**PERSONNEL PLACEMENT**

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- **Deadlines:** Ads are due by Thursday, 10 a.m., 2 weeks prior to the issue date. Science is published each Friday except the last Friday of the year. Call for holiday deadlines. Advertisements must be submitted in writing.

- **How to Submit a Classified Ad:** Prepare double-spaced typewritten copy. Do not include any abbreviations. Science will edit and typeset ads according to Science guidelines. Include billing information, and desired publication date. Available categories: Positions Open, Meetings, Announcements, Courses and Training.

- **Mail or FAX materials to:**
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- Janis Crowley, Recruitment Advertising Manager
  Telephone: 212-496-7704
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  European Recruitment Advertising
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**positions open**

**ASSISTANT/ASSOCIATE PROFESSOR—**

**Department of Rheumatology at the Hospital for Joint Diseases/Orthopedic Center, affiliated with NYU School of Medicine, is seeking an M.D., Ph.D. or M.D./Ph.D. molecular biologist with interest in signal transduction, experience in area of chemotaxicant receptors, GTP binding proteins or surface adhesion molecules desirable. Salary plus technical support included.** Applicants send curriculum vitae and three references to: Steven Abramovitz, Chair, Department of Rheumatology, HJD, 301 East 17th Street, New York, NY 10003. An Equal Opportunity Employer.

**CELL/MOLECULAR PHYSIOLOGISTS**

Applications are invited for tenure-track positions at the level of ASSISTANT OR ASSOCIATE PROFESSOR OR PROFESSOR in the Department of Physiology of The Ohio State University College of Medicine. Individuals with an established research program using cellular/molecular approaches complementing existing departmental programs are encouraged to apply. Departmental resources include a currently funded research system, cardiovascular control, epithelial transport and muscle physiology. Applications will be accepted until March 1, 1993 or until suitable candidates are selected. Send curriculum vitae, brief description of research interests, names of three references and a grant of funding to: Jack A. Rall, Ph.D., Chairperson, Search Committee, Department of Physiology, 301 Hamiton Hall, 1645 Neil Avenue, Columbus, OH 43210-1218. The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Qualified women, minorities, Vietnam-era veterans, disabled veterans and individuals with disabilities are encouraged to apply.

**FACULTY POSITION—IMMUNOBIOLOGY**

Applications are invited for a full-time tenure-track position at the level of ASSOCIATE or ASSISTANT PROFESSOR level in the Department of Biological Sciences starting August 18, 1993. The candidate will be expected to develop a vigorous research program in immunobiology to complement and utilize the programs of the department. Applicants utilizing cellular and molecular research approaches will be preferred. This position requires two years of postdoctoral training, a record of productive research, and the ability to interact collegially. Appointment at the Associate level requires a record of funded research programs. The Department of Biological Sciences has three new, state-of-the-art Core Facilities in Molecular Biology, Cell Culture, and Functional Analysis. Deadline for applications is March 15, 1993. Final decisions will be made as applications are received until the position is filled. Applicants should submit curriculum vitae, reprints of key publications, a statement of current and future research interests and names of references to: Chairperson, Immunobiology Search Committee, Department of Biological Sciences, The Wichita State University, 1845 Fairmount, Wichita, KS 67260-0026.

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**PLANT SYSTEMATIST**

The Department of Botany and Plant Pathology, Michigan State University, invites applications for a tenure-track position as ASSISTANT PROFESSOR AND DIRECTOR OF THE MICHIGAN STATE UNIVERSITY BEAL DARLINGTON HERBARIUM. Position available beginning September 1, 1993. Responsibilities include teaching undergraduate and graduate courses in the systematics of vascular plants, maintaining an active research program in plant systematics, and directing the Michie State University Herbarium, a collection of over 500,000 specimens. The area of research expertise of the successful candidate is open but should involve one or more of the following approaches to research in plant systematics. A Ph.D. in botany is required and postdoctoral experience is desirable. The successful candidate is expected to use this expertise to promote undergraduate and graduate education and to herbarium development. Applicant should send curriculum vitae, a statement of teaching interests, and current and long-term research interests and names of references to: Dr. Frank Ewers, Chair, Plant Systematist Search Committee, Department of Botany and Plant Pathology, Michigan State University, East Lansing, MI 48824-1312.

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

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**POSITIONS OPEN**

**ASSISTANT PROFESSOR OF FOREST ECOLOGY**

**SCHOOL OF FORESTRY**

**THE UNIVERSITY OF MONTANA**

The University of Montana's School of Forestry seeks applications for Assistant Professor of Forest Ecology. This tenure-track, academic-year appointment involves the traditional role of research, teaching and public service. Responsibilities include teaching an undergraduate course in Forest Ecology and additional courses in areas such as community and landscape ecology. The successful applicant will be expected to assume leadership role in the developing field of ecosystem management in the inland west. The job description and application information may be found online at [www.forestry.umt.edu](http://www.forestry.umt.edu).

**Chair, Forest Ecology Search Committee**

School of Forestry, The University of Montana

Missoula, MT 59812

Telephone: (406) 243-5522; FAX: (406) 243-4845

Review of applications will begin March 1, 1993, and continue until an appointment is made. The University of Montana is an Affirmative Action/Equal Opportunity Employer. Applications from women, minorities, and members of other protected classes are encouraged.

**NEUROSCIENIST:** The Anatomy Department, School of Veterinary Medicine, Purdue University, invites applications for a tenure track faculty position (ASSISTANT/ASSOCIATE) in neuroanatomy/neuroscience starting 1 July 1993. Applicants should have a strong commitment to teaching and research. Teaching responsibilities depend upon the applicant’s experience but may include inclusion of discipline-specific methods in human or veterinary medicine. Evidence of successful extramural funding and established productive research expertise given preference. Applicants should send curriculum vitae, a letter describing relevant experience and three letters of recommendation to: Dr. Edward Eams, D.V.M., Ph.D., Stony Chair, Department of Anatomy, School of Veterinary Medicine, Purdue University, West Lafayette, IN 47907-1218. Applications must be postmarked by March 1, 1993 or until filled. Purdue University is an Equal Opportunity/Affirmative Action Employer.

**DEPARTMENT OF BIOCHEMISTRY**

**VANDERBILT UNIVERSITY SCHOOL OF MEDICINE**

Applications are invited for tenure-track positions at the ASSISTANT PROFESSOR level. While the general areas of enzyme mechanisms, developmental biochemistry, signal transduction and gene expression are of interest, outstanding candidates in all areas of biochemistry are invited to apply. Preference will be given to individuals combining molecular genetics and biochemistry in their studies. Successful candidates will develop vigorous, externally-funded research programs and participate in training of medical and graduate students. Competitive salary, start-up funds and laboratory space are available. Applicants should forward a curriculum vitae, bibliography, summary of past research accomplishments, and a statement of plans for future research to: Biochemistry Search Committee, Vanderbilt University School of Medicine, 607 Light Hall, Nashville, TN 37232-0146

Applicants should also arrange for three letters of reference to be sent to the Department of Pharmacology, University of New Mexico School of Medicine. Individuals with research programs utilizing cellular and molecular techniques in neuroscience, cardiovascular biology or other biomedical research are of special interest. The successful applicant is expected to have extramural research support and to participate in medical and graduate teaching programs. Individuals with a Ph.D., M.D. or equivalent degree and three years postdoctoral research record should submit curriculum vitae, reprints and 3 letters of reference by April 1, 1993 to: Dr. Linda J. McGuire, Department of Pharmacology, University of New Mexico School of Medicine, Albuquerque, NM 87131-3836. Vanderbilt University is an Equal Opportunity/Affirmative Action Employer.

**ASSISTANT/ASSOCIATE PROFESSOR, TENURE-TRACK POSITION—Department of Pharmacology, University of New Mexico School of Medicine.** Individuals with research programs utilizing cellular and molecular techniques in neuroscience, cardiovascular biology or other biomedical research are of special interest. The successful applicant is expected to have extramural research support and to participate in medical and graduate teaching programs. Individuals with a Ph.D., M.D. or equivalent degree and three years postdoctoral research record should submit curriculum vitae, reprints and 3 letters of reference by April 1, 1993 to: Dr. Linda J. McGuire, Department of Pharmacology, University of New Mexico School of Medicine, Albuquerque, NM 87131-3836. Vanderbilt University is an Equal Opportunity/Affirmative Action Employer.
POSITIONS OPEN

THE UNIVERSITY OF CALGARY
ION-CHANNEL MOLECULAR BIOLOGIST

The University of Calgary Faculty of Medicine invites applications for a full-time academic position as an Ion-Channel Molecular Biologist at the ASSISTANT PROFESSOR level or higher. This position offers an excellent opportunity to develop vigorous independent research programs and collaborative interactions within a multidisciplinary research environment. Duties will include teaching and graduate student supervision. Qualifications include a Ph.D. in molecular biology, genetics, or a related discipline.

MOLecular GEneTICS, assistant profESSor

Molecular Genetics, Assistant Professor

POSTDOCTORAL POSITIONS

Two postdoctoral positions available immediately for research on tumor suppressor genes in human breast cancer and prostate cancer. Projects include regional localization by newly developed live-cell fluorescence and small interfering RNA-based gene knockdown for identification of gene functions involved, and determination of gene function. Projects are collaborative between Division of Molecular Cytotherapy, UCSF and Human Genome Center, Los Alamos National Laboratory. One position will be located at Los Alamos with emphasis on physical mapping, and the second position will be located at UCSF with emphasis on molecular biology. Candidate must have Ph.D. in molecular biology or molecular genetics with experience in gene cloning, PCR and/or DNA sequencing. Please send resume to Dr. W. Jensen, Department of Laboratory Medicine, Box 0808, University of California, San Francisco, CA 94143-0808. The University of California is an Equal Opportunity/Affirmative Action Employer. Minorities, women, handicapped, and veteran candidates are encouraged to apply.

CORYNNE PHYSIOLOGY

POSTDOCTORAL POSITION to study adenosine and other mechanisms controlling coronary blood flow. Please send a letter of interest, curriculum vitae and references to:

Dr. Eric Feigl

Dr. Keth Kroll

Department of Physiology

University of Washington

Seattle, WA 98195

Equal Opportunity/Affirmative Action Employer.

KAMAN SCIENCES CORPORATION

MICROBIOLOGIST, M.S./Ph.D. (3 to 5 years of experience) to conduct non-laboratory assessments relating to detection and exclusion of biological agents for nonproliferation and arms control efforts. Training in molecular biology and immunology desired. Laboratory and field work in process improvement. Please send resume to:

Robert M. Hedden, Assistant Manager, Chemical and Biological Defense

KAMAN SCIENCES CORPORATION

11800 Huntington Avenue, Alameda, CA 94503

EXPERIENCE: 5 years

CHEMICAL ENGINEER, B.S./M.S. (3 to 5 years of experience) to conduct non-laboratory assessments of R&D and advanced technology monitoring. Experience in detectors and integration of process monitoring systems required. Please send resume to:

Technical Recruitment No. 93-32, Kaman Sciences Corporation

11800 Huntington Avenue, Alameda, CA 94503

POSITIONS OPEN

NEUROSCIENTIST

COLUMBIA UNIVERSITY

The Movement Disorder Division of the Department of Neurology, Columbia University, seeks a neuroscientist at the ASSISTANT PROFESSOR level, for a full-time tenure-track position to examine the mechanisms of neuron death relevant to Parkinson's Disease. Candidates should have an established research interest in the cellular mechanisms of neurotoxin-induced injury to midbrain dopaminergic neurons or modification of such mechanisms by trophic factors. Expertise with in vitro systems is especially desirable. Preference given to candidates who have demonstrated ability or potential to obtain independent extramural funding. Send curriculum vitae to: Dr. Stanley Fahn, The Neurological Institute, 710 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.

CNS PHARMACOLOGIST

The expanding Department of Pharmacology at the Northeastern Ohio Universities College of Medicine (NEOUCOM) invites applications for a tenure-track position at the ASSISTANT PROFESSOR level. Applicants must hold a Ph.D. in Pharmacology, have completed no less than two years of postdoctoral training and have demonstrated ability to conduct independent research. The present department has an active research program with interests in central nervous system pharmacology. Initial funding for equipment, supplies and start-up costs will be made available to the successful applicant. Laboratory and office space are provided in this new facility located on the campus in close proximity to a wide variety of research institutions. Many opportunities are available in the geographic area for academic and scientific interactions. Some teaching experience is desirable since the position requires participation in teaching of medical and graduate students. This position will be available as of July 1, 1993. Send curriculum vitae, including a list of references, by March 15, 1993, to: Dr. Martin D. Schechter, c/o the Office of Human Resources, Northeastern Ohio Universities College of Medicine, 4445 East 11th Street, Rootstown, OH 44272-0095. NEOUCOM is an Equal Opportunity/Affirmative Action Employer.

SCIENCE welcomes placement of line classified ads by FAX. Please contact the Phone and Fax Sales Department of SCIENCE, 1155 16th Street, N.W., Suite 300, Washington, D.C. 20036; Fax: 202-682-0816

FAX NUMBER: 202-682-0816

FACULTY POSITION IN PROTEIN CRYSTALGRAPHY

The Department of Biophysics, Boston University School of Medicine, is interested in expanding its research programs in structural biology to the field of protein crystallography. The Department will move to new research facilities (Center for Advanced Biomedical Research) in the fall of 1993. In addition to new general research laboratories, these new facilities will include a state-of-the-art X-ray diffraction/laboratory and storage facilities for structural electron microscopy, NMR and a computing center. Applications are invited for a new faculty position at the ASSISTANT PROFESSOR level. Start-up funds are available. However, applicants must have a strong desire and ability to create an independent research program and send applications including curriculum vitæ, bibliography, a brief statement of research interests and three letters of reference to: Dr. David Atkinson, Biophysics Faculty Search Committee, Department of Biophysics, Boston University School of Medicine, 80 East Concord Street, Boston, MA 02118-2594. Boston University is an Affirmative Action/Equal Opportunity Employer.

MOLeULAR BIOLOGY AND POPULATION/COMMUNITY ECOLOGIST

Two tenure-track ASSISTANT PROFESSOR positions available August 1993. For each, postdoctoral experience is required and candidate is expected to develop an extramurally funded research program involving M.S. and Ph.D. students. Molecular biologist research background, with experience in methods for investigating interactions in biochemical and molecular biology. Research in biochemistry, molecular biology, or ecology is desirable. Send curriculum vitae, summary of research/teaching interests, reprints, and three letters of recommendation by March 15, 1993 to: Dr. R.C. Woodruff, Chair, Department of Biological Sciences, Bowling Green State University, Bowling Green, OH 43403. Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR in quantum molecular modeling, Département de Chimie, Université de Montréal and Centre de Recherche en Calcul Appliqué. Experience in one of the following fields would be an asset: quantum chemistry, bio/molecular modeling, theory of solutions, molecular dynamics. Develop a strong research program that can interact with Quebec industry. The candidate is expected to teach courses in quantum chemistry and in molecular dynamics. Send curriculum vitae, summary of research/teaching interests, reprints, and three letters of recommendation by March 15, 1993 to: Dr. W. Fahn, The Neurological Institute, 710 West 168th Street, New York, NY 10032. Please send curriculum vitae to: Dr. W. Fahn, The Neurological Institute, 710 West 168th Street, New York, NY 10032. The Neurological Institute of the University of Columbia is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR in quantum molecular modeling, Département de Chimie, Université de Montréal and Centre de Recherche en Calcul Appliqué. Experience in one of the following fields would be an asset: quantum chemistry, bio/molecular modeling, theory of solutions, molecular dynamics. Develop a strong research program that can interact with Quebec industry. The candidate is expected to teach courses in quantum chemistry and in molecular dynamics. Send curriculum vitae, summary of research/teaching interests, reprints, and three letters of recommendation by March 15, 1993 to: Dr. W. Fahn, The Neurological Institute, 710 West 168th Street, New York, NY 10032. Please send curriculum vitae to: Dr. W. Fahn, The Neurological Institute, 710 West 168th Street, New York, NY 10032. The Neurological Institute of the University of Columbia is an Equal Opportunity/Affirmative Action Employer.
The Laboratory of Tumor Cell Biology of the Division of Cancer Etiology, National Cancer Institute is accepting applications for a permanent position for a medical doctor with extensive research experience. The position will be at the GS-15 grade level with a salary range of $46,210-$60,070.

**The successful candidate will be expected to:**

1. Conduct original research in the area of AIDS pathogenesis with particular emphasis on the role of viral cofactors which may accelerate the progression of the disease, such as the lymphotropic herpesvirus, HHV-6. Extensive experience of the interactions between HIV and other viruses is critical.
2. Serve as Principal Investigator for experimental infection studies in animal models for AIDS, with particular emphasis on studies of coinfection and viral interaction.
3. Provide expert consultation to the Research Program of the laboratory in matters involving the study of AIDS pathogenesis and the potential role of lymphotropic herpesviruses as cofactors in AIDS.

**Candidates with the following qualifications will be given preference:**

1. M.D. with background in immunology, oncology, virology and cell biology, whose training was focused on HIV infection and lymphotropic herpesviruses.
2. Post-doctoral research experience in viral immunology with particular emphasis on lymphotropic herpesviruses.
3. Strong interest and experience in the development of a research program which utilizes techniques of cellular biology, virology and immunology to impact the areas of human retroviruses, particularly HIV-1, and the mechanisms of viral interaction, including phenotypic mixing, receptor regulation and transactivation.
4. Broad knowledge of the principal mechanisms of virus-cell interaction, virus-to-virus interaction and T-cell, B-cell and NK-cell immunology.
5. Extensive experience in fluorocytometry.
6. Ability to effectively communicate in English both orally and in writing.
7. Relevant publications in top scientific journals.

Applicants must be found to be eligible on a Civil Service Register.

If interested, please send a curriculum vitae by February 26, 1993 to:

Ms. Ethlyn Howard or
Dr. Howard Z. Streicher
National Institutes of Health
Building 37, Room 6A09
9000 Rockville Pike
U.S. Citizenship Required
NIH is an Equal Opportunity Employer

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**DNAx Research Institute**

**MOLECULAR BIOLOGIST / BIOCHEMIST**

DNAx Research Institute is seeking a staff scientist to join our research staff. Candidates should hold either a Ph. D. or M.D. and have completed post-doctoral training.

The institute conducts basic research in a variety of areas in molecular and cellular biology with an emphasis on growth factors and cytokines which regulate the immune system or hemopoietic cells. At this time we seek an individual with an established background in cell cycle control or intracellular signaling mechanisms who could develop an interactive research program with other researchers studying growth factor receptors and signal transduction. We invite applicants whose research interests could take advantage of our considerable strengths in lymphocyte and hemopoietic cell biology.

Successful candidates will have the opportunity to conduct basic research in the absence of teaching and grant writing responsibilities. Institute scientists may work with post-doctoral fellows and are free to communicate their scientific findings in an open manner. Located near Stanford University, DNAx carries out basic research in an open, academic environment. We are looking for candidates who can contribute to our enthusiastic and productive research program.

Interested applicants should send a curriculum vitae and the names of three references to the Human Resources Department, DNAx Research Institute of Molecular and Cellular Biology, 901 California Avenue, Palo Alto, CA 94304-1104 EOE.

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**EMBREX, INC.**

EMBREX, INC. is a world leading biotechnology company which develops and markets in ovo products to increase the productivity and profitability of the poultry industry. We have an immediate opening in our Embryology section to investigate gene and cell transfer to embryos via in ovo injection.

**SENIOR RESEARCH MOLECULAR BIOLOGIST**

Qualifications to include:

- Ph.D. Molecular Biology
- 2 years post-doc or industrial experience
- A knowledge of cloning, DNA manipulation and PCR
- Expression and analysis of target proteins
- Tissue Culture and Transfection
- Supervisory experience a plus.

Compensation commensurate with experience. Resumes may be sent in confidence to:

EMBREX, INC.

P.O. Box 13989

RTP, NC 27709

An Equal Opportunity Employer
THE AARON DIAMOND FOUNDATION
POSTDOCTORAL RESEARCH FELLOWSHIPS
in the Biomedical and Social Sciences

In 1993, The Aaron Diamond Foundation will support 25 postdoctoral research fellowships—to encourage excellence in research addressing the problems of AIDS and drug abuse and to increase the number of biomedical and social scientists working in New York City on these problems. The fellowship program is administered by the New York State Health Research Council, aided by a panel of distinguished scientists comprising the Fellowship Selection Committee.

The fellowship application is co-developed by the potential fellow and a mentor at a New York City institution. A list of nearly 200 established scientists interested in serving as mentors is included in the application materials, although applicants may apply with any qualified New York City scientist.

Support is provided for two years; a third fellowship year may be awarded upon subsequent application. The annual stipend is $36,000 in the first year; the mentor’s institution receives $24,000 per year to cover costs associated with the fellow’s research.

Preference is given to: (1) those with doctoral degrees awarded after 1986 (generally MDs must have completed their residency, while applicants with non-medical degrees may initiate the fellowship immediately after graduation); (2) applicants early in their careers, with five or fewer years of postdoctoral research experience; (3) those who are relocating to New York City; and (4) U.S. citizens or permanent residents. Women and members of minority groups are especially encouraged to apply.

APPLICATION DEADLINE: JULY 30, 1993

FURTHER INFORMATION:
Margaret Brown, Ph.D., Program Director
The Aaron Diamond Foundation Postdoctoral Research Fellowship Program
5 Penn Plaza, Room 508
New York, NY 10001
(212) 613-2525

ASSISTANT OR ASSOCIATE PROFESSOR
ENVIRONMENTAL/OCCUPATIONAL TOXICOLOGY
UNIVERSITY OF MINNESOTA
SCHOOL OF PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH

A toxicologist is sought for a tenured or tenure-track, 12-month faculty position in a graduate degree program offering MS, MPH, and PhD degrees with a major in environmental health. The Division conducts health-related research in industrial hygiene, air quality, environmental chemistry, epidemiology, injury prevention and safety, microbiology, radiation, occupational health nursing and occupational medicine. Responsibilities include research, teaching, advising, service, and administration as a member of a multidisciplinary faculty. Candidates must have a doctoral degree and ability to interact and collaborate with other environmental health professionals, including physical and biological scientists, epidemiologists, and policy makers. Two years of post-doctoral experience in environmental/occupational toxicology is required for appointment to assistant professor, and five years of post-doctoral experience in environmental/occupational toxicology is required for associate professor. Excellent communication skills are essential and administrative aptitude is important. Salary will be commensurate with qualifications and experience. Starting date is no later than January 1, 1994.

Applicants should send a curriculum vitae, bibliography, names of three references, and a brief statement of interest by April 30, 1993 to:

Dr. Donald E. Barber
Chair, Toxicology Search Committee
Division of Environmental and Occupational Health
Box 807 UMH
420 Delaware Street S.E.
Minneapolis, MN 55455.
(Phone: 612-626-0900, FAX: 612-626-0650)

The University of Minnesota is an equal opportunity educator and employer.
NATIONAL CANCER INSTITUTE • NATIONAL INSTITUTES OF HEALTH

MOLECULAR AND CELLULAR BIOLOGIST IN HIV-1 GENE REGULATION AND ANTIVIRAL AND GENE THERAPY RESEARCH

The Laboratory of Tumor Cell Biology of the Division of Cancer Etiology, National Cancer Institute is accepting applications for a permanent position to conduct research on antiviral therapy. The candidate should have a Ph.D. or M.D. degree and research experience in molecular and cell biology. The position will be at the GS-13 grade level with a salary range of $46,210 - $60,070.

The successful candidate will be expected to:
1. Conduct original research in the area of gene therapy and antisense oligonucleotides therapy to AIDS and AIDS-associated malignancies.
2. Serve as Project Officer for extramural contracts and CRADAs to test the effectiveness of the use of genes and antisense oligonucleotides in studying the replication of HIV-1.
3. Provide expert consultation to programs involving molecular biology and gene regulation.

Candidates with the following qualifications will be given preference:
1. Ph.D. or M.D. degree with background of molecular and cell biology of the hematopoietic cells
2. Post-doctoral research experience in HIV-1 gene regulation and in gene therapy.
3. Strong interest in developing research programs utilizing cellular and molecular biology for AIDS therapy.
4. Broad knowledge of HIV-1 gene function and regulation.
5. Ability to communicate effectively both orally and in writing.
6. A record of significant research achievement and relevant publications in scientific journals.

Applicants must be found to be eligible on a Civil Service Register.

If interested, please send a curriculum vitae by February 26, 1993 to:

Ms. Ethlyn Howard
or Dr. Howard Z. Streicher
National Institutes of Health
Building 37, Room 6A09
9000 Rockville Pike
Bethesda, MD 20892

U.S. Citizenship Required
NIH is an Equal Opportunity Employer

LUDWIG INSTITUTE INSTITUTE SAO PAULO CANCECER BRANCH RESEARCH LUDWIG IN SCANCE 10th ANNIVERSARY

MEETING

ANNOUNCEMENT

INTERNATIONAL SYMPOSIUM ON HUMAN PAPILLOMAVIRUS

April 1 - 3, 1993
São Paulo - Brazil

April 4 - 6, 1993

Cancer Inheritance; Biochemistry of the Transformed Phenotype; Tumor Immunology and Metastases; Etiology, Diagnosis and Epidemiology; Transformation, Immune Responses and Epidemiology of H.P.V.

Speakers:

Registration and Abstract Deadline
March 1st., 1993

Contact
Dr. Luisa L. Villa or Libeca M. Ward
Instituto Ludwig de Pesquisa sobre o Cancer
r. Prad. Antonio Prudente #109, 4th floor
CEP 01509-010
São Paulo SP - BRAZIL

AMGEN

Our entrepreneurial environment naturally evolves as a function of our mission: the development of recombinant DNA-based human therapeutics, utilizing the principles of cellular and molecular biology...through rapid product development and innovative commercialization strategies.

Postdoctoral Fellow in Molecular Hematopoiesis

As a postdoctoral fellow with a recent Ph.D. in Molecular/Cellular Biology, you will be involved in an interactive program studying the molecular regulation of hematopoietic stem cell migration, proliferation and differentiation. You must have experience in cDNA cloning, PCR, and other molecular biology analytical skills. Some cell culture experience and an interest in hematopoiesis is desirable.

At Amgen, we invest our employees with the freedom to manage their affairs, regulate the quality of work, and make decisions within company goals. And we back this freedom with meaningful challenge and responsibility, as well as a compensation and benefits package that reflects the level of our commitment. Submit your resume for confidential consideration to: Amgen Inc., Staffing, MS 10-1-A-411, Job Code S-505, Amgen Center, Thousand Oaks, CA 91320-1789. We are an Equal Opportunity Employer M/F/D/V.
COLORADO STATE UNIVERSITY 

Department of Zoology and Physiology

The University of Colorado at Boulder invites applications for a postdoctoral position in molecular immunology. The successful candidate will work on a project investigating the role of Toll-like receptors in innate immune responses. Appointment is available immediately and will continue until a suitable candidate is identified. Interested applicants should send a letter of introduction, curriculum vitae, and three letters of recommendation to: Dr. Steven M. Holland, Department of Zoology and Physiology, University of Colorado at Boulder, Boulder, CO 80309. The University of Colorado is an Affirmative Action/Equal Opportunity Employer.

BIOLOGY LAB COORDINATOR/INSTRUCTOR

 пенситатет the biology laboratory at the University of North Carolina at Chapel Hill invites applications for a full-time position as Biology Lab Coordinator/Instructor. The successful candidate will be responsible for managing the biology laboratory and coordinating instruction. Interested applicants should submit a letter of application, curriculum vitae, and three letters of recommendation to: Dr. John Doe, Department of Biology, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599.

Arizona State University

Department of Biology

The Department of Biology at Arizona State University invites applications for a full-time position as Departmental Coordinator. The successful candidate will be responsible for coordinating the department's operations and providing administrative support. Interested applicants should submit a letter of application, curriculum vitae, and three letters of recommendation to: Dr. Jane Smith, Department of Biology, Arizona State University, Tempe, AZ 85287.

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Listed below are a few of the excellent opportunities for conducting research that are now available with leading scientists at the National Institutes of Health.

**Adipocyte Biology**

Constantine Londos, PhD

Adipocyte metabolism in normal and pathophysiological states is being studied and specific areas of concentration include: cloning, expression, and function of genes and proteins involved in lipid metabolism; hormone signalling; and enzyme trafficking. Background in molecular biology and protein biochemistry is desirable and applicants should have no more than five years of postdoctoral experience. Laboratory of Cellular and Developmental Biology (OE-27), NIDDK, Building 6, Room B1-15.

**DNA Replication**

Nancy G. Nossal, PhD

The mechanism of DNA replication is being investigated using a multi-enzyme system of purified bacteriophage T4 proteins. Current studies focus on identifying the enzymatic reactions and the protein-protein and protein-DNA interactions that govern the coordinated synthesis of the leading and lagging strands at a replication fork. Previous experience in biochemistry or molecular biology is required. Laboratory of Molecular and Cellular Biology (OE-27), NIDDK, Building 8, Room 2A19.

**Molecular Analysis of Inflammation**

Philip M. Murphy, MD

The molecular mechanisms mediating phagocytic cell activation are being studied. Emphasis is on the molecular biology, signal transduction, and regulation of G protein-coupled receptors (e.g., formyl peptide and interleukin-8 receptors) of human neutrophils and macrophages. Experience in molecular biology, cell biology or receptor biochemistry and less than two years postdoctoral experience is required. Laboratory of Host Defenses (OE-27), NIAID, Building 10, Room 11N113.

**Molecular Endocrinology**

S. Stoney Simons, Jr., PhD

The mechanism of action of steroid hormones, especially glucocorticoids, is being studied. Emphasis is on DNA-receptor and steroid-receptor interactions, actions of antiguocorticoids, activation of receptor-steroid complexes, and modulation of steroid regulated gene transcription. A background in the control of gene transcription, protein-protein interactions, or intracellular communication is preferred. Laboratory of Molecular and Cellular Biology (OE-27), NIDDK, Building 8, Room B2A7.

**Pharmacology and Molecular Biology**

Kenneth A. Jacobson, PhD

The structure and function of adenosine receptors are being investigated using a variety of novel and selective ligands which have been synthesized by our laboratory. Future studies will utilize molecular biological techniques combined with molecular modeling to identify receptor domains that are important for ligand binding and G-protein coupling. Applicants must have less than five years postdoctoral experience. Laboratory of Bioorganic Chemistry (OE-27), NIDDK, Building 8A, Room B1A17.

**Regulation of Transcription**

Deborah M. Hinton, PhD

Mechanisms for regulating transcription are being studied using bacteriophage T4 genes that are expressed after phage-encoded factors alter the specificity of the host RNA polymerase. Current studies focus on the T4 transcriptional activator MotA and its interaction with specific T4 promoters and phage-modified RNA polymerase. Previous experience with RNA and in vitro transcription is preferred. Laboratory of Molecular and Cellular Biology (OE-27), NIDDK, Building 8, Room 2A13.

**Signal Transduction**

Lee S. Weinstein, MD

Defects of G protein-coupled signaling pathways in disease states are being investigated using biochemical, cell biological, and molecular biological techniques. Candidates should have a background in molecular biology with no more than five years of postdoctoral experience. Molecular Pathophysiology Branch (OE-27), NIDDK, Building 10, Room 8C101.

**Additional Postdoctoral Fellowship Opportunities**

For an on-line listing of additional postdoctoral openings you may access the NIH EDNET Bulletin Board's POSTDOC conference via modem (1,3014922221 or 1,8003582221). The settings for modem access are "\7,\Even\1". When connected to NIH, type in \"vt100\" at the connect message, "\F5E\" at initial, and "\AJL\" at account.

A catalog describing NIH research opportunities may be accessed via the network-based (Internet) Gopher Information System. Configure your software to point to the Internet address "gopher.nih.gov" and port "70" to access NIH Gopher and then choose NIH Information to reveal the NIH Office of Education directory. Those interested in receiving information on other postdoctoral opportunities, clinical training opportunities, or accessing Gopher may contact the Office of Education, Building 10, Room 1C129. Phone: 301-496-2427.

To Apply

If you hold a graduate doctoral degree (e.g., PhD, MD/PhD) or a professional degree (e.g., MD, DO, DDS, or DVM) accompanied by previous laboratory research experience and would like to be considered for one of these positions, please send a cover letter, curriculum vitae, bibliography, and statement of research interests to the address listed with each position. In addition, please arrange to have letters of recommendation sent from three scientists who can provide an evaluation of your qualifications.
NIH SEeks 3 Extramural Section Chiefs

The Division of Allergy, Immunology and Transplantation is seeking outstanding physicians (M.D.), scientists (Ph.D.) or persons with equivalent experience for Chief of the Molecular Immunology Section, Chief of the Host Defense and Inflammation Section, and Chief of the Autoimmunity Section. Candidates should have a strong research background in the fields of basic and/or clinical immunology.

Each position offers the challenging opportunity to creatively direct an extramural scientific research program. Academic affiliations are encouraged. We offer a competitive salary and outstanding benefits.

This is a GS-14 position with a starting salary range between $56,627 and $63,707 per annum. Physicians comparability allowance up to $20,000 may be applicable.

Please send resume or your Application for Federal Employment (SF-171) to:

Dr. Robert A. Goldstein
DAIT, NIAID
Solar Building, Room 4A18
National Institutes of Health
Bethesda, Maryland, 20892
Telephone: (301) 496-1886
FAX: (301) 402-2571

U.S. Citizenship required
NIH is an Equal Opportunity / Affirmative Action Employer

UNIVERSITY OF MINNESOTA

Assistant/Associate Professor
UNIVERSITY OF MINNESOTA
DEPARTMENT OF LABORATORY MEDICINE AND PATHOLOGY
BIOENGINEERING GRADUATE PROGRAM

BMEC Assistant/Associate Professor Search Committee

c/o Marilyn Green, Box 198 UMHC
420 Delaware St. S.E.
Minneapolis, MN 55455

Deadline for receipt of applications is July 1, 1993. Position to begin approximately December 1, 1993. The University of Minnesota is an equal opportunity educator and employer.

Medical

Director, Health Science Policy

The Institute of Medicine of the National Academy of Sciences is seeking a director for its Division of Health Sciences Policy to be responsible for planning and managing the division's program, supporting the Board on Health Sciences Policy, and providing advice to the IOM President and Executive Officer on major policy and operational matters. Duties include program development, fund raising, proposal preparation, recruitment and supervision of staff, and assuring the quality of committee and staff products. Requires a Ph.D., M.D., or equivalent in a biological or health science area and at least seven years experience in health sciences research with some practical experience in program management, experience in policy analysis desired. Also requires excellent written and oral communication skills; report preparation experience; program management skills; ability to evaluate scientific literature, to develop contacts in public and private sectors, and to deal effectively with committees comprised of leaders in the health science field. Please send resume in confidence to: NAS/IOM, (SB-NAS 320), 2101 Constitution Avenue, N.W., Washington, D.C. 20418. EOE

NATIONAL RESEARCH COUNCIL

Neuroscience Product Manager

Fuji Medical Systems USA, Inc., a pioneer in high performance imaging technologies for biological research, has an opportunity for an individual with strong research experience in neurophysiology, cell and molecular biology. Experience in ion channel imaging and use of voltage sensitive dyes is extremely helpful.

Responsibilities will include research on product applications, product enhancement, technical support, organization/direction of seminars and focus groups and production of technical documentation. This individual will be directly involved in market research and business planning.

A Ph.D. with 1-2 yrs postdoctoral research or research equivalent and knowledge of U.S. neuroscience markets is desired. Extensive U.S. travel is required.

Several positions for highly qualified sales people are also available.

Fuji offers an excellent compensation and benefits package. Please submit resume, salary requirements, and three references to: NAS/CPSMA (NAS 285-NM), 2101 Constitution Avenue, N.W., Washington, D.C. 20418. EOE.

Fuji is an equal opportunity employer.

Study Director

Undergraduate Science Education

The National Research Council is seeking a Study Director for an Undergraduate Science Education study. Responsibilities include implementing committee initiatives; identifying new committee members; working with the undergraduate science community in various university/college settings; recruiting and directing staff activity; fiscal management; maintaining currency of science education reform efforts at undergraduate institutions; and assuming effective NRC working relationships. Requires Ph.D. or equivalent in physical or biological sciences, at least 7 years relevant experience, knowledge of undergraduate education differences among institutions, undergraduate teaching experience, knowledge of regional and national educational and scientific organizations and familiarity with educational initiatives in federal agencies; writing, organizational and management skills, and ability to deal with diverse audiences. Please submit a resume, salary requirements, and three references to: NRC/CPSMA (NAS 285-NM), 2101 Constitution Avenue, N.W., Washington, D.C. 20418. EOE.

NATIONAL RESEARCH COUNCIL
The Laboratory of Tumor Cell Biology of the Division of Cancer Etiology, National Cancer Institute is accepting applications for a permanent position for a medical doctor with extensive research experience. The position will be at the GS-13 grade level with a salary range of $46,210-$60,070.

The successful candidate will be expected to:

1. Conduct original research in the area of viral etiology of tumorigenesis and human disease with particular emphasis on the role played by human T-lymphotropic viruses, eg. human T-lymphotropic virus type 1 (HTLV-I) and human herpes viruses 6 and 7 (HHV-6, HHV-7), using techniques of cellular and molecular biology.

2. Serve as principal investigator in hematopoietic stem cell biology, with particular emphasis on transducing human hematopoietic stem cells with constructs developed for gene therapy of AIDS. The candidate will also be expected to develop an independent basic research program regarding proliferation and differentiation of human hematopoietic stem cells.

Candidates with the following qualifications will be given preference:

1. M.D. (M.D., Ph.D. are preferred) with background in hematology, immunology, oncology, cellular biology and molecular biology, whose training was focused on hematopoiesis.

2. Post-doctoral research experience in hematopoiesis, particularly short-term and long-term bone marrow cultures, and in T-lymphotropic viruses, particularly HTLV-I, HHV-6 and HHV-7.

3. Strong interest and experience in developing a research program which utilizes techniques of cellular and molecular biology to impact the areas of the role and of T-lymphotropic viruses in the pathogenesis of human tumors and severe human disease.

4. Broad knowledge of HTLV-I, of human lymphotropic herpesviruses, and of hematopoiesis.

5. Ability to communicate effectively both orally and in writing.

6. Relevant publications in related scientific journals.

Applicants must be found to be eligible on a Civil Service Register.

If interested, please send a curriculum vitae by February 26, 1993 to:

Ms. Ethlyn Howard
Dr. Howard Z. Streicher
National Institutes of Health
Building 37, Room 6A09
900 Rockville Pike
Bethesda, MD 20892
U.S. Citizenship Required
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1333 H Street, N.W., Rm 830
Washington, DC 20005

SCIENCE

DEAN
COLLEGE OF DENTISTRY
University of Florida

Applications and nominations are invited for the position of Dean of the University of Florida College of Dentistry. The College of Dentistry is one of the six professional colleges located in the Health Science Center. The College serves as a statewide resource for dental education and patient care and ranks among national leaders in research. The position offers an exciting and challenging leadership opportunity in a research-oriented university environment, and an opportunity to shape the prominence of the College into the 21st century. The dean will be responsible for administering the educational, research and service programs of the College and its components which include the DMD program, postdoctoral programs (graduate, postgraduate and continuing education); the faculty practice program, and community service programs. Qualifications: earned doctorate degree in dentistry (DDS/DMD) or related science, extensive experience in dental education including significant prior experience in administration, clinical practice and research and evidence of scholarly achievements. Salary for this position, which will become available on October 1, 1993, is commensurate with qualifications.

Applications (with CV) or nominations should be sent by May 15, 1993 to:

R.R. Gutknecht, Ph.D.
Chairman, Search Committee
UF Health Science Center
P.O. Box 100185
Gainesville, Florida 32610-0185

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

Opportunities for Senior Scientists in Multi-disciplinary Research Program

The U.S. Environmental Protection Agency (EPA) is seeking senior (GS-11/14) scientists with expertise in ecological monitoring and assessment to lead exploratory research activities for the national Environmental Monitoring and Assessment Program (EMAP). EMAP is an innovative, multi-agency program designed to estimate status and trends in the condition of our nation's ecological resources. Applicants should possess technical proficiency in terrestrial, freshwater, marine, and/or landscape ecology. Experience with ecological indicators, monitoring at regional and national scales, and/or multiple-resource integration is highly desirable.

Contracts management responsibilities constitute approximately 25% of the work in these positions. U.S. citizenship is required.

Positions for exemplary scientists will be located at EMAP's technical center in the Research Triangle Park area of North Carolina. EMAP Center provides a stimulating research environment with many opportunities for scientists:

- Access to area research universities and science facilities
- Interaction with the national and international scientific community
- Research support that allows senior scientists to remain active in their research fields
- Leadership role in an innovative ecological research, monitoring and assessment program
- Competitive salary

Applications will be accepted through March 18, 1993. Please request applications from:

U.S. Environmental Protection Agency
Human Resources Management Division (MD-29)
Research Triangle Park, NC 27711
Attn: Dorothy Carr - EMAP (919)541-3014

The U.S. EPA is an Equal Opportunity Employer.
DNAX Research Institute

POSTDOCTORAL FELLOWSHIPS

DNAX Research Institute, located near Stanford University, carries out basic research in Immunology and Molecular Biology in an open, academic environment. We are looking for several individuals to work as Postdoctoral Fellows for a period of 2-3 years, who can contribute to our enthusiastic and productive research program.

Post-doctoral positions are available for research in the following areas:

- Molecular biology of novel cytokines and their receptors.
- Analysis of the structural basis and biological consequences of cytokine-cytokine receptor interactions.
- Characterization of the interleukin-10 receptor.
- Structure and function of interleukin-13 and interleukin-15 receptor.
- Biochemical characterization and cloning of proteins involved in cytokine receptor signal transduction.
- Analysis of RAF and MAP family of protein kinases in intracellular signal transduction.
- Isothermal of regulatory genes controlling the development of hemopoietic stem cells.
- Regulation of cytokine gene expression in T cells and differential expression of T cell subunit specific genes.
- Immunohistochemical analysis of cytokine gene expression during development.

Qualified applicants should send a curriculum vitae, statement of research interests, and the names of three references to DNAX Research Institute of Molecular and Cellular Biology, 901 California Avenue, Palo Alto, CA 94304-1104 An equal opportunity employer, m/f/h.

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The Department of Biochemistry at the University of Missouri-Columbia invites applications for tenure track faculty positions at the assistant professor level. Candidates should have an excellent academic background with postdoctoral experience, and will be expected to develop a vigorous research program and to participate in undergraduate and graduate teaching. The University has undertaken the development of a program in protein and nucleic acid structure. Preference for these positions will be given to individuals with experience in X-ray crystallography, NMR spectroscopy or other biophysical methods. The Biochemistry Department has new laboratory facilities to house faculty studying macromolecular structure and can provide excellent start up support with which to initiate competitive research programs. Applicants should send a curriculum vitae, a research plan, and have three letters of reference sent to:

Department of Biochemistry
117 Schwalzer Hall
University of Missouri
Columbia, MO 65211
Attention: Dr. Milton Feather,
Chair Search Committee

Applications will be accepted until suitable candidates are identified.

The University of Missouri is an Equal Opportunity/Affirmative Action Employer and specifically invites and encourages applications from qualified women and minorities.

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UNIVERSITY OF MASSACHUSETTS
Department of Veterinary and Animal Science

Applications are invited to fill the following AS-SISTANT/ASSOCIATE PROFESSOR, tenure track positions beginning Fall Semester 1993. Successful candidates will participate in a departmental biotechnology program by establishing a strong research program, funded in part by external grants. Teaching responsibilities include an undergraduate course, a graduate course in the applicant’s specialty and participation in a biotechnology laboratory methods course. Candidates must be interested in the application of biotechnology to domestic animals. Postdoctoral experience is preferable but not essential.

Virologist/Microbiologist—Qualifications: interest in molecular approaches to viral/bacterial pathogenesis in domestic animals. A Ph.D. degree in microbiology or virology with a D.V.M. degree preferable, but not essential.

Gene Expression/Developmental Genetics—Qualifications: a Ph.D. degree and experience in the application of new, advanced molecular biology as applied to gene expression/regulation and/or developmental genetics.

Immunologist—Qualifications: a Ph.D. degree and an interest in immunology as applied to domestic animals. A D.V.M. degree is preferable, but not essential. Applicants should have experience in the application of new, advanced techniques used in molecular biology.

Interested applicants should submit a curriculum vitae, a statement of research interests, transcripts, and the names of four references by March 31, 1993 to: Dr. Donald L. Block, Head, Veterinary and Animal Sciences, 313 Pelge Laboratory, University of Massachusetts, Amherst, MA 01003. Women and minorities are particularly encouraged to apply. The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.

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Place your classified ad in any January-March 1993 issue of Sciences and get double exposure. We’ll display the same position announcement at the Employment Exchange during the AAAS Annual Meeting for only $50 more.

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The Employment Exchange will take place at the AAAS Annual Meeting, 11-16 February 1993, at the Hyatt Convention Center in Boston, Massachusetts.

Thousands of scientists in various disciplines have been invited to participate. Act fast and you can reach this unique pool of candidates.

For more information on how you can interview candidates on-site please refer to the 13 November 1992 issue of Sciences, or contact Jacquelyn Roberts at (202) 326-6737, Fax: (202) 842-1065.
**ROCHE INSTITUTE OF MOLECULAR BIOLOGY**

The Roche Institute of Molecular Biology (RIMB) is seeking to recruit outstanding scientists to its faculty. Successful applicants will develop an independent research program that complements and expands current strengths. In particular, scientists investigating the molecular basis of signal transduction in the context of Developmental Biology, Neuroscience and Transcriptional Regulation are invited to apply. Applications from junior investigators are especially encouraged, although more senior appointments can also be made.

The Institute, which was founded by Hoffmann-La Roche Inc. in 1967, offers a unique and well-funded basic research environment. Faculty positions are fully supported for a minimum of 5 years. Institute scientists are not required to apply for research grants. Complete funding is provided for equipment, animal resources and supplies. Competitive salaries and benefits are provided for the investigator, support personnel, and postdoctoral fellows. RIMB faculty also participate in a joint graduate program with the Biology Department of Columbia University. Scientists at RIMB enjoy complete academic freedom and independence in the choice and pursuit of research problems.

Current staff and areas of research interest are:

- Albert, Vivian, Ph.D. Analysis of cell-specific neuronal gene expression using catecholamine neurons as a model.
- Breit, Nathan, Ph.D. Regulation of gene expression; ribosomal proteins in systemic lupus erythematosus; heat shock proteins.
- Connor, John A., Ph.D. High resolution imaging of fluorescent indicators to examine 2nd messenger actions in neurons.
- Curran, Tom, Ph.D. Regulation of gene expression by Fos and Jun in normal and transformed cells.
- Dalton, Stephen, Ph.D. Yeast cell cycle transcription, analysis of protein-protein interactions in cell cycle control.
- DePamphilis, Melvin L., Ph.D. Replication of viral and cellular chromosomes in embryonic and differentiated vertebrate cells.
- Ennis, Herbert L., Ph.D. Transcriptional regulation of developmentally important genes in Dicyostelium discoideum.
- Gridley, Thomas, Ph.D. Molecular and genetic analysis of post implantation mouse developmental genes.
- Howard, Kenneth R., Ph.D. Genetics and cell biology of germ cells in Drosophila.
- Margolis, Frank, Ph.D. Molecular analysis of oocyte neuron gene expression; chemoreception, neuromodulation and neurogenesis.
- Margolkskee, Robert, M.D., Ph.D. Molecular biology and biochemistry of sensory transduction in vertebrate taste.

RIMB is located within 10 miles of Manhattan in suburban New Jersey. Candidates should submit a curriculum vitae, three letters of reference, and a brief outline of future research directions to the Head of the Search Committee, Dr. Tom Curran, Roche Institute of Molecular Biology, Nutley, NJ 07110-1199. We are an equal opportunity employer.

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**CONSIGLIO NAZIONALE DELLE RICERCHE**

**Special Project**

**RAISA**

**RESEARCH FELLOWSHIPS IN AGRICULTURAL SCIENCES**

RAISA, a five-year broad spectrum research project by the National Research Council of Italy, re-affirming the scientific interest of the former Scheme, has the pleasure to offer senior scientists from abroad the opportunity to work, for a period of 3-11 months, in any Italian Institution affiliated to the project.

RAISA activities are carried out by some hundred research teams, structured into four Subprojects:

- SP1 agricultural systems and environment;
- SP2 biotechnologies in crop production;
- SP3 biotechnologies in livestock production;
- SP4 biotechnologies in agricultural produce and by-product processing.

The main goal is to acquire the basic knowledge to foster the evolution of the Integrated Agricultural System toward a more equitable farmers’ income, more sustainable exploitation of resources, better fulfillment of consumers’ preference and nutritional demand. A list of research trustable teams is available upon request.

The gross salary is from Ll 2,500,000 per month, according to the qualification, plus economy return ticket from home Institution to Italy. Applicants should present a research proposal of about 3 pages, with their application, CV, and a letter of acceptance from a RAISA host team, to C.N.R. P.F. RAISA, Fellowship Program, Via Tiburtina 770, I 0019 Rome, Italy. Facsimile (+39 6) 4073883.

Deadline for receipt of applications is March 20th, and successful candidates will be notified in April; they are expected to start their research in Italy within 1993.
RESEARCH ASSOCIATE position available immediately for self-motivated Ph.D./M.D. to study neuromodulator receptors and second messengers, and to investigate the efficacy of our synthetic peptide analogs on various models using an NIH-funded project. Experience in radioreceptor assay, second messengers and/or cell culture is desirable. Initial one-year appointment can be renewed for three more years. Salary commensurate with experience. Send curriculum vitae, and addresses and telephone numbers of three references by March 16, 1993 to: Dr. Alan A. Zuckerman, Ph.D., Department of Pharmacology, University of Cincinnati Medical Center, Cincinnati, OH 45267-0558.

ASSISTANT PROFESSOR, Molecular or Structural Biology, Center for Pharmaceutical Biotechnology (search extended). Applications invited for tenure-track position, available September 1993. Interest related to pharmaceutical biotechnology, medicinal chemistry or a closely related field. Send curriculum vitae, a description of research interests, and names of three references to: Dr. J. Michael Smith, Department of Pharmaceutical Chemistry, College of Pharmacy, University of Illinois at Chicago, P.O. Box 6998, Chicago, IL 60680-6998. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION In Ecological Modeling. Incumbent will assist team of researchers from the U.S. EPA and the University of Memphis in building modeling the ecological effects of global climate change. Must have excellent computer skills and experience in ecological modeling. Send curriculum vitae, research interest statement, and three letters of reference to: Dr. Linda Y. S. Ho, Department of Wildlife Ecology, University of Tennessee, Knoxville, TN 37996.

POSTDOCTORAL POSITION In Immunology. Incumbent will study the role of cytokines in the immune and inflammatory response. Send curriculum vitae, research interest statement, and three letters of reference to: Dr. J. N. McMichael, Department of Immunology, University of Alabama at Birmingham, Department of Immunology, 1 South 16th Street, Birmingham, AL 35294-0001. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION In Infectious Disease. Incumbent will study the role of cytokines in the immune and inflammatory response. Send curriculum vitae, research interest statement, and three letters of reference to: Dr. J. N. McMichael, Department of Immunology, University of Alabama at Birmingham, Department of Immunology, 1 South 16th Street, Birmingham, AL 35294-0001. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIPS In Molecular Neuroimmunology and Neuroinflammatory diseases at the University of Florida. Positions available July 1, 1993, supported by an NIH Training Grant for basic scientists or clinicians to conduct research on the molecular basis of neuroinflammation, neurotransmission, and the bidirectional communication between the nervous and immune systems. Applicants must be U.S. citizens or permanent residents of the U.S. and have completed a Ph.D. or M.D. within the last three years. Send curriculum vitae and three references to: Dr. John N. Whitaker, M.D., Department of Neurology, University of Alabama at Birmingham, Birmingham, AL 35294 (Telephone: 704-934-2402). UAB is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP available immediately for a molecular biologist to study the role of neural crest in heart development. The fellow will join a multidisciplinary group studying several aspects of chick cardiogenesis. Send curriculum vitae and names of three references to: Margaret L. Kirby, Ph.D., Heart Development Group, Department of Cellular Biology and Anatomy, Medical College of Georgia, Augusta, GA 30911-3000, FAX: 912/796-6839. An Equal Opportunity/ Affirmative Action Employer.

POSTDOCTORAL ASSOCIATE Position available immediately in the laboratory of Dr. Joseph E. Mollin for a project involving karyotypic analysis of human tumor cells using FISH and microdissection of chromosome bands. Interested candidates please send curriculum vitae and names of three references to: Personnel Department, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE POSITION available immediately to study cell cycle regulation of mammalian DNA topoisomerases II or alterations in top II associated with resistance to drugs. Recent research experience in DNA metabolism and recombinant DNA techniques will be favored. Position is available for up to three years with competitive salary and benefits. Send curriculum vitae and names of three references to: Dr. Robert A. Djaldetti, Department of Biochemistry and Clinical Pharmacology, St. Jude Children's Research Hospital, 3371 Automation Blvd, Memphis, TN 38109. An Equal Opportunity/ Affirmative Action Employer.

PATHOLOGY SCIENTIST Position available in pathology in a hospital located in southern Puerto Rico. Spanish a must. Position includes involvement in laboratory duties, research and teaching responsibilities. Send curriculum vitae and three references to: Pathology Scientist, P.O. Box 10729, Ponce, PR 00732.
THE CHINESE UNIVERSITY OF HONG KONG
Faculty of Medicine
Applications are invited for the following teaching position in the Department of Anatomy, tenable from mid-August 1993:

**Senior Lecturer/Lecturer in Anatomy**

Applicants should possess a relevant higher degree, preferably a Ph.D., or its equivalent, or a medical qualification, preferably registrable with the Hong Kong Medical Council. Teaching experience in one or more of the following topics will be an advantage: histology, embryology, neuroanatomy and topographical anatomy. The Department of Anatomy is currently active in research programmes involving tissue culture techniques, immunocytochemistry, and transmission and scanning electron microscopy.

**Annual Salary and Fringe Benefits**

Senior Lecturer: HK$334,000 - 717,360 by 8 increments
Lecturer: HK$343,680 - 389,880 by 2 increments BAR
HK$413,040 - 574,140 by 7 increments

(approx. exchange rate: US$1 = HK$7.8; £1 = HK$12)

Starting salary and grade will be commensurate with qualifications and experience.

The University offers a competitive remuneration package. Superannuable appointment benefits include leave with full-pay, medical and dental care, education allowances for children, and where appropriate housing benefit (with appointee contributing 7.5% of salary towards such provision) and leave passage benefit for eligible appointees and dependants. Appointment may also be made on fixed term contract carrying equivalent benefits including where applicable a contract-end gratuity (15% of basic salary). The University may also consider more flexible terms for suitable candidates subject to mutual agreement.

**Application Procedure**

Send full resume on duplicate, with copies of academic credentials (in duplicate) and recent publications, and arrange to have at least three letters of reference sent directly to the Personnel Officer, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong (Fax: 852/603 5026) before February 20, 1993. Quote reference number 121/509/2/92 and mark “Recruitment” on cover.

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**LIMNOLOGIST**

**UNIVERSITY OF MINNESOTA**

Mpls/St. Paul

The Great Freshwater Biological Institute (GFBI) invites applications for a tenure-track position in limnology at the assistant or associate professor level for Fall 1993.

The successful applicant must have a Ph.D. at the time of appointment with research interests in limnology, aquatic biogeochemistry, aquatic microbiology, or aquatic chemistry. Postdoctoral experience is desirable. The candidate will be expected to develop an active, well-funded field and laboratory research program in collaboration with existing and new aquatic science programs, and contribute to teaching in the limnological curriculum at the undergraduate and graduate level.

The GFBI, part of the College of Biological Sciences, is located 23 miles west of the Minneapolis campus on scenic Lake Minnetonka, and houses expansive surface and aquatic research laboratories. The mission of the GFBI is to perform basic and applied research in aquatic sciences with an emphasis on biological-chemical interactions.

Applicants should submit a resume, a brief statement of research interests, and names of three references (addresses, telephone, and fax numbers) to Professor S. J. Essienich, Search Committee Chair, Great Freshwater Biological Institute, University of Minnesota, Box 100, Navarre, MN 55392 (612-471-8476; Fax 612-471-9070). Deadline for receipt of applications is March 15, 1993.

The University of Minnesota is an Affirmative Action/Equal Opportunity employer.

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**CHAIR**

**DEPARTMENT OF CELL BIOLOGY AND PHYSIOLOGY**

**UNIVERSITY OF PITTSBURGH SCHOOL OF MEDICINE**

Nominations and applications are requested for this new faculty position in the School of Medicine. The ideal candidate will be engaged in an active laboratory research program in cell biology, physiology, or biophysics and will have the requisite academic background to ensure vigorous departmental growth. This twelve-month tenured professor position will have a salary commensurate with the experience of the individual and can be occupied as soon as possible. To ensure full consideration, we should receive applications by March 1, 1993, although late applications will be evaluated until a successful candidate has been identified (anticipated starting date September 1, 1993).

Interested candidates should submit a letter of intent and their current vitae to: Search Committee, c/o Carol Larson-Edwards, Department of Pharmacology, University of Pittsburgh School of Medicine, E1340 Biomedical Science Tower, Pittsburgh, PA 15261.

Women and minorities are encouraged to apply. The University of Pittsburgh is an equal opportunity/affirmative action employer.

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**CONSERVATION BIOLOGIST**

The Department of Biology at the University of Northern Iowa invites applications from individuals with the Ph.D. degree for a tenure-track assistant professor position in conservation biology. Possible areas of interest include species diversity, conservation genetics, rare and endangered species, species recovery, bioassay, habitat analysis and preservation, or others. The applicant will teach conservation, an advanced course in his/her speciality, and participate in the general biology or general education program. The person selected will develop a research program designed to attract participation of graduate (M.A.) and undergraduate (B.A. and B.S.) students. Teaching experience and/or post-doctoral research is preferred. Applicants must submit curriculum vitae, transcripts, statement of interests and goals in both teaching and research, relevant reprints, and three letters of recommendation. The department encourages applications from women, minority persons, Vietnam era veterans, and disabled persons. For full consideration, all application materials should be postmarked no later than March 15, 1993. Send a detailed letter of application to:

Dr. George R. Hoffman
Professor and Chair Search Committee
Department of Biology
University of Northern Iowa
Cedar Falls, IA 50614-0421
(Fax No.: 319-273-9893)

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positions open

molecular biologist

The Department of Biology of City College of the City University of New York seeks to fill a tenure-track position for a molecular biologist with expertise in hormone regulation that include, but are not necessarily limited to, control of oncogene expression, signal transduction, DNA repair or cell-cell interactions. New core facilities for hormone and signal transduction have been established. Applicants should have a Ph.D. in molecular biology, related discipline, or equivalent, and be interested in establishing a competitive research program. The successful candidate will join an NIH-sponsored research center in cell and molecular biology involving 25 faculty from several departments. A successful candidate will be expected to participate in teaching at both the undergraduate and graduate level. Competitive start-up funds are available. Rank and salary are open and depend upon experience and qualifications. Please send detailed curriculum vitae, including research plans and the names, addresses and telephone numbers of four references by April 8, 1993 to: Dr. Sharon D. Cosloy, Chair, Search Committee, Department of Biology, City College of New York, Convent Avenue and 138th Street, New York, NY 10031. An Affirmative Action/Equal Opportunity Employer, M/F.

program analyst

The Howard Hughes Medical Institute (HHMI) supports scientific research in laboratories affiliated with leading academic medical centers throughout the United States. We currently have a position available for a Program Analyst in the grants department at our Chevy Chase headquarters. Candidates will work with the Program Officer in the administration of Predoctoral Fellowships in the Biological Sciences program. Responsibilities include the development and implementation of fellowship program policies; publicizing fellowships; preparations for annual application, review, and award cycles; organization of an annual meeting of fellows; and development of follow-up surveys. Additional fellowship program duties include review of annual progress reports, preparation of reports summarizing the fellowship programs, background research relevant to fellowship program activities and serving as a liaison with the National Research Council. Qualifications include a Master's degree in biological sciences, with training in cell or molecular biology, or equivalent. Strong organizational and communications skills are required. Laboratory research experience and knowledge of the university research environment is a plus. Strong computer skills and at least two years work experience, is desirable. HHMI offers excellent salaries and benefits. Send resume with salary history to: Human Resources, HHMI, 4000 Jones Bridge Road, Chevy Chase, MD 20815-6789. Attention: CL. An Equal Opportunity Employer.

vertebrate biologist

The Biology Department of Holy Cross College seeks to fill a one-year sabbatical replacement position beginning in September, 1993. The successful candidate must have completed the requirements for a Ph.D. at the time of appointment, and will be expected to teach a lab course in chordate morphology, a general biology course for pre-medical students, and one or two courses for non-science majors. Holy Cross is a highly selective liberal arts college with an enrollment of 2700 students. It values excellence in both undergraduate teaching and research. Applications including curriculum vitae, statement of professional interests and a list of three referees should be submitted no later than March 5 to: Dr. Robert Bertin, Search Committee Chair, Department of Biology, Holy Cross College, Holy Cross, Worcester, MA 01610. Holy Cross is an Affirmative Action/Equal Opportunity Employer.


positions open

assistant research biochemist

Department of Medicine, University of California San Francisco (UCSF) seeks applications for Assistant Research Biochemist. The candidate will be expected to develop assays using specimens from patients with AIDS. The project studies the role of cytokines in altering lipid metabolism and inducing cachexia in AIDS. The successful applicant will be responsible for the laboratory aspects of this project. This position has a salary of $41,600. The candidate must have a Ph.D. and postdoctoral experience studying the effect of hormones and cytokines on lipid and energy metabolism. Must have experience with small animals, isolated cell systems, and assaying lipid synthesis, circulating lipid metabolites, serum cytokine activity, and tissue mRNA. Please submit by March 5, 1993 a letter, curriculum vitae, 3 references, selected reprints, and statement of interest to: Search Committee, Metabolism Section (11LF), V.A. Medical Center, 4150 Clement Street, San Francisco, CA 94121. UCSF is an Equal Opportunity/Affirmative Action Employer.

ph.D.: cell and molecular biologist for colon cancer research project, to work with multispecialty research team. University appointment. For further information write to: Dr. D.G. Miller, Strang-Cornell Cancer Research Laboratory, 428 East 72nd Street, New York, NY 10021.

announcements

transgenic mouse development

The National Institute of Child Health and Human Development (NICHD) Transgenic Mouse Development Facility (NTDF) operated by DNX, Inc. is now accepting applications continuously for developing transgenic mice. Applications are sent to NICHD for review and approval. Approved gene constructs will be microinjected at DNX, Inc. within approximately 15 working days. The cost is $200 per gene construct for at least two transgenic mice. For information and application materials contact: DNX, Inc., 303 B College Road East, Princeton, NJ 08540. Telephone: (609) 520-0300.

aquatic biology, mycology and plant morphology appointments for nomination for NSERC Women's Faculty Awards are invited. Must be female Canadian citizens or landed immigrants with a Ph.D. Send curriculum vitae, statement of research interests, and reprints to: R. J. F. Smith, Biology Department, University of Saskatchewan, Saskatoon, Saskatchewan, Canada, S7N 0W0, by February 19, 1993. Telephone: (306) 966-4400, FAX: (306) 966-4461. E-mail: SMITHR@SASK.US.CA.

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Brochure and applications: Dr. Brian Largent, Graduate Chair, FAX: (313) 763-1166, Telephone: (313) 764-3267.

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1993 RESEARCH CATALOG
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