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**Personnel Placement**

**SCIENCE** publishes each Friday, except the last Friday of the year. Advertising is accepted only in writing; no advertisements for items of less than $125. All advertising must be at least 2 weeks after date of issue in which ad appears. Also, personal advertisements (of $400.00 per line, or $400.00 per page) must be preceded by the understanding that the advertiser does not discriminate among applicants on the basis of sex, religion, age, color, national origin, handicap, or sexual preference. SCIENCE reserves the right, in its discretion, to decline to publish advertising.

**POSITIONS WANTED**


**POSITIONS OPEN**

**ANATOMY AND CELL BIOLOGY FACULTY POSITION**

**GROSS ANATOMIST:** Applications are invited for one tenure-track (rank open) position available 1 September 1989. Candidate must have Ph.D. and active fundable research program in molecular cell biology, developmental anatomy, experimental or functional morphology. Experience in teaching gross anatomy is prerequisite. Teaching responsibilities include gross anatomy and participating in the graduate program. Salary and rank commensurate with qualifications. For full consideration, applicants should submit curriculum vitae, a statement of research and teaching interests, and names of at least three references by 31 May 1989 to: Dr. Joel Cracraft, Chairman, Search Committee, Department of Anatomy and Cell Biology, 5C 512, University of Illinois at Chicago, 800 S. Paulina St., Chicago, Illinois 60680.

**ANIMAL BIOTECHNOLOGY:** The Animal Science Department, Virginia Polytechnic Institute and State University, invites applications for a 12-month, tenure-track position at the level of ASSOCIATE PROFESSOR, level involving 80% research and 20% teaching in an area of animal biotechnology. The research program is expected to be made to have an impact on improving animal production and could include, but are not limited to, molecular endocrinology, molecular genetics, molecular control of growth, differentiation or nutrient utilization, or manipulation of microbial populations that impact on animal production. Ability to secure external funding is essential. Ph.D. in a biological science discipline with clear evidence of training and experience in cell/molecular biology and interest in the application of molecular biology to improving efficiency of livestock production. Applicants should include a résumé, statement of research interest and complete academic transcripts. Have at least three persons send letters evaluating your qualifications. Apply to: Dr. Richard R. Frahm, Head, Animal Science Department, Virginia Polytechnic Institute and State University, P.O. Box 0430, Blacksburg, Va. 24061-0430. Telephone: 703-231-9157. Deadline for receipt of applications is 3 June 1989. Virginia Polytechnic Institute and State University is an Equal Opportunity/Affirmative Action Employer.

**DEPARTMENT OF BIOLOGY QUEEN’S UNIVERSITY KINGSTON, ONTARIO, CANADA**

The Department of Biology at Queen's University invites applications for a tenure-track position in the area of ANIMAL PHYSIOLOGY. Preference will be given to vertebrate physiologists whose research work involves physiological approaches to environmental or ecological questions, but researchers in all areas are encouraged to apply.

**Qualifications:** The successful candidate should be an enthusiastic and competent teacher and will be expected to develop a vigorous research program. Qualifications include a Ph.D. degree and published evidence of excellent research ability.

**Expected date of appointment:** This appointment can begin 1 July 1989 (or at a later date if the candidate so desires) and is expected to be at the rank of ASSOCIATE PROFESSOR with salary commensurate with qualifications.

**Application deadline:** The application deadline is 15 May 1989. Application and any questions should be directed to Dr. D. T. Dennis, Head, Department of Biology, Queen's University, Kingston, Ontario, Canada K7L 3N6.

In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Candidates of either sex are equally encouraged to apply. Queen's University is willing to help the spouse of a new appointee to seek employment.

**31 MARCH 1989 PERSONNEL PLACEMENT 1743**
ANTARCTIC DATA MANAGER

The Commission for the Conservation of Antarctic Marine Living Resources invites applications for the position of ANTARCTIC DATA MANAGER. The new holder of this position will help to define the data management policy for the Commission; develop and implement data management procedures; and serve as a link between the Commission Secretariat and other key stakeholders.

Responsibilities include the development and operation of the Commission’s computing and data management facilities and databases. Applicants must have a substantial background in computer science, particularly in information systems, database management, and software development. A working knowledge of English, French, or Spanish is required. Successful applicants will be expected to provide leadership in the area of data management.

Salary: US$54,693 to US$55,850 per annum net, depending on qualifications and experience. Position is based in Easton, Maryland.

Applications are invited from well-qualified candidates. Please submit curriculum vitae, synopsis of research interests and career objectives. Closing date: 15 April 1989.

AQUATIC ECologIST

The Department of Biochemistry, Duke University Medical Center invites applications for the position of ASSISTANT FISH TOXICOLOGIST. The position carries a salary range of US$33,000 to US$35,000.

Send resume to: Dr. M. D. Kaplan, Department of Microbiology, LSU State University, Baton Rouge, LA 70803-1715.

DEPARTME NT OF HUMAN GENETICS

Applications are invited for two positions, one at the level of ASSISTANT PROFESSOR and one at the level of POSTDOCTORAL RESEARCH ASSOCIATE. The appointments are not eligible for tenure. In every case, candidates should hold the Ph.D. degree.

Send resume, three letters of reference, and an outline of research interests to: Dr. Alan M. Kaplan, Chairman, Department of Microbiology, LSU State University, Baton Rouge, LA 70803-1715.

ASSOCIATE DEAN

ACADEMIC HEALTH SCIENCE CENTER

Responsibilities: Under the supervision of the Associate Vice President, the Associate Dean has general responsibility to work creatively with the Associate Vice President in Undergraduate and Graduate Studies and Research and to facilitate seeking grant support through extramural sources. Candidates should: be an accomplished, highly motivated scholar; have experience in academic service; and have administrative experience.

Qualifications: An earned doctorate in a biologically based discipline from a highly ranked university; excellent communication skills; and demonstrated ability to manage and coordinate the academic programs of a large health science center.

Applications should be submitted to: Dr. L. J. Pinto, Associate Dean, Academic Health Science Center, University of Virginia, Charlottesville, VA 22903. Applications are due by December 31, 1989.

ASSISTANT PROFESSIONAL

Full-time (9-month) tenured-track position, beginning fall 1989. General and applied microbiology, and general biology for department majors. Demonstrated interest in improving the general microbiology program is desirable. Ph.D. required. Send curriculum vitae and names and addresses of references to: Dr. M. L. McCarney, M.D., Director, Immunopathology Laboratory, Room 4605, The Vanderbilt Clinic, Vanderbilt University Medical Center, Nashville, TN 37232-5310.

Vanderbilt University is an Equal Opportunity/Affirmative Action Employer.
**CENTRE FOR POPULATION BIOLOGY**
**IMPERIAL COLLEGE AT SILWOOD PARK, ENGLAND.**

This major new initiative to develop fundamental understanding in the population biology of plants, animals and micro-organisms is being funded by an Interdisciplinary Research Centre by the British Government.

The Centre seeks applications for several post-doctoral positions from suitably qualified candidates, with theoretical laboratory or field expertise in one or more of the following:
- Population dynamics of plants and animals;
- Structure and dynamics of communities;
- Population genetics;
- Microbial population biology.

In addition to developing the principles of population biology, the Centre will also be concerned with their application to such problems as pest control, harvesting, conservation and the release of genetically engineered organisms.

The Centre will be located at Imperial College, Silwood Park, where the Department of Pure & Applied Biology has an international reputation for environmental studies. Many of the existing staff at Silwood Park will be actively engaged in the work of the Centre, which will also serve as a focus for visiting scientists.

The work of the Centre will be directed by Professor John Lawton, with Professors Roy Anderson, Michael Hassell and Robert May as advisors.

All positions will be for periods of two years or more and applicants should submit a C.V. and names of three referees to:

Professor J H Lawton
Imperial College
Silwood Park
Ascot
Berk., SL5 7PY
by May 12, 1989

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**IMMUNOLOGY**
**Postdoctoral Scientist**

The Upjohn Company, a leader in pharmaceutical research and development, has an opening for a postdoctoral scientist in the laboratory of Dr. Leo LeFrancois of our Cell Biology Group. The successful candidate will study molecular, biochemical and in vitro aspects of T cell differentiation and function. Ongoing projects include: 1) analysis of intraepithelial lymphocytes (IEL) in regard to T cell receptor structure and function (see Nature 333:855, 1988); 2) in vivo aspects of differentiation and lineage analysis of this unique class of lymphocytes; 3) studies of IEL in disease states and development of animal models of autoimmune intestinal disease; and 4) biochemical and functional studies of the leucocyte common antigen (T200). The applicant may also develop their own project within the general focus of the laboratory. This appointment will be for two years, with the possibility of renewal. A Ph.D. is required and previous experience in protein biochemistry, tissue culture, molecular biology and cellular immunology is desirable.

We are located in southwestern Michigan, midway between Chicago and Detroit, and our location offers varied cultural events, lakes and woodlands minutes away, abundant year-round sports and recreation. Upjohn offers a highly competitive salary and a comprehensive benefits program. The Upjohn research division is a large urban facility with a broad cross section of scientists with a wide range of research interests. For prompt, confidential consideration, send your CV/resume to: The Upjohn Company, Position 89286-HA, Corporate Recruiting, Kalamazoo, MI 49001. Please refer to advertisement number 89286-HA in your correspondence. We are an Equal Opportunity Employer M/F.

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**Deputy Director**

Health Effects
Research Laboratory
Research Triangle Park, NC

**U.S. Environmental Protection Agency**

An Equal Opportunity Employer

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The U.S. Environmental Protection Agency (EPA) is seeking candidates for the position of Deputy Director, Health Effects Research Laboratory (HERL). This position is located in Research Triangle Park, NC and is a permanent full-time position with a salary range of $47,000 to $74,000 per annum commensurate with qualifications.

HERL has a staff of about 300, over 100 of whom hold doctoral level degrees. The Laboratory has a diverse program which includes in vitro animal, human clinical, and epidemiological research designed to address issues related to the health effects of air and water chemical and biological pollutants.

The HERL is a multidisciplinary laboratory organized into six divisions: Neurotoxicology, Human Studies, Environmental Toxicology, Genetic Toxicology, Developmental Toxicology and Research and Regulatory Support. The Laboratory is staffed by health scientists with recognized expertise in a variety of disciplines—environmental medicine, physiology, epidemiology, statistics, biochemistry, neurotoxicology, reproductive toxicology, pulmonary toxicology, immunotoxicology, cardiovascular toxicology, genotoxicology, hepatotoxicology and other target organ toxicology, and microbiology—who formulate and implement a comprehensive research program to investigate human health effects resulting from exposure to environmental pollutants. The program includes both intramural investigations and extramural arrangements with universities, industry, private research institutions and other government agencies. The Deputy Director shares fully with the Director in the planning, programming, policy implementation, management, direction and control of the scientific and technical aspects of the Laboratory. This includes assuring the development of a research strategy to meet the evolving needs of EPA, presenting the program, supervising four Associate Laboratory Directors who manage the Laboratory's media-based programs, directing the progress of these programs and ensuring the scientific quality and productivity of the Laboratory.

The preferred candidate for this position would possess the following qualifications:

1. Advanced degree in a biological, medical or environmental discipline with at least six years of professional experience in any of these areas. Applicable graduate coursework may be substituted for a portion of the required experience.
2. Experience as a supervisor of a scientific/professional staff.
3. Applicants must have recognized scientific expertise as evidenced by multiple publications in peer-reviewed literature and invitations to participate in national and international meetings/panels.
4. Proven ability to provide leadership in directing the development and progress of a creative and effective multidisciplinary human research program.
5. U.S. citizenship is required.

Forward curriculum vitae and names of three references prior to May 12, 1989 to: Dr. Lawrence W. Reiter, c/o Terri Burrell, HRM0 (MD-29), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711.
THE UNIVERSITY OF ADELAIDE
invites applications from both women and men for a
LECTURESHIP (Tenurable)
Available immediately in the
Department of Microbiology and Immunology

The Department teaches Science and Medical undergraduate and postgraduate
students and has a strong research record in studying infectious agents and the
diseases they cause. Principal current research areas include the pathogenesis
of a number of enteric infections and persistent virus infections, and mecha-
nisms of immunity to these infections. The Department has particular strengths
in molecular biology, monoclonal antibody technology, immunohistochimistry
and cellular immunology. Opportunities also exist for collaboration with relevant
research groups in the adjacent Institute of Medical and Veterinary Science.
Applicants should hold a Ph.D. degree or equivalent with appropriate teaching
ability and experience and should have achieved success in modern biological
research within the field of Microbiology (including Virology). Duties of the
appointee will include lecturing, primarily to undergraduate Science students,
supervision of research work of postgraduates, and sole responsibility for some
of the teaching programmes and administrative tasks of the Department.
Preference will be given to applicants able to develop an active research group in
an area of expertise that complements existing research interests of the
Department. Further information may be obtained from the Chairman, Dr. I.
Kontaraki, Department of Microbiology and Immunology. Annual salary:
AUS$30,737 × 7 – AUS$40,100 plus Para-Clinical loading of AUS$7,460. It is
University policy to encourage women to apply for consideration for appointment
to tenurable academic appointments. Holders of full-time tenured or tenurable
academic appointments have the opportunity to take leave without pay on a half-
time basis for a specific period of up to ten years where this is necessary for the
care of children.

APPLICATIONS IN DUPLICATE, quoting reference number 1725, giving personal
particulars (including whether candidates hold Australian permanent residency
status), resume and names and addresses of three references should reach the
Registrar, University of Adelaide, GPO Box 498, Adelaide, South Australia;
5001. Telex UNIVAD AA 89141 not later than 1 May 1989. THE UNIVERSITY IS
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CHIRON CORPORATION, a recognized leader in the
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toral investigators in the following areas:

- Purification of growth factor receptors and of genetically
  engineered growth factor receptor domains. Analysis of
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  receptor interactions.

- Purification and screening of potential growth factor
  agonist and antagonist molecules.

- Studies on the biological activities of growth factors and
  growth factor analogs and their potential application in
  the development of new therapeutic agents.

Fellowships are tenable for a period of two years with possible renewal for a third year. We are especially
interested in candidates with experience in protein purifi-
cation and with a strong background in enzymology and
protein structure/function relationships.

Qualified candidates should submit their curriculum vitae, and the names of two references to Chiron Postdoctoral
Program in Protein Chemistry, Chiron Corporation 4560
Horton Street, Emeryville, CA 94608.

Senior Research Microbiologist/
Research Fellow

The Merck Sharp and Dohme Research Labora-
tories’ Culture Collection has an immediate opening
for a bacterial systematist or ecologist with an
interest in developing methods of isolating different
groups of bacteria from nature. This individual will
also be responsible for identification of strains of
interest to the Company and for maintaining the
collection of bacterial strains. Experience in
molecular taxonomy and/or taxonomy actinomy-
cestes is desired. A Ph.D. or equivalent is required.
Candidates with post-doctoral experience and a
publication record will be given preference.

Merck Sharp and Dohme Research Laboratories are
located in Rahway, NJ, approximately 25 miles from
New York City. Our salaries, benefits, and growth
potential are excellent. Interested candidates
should submit their curriculum vitae, three letters
of reference, and salary requirements to Ms. Dolores
Barefield, Merck Sharp and Dohme Research Labora-
tories, PO. Box 2000, WBD-362, Rahway, NJ
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Plant Tissue Culture Specialist

Anheuser-Busch has an opening in our Corporate Research and Development Department.

You will be responsible for establishing and operating an in-house Plant Tissue Culture Laboratory. You will research and develop new tissue culture techniques and their agricultural applications, oversee tissue culture projects in outside labs and develop proposals for new projects.

To qualify, you must have a Ph.D. in Plant Biology or a related area, or an M.S. with at least 2 years' experience. Previous work with cereal tissue culture and the ability to work in a team environment are required. In addition, experience in an industrial setting, a working knowledge of plant breeding and tissue culture experience with a variety of plant species would be pluses.

Join the leaders at Anheuser-Busch. Send your resume to: ANHEUSER-BUSCH COMPANIES; Corporate Employment; Department A-61-JM-134; One Busch Place; St. Louis, MO 63118. Equal Opportunity Employer M/F.

The Research Division of W.R. Grace & Co., a Fortune 100 company and the world's largest specialty chemical company, has exceptional opportunities in its biotechnology research programs for Ph.D. and BS/MS degreed scientists in Microbiology and Molecular Biology.

MICROBIOLOGIST

This position requires an individual with exceptionally broad experience and skills in microbiology. Project assignments will be varied and could range from mutation, selection, characterization and manipulation of wild-type bacteria, yeasts and fungi isolated from a variety of sources through studies of microbial metabolism, fermentation optimization, and the development of recombinant micro-organisms for the production of target proteins. The successful candidate will also participate in technology transfer to development groups or collaborations with operating divisions within Grace to solve problems and assist in new technology development.

MOLECULAR BIOLOGISTS

Scientists will conduct research in the application of recombinant DNA, microbial genetics and biochemistry for the production of therapeutic, bio-catalytic or functional proteins. These positions require a B.S. or M.S. degree in the Biological Sciences and experience in the construction of recombinant plasmids and the expression of cloned DNA sequences.

Projects will be multidisciplinary collaborative efforts which require scientists with a high degree of self-motivation, excellent communication skills and the ability to work as part of a large team.

Grace offers an attractive salary, an excellent benefits program and a rewarding, growth-oriented career. We actively encourage the publication of technical papers. We are located in the picturesque community of Columbia, Maryland, close to both Baltimore and Washington, DC.

Please send your resume, in confidence, including salary history to:

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ASSISTANT PROFESSOR—PHYSIOLOGY
The Department of Physiology, School of Medicine, University of Ottawa, invites applications for a vacant tenure-track position as Assistant Professor. Applicants are expected to have a candidate to compete for a research scholarship to be held in this department (e.g., MRC). Candidates should have an M.D. or Ph.D., with experience in clinical and/or basic research. Applicants with postdoctoral experience. The development of an independent, funded research program and participation in graduate and undergraduate teaching are expected. For one of these positions, preference will be given to a candidate working in neurophysiology or a related area.

Ability to teach in French would be an advantage. Send a letter of interest, curriculum vitae, summary of research plan and names and addresses of three references to: Dr. R. C. Marshall, Chairman, Department of Physiology, Health Sciences Building, 457 Smyth Road, Ottawa, Ontario, K1H 8M5. Canadian immigration policy requires that priority be given to Canadian citizens and permanent residents.

ASSOCIATE PROFESSOR IN COGNITIVE NEUROSCIENCE
The Biological Psychology Ph.D. Program and the Oklahoma Center for Alcohol and Drug-Related Studies is seeking applicants for a tenure-track faculty position for a starting date as early as 1 September 1989. The successful candidate will be proficient both in cognitive psychology/human performance and in endocrinology or other behavioral psychology. Salary, fringe benefits, and research support will be commensurate with candidate's experience. Applicants must have a Ph.D. beginning 1 May 1989 and will be considered until the position is filled. Interested applicants should send a letter of interest, curriculum vitae, and the names and addresses of three references to: Frank A. Holloway, Ph.D., Chair, Search Committee, University of Oklahoma Health Sciences Center, Research Resources Building, Room 306-R, P.O. Box 2695, Oklahoma City, OK 73190. Telephone: 405-271-2011. The University of Oklahoma is an Equal Opportunity/Affirmative Action Employer.

ASSOCIATE IN RESEARCH DEPARTMENT OF SURGERY HARVARD MEDICAL SCHOOL AND BRIGHAM AND WOMEN'S HOSPITAL BOSTON, MASSACHUSETTS
Division of Cardiac Surgery at Harvard Medical School and Brigham and Women's Hospital has an opening for a research associate in cardiac surgical research. Applicants must have a Ph.D. or M.D./Ph.D. in cardiovascular physiology, pathology, or related field. Candidates must be interested in interdisciplinary research and be self-motivated. Please send résumés and references to Dr. Lawrence H. Cohn, M.D. Chief, Division of Cardiac Surgery Brigham and Women's Hospital 75 Francis Street Boston, MA 02115

ASSOCIATE IN CLINICAL RESEARCH NEUROLOGY DEPARTMENT OF NEUROLOGY BRIGHAM AND WOMEN'S HOSPITAL BOSTON, MASSACHUSETTS
Division of Cardiac Surgery at Harvard Medical School and Brigham and Women's Hospital has an opportunity for a research associate who has the equivalent of a Ph.D. to have experience with data entry, and basic programming skills to head up large data bank for coronary artery surgery. Excellent wages and benefits.

Send résumé to:
Lawrence H. Cohn, M.D.
Chief, Division of Cardiac Surgery
Brigham and Women's Hospital
75 Francis Street
Boston, MA 02115

BIOLOGIST
in research engaged to relate research to study of human immune system. Requirements include: Ph.D. in biology plus 3 years of experience in cloning of genes, performing of molecular assays, biochemistry of SIRS, cell culture of SIRS producing cell lines, isolation and purification of SIRS messenger RNA, translation of RNA in cell free translation systems, and analysis of the products by SDS-polycrylamide gel electrophoresis. $42,500 per year. Place of employment/job interview: Palo Alto, California. Send this ad with résumé to: Job Office. CM0344, Sacrament, CA 95823-0560 not later than 14 April 1989.

BIOLOGY: ASSOCIATE PROFESSOR, TENURE-TRACK Position available September 1989. Teach general biology, anatomy/physiology and embryology with emphasis on laboratory. Appreciation of the liberal arts ethos expected. A Ph.D. degree, and an interest in interdisciplinary activities, student advising, and faculty committee work is expected. Ph.D. preferred. Send curriculum vitae and names, addresses and telephone numbers of three references to: Dr. L. N. Stauffer, Chairman, Department of Biology, Drury College, Springfield, MO 65802.

BIOLOGY—WOMEN’S STUDIES. The Department of Biological Sciences and the Women’s Studies Center at Florida International University will make a tenure-track joint appointment in a field of biology relevant to women’s studies. The position will begin in the fall semester, 1989. Candidates should have demonstrated ability in teaching and research and a record of scientific publications in areas of interest to women’s studies. The successful candidate will teach courses for both areas and develop a strong research program. Candidates should have a Ph.D. who are interested in one or more areas of departmental strength (marine, molecular, human or tropical biology; ecology, microbiology) who are strongly encouraged to collaborate with other individuals in areas of other areas of biology will be seriously considered. Candidates should submit curriculum vitae, letter of appointment, and three letters of reference to: Dr. John O’Neal, Chair, Search Committee, Department of Biology, Temple University, 3400 North Broad Street, Philadelphia, PA 19140. The State University of Florida is an Affirmative Action/Equal Opportunity Employer.

CURATOR OF BOTANY
The Field Museum of Natural History seeks an outstanding scientist for a career-track position as Assistant Curator of Botany. Applicants should currently hold a Ph.D. in botany with an emphasis in angiosperm systematics. The successful candidate will be part of the Museum's program of original research, curatorial responsibilities, supervision of supporting staff and administration. Ability to obtain grant support for research programs and collection facilities is desirable. The botanical holdings of the Field Museum contain one of the richest collections of Neotropical plants in the world. Candidates whose research activities can add to, and make use of, our unique collection resources will be given special consideration. Technical facilities include SEM, computer center, library and library/database facilities. Send: 300 S. Lake Drive, P.O. Box 31000, Chicago, IL 60604-9995. The Field Museum of Natural History is an Equal Opportunity Employer.

CURATOR OF BOTANY
The Field Museum of Natural History seeks an outstanding scientist for a career-track position as Assistant Curator of Botany. Applicants should currently hold a Ph.D. in botany with an emphasis in angiosperm systematics. The successful candidate will be part of the Museum's program of original research, curatorial responsibilities, supervision of supporting staff and administration. Ability to obtain grant support for research programs and collection facilities is desirable. The botanical holdings of the Field Museum contain one of the richest collections of Neotropical plants in the world. Candidates whose research activities can add to, and make use of, our unique collection resources will be given special consideration. Technical facilities include SEM, computer center, library and library/database facilities. Send: 300 S. Lake Drive, P.O. Box 31000, Chicago, IL 60604-9995. The Field Museum of Natural History is an Equal Opportunity Employer.

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SENIOR RESEARCH ASSOCIATE for position as supervising physicist for computer programs for Biophysical Imaging and Opto-electronics. Will have operating responsibility for the resource laboratories and equipment. Applicants should have a Ph.D. in physics, have experience with data entry, and basic programming skills to head up large data bank for coronary artery surgery. Excellent wages and benefits.

Send résumé to:
Dr. Robert L. Lee
Cornell University
Department of Physics
Ithaca, NY 14853

BIOLOGICAL PHYSICS CORNELL UNIVERSITY
SENIOR RESEARCH ASSOCIATE for position as supervising physicist for computer programs for Biophysical Imaging and Opto-electronics. Will have operating responsibility for the resource laboratories and equipment. Applicants should have a Ph.D. in physics, have experience with data entry, and basic programming skills to head up large data bank for coronary artery surgery. Excellent wages and benefits.

Send résumé to:
Dr. Robert L. Lee
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Ithaca, NY 14853

BIOLOGY: One-year SABBATICAL LEAVE RE-
PLACEMENT position available in a career-oriented, liberal arts college that encourages research. Teaching assignment includes a general biology course for majors and courses in genetics and evolution. Position available 20 August 1989. Send curriculum vitae and three letters of recommendation by 14 April 1989 to:
Dr. Donald Troie, Chair
Department of Biology
Wilmington College
Wilmington, OH 45177

TEMPLE UNIVERSITY SCHOOL OF MEDICINE
CHAIRMAN,
DEPARTMENT OF BIOCHEMISTRY
Applications or nominations are invited for the Chair of the Department of Biochemistry. Candidates should have proven leadership ability and must be nationally recognized for their scientific contributions to biochemistry or related fields. The successful candidate must have demonstrated interest and ability in effective teaching and the capability of providing the administrative leader-
ship to continue and extend the department's established standing in research, teaching, and service. An excellent opportunity exists to expand an already strong depart-
ment and to interact with the newly expanded Fels Institute for Molecular Biology and Cancer Research.

Applications will be accepted until 1 May 1989 and should include curriculum vitae, a summary of current research, copies of representative publications, a description of teaching and administrative experience and the names, addresses, and telephone numbers of three or more references. Mail applications to:
Dr. John O’Neal
Chair of the Search Committee
Department of Pharmacology
Temple University School of Medicine
3400 North Broad Street
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National Park Service, Indiana Dunes National Lake-
shore, Porter, Indiana, invites applications for CHIEF SCIENTIST, INCUMBENT RESEARCH. Incumbent is responsible for all park re-
search activities in the fields of geology, soil science, hydrology, air quality, zoology, botany, and fire ecology. This position reports to the Division Director of the development activities. Also, conducts studies in own area of expertise. Must be a U.S. citizen. Ph.D. or equivalent combination of professional experience and education re-
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Glen Alexander, Indiana Dunes. Telephone: 219-
926-3761. National Park Service is an Equal Opportunity/Affirmative Action Employer.
ST. JOHN'S UNIVERSITY
NEW YORK

Faculty Position
Toxicology/Pharmacology

ASSISTANT/ASSOCIATE PROFESSOR. Candidate should have Ph.D. and post-doctoral experience in Toxicology, Pharmacology, or a related field. Responsibilities will include undergraduate and graduate teaching, training graduate students, and the development of a strong research program capable of attracting extramural funds. Current faculty interests encompass neurotoxicology, pulmonary toxicology, renal toxicology, carcinogenesis, drug metabolism, and clinical and forensic toxicology.

We are located on a 100-acre campus in a residential area of Queens, with access to Manhattan (20 min.) by subway or train. Application letters with curriculum vitae, statement of research interests, and names of three references should be sent to:

Dr. Amit Kapoor, Professor and Chairman
Dept. Pharmaceutical Sciences
St. John's University, Jamaica, NY 11439

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PROJECT MANAGER

- Land and Water Quality Studies

EPRI, on the San Francisco Peninsula, an R&D firm chartered to provide research and development for all segments of the U.S. electric utility industry, seeks a senior-level professional to initiate and manage technical, financial and administrative aspects of research contracts to ensure delivery of quality R&D products in a timely manner. You will develop concepts and ideas, prioritize industry needs and implement research projects, as well as participate in technology transfer efforts and interact with utilities, government agencies, universities and other R&D organizations.

Qualified candidates will have a PhD in Earth Sciences (soil science, geology, environmental science, hydrology, water resources) or the equivalent, at least 5 years' related experience, excellent communication/marketing skills and the ability to work independently.

EPRI offers a stimulating environment, competitive salaries and comprehensive benefits. For immediate consideration, please send your resume, including salary requirements, to D. Staten, Human Resources Division, Dept. SCI, EPRI, 3412 Hillview Ave., PO. Box 10412, Palo Alto, CA 94303. An equal opportunity employer.

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SENIOR RESEARCH SCIENTIST
BIOCHEMISTRY/IMMUNOLOGY

ImmuNoTherapeutics is seeking a Ph.D. level individual with experience in biochemistry/immunology and cell biology. The individual must have a strong background in biochemistry. The ideal candidate would have experience in one or more of the following areas: in vitro lymphocyte and macrophage function studies, lymphocyte receptor/membrane biochemistry, or tumor immunology (in vitro or in vivo). The individual will be responsible for biological and immunological evaluations of biological response modifiers, and for immunological monitoring of programs related to clinical studies. Previous experience in clinical studies or FDA related matters would be extremely useful.

ITI is a public biotechnology company involved in the research and development of human pharmaceuticals for cancer therapy. Please send curriculum vitae and name of three references to Gerald Vosika, M.D., chairman and president, ImmunoTherapeutics Inc., 509 - 25th Avenue North, Fargo, ND 58102. ITI is an equal opportunity employer.

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Plant Cell Biologist
Research Scientist

Du Pont's Agricultural Products Department is seeking an accomplished Plant Cell Biologist to be part of a maize cell culture and transformation group in its Biotechnology Division.

The individual will join a multidisciplinary team engaged in innovative research focused on crop improvement through biotechnology. The ideal candidate will have a strong background in maize tissue culture and considerable experience with transformation techniques. Additional skills in molecular analysis of transgenic plants are desirable but not essential. A minimum of a Ph.D. with post-doctoral training or an M.S. with equivalent experience is desired.

At Du Pont you'll find a stimulating scientific environment in a modern research facility located near Wilmington, DE. Our Mid-Atlantic location offers a wide range of academic, cultural and recreational activities. Please send a curriculum vitae to Professional Staffing, Employee Relations Department, Du Pont Company, Room X-5165, Wilmington, DE 19898.

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An Equal Opportunity Employer M/F/H/V
U.S. Citizenship or Permanent Visa Required
FACULTY POSITION IN PHYSIOLOGY

The Department of Physiology at Temple University School of Medicine invites applications for a tenure-track appointment at the ASSISTANT PROFESSOR level. Qualifications for the position include an M.D. or a Ph.D. degree with postdoctoral experience.

The applicant will be expected to develop an active independent research program supported by extramural funding and to contribute to the teaching programs of the department. All areas of research interest will be considered. Salary is commensurate with experience. Applicants should send curriculum vitae, description of research activities and the names and addresses of three references to: Dr. James P. Ryan, Chairman of Search Committee, Dept. of Physiology, TEMPLE UNIVERSITY SCHOOL OF MEDICINE, 3401 N. Broad Street, Philadelphia, PA 19140.

Temple is an affirmative action, equal opportunity employer.

Board of the Swiss Federal Institutes of Technology
Paul-Scherrer-Institute,
Villigen/Würenlingen, Switzerland

DIRECTOR

Applications are invited for the position of Director of the Paul-Scherrer-Institute (PSI) in Würenlingen/Villigen, Switzerland.

The PSI is a federal multidisciplinary research organization (1000 employees) that conducts research in elementary-particle and nuclear physics, solid-state physics, life science, and energy engineering, both nuclear and non-nuclear. It develops and operates advanced research facilities in support of Swiss universities and international research organizations.

The Director is responsible for the scientific, technical and administrative management of the PSI, and normally assumes auxiliary duties on the faculty of the Swiss Federal Institute of Technology in Zürich or the Swiss Federal Institute of Technology in Lausanne.

Candidates for the position of Director should have a strong record of leadership in either a university or an industrial environment. They should also hold an advanced degree, have demonstrated competence in physical, chemical, biological or engineering research, and be reasonably fluent in German, French and English.

The new Director is expected to assume his or her duties in spring, 1990. Applications should be submitted by May 31, 1989, to the President of the Board of the Swiss Federal Institutes of Technology, ETH-Zentrum, CH-8092 Zürich, Switzerland.

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For further information, telephone Ed. Keller, Recruitment Advertising Manager, or Donna Rivera, Production Manager at SCIENCE: 212-730-1050, or write to: SCIENCE, 1515 Broadway, NY, NY 10036.

CURRENT DISTRIBUTION 160,000
The Sterling Research Group, the worldwide pharmaceutical research and development organization of Sterling Drug Inc., announces two openings for Sr. Research Scientists in the Pharmacology Department of its Rensselaer, New York facility.

The neurobiology program of Sterling Research Group offers excellent opportunities to participate in challenging, interdisciplinary drug discovery and basic research approaches aimed at identifying novel therapy for psychosis, neurodegenerative diseases, and pain.

ELECTROPHYSIOLOGISTS

An opportunity exists for neuroscientists to employ electrophysiologic techniques to study potential therapeutic and disease mechanisms in CNS disorders. Requirements include a Ph.D. in Neurophysiology, Neuropharmacology, or a related discipline and two or more years of relevant postdoctoral experience. Expertise in both in vitro and in vivo electrophysiologic techniques is highly desirable.

NEUROBIOLOGISTS

An opportunity also exists for neurobiologists interested in the regulation and modulation of neuronal gene expression as it relates to CNS disorders and potential therapy. Candidates should have a doctoral degree in Neurobiology, Cell Biology, Biochemical Pharmacology, or a related discipline and two or more years of relevant postdoctoral experience.

The Rensselaer facility is located near Albany, New York, which is a center for summer and winter recreational activities. We offer attractive salary and benefit programs and an exciting work environment based on a team approach to research and development.

Please send resume in confidence to: Jo Ann Fitzgerald, Employee Relations Administrator, STERLING RESEARCH GROUP, A Division of Sterling Drug Inc., 81 Columbia Turnpike, Rensselaer, NY 12144, a subsidiary of the EASTMAN KODAK COMPANY. Equal Opportunity Employer M/F/H/V.

The Office of Naval Research (ONR) is seeking an outstanding individual to serve in this Civil Service position in the Senior Executive Service. Salary range is $68,700 to $80,700, depending on qualifications. In addition to salary, career SES appointees are eligible to compete for performance awards and bonuses.

The Director, Chemistry Division supervises senior Scientific Officers plus support personnel, and is responsible for providing leadership, coordination and direction for the Contract Research Program in chemical sciences. The Division Director is the scientific administrator of ONR R&D activity in the field with full responsibility for staffing his/her program, establishing overall priorities and procedures, and recommending changes in program objectives and policies to the Director, Mathematical and Physical Sciences. The Division Director serves as the principal consultant to the Navy on developing naval applications in chemical science.

Candidates should possess a Ph.D. or equivalent in chemistry or related discipline and significant research experience in at least two of the following areas: physical chemistry, electrochemistry, surface chemistry, solid state chemistry (especially that related to electronics and optics), synthesis, and chemical materials (with emphasis on polymers for structural and electronics applications). In addition to an active career in the conduct of research in the relevant areas, direct experience in the management and coordination of large scale research projects is highly desirable.

Interested persons should submit a resume, including a list of publications, and a Standard Form 171, Application for Federal Employment (available at Federal Job Information Centers or from the address below), to:

Office of the Chief of Naval Research
Civilian Personnel Division, Code 01242P
Attn: Announcement #89-14 (S)
800 North Quincy Street
Arlington, VA 22217-5000

Applications will be accepted through June 2, 1989 and must be received by that date. Applicants are requested to complete the appropriate supplemental forms. For further information and supplemental forms, please call (202) 696-4705.

U.S. CITIZENSHIP REQUIRED

A N E Q U A L O P P O R T U N I T Y E M P L O Y E R
POSITIONS OPEN

DEPARTMENT HEAD. The Department of Nutritional Sciences at the University of Connecticut, Storrs, invites applications. The successful candidate will have an exceptional record of accomplishment in research, teaching, and administration, as well as a strong commitment to diversity and inclusion. The University of Connecticut is an AA/EEO employer. Applications should be submitted at https://www.h procedure.com/UniversityofConnecticut (Job #4206). Deadline: 1 May 1989.

HOWARD UNIVERSITY DIRECTOR OF UNIVERSITY LIBRARIES

Applications are now being accepted for this position. The Director of Libraries and University Librarian is a member of the University’s Administration and has responsibility for the planning, administration, and development of the Libraries. Salary will be commensurate with qualifications and experience. To ensure consideration, please submit a letter of interest and curriculum vitae by 1 April 1989. Applicants are encouraged to submit a cover letter expressing their interest in and qualifications for this position and the anticipated scope of work described in the position announcement. The search will be continued until the position is filled. To apply, submit a letter of interest and curriculum vitae to: President, Howard University, Washington, D.C. 20059.

ECOTOXICOLOGIST

Exxon Biomedical Sciences, Inc. has an immediate opening for a Research Toxicologist specializing in ecotoxicology and environmental health assessment. The successful candidate will have a Ph.D. in ecotoxicology or environmental health sciences and have published in peer-reviewed journals. Salary will be commensurate with qualifications and experience. To apply, please send a letter of interest and curriculum vitae to: Exxon Biomedical Sciences, Inc., CN 2350, Merters Road East Millstone, NJ 08873-2380 Equal Opportunity Employers M/F/H/V

INSTRUCTOR, nuclear medicine and tumor biology for a multidisciplinary group to study the case of monoclonal antibodies as carriers of radionuclides for diagnosis and therapy of cancer. The candidate should have knowledge of the latest developments in the field to teach residents. The position is open immediately. Applications should be submitted at https://www.h procedure.com/UniversityofConnecticut (Job #4206).

POSITIONS OPEN

FACULTY POSITIONS IN PHARMACOLOGY

Applications are invited for two tenure-track positions beginning 1 September 1989. The University of Maryland School of Medicine invites applications for full-time, 9-month appointments at the level of assistant, associate, or full professor, depending upon background and experience. The successful candidate will be expected to perform research in areas of special interest that are consistent with the mission of the Department of Pharmacology and to participate in classroom instruction and student research. The successful candidate will be expected to perform research in areas of special interest that are consistent with the mission of the Department of Pharmacology and to participate in classroom instruction and student research. Applications should include a curriculum vitae and a statement of current research interests. The University of Maryland School of Medicine, Baltimore, Maryland 21201. An Equal Opportunity Employer.
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**SENIOR BIOCHEMIST**

Applicants will have a Ph.D. in molecular genetics or an appropriate area of biochemistry, with at least 2 years of postdoctoral experience in molecular biology/genetics. Candidates must be able to perform all fundamental molecular genetic techniques such as DNA isolation and cloning, restriction mapping, plasmid and phage library construction, the use of radioactive probes in nucleic acid blotting and library screening, and the design and construction of prokaryotic and eukaryotic expression vectors. In addition, special attention will be given to those candidates with experience in receptor cloning and expression. The position is in the newly formed Biophysical Chemistry Department and offers close association with x-ray crystallographers and protein nmr spectroscopists with goals toward structural understanding of receptor antagonism and enzyme inhibition. The long term objectives of this department are focused on rational drug design.

**JUNIOR BIOCHEMIST**

The research scientist we seek will possess a BS/MS in molecular genetics or an appropriate area of biochemistry and several years experience in at least three of the following: cDNA cloning and library construction, DNA sequencing, plasmid vector construction, mRNA analysis, mammalian cell culture, expression cloning and protein purification. Experience in yeast or E. coli fermentation would be considered a valuable asset.

Merck Sharp & Dohme Research Laboratories are located in Rahway, New Jersey approximately 25 miles from New York City. Our salaries, benefits and growth potential are excellent. Interested candidates should submit their curriculum vitae with names of three references and salary requirements to: Ms. Lonnie Doetz, RSPM-TLL, Merck & Co., Inc., P.O. Box 2000, Rahway, NJ 07065.

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**POSTDOCTORAL POSITIONS IN IMMUNOPHARMACOLOGY**

Hoffmann-La Roche, a research-intensive pharmaceutical company located in suburban New Jersey, 12 miles from New York City, is seeking four Research Associates (Postdoctoral Fellows) to pursue research related to immune regulation in their Immunopharmacology Program.

**CELLULAR IMMUNOLOGISTS**

(2 positions)

1) Research will focus on establishing a chimeric human-mouse model immune system by the reconstitution of human immune cells in immunodeficient mice. Emphasis will be on characterizing B and T cell functions; evaluating antigenicity and efficacy of various lymphokines and monoclonal antibodies, and developing human monoclonal antibodies in the chimeric model. A PhD in Immunology or related discipline and some experience with in vitro and in vivo immunological assays are required. Please refer to Position JH on resume.

2) Research will focus in the area of autoimmunity, and will involve studies of a novel lymphocyte, the CD5+ B cell. Murine models of autoimmunity, such as the NZB strain which has elevated numbers of CD5+ B cells (Ly1+ B), as well as human CD5+ B cells will be analyzed. The purpose of these studies will be to determine the role of these unique lymphocytes in both the development and regulation of autoimmunity; experiments will be at both the cellular and the molecular levels. A PhD in Immunology or a related discipline is required. Please refer to Position ER on resume.

**CELLULAR/MOLECULAR BIOLOGIST OR BIOCHEMIST**

You will participate in a multi-disciplinary program involved with the role of interleukin-1 and interleukin-1 receptor interactions in inflammation and immune regulation. You will conduct independent, basic research, and should have good training in membrane and receptor biochemistry, signal transduction, protein chemistry or molecular biology. A PhD is required; experience in immunology is desirable. Please refer to Position PK on resume.

**MOLECULAR IMMUNOLOGIST**

Joining a multi-disciplinary team of Immunologists, Protein Chemists and Molecular Biologists, you will perform research on the identification, cloning and characterization of a novel cytokine which synergizes with IL-2 to facilitate cytolytic lymphocyte responses in vitro. A PhD in Immunology or a related discipline, and some experience in molecular biological techniques are required. Please refer to Position MG on resume.

These immediate positions offer the opportunity to conduct basic research while interacting with colleagues skilled in translating the results of research into therapeutic approaches. Publication of results is encouraged.

For immediate consideration, please send your curriculum vitae, the names of three references, and the code for the position of interest, to: Dr. William Benjamin, Research Leader of Immunopharmacology, Roche Research Center, Hoffmann-La Roche Inc., Nutley, New Jersey 07110. We are an equal opportunity employer.
MOLECULAR BIOLOGIST

Two postdoctoral positions—nucleic acids experience required. (i) Work with gene transfer, regulated expression, CIS and trans-acting factors regulating genes for steroidogenic enzymes. (ii) Work with bacterial and yeast expression systems, maximizing expression, purifying and characterizing expressed products. Send curriculum vitae and letters of reference to: Dr. Walter L. Miller, Laboratory of Molecular Biology, Room 677-S, University of California, San Francisco, CA 94143–0454.

MOLECULAR GENETICIST to establish a new laboratory in our Department of Genetics. The successful candidate will be expected to develop a strong independent research program and will have opportunities to collaborate in ongoing research involving human subjects and our unique pedigreed colonies of 3,000 boons and 1,200 marsupials. Major projects involve comparative gene mapping, genetic/dietary interactions in relation to lipoproteins and atherosclerosis, gene regulation in relation to hypertension-induced cardiac hypertrophy, genetics and gene regulation in relation to alcohol metabolism, X-chromosome inactivation, and primate evolution and speciation. This is an excellent opportunity for a creative scientist in a young expanding department. Salary and rank will be commensurate with experience. Please mail resume, statement of research interests and names, addresses, and telephone numbers of three references to: Personnel Director (15), Southwestern Foundation for Biomedical Research, P.O. Box 28147, San Antonio, TX 78284. Equal Opportunity Employer M/F.

POSTDOCTORAL POSITIONS available to conduct research on RFLP analysis of corn and other cereal crops. Applicants should have experience with standard molecular biology techniques. Candidates with a Ph.D. in molecular biology, genetics or plant breeding are encouraged to apply. Please send resume and transcripts to: Gyll Paul, Department of Agronomy, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061. Telephone: 703-231-6000. VPI/ESU is an Equal Opportunity/Affirmative Action Employer.

PHARMACOLOGIST (RESEARCH SCIENTIST)—High-level research to optimize stability and quality of products. Study bioavailability problem for new drugs based upon application of physical pharmacy concepts and pharmacokinetic principles, utilizing HPLC, x-ray diffractometry, IR, DSC, and knowledge of in vitro irritation evaluation techniques. Formulate and characterize various new drug delivery systems. Ph.D. in pharmacology with 1 year of experience in job offered or 1 year of experience in research in transdermal water loss and skin responses to ultraviolet radiation. Must have coursework in chemical kinetics and mechanisms, drug delivery and principles of chemical thermodynamics. Forty hours per week. $74,000 per year. Send resume to: T.O. #0010178, NYS Job Service, 68 West Huron Street, Buffalo, NY 14202.

POSTDOCTORAL POSITION: Dana-Farber Cancer Institute and Harvard Medical School. A position is available in the summer/fall of 1989 for a Ph.D. to participate in studies of the regulation of Southern blot, cDNA library screening. Please send curriculum vitae and the names of three references to: Dr. Henry A. Stavely, Associate Director, Dana-Farber Cancer Institute, 957, 450 Brookline Avenue, Boston, MA 02115. Equal Opportunity Employer M/F.

UNIVERSITY OF GUELPH

DEAN, ONTARIO AGRICULTURAL COLLEGE

The University of Guelph invites applications and nominations for the position of Dean of the Ontario Agricultural College. The appointment will commence on July 1, 1989. The University of Guelph has a special responsibility within the Ontario University system to serve agriculture in the broadest sense. The University is committed to a leadership position in education, research and extension related to the use of the components of the agriculture and food system, whether these be physical, financial or human. We have a major concern regarding the impact of resource use on our environment and on society in general.

One of seven Colleges in the University, the Ontario Agricultural College offers a wide range of undergraduate, graduate and research programs in support of agriculture and has a major commitment to international activities. The College has approximately 180 faculty members in nine academic departments: Agricultural Economics and Business, Animal and Poultry Science, Crop Science, Environmental Biology, Food Science, Horticultural Science, Land Resource Science, Rural Extension Studies, and Landscape Architecture. The College currently enrolls approximately 3,300 students in its undergraduate and diploma programs and 480 students in its M.Sc., M.Agr., M.L.A. and Ph.D. graduate programs. The total annual research budget is in excess of $22 million.

Applicants should have a proven record of leadership and achievement in education and research and a broad understanding of agriculture as it relates to universities, industry and the general public. The appointment as Dean will be for a five year term, renewable for an additional five years, and will include a tenured faculty appointment in an appropriate department. Applications and nominations should be submitted by May 15, 1989 to Dr. J. R. MacDonald, Vice-President, Academic, University of Guelph, Guelph, Ontario, N1G 2W1.

In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents.

The University of Guelph is committed to Employment Equity.
Applications are invited for a tenure track position as assistant professor in veterinary immunology. Responsibilities include supervision of the Clinical Immunology Laboratory of the Veterinary Teaching Hospital, research, and teaching. Research opportunities exist in the fields of immunological diseases and diagnostics with the possibility of collaboration and consultation in production and application of conventional and genetically engineered monoclonal antibodies.

Applicants should have a Ph.D. and preferably a DVM degree with experience in laboratory diagnostics and in monoclonal antibody production. A central interest in diagnostic immunology including both applications and development is essential.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents.

Please address enquiries to Dr. Bruce Wiltie, Chairperson, Department of Veterinary Microbiology and Immunology, Ontario Veterinary College, University of Guelph, Guelph, Ontario, Canada, N1G 2W1. Applications will be accepted until May 31, 1989 or until the position is filled. Subject to final budgetary approval.

The University of Guelph is committed to Employment Equity.
PLANT NUTRITIONAL/ECOLOGY
UNIVERSITY OF CALIFORNIA, DAVIS

The Department of Land, Air, and Water Resources seeks a tenure-track university tenure-track teaching and research position in plant nutritional/ecology at the ASSISTANT PROFESSOR level. The appointee will develop and maintain a program in plant nutrition in natural or managed ecosystems, emphasizing factor interactions, integration at level of plant-soil system or ecosystem, and stress-related problems. The appointee is expected to teach an undergraduate course in plant nutrition or soil fertility and a graduate course in plant-soil nutrient interactions. Ph.D. in plant physiology, plant ecology, soil science or a closely related field is required. Background in plant nutrition and soil fertility, ecophysiology and/or systems ecology is expected. Modeling skills and experience in soil fertility advantageous. The position commences 1 January 1990. Applicants should submit: a resume, transcripts, research and teaching statements with background in each, copies of publications and manuscripts and the names and addresses of at least four references to: Professor D. N. Munns, Plant Nutrition, Search Committee Chair, Department of Land, Air and Water Resources, University of California, Davis, CA 95616. Applications should be postmarked by 30 June 1989.

RESEARCH MEDICAL OFFICER
FOOD AND DRUG ADMINISTRATION
PUBLIC HEALTH SERVICE
HEALTH AND HUMAN SERVICES
CENTER FOR BIOLOGICS EVALUATION AND RESEARCH
The Laboratory of Cell Biology seeks a Medical Officer, GS-602-13 to implement and direct a research program; review Investigational New Drug and licensing applications in areas related to monoclonal antibodies, immunomodulators, growth factors, tissue culture reagents and biotechnology; and develop scientific guidelines for regulating products. Salary range from $50,137 to $64,238 per annum, excellent benefit package, flexible work schedule, and Physician's Comparability Allowance of $2,000 to $10,000 per year is also available. Qualifications: M.D. or Ph.D. in a doctoral experience/training in immunology/immunobiology with emphasis on tissue culture skills and biochemical techniques related to signal transduction; knowledge of TLC and HPLC chromatographic techniques and related instrumentation; and detailed knowledge of computer based data handling/processing. The ability to direct/lead technical and research personnel is desired. U.S. citizenship required. Please send curriculum vitae or Standard Form 171 to: Faru Guest Parklawn Building, Room 4B-26 3535 E. River Road Rockville, MD 20857 Telephone: 301-443-6003 FDA is an Equal Opportunity Employer.

RESEARCH PROGRAM DIRECTORS
California Institute of Biological Research (CIBR), a non-profit institute, has recently been established with financial support from Stratagen in La Jolla, California. The institute is in a beautiful coastal location in close proximity to the Salk Institute, Institute of Scripps Clinic, Medical Biology Institute, La Jolla Cancer Research Center, and the University of California, San Diego. CIBR will consist of laboratories with research interests in cataract gene regulation, oncogenes, cellular and molecular transformation, control of immune responses, molecular biology of differentiation, and mammalian development. Research Program Directors should demonstrate the ability to obtain funding from extramural granting agencies. Research Program Directors will also be responsible for current and future center supplementation and may serve as consultants to Stratagen with the opportunity to engage in collaborative projects. Investigators with appropriate research interests are encouraged to apply.

Send curriculum vitae to: Personnel, California Institute of Biological Research, 11099 North Torrey Pines Road, La Jolla, CA 92037.

SCIENCE ENDED CHAIR
Incarnate Word College (IWC) invites nominations and applications for the newly endowed chair in science. Earned doctorate, proven record of excellence in teaching in biology, or a related field, and significant research experience required. Review of applications begins 15 March 1989. Send applications and all supporting materials to: Search Committee Chair, Incarnate Word College, 4301 Broadway, San Antonio, TX 78209. Ap- plications from women and minorities are encouraged. IWC is an Equal Opportunity/Affirmative Action Employer.

University of California, Los Angeles (UCLA) Urology Division seeks Board-certified UROLOGIST with expertise in renal transplantation for faculty position. Requirements: proven ability to organize clinical training, ability to collaborate in immunology research; experience in reconstructive and pediatric urology; excellent surgical skills. Applicants should contact: The UCLA Department of Urology, 715 Packard Ave., Los Angeles, CA 90024-1758. UCLA is an Equal Opportunity/Affirmative Action Employer.
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Soils/Plant Research Biologist

As an important member of our Plant Science Discovery Department, you will serve as a resident authority on soil-plant-environment-herbicide interactions. We will look to you to set up bioassay systems and to determine the primary factors influencing plant responses to soil residue levels of herbicides as well as analyzing the interaction of these responses with environmental changes.

In our multi-disciplinary environment, you will have the opportunity to not only work closely with Chemists, but also with Development Project Managers and Discovery Researchers throughout the organization. In addition to a PhD in Soil Science, Plant Nutrition, Plant Physiology or Weed Science, your expertise in soil chemistry, soil-ion and soil-plant interactions should be complemented by solid laboratory experience in soil analysis, plant growth and physiology. Experience with radioisotopes as well as HPLC, GC and associated analytical techniques also required.

At American Cyanamid, we recognize and reward talent. Evidence our dual career ladder which provides excellent opportunities for personal and professional growth. You'll also enjoy a very competitive salary, comprehensive benefits including a 401(k) savings plan, flex-time and relocation assistance. We invite you to work together with us. Please forward your c.v. in confidence to: Employment Manager, Dept. SCI-389, American Cyanamid Company, Agricultural Research Division, P.O. Box 400, Princeton, N.J. 08540. An Equal Opportunity Employer, M/F/H/V.

Immunologists

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Director, Immunology R&D

Organize, staff and manage an R&D function with capacity to propose, design and develop new products or improve existing products. Hands-on involvement expected. We seek a Ph.D. with lab management experience or equivalent. Business experience with exposure to Sales/Marketing, Operations and other business functions preferred.

Immunologists

Responsible for product development and developing protocols. We require M.S. with 1-3 years laboratory experience or equivalent.

Be part of this exciting venture.

Send resume, in confidence, to:

Mr. Richard L. Hotaling, Jr.
Manager of Personnel
Life Technologies, Inc.
8717 Grovemont Circle
P.O. Box 6009
Gaithersburg, MD 20877
(A suburb of Washington, D.C.)

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OPENINGS FOR SCIENTISTS AT NATIONAL INSTITUTE FOR BIOMEDICINE APPROACH AND GENETIC ENGINEERING (NIBGE) Faisalabad, Pakistan

Applications are invited from senior Pakistani Scientists residing abroad and possessing postgraduate qualifications and relevant experience in the fields of biology, microbiology, biochemistry, genetics, molecular biology, bioprocess engineering, industrial microbiology, plant biotechnology, etc. for the positions in NIBGE Faisalabad sponsored by the Government of Pakistan. Enquiries and biodata may be sent to: The Director, Nuclear Institute for Agriculture and Biology (NIBA), P.O. Box No. 128, Faisalabad, Pakistan, Cable: NIAB, Telex: 43386 NIAB PK.

OPENINGS FOR FACULTY POSITIONS

Tenured or tenure-track faculty positions are available in a newly established Program in Molecular Medicine. This interdisciplinary program currently includes nine faculty research programs in complementary fields of biomedical science and occupies 40,000 square feet of research laboratories constructed in a newly completed building. The Medical Center is committed to recruiting and supporting scientists of the highest quality, in an outstanding research environment. Research areas currently being expanded include:

1. Molecular virology/retroviruses
2. Molecular immunology
3. Tumor biology/oncogenes
4. Molecular structure by crystallography/NMR.
5. Cellular physiology/signal transduction

There is particular interest in candidates using contemporary methodologies, e.g. transgenic animals. Applicants must have a Ph.D. or M.D. degree with demonstrated research productivity. A strong motivation toward creative research and ability to attract independent funding is essential. Salary and faculty status are negotiable. Applicants must submit curriculum vitae, summary of research interests and names of three references to: Dr. Michael P. Czech, Director or Dr. John L. Sullivan, Search Committee Chairman, Program in Molecular Medicine, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, MA 01655.

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JPL/NASA VISITING SENIOR SCIENTIST SPACE BIOMEDICAL RESEARCH

The Jet Propulsion Laboratory invites applications to the Visiting Senior Scientist Program in the area of Space Biomedical Research. The position requires a Ph.D. or equivalent degree along with research experience and a record of research publications. Although any qualified person may apply, tenured faculty members with experience in NASA's Biomedical Research Program are the preferred choice. Responsibilities include aiding in the planning and implementation of the Biomedical Research Program within the Life Sciences Division at NASA Headquarters. Duties include extensive contacts with the research community, conducting peer reviews of research proposals, recommending selection of investigations as well as assisting in the maintenance of a balanced and productive program within budgetary resources. The appointee is expected to work closely with managers at several NASA centers and to advise potential investigators from the university community how their plans relate to the NASA Biomedical Program. Frequent travel and residence near NASA Headquarters (in the Washington, D.C., area) will be required. Appointees must be U.S. citizens and permanent residents, and are expected to return to their home institutions following their NASA assignment. Please provide curriculum vitae, bibliography and the names of four references to:

Dr. Harold Kane, Jr., 180-900
Department V
Jet Propulsion Laboratory
4800 Oak Grove Drive
Pasadena, CA 91109
Telephone: 818-354-8251

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COURSES

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- 6 to 4 October 1989 at the University of Alabama, EIWMS (Tuscaloosa)—1st Annual Institute

SCIENCE, VOL. 243
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