laboratory focus on the application of functional genomic techniques to the study of RNA and protein expression in human brain tissues. The principal target diseases are schizophrenia, bipolar disorder, and unipolar depression. Further information regarding the program can be found on our website: www.stanleylab.org.

Preceptors will be Johns Hopkins Medical School faculty in the Departments of Psychiatry, Pediatrics, Neurology, Neurosciences, Medicine, and from the Program of Cellular and Molecular Medicine. Fellows will have the opportunity to work with several preceptors during the course of their fellowship. It is expected that fellows will have an M.D. and clinical training in neurology or psychiatry or a Ph.D. in a relevant basic science, or both. The goal is to bring together fellows and faculty members with diverse backgrounds into a program to discover the molecular and cellular bases of bipolar effective disorder and schizophrenia. For further information, contact:

Robert H. Yolken, M.D.
Professor of Pediatrics
Johns Hopkins University
600 N. Wolfe Street
Blalock 1111
Baltimore, MD 21287-4933
Phone: 410-955-3271
Fax: 410-614-1491
E-mail: acusic@welchlink.welch.jhu.edu

The Johns Hopkins University is an Equal Opportunity Employer.

AWARD

The Ellison Medical Foundation Senior Scholar Award Announcement of Opportunity

The Ellison Medical Foundation has been established by a gift from **Mr. Lawrence J. Ellison** to support biomedical research on aging, including basic biology, epidemiology, and clinical investigation.

The Ellison Medical Foundation Senior Scholar program is designed to support established investigators to conduct research in the basic biological and clinical sciences relevant to understanding aging processes and age-related diseases and disabilities. The award is intended to provide significant support to established investigators in order to allow the development of new, creative research programs by investigators who may not currently be conducting aging research or who may wish to develop new research programs in aging. The Foundation particularly wishes to stimulate new research, which has rigorous scientific foundations, but which may not be currently funded adequately, because of its perceived novelty, its high risk, or because it is from an area where traditional research interests absorb most funding.

The first round of Ellison Medical Foundation Senior Scholar Awards will be issued in late 1998 or early 1999. Ten awards are anticipated in this round. Awards will be for up to \$150,000/yr. for up to four years. Applicants for the Senior Scholar Award are expected to furnish evidence of substantial prior scientific creativity and productivity not necessarily targeted to aging heretofore. Evaluation by the Scientific Advisory Board will be based upon the applicant's submission re: scientific contributions to date, the quality of publications, and the importance to aging of the proposed new research. The Scientific Advisory Board will pay close attention to arguments as to why the work does not or would not qualify for support from established sources such as the NIA. Except for compelling circumstances, the awards are not intended to supplement ongoing, already funded programs but, instead, to inspire new directions, which may entail substantial risk.

Letters of intent to submit an application must be received before close of business July 1, 1998, at The Ellison Medical Foundation address below. Letters of intent received after July 1 will be deferred to a future round as and when it is announced. Letters of intent are limited to two pages and should include a brief description of the proposed research, a brief description of the applicant's current research, and a statement of the relevance of the proposed research to aging. A one-page bibliography of prior works, and a one-page c.v. for the applicant (including current support with titles, source, duration, and level of support), should be appended to the letter of intent. Applicants invited to submit a full application will be notified of their selection and provided with application forms around August 4, 1998. Applications will be due October 1, 1998.

For further information, contact:

Richard L. Sprott, Ph.D.
Executive Director
The Ellison Medical Foundation
P.O. Box 34474
West Bethesda, MD 20827
Phone: 301/299-6805
E-mail: rsprott@concentric.net

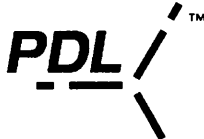
PROTEIN DESIGN LABS

Protein Design Labs' interdisciplinary approach to drug discovery integrates computer-based design with molecular biology, immunology and protein chemistry. We have the following opportunity available:

SCIENTIST/STAFF SCIENTIST

Heading up a group of 4-6 scientific and technical staff, you will be responsible for analytical methods development, characterization of therapeutic antibodies and degradation procedures. Duties include preparing product characterization sections of INDs for FDA submission, and contributing to the completion of milestones associated with specific scientific projects and experiments. The ideal candidate will possess a PhD in Chemistry or Biochemistry with 2-5 years industrial experience in protein structure elucidation. Demonstrated ability to manage/supervise personnel and projects and experience with HPLC and gel electrophoresis are essential. Familiarity with the operation of an HPLC/Mass Spectrometer is preferred and analytical methods development skills are needed. Must possess excellent written and verbal communication skills and computer literacy, as you will be working with a variety of computers.

PDL's fast-paced, highly challenging environment offers exceptional professional opportunities, competitive salaries and a comprehensive benefits package. Later in 1998, we will be relocating just across the San Francisco Bay to Fremont. Visit our home page at www.pdl.com to learn about our company and other career opportunities at PDL. Please send your resume to: Protein Design Labs, Inc., Human Resources, Job Code 396, 2375 Garcia Ave., Mtn. View, CA 94043, fax 650/962-0437. EOE.



SYSTEMATIC ZOOLOGIST

The Field Museum is seeking an outstanding Systematic Zoologist to fill a career track appointment at the level of Assistant (possibly Associate) Curator in the Department of Zoology/Division of Insects. Candidates pursuing innovative, collection-based research in systematic biology of insects or other terrestrial arthropods will be considered. Of special interest are research programs that make important contributions to additional fields, such as theoretical systematics, functional morphology, development, biogeography, or conservation. Existing collection strengths include: mites, beetles, ants, soil/litter and ectoparasitic arthropods and macrolepidoptera.

The successful candidate will have a Ph.D. and a proven record of scientific achievement. In addition to research, responsibilities include: curation of collections and participation in public exhibit and education programs. Strong relationships with local Universities provide opportunities for participation in graduate and undergraduate training.

Applications should include: Curriculum Vitae, statement of research objectives, a brief statement addressing the role of museum collections in the applicant's research program, names and contact information for three people from whom letters of recommendation may be sought, and copies of relevant publications. Send applications by September 15, 1998, to:

Search Committee
Department of Zoology
The Field Museum
 Roosevelt Road at Lake Shore Drive
 Chicago, IL 60605-2496
 E-mail: shackett@fmnh.org
 Or visit us at www.fmnh.org

The Field Museum is an Equal Opportunity Employer; we encourage applications from women and minorities.

Advances in technology and scientific innovation.

THAT'S THE EXCITEMENT OF ALLERGAN.

SENIOR SCIENTIST, TOXICOLOGY

Allergan, a technology driven company, is a global leader in specialty pharmaceutical products and surgical devices. We're currently seeking an individual to direct animal toxicity studies, individually valued up to \$1,000,000, in support of drug application submissions.

Responsibilities include designing/directing/monitoring acute, subacute, chronic and special in-house toxicology studies and overseeing contract lab studies. Additionally, you will supervise staff, analyze/interpret data and approve study conclusions. Responsibilities also include preparation and/or review of IND's, NDA's, CIB's and Expert Reports.

Requires a Ph.D., M.D. or D.V.M. and 4 years specifically related experience; an M.S. degree and 6-8 years experience. Must be able to skillfully apply the principles/theories of anatomy, physiology, biology, pharmacology and toxicology. Must be able to manage multiple test sites, identify test system problems, develop/test new systems, recommend modifications to meet changing federal requirements, hire/train staff and make purchase decisions for the department. Strong presentation, leadership, analytical and writing skills are essential. We prefer certification as a diplomate of the American Board of Toxicology (DABT).

We reward our employees with a competitive salary, an excellent benefits package and a great working environment. Please send resume (e-mail preferred) to: klaus_jennifer@allergan.com If unable to e-mail, send to: Allergan, Attn: JK/T0X/T2-1B, 2525 Dupont Dr., Irvine, CA 92612. No phone calls please. EOE.



www.allergan.com

Department Head, Biochemistry UNIVERSITY OF ARIZONA

The Department of Biochemistry is conducting a search for a person to be appointed Head of the Department. Applicants/nominees must submit an up-to-date curriculum vitae and publication list, and the names of at least three references. Review of applications will begin on July 15, 1998 and will continue until the position is filled. To ensure full consideration, all application materials should be received by July 15. Send applications and nominations to Professor and Interim Department Head Marc Tischler, Chair, Head-Search Advisory Committee, Department of Biochemistry, P. O. Box 210088, The University of Arizona, Tucson, Arizona 85721.

The department spans the Colleges of Science and Medicine, with resources drawn from both, and faculty appointed in one of the two colleges. The department's facilities are distributed on both the Main and Health Sciences campuses, with the latter housing the Division of Medical Biochemistry. The department conducts a broad integrated program of education and research, and has undergraduate programs leading to the Bachelor's degree, and a joint Ph.D. program with the Department of Molecular and Cellular Biology. These degree programs serve the needs of students with varied career goals involving biochemistry. The department is also responsible for biochemistry education in the College of Medicine. Additional information about the department can be viewed at www.biochem.arizona.edu.

The department head reports to the Dean of the College of Science, and is responsible for providing proactive academic leadership, for planning and administration of the department's educational and research programs, for managing the department's budgets, facilities and personnel and for leading the faculty in long-term strategic planning that responds to changing environments, needs, opportunities and realities affecting academic and research programs. The department head is expected to lead in a collegial, constructive partnership with the faculty and administration. The successful candidate must have an established record of funded research and productivity in any area of biochemistry as evidenced by national and international recognition, and a successful record in teaching, including training graduate and postdoctoral students. *The University of Arizona is an EEO/AA Employer - M/W/D/V*

CENTER FOR SCIENTIFIC REVIEW NATIONAL INSTITUTES OF HEALTH

The Center for Scientific Review (CSR) wants to identify research scientists with expertise in HIV/AIDS who are interested in serving as Scientific Review Administrators (SRA) in the management of the NIH peer review process.

Scientific Review Administrators (GS-12/13/14) Responsible for the overall management of committees composed of leading scientists in their respective fields who meet to judge the scientific merit of investigator-initiated research grant applications.

Supervisory Scientific Review Administrator (GS-15) Supervises SRAs and support staff in the AIDS and Related Research Initial Review Group (IRG); assigns research grant applications to individual committees of the IRG best qualified to evaluate the scientific value and adequacy of the proposed research, and manages a study section that assesses the scientific merit of assigned grant applications.

Those interested in applying should have research experience in one or more of the following areas: virology, immunology, drug development/design, opportunistic infections and epidemiology related to HIV/AIDS and its sequelae, or the social and behavioral science aspects of HIV infection, transmission, and disease progression in the individual, group, and community.

Applicants must be U.S. citizens, have earned the Ph.D. or M.D. (or have equivalent training and experience), and a record of research accomplishment. Salaries for these positions range from \$47,066 to \$118,400 per year depending upon qualifications.

Please submit curriculum vitae by July 6, 1998, to:

Bruce A. Maurer, Ph.D.
National Institutes of Health
6701 Rockledge Drive
Center for Scientific Review
Room 5108, MSC 7852
Bethesda, MD 20892-7852

E-mail: scirev@drg.nih.gov

Selection for this position will be based on merit, with no discrimination for non-merit reasons, such as race, color, sex, national origin, marital status, disability, age, sexual orientation, or membership/nonmembership in an employee organization.

The Science of Agricultural Genetics

Pioneer Hi-Bred International, Inc.,

is the world leader in agricultural

genetics. Founded in 1926, we

are a publicly held company that

invests more than \$160 million in

research and product development.

Pioneer® brand products are grown

in almost every crop producing

continent in the world. At our

head-quarters in Des Moines,

Iowa, we're adding to our

Research team.

SENIOR RESEARCH ASSOCIATE

Heterosis — Molecular Breeding (Job #AT-8075)

We are looking for someone with an M.S. degree or equivalent in Molecular Biology, Genetics or related fields with 3 to 5 years relevant lab experience to clone and characterize candidate genes associated with heterosis and combining ability in corn. Responsibilities will include analysis of RNA expression profiling data, cloning and characterizing candidate genes, and development of diagnostic gene expression microarrays. Experience with basic molecular genetic techniques, e.g. cDNA library construction and screening, DNA sequencing and RNA expression analysis, will be essential. Knowledge of plant quantitative genetics and breeding methodologies is desirable, and demonstrated skill in using or developing computational tools for statistics and visualization of relationships in complex data sets will be looked on favorably. Ability to work both independently and as part of a team focusing on improving breeding efficiency will be very important. Individual will be expected to keep clear and accurate records in a notebook, contribute to patent applications or publications, and prepare written and oral summaries of their work. Application deadline: June 12, 1998.

POST DOCTORAL ASSOCIATE

Heterosis — Expression Profiling (Job #AT-8085)

We are seeking an enthusiastic and motivated individual with a Ph.D. in Population Genetics, Agronomy, Crop Science or related field to identify gene expression changes associated with xenia and reciprocal hybridization in corn. Excellent computational skills and familiarity with methods for multivariate analysis of large noisy data sets or visualization of complex relationships between variables will be essential. Some field genetics and molecular biology lab work will also be required. Experience or familiarity with quantitative or evolutionary population genetics, and basic knowledge of molecular genetic techniques, especially RNA isolation, will also be essential. Individual will be expected to keep clear and accurate records in a notebook, contribute to patent applications or publications, and prepare written and oral summaries of their work. Application deadline: June 12, 1998.

RESEARCH ASSOCIATE

Crop Protection — Insect Resistance (Job #CP-8075)

An individual is needed to play an integral part in the development of insect resistant transgenic plants. This scientist will function as an integral part of a group with a broad range of responsibilities, ranging from discovery and characterization of insecticidal principles to expression of these principles in transgenic plants. An M.S. with two years of experience or a B.S. with four years experience in the area of molecular biology is required. We currently have a need for scientists with experience in cloning, designing and characterizing proteins. A high level of competence with routine procedures of molecular biology, especially cloning and characterizing genes, is a must. The successful candidate will preferably have experience with insecticidal proteins, insect cell culture, microbiology, or insect resistant transgenic crops. Familiarity with techniques of cosmid cloning or phage display is preferred. Familiarity with corn and its associated insect pests is desired. Participation in other facets of research to develop insect resistant transgenic crops is expected. This includes expression of foreign genes in plants and characterization of the mode of action of insecticidal proteins. This position requires the ability to interact with other researchers. Good communication skills are a must. Application deadline: June 12, 1998.

SENIOR RESEARCH ASSOCIATE

Soybean Genome Mapping (Job #98-00162BS)

Pioneer Hi-Bred International, Inc. is seeking applicants for a Senior Research Associate (SRA) position located in Johnston (Des Moines), Iowa, to lead a progressive team that maps the soybean genome. Must be competent with genetic mapping strategies, genetic marker laboratory technologies, data management, and statistical analyses; and have an understanding of qualitative and quantitative genetics. Effective communication and interpersonal skills are important. Minimum Education/Experience: M.S. degree in biological sciences or equivalent work experience plus 3 years of directly related work experience with genetic mapping. Application deadline: July 17, 1998 (or until position is filled).

Located in Johnston, Iowa, Pioneer offers a superb working environment, a competitive salary, and an excellent company benefit package. For confidential consideration send 3 copies of your cover letter and current resume to: Pioneer Hi-Bred International, Inc., Attn: Human Resources - Research (Job #xx-xxxxS), P.O. Box 1004, Johnston, IA 50131-1004. E-mail: obscure@pioneer.com. Learn more about Pioneer and other job opportunities: www.pioneer.com



**PIONEER HI-BRED
INTERNATIONAL, INC.**
An Equal Opportunity Employer

POSITIONS OPEN

ASSOCIATE DEAN FOR RESEARCH TEXAS VETERINARY MEDICAL CENTER

Qualifications: Essential qualifications for the position are M.D.-Ph.D., D.V.M.-Ph.D., or Ph.D. degrees with preferred research training in one of the following areas: toxicology, molecular genetics, reproductive/developmental biology, neuroscience, cardiovascular science, infectious disease/immunology, epidemiology, or food science. The applicant must show a strong record of accomplishments in research and graduate education. Preference will be given to those who hold both professional and graduate degrees. In addition, preference will be given to applicants who have demonstrated administrative abilities, skills in research team and interdisciplinary team building, a history of sustained extramural research support, and evidence of leadership roles at the federal level in research evaluation and priority setting (study section, council experience, or other appointment indicating a national leadership role in research). Experience with industrial partners is also desirable.

Responsibilities: The successful candidate will be expected to work with the faculty and administration in a leadership/participation capacity to build a nationally recognized program in biomedical research and graduate education; promote the development of higher quality research programs at the university, system, state, and federal levels; facilitate individual faculty and team development in research and graduate education; lead a planning process to develop short and long-term plans for research enhancement, including program project and center grants, faculty development/recruitment, facilities enhancement, and equipment enhancement at the college and university level; represent the college faculty in all issues dealing with research and graduate education at the college, university, system, state, and national level; to work with the faculty to develop a uniform mission and research program that cuts across departmental and college barriers. A faculty appointment in one of the college departments will allow the successful applicant to continue his/her own research endeavors. A complete job description is available upon request from the Chair of the Search Committee, or available on the World Wide Web ([website: http://www.cvm.tamu.edu/positions/htm](http://www.cvm.tamu.edu/positions/htm)).

Position Available: On or after January 1, 1999. This position is a fully funded tenure-track position jointly funded by the College of Veterinary Medicine and the Texas Agricultural Experimental Station.

Application Deadlines: Review of applications will begin September 1, 1998, and will continue until the position is filled.

Application Procedure: A letter of application, curriculum vitae, and the names, addresses, and telephone numbers of five references should be sent to the Chair of the Search Advisory Committee:

Dr. Gerald R. Bratton
Chair of Search Advisory Committee
Department of Veterinary Anatomy
and Public Health
College of Veterinary Medicine
Texas A&M University
College Station, TX 77843
Telephone: 409-845-2828
FAX: 409-847-8981
E-mail: gbratton@cvm.tamu.edu

ASSISTANT ADJUNCT PROFESSOR of surgery, Division of Urology, University of California, San Diego. Position includes participation in teaching, research, and university service. Salary per UC pay scale. Qualifications: (1) Ph.D. in pharmacology; (2) experience in basic research and teaching at the undergraduate, graduate, and postgraduate levels; (3) experience in immunopharmacology, reproductive toxicology, male infertility, and erectile dysfunction required. Send curriculum vitae with names of three references to: Joseph D. Schmidt, M.D., Professor and Head, Division of Urology, University of California, San Diego, 200 West Arbor Drive, San Diego, CA 92103-8897. Closing date May 31, 1998. *University of California is an Equal Opportunity/Affirmative Action Employer.*

VISITING ASSISTANT PROFESSOR of biochemistry. Ph.D. required. One-year position beginning August 26, 1998, to teach senior-level biochemistry and general chemistry in Bachelor of Science in Biochemistry Program. Training in nucleic acid techniques preferred. \$37,250 for nine months. Submit résumé, transcript, and three letters of recommendation to: Edgar N. Drake, Head, Department of Chemistry, Angelo State University, San Angelo, TX 76909. Application is open but may be closed after July 1, 1998.

POSITIONS OPEN

TENURE-TRACK/TENURE FACULTY POSITION

Department of Molecular and Cellular Physiology

Individuals with outstanding research accomplishments in the general areas of molecular and cellular physiology are invited to apply for a tenure-track/tenured position at the level of ASSISTANT through FULL PROFESSOR. The successful candidate must be prepared to participate actively in quality graduate and medical education and will be expected to establish and maintain a vigorous research program of medical relevance. Applicants at the Associate or Full Professor level must currently be directing successful well-funded research programs in areas complementary to existing faculty interests.

The applicant's research should employ the use of modern biochemical, molecular, and/or cell biological techniques to study the regulation of cell and/or organ system function by developmental, environmental, or endocrine signals. The candidate should have an interest in dissecting the signaling pathways that mediate these regulatory actions, and the capability to do so.

Letters of recommendation will be requested following an initial evaluation. Applicants should submit a curriculum vitae and a brief summary of research interests and goals to the individual below:

Professor J. Wesley Pike
Molecular Physiology Search Committee
Department of Molecular and Cellular Physiology
P.O. Box 670576
University of Cincinnati
Cincinnati, OH 45267-0576

MEDICAL HISTOLOGY FACULTY POSITION

Medical histology. The Department of Biomedical Sciences, Ohio University College of Osteopathic Medicine, invites applications for a full-time tenure-track ASSISTANT PROFESSOR position. Primary responsibilities are to teach medical microscopic anatomy and to maintain a viable, independent research program. A Ph.D. or equivalent and postdoctoral research training are required.

Ohio University has 19,000 students, including 2,000 graduate and 400 medical students. The Biomedical Sciences faculty is integrated into the University and directs graduate students (M.S. and Ph.D.) in the Department of Biological Sciences.

Starting date is September of 1998 or January of 1999. The eleven-month salary will be commensurate with experience, and is accompanied by an excellent benefits package. Review of applications will begin on July 1, 1998, but applications will be accepted until the position is filled. Please submit a letter of application, curriculum vitae, statement of teaching and research interests, and three letters of recommendation to: Cheri McFee, Medical Histology Search Committee, Ohio University College of Osteopathic Medicine, 304 Grosvenor Hall, Athens, OH 45701-2979.

Ohio University is an Affirmative Action/Equal Opportunity Employer.

University of Florida seeks an ASSISTANT PROFESSOR in the Department of Medicine, Division of Pulmonary Medicine. M.D. degree with at least six years of experience in lung transplantation in children and adults to direct its Lung Transplant Program. A record of experience and successful publication in lung transplant research, particularly in the area of transplant rejection, is essential, as is Board-certification/eligibility in pulmonary and critical care medicine. Salary and benefits are commensurate with experience. Recruiting deadline: June 30, 1998. Anticipated starting date: September 1, 1998. Please submit curriculum vitae to: Eloise Harman, M.D., Professor and Chief, Box 100225 JHMC, Gainesville, FL 32610. *An Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSOCIATE position available for one year to study the molecular mechanisms of axonal guidance. Position requires a Ph.D. or equivalent and extensive postdoctoral experience in both molecular biology and neural anatomy. The position requires *in situ* hybridization and neuron culture techniques. Salary is commensurate with experience and a comprehensive benefits package is available. Please send curriculum vitae by June 19, 1998, to: Ms. Deborah Bachorik, Laboratory for Cancer Research, College of Pharmacy, Rutgers, The State University of New Jersey, 164 Frelinghuysen Road, Piscataway, NJ 08854-8020. FAX: 732-445-0687.

POSITIONS OPEN

CHEMISTRY FACULTY, TENURE-TRACK MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Department of Chemistry

The Department of Chemistry invites applications for tenure-track positions in all areas of chemistry. While the preferred level of appointment is at the rank of ASSISTANT PROFESSOR, applications for appointment at more SENIOR levels are also welcome. Outstanding individuals with a strong commitment to research and teaching are encouraged to apply by arranging to have a curriculum vitae, a brief description of research plans, and three letters of recommendation sent to: Professor Stephen J. Lippard, Department of Chemistry, 18-399, Massachusetts Institute of Technology, Cambridge, MA 02139-4307 by October 1, 1998.

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

The Department of Biochemistry and Biophysics/Johnson Research Foundation at the University of Pennsylvania invites applications for a non-tenure-track RESEARCH ASSISTANT PROFESSOR position. The position requires a Ph.D. in biophysics/bioengineering and expertise in reflectance/fluorescence spectroscopy of tissues and tissue pigments, including metabolic cofactors, structural proteins, and blood. Other requirements include instrumentation skills, familiarity with signal-to-noise ratio quantitation, fast scanning and low temperature spectrometry, and photon migration technology. Effective clinical collaboration skills are required. Candidates should provide a curriculum vitae, a statement of research interests, and arrange to have three letters of reference sent, by July 1, 1998, to: Ms. Ruth Keris, Department of Biochemistry and Biophysics, University of Pennsylvania, Philadelphia, PA 19104-6059. *The University of Pennsylvania is an Affirmative Action/Equal Opportunity Employer.*

TWO ASSISTANT PROFESSORS IN PLANT BREEDING/GENETICS CORNELL UNIVERSITY

Department of Horticultural Sciences
New York State Agricultural Experiment Station
Geneva, New York

The successful candidates will be expected to lead breeding programs in vegetables (crucifers) and small fruits (raspberry and strawberry), respectively. A Ph.D. in plant science with training in plant breeding, genetics, and biotechnology required. For further details see complete position announcements at [website: www.nysaes.cornell.edu/hort/position.html](http://www.nysaes.cornell.edu/hort/position.html). Send résumé, transcripts, and the names of three references to the Chair of the respective search committee: Department of Horticultural Sciences, Cornell University, Geneva, NY 14456.

DIRECTOR LABORATORY FOR PEDIATRIC CRITICAL CARE RESEARCH

A Pulmonary Physiologist/Biomedical Engineer is sought to direct this laboratory at The Children's Regional Hospital at Cooper Hospital/UMC, Robert Wood Johnson Medical School at Camden. Laboratory, vivarium, and office space located next to hospital. Excellent salary/benefits. Send curriculum vitae to: S. E. Courtney, M.D., M.S., Director of Clinical Research, Department of Pediatrics, Division of Neonatology, The Children's Regional Hospital at Cooper Hospital/UMC, One Cooper Plaza, Camden, NJ 08103 or call Dr. Courtney for more information: Telephone: 609-963-3981. *Equal Employment Opportunity.*

RESEARCH ASSISTANT PROFESSOR. Cardiology and molecular medicine, Oregon Health Sciences University. Biomedical Scientist sought for open-ended opportunity in NIH-funded cardiac molecular biology laboratory, focused on mechanisms of cardiac myocyte growth, emphasizing tyrosine kinase signaling pathways. Successful applicant will assist in developing and characterizing murine transgenic lines that utilize tetracycline transactivator systems. Required: Ph.D. and postdoctoral training in molecular/cellular biology, relevant experience and publications. Send curriculum vitae and names and telephone numbers of three references to: R. E. Hershsberger, M.D., Card-UHN-62, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201. FAX: 503-494-5049.

POSTDOCTORAL RESEARCH

at The Wistar Institute and
University of Pennsylvania

The Wistar Institute and University of Pennsylvania offer a collaborative postdoctoral position working with molecular genetic, biochemical and cell biologic approaches to study mechanisms of signal transduction and cell-cell/matrix interactions in vascular biology.

If interested, please send a curriculum vitae, bibliography and three letters of recommendation to:

Dr. E. Pure
The Wistar Institute
3601 Spruce Street
Philadelphia, PA 19104-4268



EEO/AA/M/F/D/V

CLINICAL DIRECTOR

National Institute on Aging ■ National Institutes of Health
Public Health Service ■ Department of Health and Human Services

The National Institute on Aging (NIA) is now seeking applications for the position of Clinical Director. This is a Civil Service position. Starting salary commensurate with qualifications and experience. Candidates may be eligible for Physician's Comparability Allowance up to \$20,000 per year. Alternatively, candidates may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service as well as the Senior Biomedical Research Service.

The Clinical Director provides scientific leadership for the NIA intramural clinical research program at Johns Hopkins Bayview Medical Center. He/she is responsible for the development, administration, coordination, and oversight of innovative investigator-initiated clinical research on normal aging and aging-associated diseases, including cancer, osteoarthritis, osteoporosis, diabetes, heart disease, Alzheimer's disease, and a host of other conditions. The clinical investigation is of both an observational (for example, the Baltimore Longitudinal Study of Aging) and interventional nature. A general goal is the application of molecular medicine to the problems associated with aging. The Clinical Director is responsible for creating and maintaining a research environment in which clinical findings influence the direction of laboratory studies and laboratory findings are applied to patients. The Clinical Director will also serve as Chief, Laboratory of Clinical Investigation and will have resources to conduct laboratory research in addition to laboratory monitoring of clinical research. The Clinical Director will assure that clinical research in the NIA reflects the highest standards of scientific excellence and the highest ethical standards for the protection of human subjects participating in intramural clinical research. We are seeking a physician with expertise in the development of innovative clinical research programs who has demonstrated the ability to manage a large, multidisciplinary clinical research program. Experience and working knowledge with issues related to human subjects experimentation is desirable.

Further information may be obtained by contacting Ms. Theresa Niebuhr at 410-558-8116. A current curriculum vitae and bibliography and three letters of recommendation should be submitted to: **Personnel Office, National Institute on Aging, Gerontology Research Center, 5600 Nathan Shock Drive, Baltimore, MD 21224-6825. Applications must be postmarked by July 6, 1998.**

NIH is an Equal Opportunity Employer

Manager, Confocal Imaging Facility Experimental Immunology Branch of the National Cancer Institute

The Experimental Immunology Branch (EIB) of the National Cancer Institute (NCI) invites applications for a Staff Scientist position to function as Manager of a Confocal Imaging Facility. Typical applicants will have an advanced degree in immunology, cell biology, or allied fields. The applicant must have extensive experience using laser scanning confocal microscopy, digital imaging, and video microscopy in cell biological applications. The applicant should have a wide range of computer skills that facilitate image capture and analysis, and preferably have some programming skills. The applicant would manage and run a core facility to support the imaging need for the EIB, which is a highly interactive group of about 50 scientists conducting research in molecular and cellular immunology. The applicant will be expected to apply new imaging technologies as they emerge. Salary range is between \$54-70,000 depending on qualifications and experience. Applicants should send curriculum vitae, bibliography, statement of career directions, and three letters of reference to:

Ms. Karen Augustine
National Institute of Health
10 Center Drive
Bldg. 10 Room 4B17 MSC 1360
Bethesda, MD 20892-1360

Applications should be postmarked by July 15, 1998.

NIH is an Equal Opportunity Employer.



Research Planning In Neuroscience

The National Institute of Neurological Disorders and Stroke (NINDS), located in Bethesda, MD, is seeking a neuroscientist to help identify opportunities and directions in basic and clinical neuroscience research. The successful candidate will work with senior Institute management and members of the research community to develop a strategic vision for the Institute, to formulate initiatives that create unusual opportunities consistent with the Institute's research objectives and mandate to respond to public health needs.

Qualifications include advanced training and/or experience in neuroscience or a related field; written and oral communications skills; and organizational skills to manage a complex planning process involving all Institute activities and all major aspects of the neurological sciences. Salary will be set commensurate with experience.

Applications must be postmarked by July 6, 1998. Applicants are required to submit a bibliography and curriculum vitae, résumé, or any other written format which addresses the requirements indicated in this announcement. **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) 402-2818.**

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.

POSITIONS OPEN

Fujisawa Research Institute of America is the U.S. research subsidiary of highly respected Fujisawa Pharmaceutical Company headquartered in Osaka, Japan. We are seeking visionary scientists to join our pursuit of innovative pharmaceutical products in our Chicago suburban facility.

PRINCIPAL RESEARCH SCIENTIST MOLECULAR PHARMACOLOGY

You will apply techniques of molecular biology to fundamental problems of pharmacological interest.

Applicants must have a Ph.D. (or equivalent) with at least three to five years of experience in molecular pharmacology or molecular biology, and a proven commitment to a career in independent research. Experience with scientific methods such as mRNA isolation, quantitative PCR, cDNA library construction, differential screening, gene identification, and gene functioning is desirable. Strong bioinformatics skills are a plus.

As an industry leader, we can provide a rewarding career opportunity affiliated with Northwestern University and an attractive compensation and benefits package. For immediate consideration, FAX or mail your résumé with compensation history to:

Fujisawa Research Institute of America
Department HJ
Northwestern University Research Park
1801 Maple Avenue
Evanston, IL 60201
FAX: 847-467-4471

Equal Opportunity Employer/Minorities/Females/Disabled/Veterans.

DIRECTOR, GENE THERAPY

Tulane University Medical Center in New Orleans, Louisiana invites nominations and applications for the position of Director for a gene therapy center. Qualified doctoral-level candidates must have proven records of research funding, experience, and achievement in the field of gene therapy or molecular medicine. They should have administrative and leadership experience for coordinating basic and clinical research. Strong emphasis will be placed on the candidate's ability to marshal the resources of the Medical Center, which includes a School of Medicine, a School of Public Health and Tropical Medicine, and a Primate Center. Tulane's institutional commitment and currently active research projects in gene therapy offer an excellent opportunity for establishing a strong integrated program that can attract extramural funding and achieve national prominence. The successful candidate will occupy an endowed chair.

Applicants should send a complete curriculum vitae and the names of at least three references to:

Dr. Peter J. Gerone
Chairman, Gene Therapy Search Committee
Office of the Chancellor, SL76
Tulane University Medical Center
1430 Tulane Avenue
New Orleans, LA 70112

Tulane is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and members of minority groups.

SCIENTIFIC DIRECTOR MACROMOLECULAR INTERACTIONS FACILITY University of North Carolina at Chapel Hill

Ph.D. in chemistry or the biomedical sciences with experience in biophysical methods. Two to three years of postdoctoral experience with strong publication record. Duties require demonstrated competence to (1) supervise a multi-user equipment facility with Microcal VP-Differential Scanning Calorimeter, Beckman Analytical Ultracentrifuges, BIAcore-2000 and BIAcoreX surface plasmon resonance instruments, circular dichroism, calorimetry, and fluorescence spectrometers; (2) instruct faculty/students in experimental design and data collection; (3) assist in writing grant applications and manuscripts. Appointment as a Research Assistant Professor in the Department of Biochemistry and Biophysics is possible. Send résumé plus names and addresses of three references to: Professor Tom Traut, Department of Biochemistry and Biophysics, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-7260. E-mail: traut@med.unc.edu. Minority and female candidates are asked to voluntarily identify themselves. The University of North Carolina is an Equal Opportunity Employer.

POSITIONS OPEN



CARDIOVASCULAR DISEASE RESEARCH INVESTIGATOR

Applications are invited for an experienced Scientist to develop a cardiovascular disease research program at North Carolina Central University (NCCU). The successful candidate will create and direct the Cardiovascular Disease Research Program. The program will be a mechanism-based, multidisciplinary, interdepartmental activity that unifies and expands the institution's cardiovascular projects in basic research, providing training for undergraduate and graduate students and enhancing faculty development. The Principal Investigator will be expected to encourage collaborative research and training relationships with scientists at other institutions.

Applicants considered for the position must hold a Ph.D. and/or M.D. with a proven record of sponsored research program management, and qualify for a position in one of the basic science departments at the level of Associate Professor or Professor. Additional requirements include demonstrated administrative and scientific leadership abilities; a record of professional accomplishments and publications in peer-reviewed journals; teaching experience at the undergraduate and/or graduate level; and an extensive record of research funding. NCCU has recently expanded its research capacity with the creation of a Biomedical/Biotechnology Research Institute (BBRI) located on its campus. The BBRI is a modern facility that will be the major center for the cardiovascular research program.

Review of applicants will begin on May 25, 1998, and will continue until the position is filled. Applicants are asked to submit a curriculum vitae, a description of research interests, and three letters of reference to:

Ms. Gloria A. Haynes
The BBRI Search Committee
Special Assistant to the Chancellor
North Carolina Central University
P.O. Box 19363
Durham, NC 27707

North Carolina Central University is a constituent institution of the University of North Carolina System and an Equal Opportunity/Affirmative Action Employer. NCCU complies with the Immigration Reform and Control Act of 1986.

Pediatric infectious diseases. **OPEN RANK.** Oregon Health Sciences University, Department of Pediatrics, Portland, Oregon seeks a **PHYSICIAN/SCIENTIST** with an established record to pursue a laboratory-based research program. The research program on campus is particularly strong in the areas of pathogenic microbiology, cellular immunology, and molecular neurosciences. The research atmosphere on campus is conducive to collaborations and the candidate will have numerous opportunities to interact with other faculty. Microbiology-related research topics on campus include studies on the biology and pathogenesis of CMV, HIV-1, SIV, HHV-8, hepatitis C, Neisseria, Salmonella, Listeria, Vibrio, Mycobacteria, Helicobacteria, and Leishmania, as well as interactions of microbes with Class I and Class II MHC antigen presenting systems. Position includes set-up funds, laboratory space, and eight to nine months per year of protected time. M.D. and Board-eligible/Board-certified in pediatric infectious diseases required. Please submit curriculum vitae and description of career plans to: Paul Lewis, M.D., Oregon Health Sciences University, Mailstop: PED, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201. E-mail: lewisp@ohsu.edu. Women and minorities are encouraged to apply.

TECHNOLOGY COORDINATOR OIL SPILL RECOVERY INSTITUTE

The Oil Spill Recovery Institute (OSRI), a federally established research organization focused on oil pollution issues in the Arctic and subarctic, is seeking an individual to develop and coordinate an international technology program. Preference given to those with advanced degrees in the physical or engineering sciences (a Ph.D. is preferred) and experience in oil pollution research. Send letter of interest and résumé to: G. L. Thomas, Ph.D., Executive Director, Oil Spill Recovery Institute, Box 705, Cordova, AK 99574. For more details go to website: <http://www.pwssc.gen.ak.us/osri>.

POSITIONS OPEN

CENTER DIRECTOR WESTERN REGIONAL RESEARCH CENTER

Center Director, Western Regional Research Center, Agricultural Research Service, United States Department of Agriculture, Albany, California. To direct diverse research programs to generate new knowledge and technology to ensure an abundance of safe, high-quality, and high-value agricultural commodities, while maintaining or enhancing environmental quality. Position requires background in research and administration to provide intensive scientific knowledge, executive skills, and leadership for effective administration of complex and diverse Center programs.

Announcement No. ARS-SES: 98-1. Closing date: June 19, 1998. Salary range \$99,200 to \$118,400. Contact:

USDA, ARS, AFM, HRD
Policy Branch
ATTN: Lee Triplett
5601 Sunnyside Avenue
Stop Code 5301
Beltsville, MD 20705-5301
Telephone: 301-504-1434
Website: www.ars.usda.gov

ARS is an Equal Opportunity Employer.

DIRECTOR OF MARKETING AND SALES

Kirkegaard and Perry Laboratories (KPL), a major supplier of biotechnology products, is seeking an enthusiastic and creative marketing and sales leader to direct our worldwide revenue growth. The successful candidate will report directly to the CEO and bring a proven track record of leading the strategic development of products in research reagents, molecular biology, and immunological reagents. He or she should have at least six to eight years of progressive experience and have successfully managed all functions within sales and marketing in biotechnology. The candidate will be results-oriented with strong industry knowledge, internal and external communications, and computer skills (including Internet commerce). A B.S. degree in science and MBA in marketing is required.

Please visit our website: www.kpl.com for more information about our company. Qualified candidates should respond with a cover letter including salary requirements and résumé to: Kirkegaard and Perry Laboratories, Human Resources Department, Director of Marketing and Sales, 2 Cessna Court, Gaithersburg, MD 20879. E-mail: hr@kpl.com; FAX: 301-948-5815. We are proud to support work force diversity, Equal Employment Opportunity, and Affirmative Action.

The Division of Gastroenterology and Hepatology at Mayo Clinic in Rochester, Minnesota, is recruiting an individual to fill a **RESEARCH POSITION**. The candidate must hold an M.D. or Ph.D. degree, have national/international visibility as an Investigator, and have a track record of sustained federal funding in the United States or its equivalent abroad. His/her research interest should be relevant to gastroenterology and/or hepatology. The Mayo Clinic provides an outstanding research environment with substantial intramural support. Academic rank will be commensurate with the individual's experience. Interested applicants should submit a statement of research interests, curriculum vitae, bibliography, and a list of references to: Dr. Nicholas F. LaRusso, Chair, Division of Gastroenterology and Hepatology, Mayo Clinic, 200 First Street S.W., Rochester, MN 55905. E-mail: thornton.lisa@mayo.edu. Deadline for application is July 1, 1998. Mayo Foundation is an Affirmative Action/Equal Opportunity Educator and Employer.

TENURE-TRACK POSITION NATIONAL EYE INSTITUTE

A tenure-track Ph.D. or M.D. Scientist is sought to establish an independent research unit within the Laboratory of Immunology, National Eye Institute (NEI), National Institutes of Health (NIH). The work should guide and complement studies with clinical colleagues of the mechanism and novel treatments of human ocular inflammatory diseases. Experience in cellular and molecular immunology and related disciplines are required. Space, budget, and personnel resources are committed for the support of the selected candidate. Previous applicants need not reapply. A curriculum vitae, bibliography, detailed statement of research interests, selected publications, and three letters of recommendation should be sent to: Ms. Cheryl Wild, NEI Personnel Management Branch, NEI, Building 31, Room 6A18, NIH, Bethesda, MD 20892-2510. Closing date July 30, 1998.

FIFTH ANNUAL REPORT OF MIZUTANI FOUNDATION FOR GLYCOSCIENCE

(Research Grants Awarded in 1998)*

Last year, Mizutani Foundation for Glycoscience received 117 research grant applications from 23 countries. After careful evaluation for scientific merit, potentiality, and feasibility, the foundation approved 13 projects and awarded a total of ¥70,000,000 to them. The grantees for the 1998 fiscal year are (in alphabetical order):

1. **Campbell, Kevin P.**; The University of Iowa College of Medicine, HHMI, USA; "Carbohydrate moieties of α -dystroglycan, its link with extracellular matrix"
2. **Gatt, Shimon**; Hebrew University, Israel; "Fluorescence-based studies of glycosphingolipid storage diseases"
3. **Hoshi, Motonori**; Tokyo Institute of Technology, Japan; "Egg-coat saccharide chains serving as physiological signals for sperm"
4. **Lipták, András**; L. Kossuth University, Debrecen, Hungary; "Totally synthetic saccharide-protein conjugate vaccines against *Shigella* infections"
5. **Marco-Contelles, José**; Instituto de Química Orgánica General (CSIC), Spain; "Synthesis of aminocyclitols via samarium diiodide carbocyclization of 1,6-carbonyl oxime ethers derived from sugars"
6. **Pagano, Richard E.**; Mayo Foundation, USA; "Synthesis & characterization of novel glycosphingolipids for cell biology"
7. **Raetz, Christian R. H.**; Duke University Medical Center, USA; "Synthesis and biological activity of endotoxin photoaffinity probes"
8. **Rapraeger, Alan C.**; University of Wisconsin-Madison, USA; "Mapping of bioactive heparan sulfates in development"
9. **Sandrin, Mauro S.**; Austin Research Institute, Australia; "Molecular analysis of Golgi localization signals of glycotransferases"
10. **Schachner, Melitta**; Institut für Biosynthese Neuraler Strukturen, Germany; "Functions of oligomannosides in neural recognition molecule-dependent cell interactions"
11. **Woods, Robert J.**; The University of Georgia, USA; "Carbohydrate mimics complexed with their protein receptors"
12. **Yamaguchi, Yu**; The Burnham Institute, USA; "Transgenic studies on the role of hyaluronan in brain function"
13. **Yanagishita, Masaki**; Tokyo Medical and Dental University, Japan; "Regulation of heparan sulfate proteoglycan metabolism by heparanase"

* Methods of application for new research grants and related subjects can be found in the Internet <<http://mizutanifdn.or.jp>>.

Mizutani Foundation for Glycoscience: Sen-i Kaikan, 3-1-11 Nihonbashi-honcho, Chuo-ku, Tokyo 103-0023, Japan
(Fax: 81-3-3246-1265; Phone: 81-3-3246-0224; E-mail: info@mizutanifdn.or.jp).

Assistant Professor Cognitive Neuroscience

Applications are invited for three tenure-track faculty positions in the Keck Center in Behavioral Plasticity and the Center for Neurobiology and Behavior, at Columbia University College of Physicians and Surgeons. Successful candidates will be expected to develop a vigorous, extramurally funded independent research program in cognitive neuroscience, using approaches such as single unit recording, behavioral psychology, computational methods, brain imaging, and related techniques. They will have the opportunity to interact with ongoing research programs that include analysis of mechanisms of selective attention, visual perception, motor control and learning and memory. A generous start-up package and newly constructed laboratory space will be made available. Applicants must possess a Ph.D. or M.D. degree and have at least two years of post-doctoral training. Submit curriculum vitae, names and addresses of three references, and summary of research objectives, to:

Search Committee, Center for Neurobiology and Behavior, Columbia University, New York State Psychiatric Institute, 722 W. 168 St., New York, NY 10032.

Columbia University

takes affirmative action to ensure equal opportunity.

SCIENCE That HEALS

From a Company That Gets Results

Creative Biomolecules, Inc. is a discovery and development company focused on proprietary protein-based therapeutics for human tissue regeneration and restoration. The Company's therapeutics are based on proteins that act as signals in initiating and regulating the cellular events involved in tissue regeneration and organ formation.

Hopkinton, MA

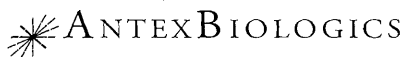
Signal Transducer Program Director - Put your demonstrated expertise in research administration and your outstanding interpersonal and communications skills to excellent use as you coordinate the activities of our internal and external research efforts leading to the discovery and application of small molecules that modulate the pathways involved in TGF beta and BMP signaling. Specifically, you will coordinate the efforts of contractors, collaborators, and internal research teams and of the pre-clinical, product development, and production groups as they relate to this program. You will also lead a group involved in the expression of signaling proteins and receptors, the development of assays that report the biology of these compounds, and the exploration of the biological effects of lead compounds. To qualify, you must have a Ph.D. in a biological science, at least 7 years of academic or industrial experience, and an outstanding record of publication and/or achievement.

Candidates with experience in one or more of the following areas are especially encouraged to apply: design of medium and high throughput screening for protein interactions or other biological endpoints, signal transduction biology, use of animal models as a basis for clinical utility, and working with preclinical and product development groups.

Creative BioMolecules offers an excellent compensation and benefits package, including 3 weeks' vacation along with a company-matched 401(k) plan and an employee stock purchase plan. For immediate consideration, please send or fax your resume to: Human Resources, Creative BioMolecules, 45 South Street, Hopkinton, MA 01748. Fax: (508)782-1541. An equal Opportunity Employer

CBM CREATIVE
BIOMOLECULES

POSITIONS OPEN



BIOCHEMIST PROTEIN PURIFICATION AND PROCESS DEVELOPMENT

Antex Biologics is seeking a **SENIOR SCIENTIST/MANAGER** with experience in the development and the scale-up of protein purification processes. A Ph.D. in biochemistry, or related field, with five to ten years of experience in industry is preferred. The successful candidate should be accomplished in recovery and purification of proteins from the outer membranes of bacteria; chromatography (liquid, HPLC, and EPLC), and analytical methods to characterize proteins. Experience with supervision of technical staff and a familiarity with cGMP is highly desired. Send résumé to: **Human Resources, Antex Biologics, 300 Professional Drive, Gaithersburg, MD 20879. E-mail: info@antexbiologics.com.**

PARASITOLOGY

Join the prestigious New York University Medical Center and discover how rewarding your career can be. Unique opportunities are available in **Dr. Laura Polge's** laboratory in the Department of Medical and Molecular Parasitology. NIH funding is available to study the gene structure and expression in the human malaria parasite, *Plasmodium falciparum*. You'll use transfection technology to study the role of gametocyte stage genes in sexual differentiation, and standard and genomic molecular techniques to determine if DNA rearrangements participate in regulated gene expression during life cycle switches by the parasite. Experience in molecular biology is required. Background in yeast genetics is desirable. Our department has several groups working on all aspects of malaria biology, providing a rich intellectual resource. Please send curriculum vitae and three letters of recommendation to: **William Kelley, Human Resources Department, New York University Medical Center, 550 First Avenue, New York, NY 10016. Visit our website: <http://jobs-www.med.nyu.edu/Employment>. Equal Opportunity Employer.**

VISITING BIOLOGY ASSISTANT PROFESSOR. Nine-month appointment beginning August 26, 1998. Teaching responsibilities include human biology, man and the environment, human anatomy, and human physiology. Preference given to candidates with interest and ability in (1) using effective pedagogy that fosters inquiry-based and collaborative learning, (2) using information technology, and (3) designing methods to assess learning. Candidates with interest and experience in these areas are encouraged to apply in anticipation of a national search for a tenure-track position for 1999–2000. Doctorate and demonstrated undergraduate teaching required. Submit letter of application, résumé, and letters from five professional references to: **Dr. Bonnie Amos, Head, Department of Biology, P.O. Box 10890, Angelo State University, San Angelo, TX 76909. Deadline is open but may be closed at any time after July 1, 1998.**

RESEARCH BIOLOGIST/CHEMIST. Needed for Division of Molecular Pathology in the Department of Cellular Pathology. Will conduct research on the application of molecular biology techniques to diagnostic and basic research questions, particularly the use on paraffin-embedded, formalin-fixed tissue. Work is expected to result in authorship or co-authorship. Must have Master's or Ph.D. in chemistry or biology, followed by hands-on research experience. Must have demonstrated ability to work independently and assume responsibility for project design, execution, and presentation. E-mail or FAX résumé and cover letter with salary requirements to: "**Personnel**," e-mail: lei@email.afip.osd.mil; FAX: 202-782-1476.

RESEARCH COORDINATOR GASTROENTEROLOGY LABORATORY

Immediately available one-year research position (extendable upon availability of funding) in mucosal immunity/inflammatory bowel disease research. Experience in molecular biology and tissue culture technique required. Applicants should send curriculum vitae to: **Dr. Asit B. Panja, Director of Gastrointestinal Research, Winthrop University Hospital, 222 Station Plaza North, Suite 429, Mineola, NY 11501. Equal Opportunity Employer/Affirmative Action.**

POSITIONS OPEN

DIRECTOR OF RESEARCH TENURED RESEARCH SCIENTIST WAYNE STATE UNIVERSITY

The Department of Otolaryngology at Wayne State University invites applications for a tenure-track academic appointment from a qualified scientist who will enhance the ear research program. Qualifications for the position include a Ph.D. or M.D. and Postdoctoral Fellowship with experience and success in independent funding. Responsibilities will include establishing an independent laboratory, moderate teaching, and administration of the departmental research program. Academic appointment and compensation will be related to training and experience. Letter of inquiry, recent reprints, and curriculum vitae should be sent to: **Robert H. Mathog, M.D., Professor and Chairman, Department of Otolaryngology, Wayne State University, 4201 St. Antoine, 5 E UHC, Detroit, MI 48201. Wayne State University is an Equal Opportunity/Affirmative Action Employer. All buildings, structures, and vehicles at WSU are smoke-free. Wayne State University—people working together to provide quality service.**

CELL BIOLOGIST/BIOENGINEER

One to two Research-level positions available immediately at the University of Texas Medical School–Houston, and the Texas Heart Institute, for Cell Biologists and/or Bioengineers with significant background and experience in cell biology. Successful candidates will have a doctoral-level degree (M.D., Ph.D., M.D.-Ph.D., or equivalent) and background experience in one or more of the following areas: angiogenesis, atherosclerosis, plaque rupture, immunology, or apoptosis, and an interest or background in the use or measurement of heat or thermal energy *in vivo* to study or control physiological processes. Interest and experience with molecular pathology is helpful. Projects involve the use of infrared imaging of vascular plaques to predict and/or control rupture of unstable atherosclerotic plaques. Send curriculum vitae as well as names and points of contact of three references to: **Ward Casscells, M.D., c/o Ms. Carolyn Williams, Texas Heart Institute, Department of Vascular Cell Biology, P.O. Box 20345, Mail Code 2-255, Houston, TX 77225.**

Biological chemistry positions. Several **TENURE-TRACK FACULTY POSITIONS** are anticipated to be available at all academic levels. Preference will be given to individuals with promising or outstanding, chemical-based research programs in biological chemistry that complement current research programs in the Department of Chemistry and the University of Kentucky Medical Center. Consult our website: www.chem.uky.edu for information on faculty research interests, major research equipment, and other aspects of the Department. The successful candidate would be expected to develop an extramurally funded, nationally recognized research program and teach undergraduate and graduate courses in the department. Applicants should submit a curriculum vitae and outline of plans for research, and should arrange for at least three letters of recommendation to be sent to: **Biological Chemistry Search Committee, Department of Chemistry, University of Kentucky, Lexington, KY 40506-0055. Applications should be received by July 1, 1998. The University of Kentucky is an Equal Opportunity Employer and especially invites and encourages applications from women and underrepresented minorities.**

Two **POSTDOCTORAL POSITIONS** are available from July 1998 for strongly motivated individuals to work on (1) molecular mechanisms of IL-12 regulation (measles, HIV, multiple sclerosis) or molecular mechanisms of endotoxin tolerance-mediated regulation of innate immunity (C. Karp); or (2) cellular and molecular mechanisms of allergic disease (M. Wills-Karp). Strong foundation in immunology and molecular biology required. Funding requires permanent residency or U.S. citizenship. A **TECHNICAL POSITION** is also available from July 1998 for a strongly motivated individual with expertise in cellular immunology. Send letter of interest, curriculum vitae, and three letters of reference to: **Dr. Chris Karp, Department of MMI, E5008, or Dr. Marsha Wills-Karp, Department of EHS, 7006, School of Public Health, Johns Hopkins University, 615 North Wolfe Street, Baltimore, MD 21205.**

POSITIONS OPEN



NATIONAL PROGRAM LEADER HUMAN NUTRITION

The Agricultural Research Service of the U.S. Department of Agriculture invites applications for the position of National Program Leader for Human Nutrition. This is a full-time, permanent position located in Beltsville, Maryland. The National Program Leader is responsible for leading and coordinating the Agency's research programs related to human nutrition. In addition to a degree in nutrition or related field, applicants must have a strong knowledge of nutrition and related areas; have the ability to plan, conduct, coordinate, and evaluate research programs; have skills to establish goals and priorities for an active and growing research program that is national in scope; represent the Agency to other governmental and private entities; and have the ability to organize and lead groups of technical experts. Applicants must be U.S. citizens. The closing date for the submission of applications is June 22, 1998. Program information is available by contacting: **Dr. Caird Rexroad, Telephone: 301-504-7050; FAX: 301-504-6191; e-mail: cer@ars.usda.gov.** Those interested in the position should contact: **Human Resources Division, Telephone: 301-504-1484** to request a copy of Vacancy Announcement ARS-X8B-8182 or electronically under job vacancies at website: www.ars.usda.gov. *USDA/ARS is an Equal Opportunity Employer.*

SENIOR STAFF FELLOW IN MAST CELL BIOLOGY

A Senior Research Science position is immediately available to study the regulation of mast cell growth and differentiation (see: *J. Clin. Invest.* 99:1721, 1997; *J. Immunol.* 159:4006, 1997) in conjunction with ongoing studies on the role of mast cells in inflammatory and immune processes. Experience in cellular and molecular biology is required. Applicants should have an M.D. or Ph.D. degree, at least three years of postdoctoral experience, and be a United States citizen or a resident alien. Please send curriculum vitae and the names, addresses, and telephone numbers of three references to:

**Dr. Dean Metcalfe
Laboratory of Allergic Diseases
NIAID, NIH
Building 10, Room 11C205
10 Center Drive MSC-1881
Bethesda, MD 20892-1881 USA
E-mail: dean_metcalfe@nih.gov**

NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS are available immediately to study the structure-function and molecular regulation of transmembrane receptors for bioactive peptide hormones (natriuretic peptides, angiotensins) and growth factors. Individuals with different disciplines using molecular biology techniques will be considered; however, those with experience in molecular aspects of hypertension and cardiovascular regulation will be given preference. Qualified candidates should have a Ph.D. and/or M.D. degree and strong background in molecular cloning, gene expression, and/or site-directed mutagenesis is highly desirable. Send curriculum vitae and three references to:

**Dr. K. N. Pandey
Department of Physiology SL39
Tulane University Medical School
1430 Tulane Avenue
New Orleans, LA 70112-2699**

An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

Postdoctoral position available to study the action of neuropeptidases in regulating peptide levels. Studies involve the use of recombinant enzymes. Experience in molecular biological techniques or enzymology an asset. Send curriculum vitae and letters of recommendation to: **Dr. Louis B. Hersh, Department of Biochemistry, MS607 Medical Center, University of Kentucky, Lexington, KY 40536-0298. An Affirmative Action/Equal Opportunity Employer.**

Structure-Based Functional Genomics

October 4 – 7, 1998
Golden Inn on the Beach
Avalon, New Jersey

Organizing Committee

S. Anderson • E. Arnold
G.T. Montelione • A. Stock

Initiative in Structural Bioinformatics

Rutgers, The State University of New Jersey

University of Medicine and
Dentistry of New Jersey

Plenary Speakers

- H. Berman (Rutgers University and Nucleic Acid Database)
- S. Brenner (Stanford University)
- S. Burley (Rockefeller University)
- D. Eisenberg (University of California, Los Angeles)
- S. Fesik (Abbott Laboratories)
- W. Hendrickson (Columbia University)
- L. Holm (European Bioinformatics Institute, Cambridge)
- B. Honig (Columbia University)
- S.-H. Kim (University of California, Berkeley)
- E. Koonin (National Institutes of Health)
- R. Levy (Rutgers University)
- J. Moulton (Center for Advanced Research in Biotechnology)
- C. Orengo (University College, London)
- L. Patthy (Hungarian Academy of Science)
- G. Rose (Johns Hopkins University)
- A. Sali (Rockefeller University)
- C. Sander (Millennium Pharmaceuticals)
- M. Sippl (University of Salzburg)
- J. Skolnick (Scripps Research Institute)
- J. Sussman (Weizmann Institute and Brookhaven Protein Databank)
- T. Terwilliger (Los Alamos National Laboratory)
- G. Wagner (Harvard Medical School)
- K. Wüthrich (Swiss Federal Institute of Technology, Zürich)
- S. Yokoyama (University of Tokyo)

Sponsored by:

New Jersey Commission on
Science and Technology

Center for Advanced Biotechnology
and Medicine

Burroughs-Wellcome Fund
Merck Genomics Institute

Registration and additional information about
the program and lodging are available at:

[http://www.cbam.rutgers.edu/
bioinformatics_meeting](http://www.cbam.rutgers.edu/bioinformatics_meeting)

or contact Ms. R. Watson at 732/235-5321

Registration limited to ~180 persons.

Registration deadline: June 22, 1998



l'alliance ouvre les portes de la découverte

New scientific discoveries are based on innovation, sharing knowledge and synergy of skills. This philosophy is a priority for the Institut de Recherche Jouveinal (IRJ), one of the European

Pharmaceutical Research Centres of Parke-Davis located in the southern region of Paris. In our research centres, in Ann Arbor (USA), Cambridge (UK) and Fresnes (FR), scientists are working on a broad range of mechanistic approaches to discover and develop new drugs for important human diseases. Our present goal is to expand and build new teams in France and work closely with our international teams. We are currently looking to recruit in the following areas :

Allergy-inflammation Senior Scientists

Several positions are available at the senior scientist level and require a PhD with 2-4 years Post-Doctoral experience in the area of immunology related to allergy and inflammation.

Specifically we are seeking :

- Immunologist with experience in *in vivo* inflammatory models. The candidates will select and validate existing animal models as well as initiate new models on the basis of their relevance to the pathogenesis of specific inflammatory human diseases (including atopic dermatitis, psoriasis, asthma). Experience in state of the art histological techniques is required.
- Senior scientists with expertise in human and murine (in vitro) immunology systems especially concerning antigen specific stimulation of B and T cells. Knowledge of cell sorting techniques and experience with confocal microscopy would be useful. **Ref. AI/SC**

Gastroenterology Senior Scientists

The Institut de Recherche Jouveinal is one of France's leading sources of gastroenterology research and we are seeking to expand our team with additional senior scientists.

As a part of the Gastrointestinal discovery team, the selected candidates will be responsible for initiating and carrying out scientific research in novel mechanistic strategies to the treatment of a variety of Gastrointestinal diseases, including IBD, IBS and pancreatic disorders.

Positions are available at the senior scientist level and require a PhD with 2-4 years Post-Doctoral experience in the gastrointestinal disease area, with a focus on in vitro cell biology/histological expertise. **Ref. GE/SC**

For consideration, please send your complete resume (with the list of publications) quoting appropriate reference number to Marie-Aude Julien, Institut de Recherche Jouveinal/Parke-Davis, Human Resources Department, 3/9 rue de la Loge, BP 100, 94265 Fresnes Cedex, France. Fax : (33.1) 40 96 77 32



POSITIONS OPEN

ANTIMICROBIAL PEPTIDES REGULATION OF EXPRESSION AND MECHANISMS OF ACTION University of California, Irvine

Three **POSTDOCTORAL POSITIONS** are immediately available in the University of California, Irvine Department of Pathology for studies on mammalian antimicrobial peptides (see: *FASEB J.* 10:1280-1289, 1996). Innovative Investigators are sought to expand ongoing studies on the peptide gene expression and mechanisms of antimicrobial action. Individuals with experience in the following areas are encouraged to apply: solid phase peptide synthesis; heterologous protein expression in bacterial, yeast, or mammalian cell systems; site-directed mutagenesis; cDNA and genomic cloning; interactions of peptides with model membranes. Send curriculum vitae, summary of research experience and interests, and names of three references to: **Dr. Michael E. Selsted, Department of Pathology, College of Medicine, University of California, Irvine, CA 92697-4800.** The University of California is an Equal Opportunity Employer committed to excellence through diversity.

CENTER FOR NEUROVIROLOGY AND NEUROONCOLOGY Allegheny University of the Health Sciences

POSTDOCTORAL POSITIONS. Several Postdoctoral positions are immediately available for candidates with an interest in studying (1) the molecular biology and pathogenesis of HIV-1 in brain, and molecular therapeutic strategies toward neurological diseases in AIDS; (2) gene expression in brain with an emphasis on demyelinating diseases, and the development of gene and cellular therapeutic approaches toward treatment of demyelinating diseases. A Ph.D. or comparable professional degree with experience in cellular and molecular biology is required. Please send a curriculum vitae and three letters of reference to:

Shohreh Amini, Ph.D., Professor
Center for NeuroVirology and NeuroOncology
Allegheny University of the Health Sciences
Broad and Vine Streets, Mail Stop 406
Philadelphia, PA 19102

Allegheny University of the Health Sciences is an Equal Opportunity Educator and Employer.

POSTDOCTORAL POSITION available immediately to study the role of c-kit (receptor for stem cell factor) in the regulation of mast cell function and in the pathogenesis of systemic mast cell disorders (*PNAS* 92: 10560, 1995). Studies include structure-function relationships determining interactions between c-kit and signaling proteins, and the role of c-kit in inflammatory and immune processes. Experience in cellular and molecular biology is required. Some familiarity with transgenic/knockout technology is desirable. Please send curriculum vitae and the names, addresses, and telephone numbers of three references to:

Dr. Dean Metcalfe
Laboratory of Allergic Diseases
NIAID, NIH
Building 10, Room 11C205
10 Center Drive MSC-1881
Bethesda, MD 20892-1881 USA
E-mail: dean_metcalfe@nih.gov

NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available at the Karmanos Cancer Institute at Wayne State University. Ph.D. in immunology to develop novel anticancer immunotherapeutics. Work with a team of clinicians and scientists to design and test peptide- or gene-based immunotherapeutic agents for potential clinical application. Send curriculum vitae and three letters of recommendation to: **Wei-Zen Wei, Ph.D., Associate Professor, Karmanos Cancer Institute, 110 East Warren, Detroit, MI 48201.** Wayne State University School of Medicine, the country's largest single-campus medical school, is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS are available to study gene induction by novel interferon regulated factors (*PNAS* 94:103, 1997; 94:7227, 1997). Applicants should have a Ph.D. or M.D. or equivalent degree with training in basic techniques of molecular biology. Please submit curriculum vitae and references from three individuals for consideration to: **Dr. D. Kalkavolanu, Cancer Center, BRB 9th Floor, University of Maryland School of Medicine, 655 West Baltimore Street, Baltimore, MD 21201.** Telephone: 410-328-1396; FAX: 410-328-6559; e-mail: dkalvako@umaryland.edu.

POSITIONS OPEN

The Division of Hematology at Duke University Medical Center, Durham, North Carolina, has several **POSTDOCTORAL RESEARCH FELLOWSHIP** positions available for research in the areas of sickle cell anemia, transfusion, coagulation, and thrombosis. Candidates must be U.S. citizens or permanent residents and be eligible for at least two years of funding on NIH/NRSA training grants. Available positions:

Charles Greenberg, M.D.: role of coagulation in sickle cell anemia.

William Kane, M.D., Ph.D.: structure/function relationships of coagulation factor V.

Thomas Ortel, M.D., Ph.D.: coagulation factor VIII inhibitors; antiphospholipid antibodies.

Marilyn Telen, M.D.: adhesion molecules in sickle cell anemia; immunology of transfusion reactions.

J. Brice Weinberg, M.D.: role on NO in malaria; role of NO in inflammation.

Applicants should contact: **Marilyn Telen, M.D., Professor and Chief, Division of Hematology, Box 2615, Duke University Medical Center, Durham, NC 27710.** FAX: 919-681-7688; e-mail: telen002@mc.duke.edu.

Duke University is an Equal Opportunity Employer.

POSTDOCTORAL POSITION DEPARTMENT OF BIOMEDICAL ENGINEERING

Postdoctoral position available immediately to study the relationship between arterial fluid mechanics and events occurring during atherosclerosis. A Ph.D. in biomedical engineering, chemical engineering, or related areas required. Experience with immunochemistry, lipoprotein oxidation, and/or flow visualization highly desirable. Please send curriculum vitae, names of three references, and summary of research experience to: **George A. Truskey, Ph.D., Department of Biomedical Engineering, Duke University, 136 Hudson Hall, Durham, NC 27708-0281.** FAX: 919-660-5362; e-mail: gtruskey@acpub.duke.edu. Duke University is an Equal Opportunity/Affirmative Action Employer.

A **POSTDOCTORAL POSITION** is available immediately to study the structure, gene content, and evolution of the subtelomeric regions of human chromosomes and their role in generating functional diversity, e.g., in the olfactory receptor repertoire (see: *Hum. Molec. Genet.* 7:13-26, 1998). A strong background in molecular biology or genomics is required. Please submit a description of research interests, curriculum vitae, and three letters of reference to: **Dr. Barbara Trask, Department of Molecular Biotechnology, University of Washington, Box 357730, Seattle, WA 98195.** E-mail: trask@biotech.washington.edu; FAX: 206-685-7354. The University of Washington is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION IN MOLECULAR IMMUNOLOGY University of California, San Francisco

To work on immunoglobulin heavy chain class switch or hypermutation. Experience in molecular biology is essential. Send curriculum vitae, a summary of previous research, and names of two referees to:

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

POSTDOCTORAL POSITION in signal transduction available to study the role of paxillin and associated proteins in cell adhesion-related signaling and cytoskeletal organization. Experience in cell biology and/or molecular biology techniques essential. A background in cell adhesion or signal transduction is desirable. Send curriculum vitae and references to: **Dr. Chris Turner, c/o Personnel Office—Job #6055, SUNY Health Science Center at Syracuse, 750 East Adams Street, Syracuse, NY 13210.** An Affirmative Action/Equal Employment Opportunity/ADA Employer, committed to excellence through diversity.

Key **RESEARCH POSITION** focused around proprietary stem cell amplification system. Ph.D. with several years of experience preferred. Only candidates who have a strong background in stem cell biology, particularly hematopoietic and/or embryonic, need apply. Mouse engraftment experience a major plus. FAX résumé to: **t. Breeders, Inc., FAX: 508-831-3521.**

POSITIONS OPEN

POSTDOCTORAL POSITION

A Postdoctoral position is available in the Cardiology Branch of the NHLBI, NIH. The laboratory is focused on signal transduction pathways relevant to cardiovascular disease. Particular emphasis is on the role of reactive oxygen species as signaling molecules (see: *Curr. Opin. Cell Biol.* 10:248-253, 1998). Applicant must have a strong background in molecular biology and less than five years of postdoctoral experience. Interested applicants should send a curriculum vitae to: **Toren Finkel, M.D., Ph.D., Cardiology Branch, NHLBI, NIH, 10 Center Drive, Building 10, Room 7b-15, Bethesda, MD 20892-1650.** FAX: 301-402-0888.

POSTDOCTORAL RESEARCH POSITIONS DEPARTMENT OF PHARMACOLOGY University of Colorado Health Sciences Center Denver, Colorado 80262 USA

Two NIH-funded Postdoctoral positions are available in the laboratory of **Dr. Dermot Cooper** to study the regulation of Ca^{2+} -sensitive adenylyl cyclases. The projects involve structure-functional and cell-biological analyses of the features conferring *in vitro* sensitivity to Ca^{2+} and *in vivo* sensitivity to Ca^{2+} -entry on adenylyl cyclases (e.g., see: *JBC* 273:9297; 272:18093; 271:12438; 270:1149; *Nature* 374:421). Prior extensive experience with either $[Ca^{2+}]_i$, cAMP-signaling, or molecular biological methods is essential. The positions will be from two to three years duration, at \$26,000 per annum plus benefits. Please send enquiries (with full curriculum vitae) and references to: **D. M. F. Cooper, Department of Pharmacology, University of Colorado Health Sciences Center, Box C-236, Denver, CO 80262 USA.** E-mail: cooperd@essex.uchsc.edu.

For information on the department see website: <http://www.uchsc.edu/sm/pharmac/>.

POSTDOCTORAL POSITION IN FUNCTIONAL NEUROANATOMY NIMH

A Postdoctoral or Staff Fellow position is available to apply molecular and histochemical techniques to study the brain's response to peripheral immune challenges. The candidate should have a strong background in molecular biology and an interest in using anatomical localization techniques to examine immune-to-brain signaling (NF- κ B-mediated actions, cytokine expression in brain, signal transduction mechanisms). Opportunity to carry out independent work, with guidance and excellent facilities provided. Applicants must have a Ph.D. or M.D. For additional information, see website: <http://intramural.nimh.nih.gov/lcmr/sfn/>. Write to: **Miles Herkenham, Ph.D., Section on Functional Neuroanatomy, NIMH, Building 36, Room 2D15, 36 Convent Drive, Bethesda, MD 20892-4070.** The NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION

Posttranscriptional regulation. A position is available immediately in the Department of Molecular Biology and Immunology to study global regulation of bacterial gene expression by a novel RNA binding protein and transacting RNA molecular, CsrA and CsrB, respectively (see: *J. Biol. Chem.* 272:17502-17510, 1997; *J. Bacteriol.* 179: 4639-4642, 1997). Ongoing studies include characterization of the RNA-protein interactions of the Csr system, elucidation of novel metabolic and physiological roles of Csr, and bacterial genetic screening for novel regulatory components. Previous experience in studying RNA-protein interactions and bacterial molecular genetics is desirable. Submit résumé and three references to: **Department of Human Resource Services, University of North Texas Health Science Center at Fort Worth, TX 76107-2699.**

Equal Employment Opportunity/Affirmative Action Institution.

POSTDOCTORAL POSITION ION CHANNEL RESEARCH

Available immediately to investigate ionic selectivity and other structure-function relationships in the voltage-sensitive sodium channel and Ca-activated potassium channel. Recent graduates with a background in electrophysiology, membrane biophysics, and protein biochemistry are preferred. Send curriculum vitae and reference letters to: **Dr. Edward Moczydlowski, Yale University School of Medicine, Department of Pharmacology, Sterling Hall of Medicine, 333 Cedar Street, P.O. Box 208066, New Haven, CT 06520-8066.** E-mail: edward.moczydlowski@yale.edu.

Serono Pharmaceutical Research Institute S.A.



The Institute is an affiliate of The Ares-Serono Group which has its Executive Headquarters in Geneva and is a leading multinational engaged in research, development, and marketing of products in the biotechnology field. The Institute is a state-of-the-art centre of scientific excellence. Its research is directed towards the identification of novel molecular mechanisms underlying disease and the discovery of new drugs.

A challenging and exciting opportunity exists for a

MUSCLE CELL BIOLOGIST

within the Molecular Biology Department. Applicants need to have a Ph.D. in molecular or cell biology, biochemistry or a related discipline. Previous experience in the control of muscle cell differentiation or protein turnover are necessary. Familiarity with cell-based assays and receptor characterization would be an advantage.

The position requires an interest in the causes of muscle degeneration. The successful candidate will conduct fundamental research on this topic and participate in a group that seeks to discover new endocrine and pharmacological compounds that affect wasting diseases. The applicant can expect to benefit from close contacts with other departments including biochemistry and *in vivo* pharmacology.

Informal enquiries concerning the position can be directed by e-mail to gary.buell@serono.com.

If you are interested, please send your curriculum vitae with a list of publications and the names of three referees to the Personnel Department of the Institute.

Serono Pharmaceutical Research Institute S.A.

14, chemin des Aulx

1228 Plan-les-Ouates

Geneva/Switzerland

Telephone

+41 22 706 96 66

Telefax

+41 22 794 69 65

*What's
the shortest
distance
between
two points?*

● you

● great career
opportunities

SCIENCE

**PROFESSIONAL
NETWORK**

www.sciencemag.org

Select SCIENCE Professional
Network from the menu

EUROPEAN OPPORTUNITIES

DeveloGen is a young biotechnology company inspired by the innovative idea that molecular genetics and developmental control genes can be used as therapeutic tools against diabetes, obesity and pancreatic cancer. We are presently seeking several highly motivated, well trained individuals to join stimulating research teams in a creative environment composed of leading developmental biologists and clinicians. We are offering exciting career opportunities in the following areas:



DeveloGen

Diabetes Research

Postdoctoral Scientist: Endocrinology

Expertise on the effect of hormones and growth factors on cellular differentiation and proliferation · Research experience in tissue culture and immuno-histochemistry · Background in molecular biology preferred · Job code: DEP

Pancreatic Cancer Research

Postdoctoral Scientist: Molecular Biology

Knowledge in pancreas development or carcinogenesis preferred · Experience with transgenic animals and molecular biology strongly desired · Some experience in microarray technology and the use of computational tools for biological analysis preferred · Job code: PCM

Obesity Research

Postdoctoral Scientist: Developmental Biology

Experience in molecular biology required · Knowledge in *Drosophila* genetics and development preferred · Job code: DFT

Candidates should have extensive knowledge in their fields. All positions require individuals who can communicate effectively and are capable of working both independently and within a team. We offer competitive salaries, opportunities for rapid advancement and close contacts to several well-known research institutions. To apply, send your CV together with a list of publications, the names of two referees and indicate the appropriate research field to: DeveloGen AG, Mrs. Heike Ackermann, Rudolf-Wissell-Straße 28, D-37079 Göttingen, Germany · Closing date: June 30, 1998 · An Equal Opportunity Employer

POSITIONS OPEN

POSTDOCTORAL TRAINING PROGRAM IN MOLECULAR HEMATOPOIESIS Center for Molecular Hematopoiesis The University of Illinois at Chicago

Postdoctoral Training Fellowship programs are available immediately for individuals with a Ph.D. or M.D. degree. Applications should demonstrate a strong background in molecular/cellular biology with an interest in hematopoiesis. Faculty interests:

Ronald Hoffman, M.D. Hematopoietic stem cell biology.

Amittha Wickrema, Ph.D. Differentiation and signaling in erythroid progenitors.

Leonidas Platanias, M.D., Ph.D. Cytokine signal transduction in hematopoiesis.

Steven Ackerman, Ph.D. Transcriptional regulation of myeloid lineage commitment and differentiation.

Wendy Stock, M.D. Molecular basis of stem cell renewal gene discovery.

Jeffrey Medin, Ph.D. Gene transfer to hematopoietic cells.

Tony A.-N. Kong, Ph.D. Signaling/apoptosis of anticancer drugs.

Interested individuals should send a letter requesting an application to:

Dr. Ronald Hoffman, Director
Center for Molecular Hematopoiesis
University of Illinois at Chicago
900 South Ashland Avenue, M/C 734
Chicago, IL 60607

POSTDOCTORAL RESEARCH POSITION

The Neuroscience Program of the Laboratory of Cellular and Molecular Cerebral Ischemia will offer a Postdoctoral Research position beginning summer/fall 1998. Research focuses on the basic mechanisms that determine neuronal plasticity and neuronal degeneration. Successful applicants must have a Ph.D. and/or M.D. with expertise in cellular and molecular biology. Please forward a curriculum vitae and names of three references to: **Kenneth Maiese, M.D., Neurology and Anatomy and Cell Biology, 6E-19 UHC, Wayne State University School of Medicine, 4201 St. Antoine, Detroit, MI 48201.** E-mail: kmaiese@med.wayne.edu; website: search "maiese". Wayne State University is an Equal Opportunity/Affirmative Action Employer.

STANFORD UNIVERSITY SCHOOL OF MEDICINE

Two POSTDOCTORAL POSITIONS are available immediately for highly motivated individuals to study transcriptional control in tumor development. A recent Ph.D. degree with strong background in molecular biology is required. Prior experience in DNA-protein interactions, yeast two-hybrid system, and protein biochemistry is highly desirable. We provide fruitful research environment, competitive salary, and fringe benefits. Send curriculum vitae and the names of three references to: **Dr. Zi-Jie Sun, Division of Head/Neck Surgery, R135, Department of Surgery and Genetics, Stanford University Medical School, Stanford, CA 94305.**

POSTDOCTORAL POSITION M. D. ANDERSON CANCER CENTER

Two NIH-funded positions available immediately in the areas of mammalian recombinational DNA repair or cell cycle checkpoint responses. Expertise in molecular biology and/or biochemistry required. Salary is competitive and commensurate with experience. Send curriculum vitae and three reference names to: **Dr. Randy Legerski, Department of Molecular Genetics, University of Texas M. D. Anderson Cancer Center, Houston, TX 77030.** E-mail: randy_legerski@molgen.mdacc.tmc.edu.

POSTDOCTORAL FELLOWS. University of Arkansas for Medical Sciences (UAMS) Pain Neurobiology Laboratory committed to research on long-term effects of pain is seeking Fellows with experience in molecular/anatomical methods, handling rat pups, image capture, and quantification of cell staining/ISH data. Salary/rank commensurate with experience, excellent benefits. Send curriculum vitae and three references to: **K. S. Anand, Arkansas Children's Hospital, S-431, 800 Marshall Street, Little Rock, AR 72202.** E-mail: anandsunny@exchange.uams.edu. UAMS is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

DNA REPAIR/IMMUNOSENESCENCE

Two POSTDOCTORAL POSITIONS available July 1998 to study the role of DNA repair during lymphocyte development and aging. Other interests include the regulation of chromosomal DNA end structure and its relationship to replicative senescence. Molecular approaches including targeted gene inactivation and transgenic mice are being used. Candidates must have a Ph.D. and/or M.D., and a strong background in molecular biology and immunology. Send curriculum vitae and names of three references to:

Dr. Andre Nussenzweig
Experimental Immunology Branch
National Institutes of Health, NCI
Building 10, Room 5A06
10 Center Drive MSC1360
Bethesda, MD 20892-1360
FAX: 301-496-0887
E-mail: andre_nussenzweig@nih.gov
NCI is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS UNIVERSITY OF MICHIGAN

Positions are available immediately to investigate inflammatory responses following injury and infection. Studies are directed toward delineation of immune mechanisms and development of innovative therapeutic modalities. Prior experience in gene therapy and cellular immunology preferred. Extensive experience in molecular biology and either cell biology or biochemistry is required.

Send or FAX a cover letter stating career goals, curriculum vitae, and three letters of reference to: **Stewart C. Wang, M.D., Ph.D., Director of Trauma Burn Research Laboratories, 1520 D Medical Science Research Building 1, 1150 West Medical Center Drive, Ann Arbor, MI 48109-0666.** FAX: 734-763-4135.

The University of Michigan is a nondiscriminatory Affirmative Action Employer.

Developmental biology POSTDOCTORAL POSITION to study role of the cut-homeodomain transcription factor HNF-6 in morphogenesis of liver and pancreas using HNF-6 transgenic and gene knockout mouse models (see: *Dev. Biol.* 192:228, 1997; *Mol. Cell. Biol.* 16: 6273, 1996). Preference will be given to applicants with knowledge of transgenic and knockout mouse technology. Please send curriculum vitae, names, and telephone numbers of three references to: **Dr. Robert Costa, University of Illinois at Chicago, Department of Biochemistry and Molecular Biology (M/C 536), 1819 West Polk Street, Chicago, IL 60612-7334.** FAX: 312-413-0364; e-mail: robcosta@uic.edu. UIC is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE/INSTRUCTOR University of Colorado Health Sciences Center

To carry out research in three project areas: (1) control of apoptosis in prostate cancer, (2) regulation of differentiation of human leukemic cells, and (3) control of myeloid growth by GM-CSF. Emphasis on protein kinase and phosphatase pathways. Please send curriculum vitae to: **Dr. Andrew S. Kraft, Chief, Division of Medical Oncology, 4200 East 9th Avenue, Denver, CO 80262.** FAX: 303-315-5502.

POSTDOCTORAL POSITION is available to determine X-ray crystal structures of metal-requiring enzymes in critical biosynthetic pathways (e.g., see: *PNAS* 93:13589, 1996; *Nature* 383:554, 1996; *Science* 277:1820, 1997). Proficiency in protein biochemistry and crystallography required. Send curriculum vitae and the names of three references to: **Prof. David W. Christianson, Roy and Diana Vagelos Laboratories, Department of Chemistry, University of Pennsylvania, Philadelphia, PA 19104-6323** by June 30, 1998.

POSTDOCTORAL POSITION is available to study angiotensin-IV receptor-mediated vasorelaxation in pulmonary circulation. Experience in receptor characterization, organ bath and perfusion studies, vascular cell biology, and signal transduction mechanisms with emphasis on calcium homeostasis required. Send curriculum vitae and three references to: **J. M. Patel, Ph.D., Division of Pulmonary Medicine, Health Center P.O. Box 100225, University of Florida, Gainesville, FL 32610-0225.** FAX: 352-379-7421.

POSITIONS OPEN

POSTDOCTORAL POSITIONS THE MOLECULAR EPIDEMIOLOGY OF CANCER

The Harvard-University of California, San Francisco (UCSF) Collaborative Research Program in Molecular Epidemiology has immediate openings for individuals to join in the integrated study of host susceptibility and tumor genetics in lung/aerodigestive, colorectal, or central nervous system cancer. Successful candidates must have Ph.D. or equivalent in molecular biology, human genetics, epidemiology, or a related field. Positions are available at Harvard (contact **Dr. Kelsey**) or at UCSF (contact **Dr. Wientke**).

Forward cover letter, curriculum vitae, and three letters of reference to:

Karl Kelsey, M.D.
Department of Cancer Cell Biology
Harvard School of Public Health
665 Huntington Avenue
Boston, MA 02115

or

John Wientke, Ph.D.
Department of Epidemiology and Biostatistics
UCSF School of Medicine
500 Parnassus Avenue
San Francisco, CA 94143-0560

Applicants must be eligible for NRSA training; i.e., U.S. citizens or permanent residents.

POSTDOCTORAL FELLOWSHIP

A Postdoctoral position is available at the University of Washington/Seattle VA in a top diabetes research laboratory studying neural regulation of pancreatic islet function, using molecular, immunochemical, and physiological techniques. The successful candidate will help develop new techniques to assess sympathetic neural activity in rats and transgenic mice, and its role in impaired islet function in diabetes. Excellent research support and training are available through U.W. Diabetes Center, local collaborators and an interactive group of top-notch Investigators and Fellows. Experience in immunohistochemistry and transgenic mice are assets. To apply, send curriculum vitae, previous research experience, and names, telephone numbers, and e-mail addresses of three references to: **Laura Brown, Seattle VA, Division of Endocrinology and Metabolism (151), 1660 South Columbian Way, Seattle, WA 98108.**

WASHINGTON UNIVERSITY SCHOOL OF MEDICINE POSTDOCTORAL POSITION

Position available to study molecular and genetic mechanisms of human allergic disorders (*NEJM* 332:1720, 1997). Experience in molecular and transgenic techniques required. Send curriculum vitae and three references to: **Talal Chatila, M.D., M.Sc., Washington University School of Medicine, St. Louis Children's Hospital, #1 Children's Place, St. Louis, MO 63110.** E-mail: chatila@kids1.wustl.edu. Washington University is an Affirmative Action/Equal Opportunity Employer.

NIH-funded POSTDOCTORAL POSITIONS immediately available at New York University Medical Center. Two positions are available to study epithelial cell biology including (1) molecular regulation of pro-inflammatory cytokines or (2) gene therapy for lung cancer using viral vectors. Requirements: M.D. or Ph.D. Requires U.S. citizenship or permanent U.S. residency. Send, e-mail, or FAX curriculum vitae to: **John Hay, M.D., or Joan Reibman, M.D., Division of Pulmonary and Critical Care Medicine, New York University Medical Center, 550 1st Avenue, RM NB7N24, New York, NY 10016.** E-mail: hayj01@mcrcr6.med.nyu.edu; FAX: 212-263-8442.

POSTDOCTORAL POSITION available to develop nucleic acid-based gene therapy approaches (ribozymes) for rheumatoid arthritis. Applicant should have Ph.D. in biochemistry or molecular biology; experiences in RNA purification/analysis; and mammalian cell culture are essential. Starting date approximately August 1998. Please send curriculum vitae and three letters of recommendation to: **W. Zacharias, Department of Medicine, Division of Hematology-Oncology, University of Alabama at Birmingham, AT 579, 1824 6th Avenue South, Birmingham, AL 35294-3300.** E-mail: wzacharias@bmg.bhs.uab.edu.

POSITIONS OPEN

CENTER FOR NEUROVIROLOGY AND NEUROONCOLOGY

Allegheny University of the Health Sciences

POSTDOCTORAL POSITIONS. Postdoctoral Fellow positions are immediately available for candidates interested in developing molecular therapeutic strategies against HIV-1 utilizing ribozymes and chemokines. Candidates should have strong research background in molecular biology and biochemistry.

All interested candidates should forward curriculum vitae and summary of their research interests to:

Kamel Khalili, Ph.D., Director
c/o Mr. Greg Wacker, Business Manager
Center for NeuroVirology and NeuroOncology
Broad and Vine Streets, Mail Stop #406
Philadelphia, PA 19102
E-mail: bathe@auhs.edu

Allegheny University of the Health Sciences is an Equal Opportunity Educator and Employer.

TWO POSTDOCTORAL POSITIONS DEVELOPMENTAL BIOLOGY AND TUMOR IMMUNOLOGY

Positions available to study (1) expression/function of homeobox genes in prostate development and disease using cell/organ culture, biochemical, and transgenic approaches; (2) role of antigen presentation, MHC genes, and T cell activation in tumor immunity and immunotherapy of cancer using mouse and human models. Applicants should have a Ph.D. or M.D. and background in molecular biology, immunology, or genetics. Send curriculum vitae and names of three references to: **Dr. Chuck Rieberich** (development), or **Dr. S. Ostrand-Rosenberg** (tumor immunology), Department of Biological Sciences, University of Maryland, Baltimore, MD 21260. *UMBC is an Equal Opportunity Employer.*

POSTDOCTORAL POSITION. A position is immediately available in the Immunotherapy Program at the Medical College of Wisconsin Cancer Center. The selected person will initiate new approaches in the immunotherapy of breast cancer with the possibility of such studies advancing from laboratory experiments to clinical trials in the context of the Lymphocyte Propagation Laboratory. The position is for three years and offers a competitive salary based on the candidate's qualifications. A background in immunology and cell and molecular biology is required. Please send curriculum vitae, cover letter, and three references to: **Dr. William Burns**, Medical College of Wisconsin, 8701 Watertown Plank Road, MRC Building, Room 6033, Milwaukee, WI 53226.

POSTDOCTORAL POSITION BAYLOR COLLEGE OF MEDICINE

Position available immediately to study tumor suppressor gene inactivation during prostate cancer progression in animal models. A strong background in molecular biology is essential and experience in working with knock-out/transgenic animals and cell culture would be useful.

Contact: **Dr. Michael Ittmann, M.D.-Ph.D.**, Department of Pathology, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030. FAX: 713-794-7938; e-mail: mittmann@bcm.tmc.edu. *Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.*

POSTDOCTORAL POSITIONS available in HIV/AIDS pathogenesis on the role of dendritic cells and antigen-specific activation in immunopathogenesis (**Dr. Drew Weissman**), HIV modulation of central nervous system cell function in neuropathogenesis (**Dr. Dennis Kolson**), and HIV cell tropism and macrophage infection (**Dr. Ronald Collman**). Strong background required in molecular virology, immunology, or related area. Submit letter, curriculum vitae, and three references to: **Sharon Robinson**, 522 Johnson Pavilion, University of Pennsylvania, Philadelphia, PA 19104-6060. FAX: 215-662-2947.

POSTDOCTORAL POSITION available immediately to study mechanisms of chaperone-mediated protein folding. Recent Ph.D.'s with a strong background in biochemical methods desirable. Send curriculum vitae and names of three references to: **Dr. David Chuang**, Department of Biochemistry, University of Texas Southwestern Medical Center, Dallas, TX 75235-9038. E-mail: chuang01@utsw.swmed.edu; FAX: 214-648-8856. *An Equal Opportunity Employer.*

POSITIONS OPEN

POSTDOCTORAL TRAINING FELLOWSHIPS IN MOLECULAR BIOLOGY OF AGING AT SAN ANTONIO

The University of Texas Health Science Center at San Antonio is funded by NIH to support an interdisciplinary training program in the molecular biology of aging. Research areas include transcription factors and programmed changes in gene expression; somatic mutations and epigenetic changes in gene expression; oncogenes and tumor suppressor genes in cell growth, differentiation, and apoptosis; free radicals and DNA damage; DNA repair; aging of the endocrine and immune systems; transmembrane signaling; the molecular basis of age-associated diseases such as prostatic hyperplasia, Parkinson's disease, Alzheimer's disease, bone pathology, and retinal degeneration. Many of the research projects utilize the transgenic mouse and knockout mouse approaches to study the biology of aging and age-associated diseases. U.S. citizenship or permanent residency is required. Please send curriculum vitae and names of three referees to: **Bandana Chatterjee, Ph.D.**, Program Director, Molecular Biology of Aging Training Grant, Department of Cellular and Structural Biology, The University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284-7762. *The University of Texas Health Science Center at San Antonio is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available immediately to examine signal transduction/receptor biology in vascular endothelial cells. Our interests are thrombosis, inflammation, and arterial disease. Current studies involve extracellular adenosine nucleotide metabolism, purinergic receptors, and thrombin receptors. Candidates should have a strong background in molecular biology or mouse genetics. Please send curriculum vitae and the names and telephone numbers of three references to: **Andrew J. Connolly, M.D.-Ph.D.**, Vascular Research Division, Department of Pathology, Brigham and Women's Hospital, LMRC-422, 221 Longwood Avenue, Boston, MA 02115. FAX: 617-566-7533; e-mail: aconnolly@rics.bwh.harvard.edu. *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available immediately to study CFTR chloride ion channels using structure/function approaches and molecular modeling. Experience in electrophysiological or molecular biological methods required. Contact: **Dr. Nael McCarty**, Center for Cell and Molecular Signaling, Emory University, Telephone: 404-727-7400; website: <http://www.emory.edu/WHSC/MED/PHYSIOLOGY>. *Emory University is an Equal Opportunity Employer.*

EUROPEAN OPPORTUNITIES

PROFESSORSHIP IN ANALYTICAL CHEMISTRY DEPARTMENT OF CHEMISTRY University of Copenhagen

The Department of Chemistry, University of Copenhagen invites applications for a Full Professorship in experimental analytical chemistry. This new position is created as a part of a departmental initiative within chemistry and the environment, in accordance with the declared policy of the University to strengthen research and education in environmental sciences. The position is open to appointment from January 1, 1999. Applicants must document independent research activity at the highest international level within areas of analytical chemistry addressed at solving key environmental problems. Experience in supervisory roles and teaching qualifications at all university levels are mandatory. The Professor is expected to provide leadership, further collaboration, maintain an international network, and attract external funding. The position is intended to strengthen the research activities within environmental soil and water chemistry.

Terms of appointment and payment according to agreement between the Ministry of Finance and the Danish Confederation of Professional Associations.

Deadline for applications: September 1, 1998, at 12:00 a.m.

Please observe: The full announcement can be obtained by contacting: **The Head of Department, Sven E. Harnung**, Telephone: +45-3532-0111; FAX: +45-3532-0214 or is available on the departmental website, and prospective applicants should consult this before submitting an application. Website: <http://www.kiku.dk>.

MARKETPLACE

Diverse Small Molecules Ready for Screening

In plates, immediately available
**50% academic discount, or use our
new easy access plan**
ChemBridge Corporation

Website: www.chembridge.com

E-mail: chem@chembridge.com
(800) 964-6143 or (619) 451-7400
FAX: (619) 451-7401

Circle No. 21 on Readers' Service Card

Custom Ascites Production

BabCO is your best choice for ascites scale-up.

Rapid Turnaround
Small and Large Volume Production
Inbred, Outbred and Nude Mouse Strains

BabCO
BERKELEY ANTIBODY COMPANY

Toll Free: 800-922-2226
email: service@babco.com
<http://www.babco.com>

Circle No. 45 on Readers' Service Card

ATTENTION: OXIDATIVE STRESS RESEARCHERS

New Catalog Now Available

Comprehensive menu
of innovative technologies
for oxidative stress research

OVER 120 NEW PRODUCTS AVAILABLE

- Assays for Markers of Oxidative Stress
- Comprehensive Menu for Nitric Oxide Research
- Specialized Chemicals for Oxidative Stress Research
- Wide Range of Anti-Oxidants
- Specialized Antibodies
- Specialized Enzymes
- Unique Spin Traps

OXIS
International, Inc.

e-mail: info@oxis.com
voice: USA 1-800-547-3686
home page: <http://www.oxis.com>

... and much more

Circle No. 17 on Readers' Service Card

Fluorescent Reagents

for DNA Synthesis

6-FAM Amidite (100 µmol ◇ \$150)

TAMRA-CPG (50 nmol col. ◇ \$15)



**Solid Phase
Sciences**

81 Digital Drive, Novato, CA

800-GENOME1 www.solidphase.com

Circle No. 37 on Readers' Service Card

Apoptosis • DNA Damage Aging • DNA Repair

- Antibodies
- Quantitative Assays
- QS-well Plate Assays
- TACS™ In Situ Assays
- Flow Cytometry
- DNA Repair Enzymes

TREVIGEN
1-800-873-8443 • Fax: 301-216-2801 • e-mail: info@trevigen.com

Circle No. 36 on Readers' Service Card

MARKETPLACE



**MORE PRODUCTS
ON PREVIOUS PAGE**

**CUSTOM ANTIBODIES
TO PEPTIDES AND PROTEINS**

1-800-481-9737



(760) 788-9691 • fax: (760) 788-9694
e-mail: antibodies@htibio.com
http://www.htibio.com

Circle No. 9 on Readers' Service Card

ANTIBODIES

For Research & Routine Histology
Inflammation-Endothelial Cells-
Pathological Markers
Custom Monoclonals and Polyclonals
BMA Biomedicals Ltd. (800) 634-3183 (US)
Intl: +41 61 811 6222/+41 61 811 6006 (fax) info@bma.ch

Circle No. 23 on Readers' Service Card

Smart Move!

Check around, you'll find CBI is the most comprehensive biotech service company in the market today. We provide:

- Protein Sequencing (N- & C- Terminal)
- Automated DNA Sequencing
- DNA/RNA/PNA Synthesis
- Peptide Synthesis
- Amino Acid Analysis
- Calorimetry
- Mass Spectroscopy



Call CBI for special projects,
pricing: **1-800-735-9224**.

**Commonwealth
Biotechnologies, Inc.**
fax: 804-648-2641 cbei2020.net www.cbi-biotech.com

Circle No. 40 on Readers' Service Card

FLUORESCENT ION INDICATORS

FLUO-3 FURA-2
BCECF Custom Synthesis
512-280-5223 fax 512-280-4997
www.teflabs.com
TEFLABS Texas Fluorescence Labs

Circle No. 28 on Readers' Service Card

**CUSTOM MONOCLONAL
ANTIBODIES**



• FINEST HYBRIDOMA SERVICE
• BEST PRICES
AUSTRAL BIOLOGICALS
1-800-433-7105

Circle No. 10 on Readers' Service Card

MARKETPLACE

DNA Primers from \$0.85/base

Ready to Use
No Setup Charge
No Hidden Costs



Institutional
Discounts
Available

The Great American Gene Company
http://www.geneco.com
email: geneco@ix.netcom.com fax: (800) 816-5517

Circle No. 3 on Readers' Service Card

**Custom Peptides
& Antibodies**

Best Service & Price! Compare and Save!

Alpha Diagnostic (800) 786-5777

Fax (210) 561-9544; info@4adi.com

Web site: http://www.4adi.com

Circle No. 8 on Readers' Service Card

XX IDT®
INTEGRATED DNA TECHNOLOGIES, INC.

**Custom DNA
Synthesis
95¢/Base**

- 100 nmole Scale
- No Set-up Fee
- Deprotected and Purified
- 24 Hour Shipping

Ask About Our
Group Discount Programs!

E-mail: orders@idtdna.com
Website: www.idtdna.com
Fax: 1-319-626-8444
Phone: 1-800-328-2661

Circle No. 30 on Readers' Service Card

CUSTOM DNA SYNTHESIS

PURE & SIMPLE

- Superb Technical Support

- Impeccable Quality

- World's Fastest Service

- Cap Gel & TOF Mass Spec

* Some restrictions apply. Please call for details.

MIDLAND

STILL THE UNDISPUTED #1 CUSTOM DNA SYNTHESIS SERVICE

THE MIDLAND CERTIFIED REAGENT COMPANY
Phone 1-800-247-8766 FAX 915-694-2387
email mcr@oligos.com

Circle No. 4 on Readers' Service Card



**PRINCETON
BIOMOLECULES**

Your most reliable source of

PEPTIDES

Phone: 614-487-3663 Fax: 614-487-3664
E-mail: PBCpeptide@aol.com

Circle No. 20 on Readers' Service Card

MARKETPLACE

* DNA Sequencing
* Synthetic Genes
* Protein Expression/
Purification
* Mutagenesis
* Full R&D Contracts



LONG PEPTIDES
50-200 A.A. long peptides.
Purified folded and sequence
verified!



AS LOW AS

65¢
/base



AS LOW AS

\$15⁰⁰
/residue

PLEASE
CALL FOR

**ANTIPEPTIDE ANTIBODIES
& MORE**



**BIO-SYNTHESIS
INCORPORATED**

Tel: 1-800-227-0627 Fax: 972-420-0442

Circle No. 6 on Readers' Service Card

Custom Peptides

No-obligation peptide assessment and quote.
Various quantities (from 1 mg), purities (to 95%)
and modifications at highly competitive prices.

Web: www.chirontechnologies.com

CHIRON TECHNOLOGIES

US: East Coast Tel: 800 633 8161 Fax: 800 424 3970
US: West Coast Tel: 800 644 1866 Fax: 800 655 1866
International Tel: +61 3 9565 1111 Fax: +61 3 9565 1199
Europe Tel: +33 141 38 9400 Fax: +33 141 38 9409

Circle No. 41 on Readers' Service Card

CLONING & EXPRESSION

Rapid Full Length Cloning of Genes
Guaranteed Gene Expression in Bacteria, Yeast,
Insect, and Mammalian Systems
High Purity and Bulk Protein Purification

ExpressGen, Inc.

1-877-CLONING www.expressgen.com

Circle No. 48 on Readers' Service Card

**Desalted
Oligos**

64¢
/base

VISA & Mastercard

Accepted

* No Setup

* 1-5 ODs

"DNA...It's in our blood"

1-800-654-4671

info@ana-gen.com

ANA-GEN
Ana-Gen Technologies, Inc.

Circle No. 7 on Readers' Service Card

Custom DNA

Purified & Delivered in 48 Hours

\$1.20 per base • Purified

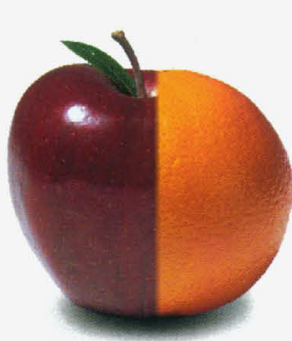
<http://www.resgen.com>

Research Genetics, Inc.

1-800-533-4363

Circle No. 1 on Readers' Service Card

At 60¢ per base, OPERON'S **DNA** makes *anything* POSSIBLE.



THE APPLORANGE



THE ZUCCHANA



GREAT VALUE AND TREMENDOUS SAVINGS FROM THE WORLD'S LEADING SUPPLIER OF DNA.

Operon's highly competitive prices and full line of DNA synthesis scales, options, and modifications present a whole new world of possibilities. Our custom DNA is now available from just 60¢ per base, so you can afford to do more experiments and get more results.

Operon consistently delivers precisely the product you need, on time, with unsur-

Custom DNA Synthesis Prices		
Scale	Price/base	Set-up
0.05 μ mole	\$0.60	\$5.00
0.2 μ mole	\$1.20	\$10.00
1.0 μ mole	\$2.40	\$20.00

passed purity and backed by our unconditional guarantee. Imagine all of this at extremely competitive prices. We ship our custom-made sequences in 24 hours on average, including large orders and orders placed late in the day.

So don't let your budget limit your thinking!



OPERON

WORLD'S LEADING SUPPLIER
OF SYNTHETIC DNA

CALL OPERON, THE COMPANY THAT MAKES ANYTHING POSSIBLE.

1-800-688-2248, EXT.100, FOR MORE INFORMATION

©1998 OPERON TECHNOLOGIES, INC. 1000 ATLANTIC AVENUE, SUITE 108, ALAMEDA, CA 94501. PHONE: 510-865-8644. FAX: 510-865-5255. NIHBP 263-00033233.

Circle No. 35 on Readers' Service Card

Custom Peptide Synthesis

New Lower Price

\$14.00/residue!

Our popular custom peptide synthesis service just got even better. We are now offering the service for \$14.00 per residue for peptides 10-20 residues in length. This service guarantees a minimum of 20mg of product and, as always, the mass spectrometry is included free of charge. Peptides will be shipped 5 days after the order is placed. No minimum order required

For researchers needing longer peptides or more product, we also offer a bulk synthesis service for \$39.00 per residue. Please call our custom peptide synthesis department, or send e-mail to kwasmund@resgen.com, for additional details on either of these services.

Research Genetics

Accelerating Discovery

2130 Memorial Pkwy, SW • Huntsville, AL • 35801

U.S. or Canada 800-533-4363

Worldwide 256-533-4363

U.K. 0-800-89-1393

FAX 256-536-9016

<http://www.resgen.com>

Circle No. 31 on Readers' Service Card