

tinoids are important molecules with multiple functions.

The synthesis of new derivatives of vitamin A and the testing of their functions in biological systems have increased our understanding of the native compound and moved consideration of the retinoids from their nutritional aspects to their molecular ones. Although the importance of vitamin A and its molecular interaction in vision have been appreciated for some time, the metabolic interactions of vitamin A, the serum and cellular retinol-binding proteins, and the pleiotropic biochemical effects of retinoids have only recently been appreciated. All these topics are covered extremely well in these two volumes.

Retinoids have been used in the past decade to probe the process of differentiation and maturation. What has become clear is that these compounds affect biological responses in a wide variety of normal and malignant cells, both in vitro and in vivo, and may in certain instances regulate oncogene expression. These themes are presented and discussed well in chapters by Roberts and Sporn and Moon and Itri. Molecular biology has developed rapidly in the past year, and I suspect that if the chapter concerning differentiation and maturation were being written today it would include a large section on the regulation of genes and growth factors. The retinoids may function to regulate the immune systems, and the book contains a current, balanced review of the subject by Dennert.

The nutritional role and the clinical aspects of vitamin A are fairly discussed. The role of vitamin A in classical nutrition is dealt with in a highly readable chapter by Underwood that is perhaps the best review of this topic that I have read.

The preclinical and clinical toxicology of selected retinoids is fairly discussed by Kamm, Ashenfelter, and Ehmann, although the important teratogenic effects of retinoids in humans, which were recognized largely in the past year, are necessarily not covered. A chapter on retinoids and cancer by Moon and Itri succeeds admirably in the very difficult task of integrating animal and clinical studies. The authors provide a firm base for understanding a subject in which there has been an explosion of interest in the past year or two that has generated a large number of human trials. The potentials and pitfalls of the subject are well considered.

The major impact that the retinoids have had on a whole series of serious, largely untreatable dermatological conditions is concisely presented in a 17-page

chapter by Peak. Three pairs of before-and-after photographs of three different serious cutaneous diseases dramatically show why almost all dermatologists consider the use of retinoids to be the most important advance in the treatment of skin diseases in the 20th century. Many investigators suspect that retinoids will come to play important roles in the treatment of other diseases, including cancer and rheumatological diseases.

The Retinoids will likely be viewed as a classic for decades. It will certainly serve as an important reference for years to come.

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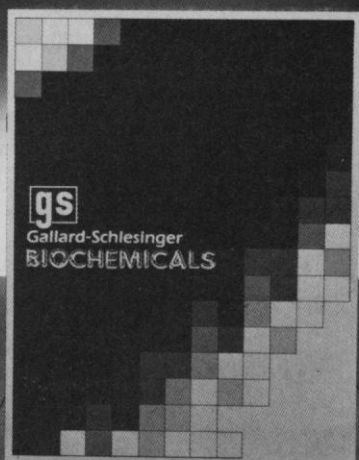
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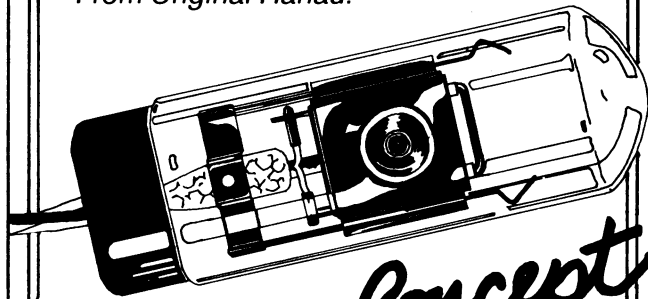
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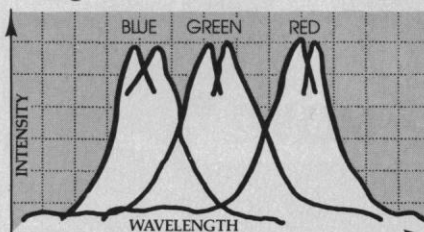
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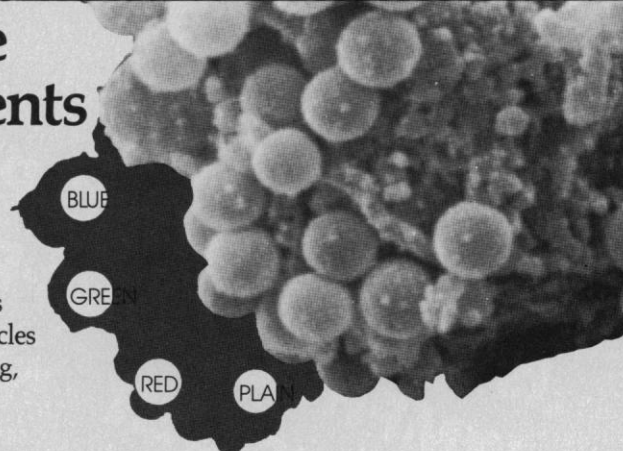
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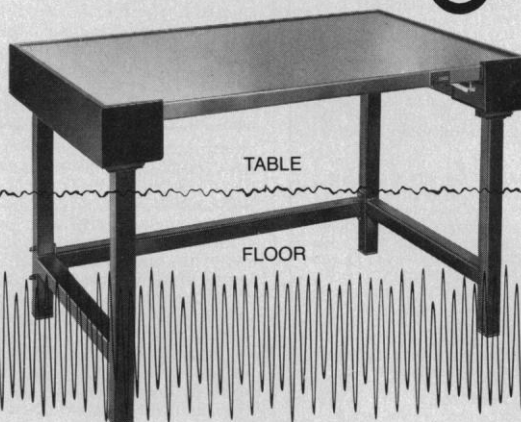
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ASSISTANT PROFESSOR. A position is available for a neurophysiologist with experience and interest in electrophysiology of limbic system neurons using in vitro preparations and patch clamp techniques. Send résumé by 15 May to: **Chairman, Section of Neuroanatomy, Yale University School of Medicine, 333 Cedar Street, New Haven, Conn. 06510.** *An Equal Opportunity/Affirmative Action Employer.*

GENERAL COLLEGE UNIVERSITY OF MINNESOTA MINNEAPOLIS CAMPUS

ASSISTANT PROFESSOR, tenure-track position. Ph.D. (by September 1986) with major in **biological science, applied biological science, or science education.** Experience teaching college level science classes and interest in teaching science-anxious students. Direct inquiries to: **Secretary to SBM Search Committee, General College, 106 Nicholson Hall, 216 Pillsbury Drive, SE, Minneapolis, Minn. 55455.** Deadline for applications: 10 May 1985. It is the responsibility of the applicant to secure and submit all requested or necessary materials. **NOTE:** All application materials, including a letter of application, current transcripts, curriculum vitae, and three letters of recommendation must be received by 4 p.m., 10 May 1985. (Postmarks are not sufficient.) *The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.*

GENERAL COLLEGE UNIVERSITY OF MINNESOTA MINNEAPOLIS CAMPUS

ASSISTANT PROFESSOR, tenure-track position. Ph.D. (by September 1986) in **mathematics or math education**, with 2 years of experience teaching math and teaching nontraditional students. Direct inquiries to: **Secretary to SBM Search Committee, General College, 106 Nicholson Hall, 216 Pillsbury Drive, SE, Minneapolis, Minn. 55455.** Deadline for applications: 10 May 1985. It is the responsibility of the applicant to secure and submit all requested or necessary materials. **NOTE:** All application materials, including a letter of application, current transcripts, curriculum vitae, and three letters of recommendation must be received by 4 p.m., 10 May 1985. Postmarks are not sufficient. *The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.*

ASSISTANT PROFESSOR OF IMMUNOLOGY—The Department of Microbiology invites applications for appointment as assistant professor of the Jefferson Medical College, Thomas Jefferson University. Candidates are expected to possess a Ph.D. or M.D., have postdoctoral experience, and a strong record of research achievement in immunology. Individuals with particular interest in cell mediated responses are encouraged to apply. The successful candidate will be expected to pursue an independent research program and participate in the medical and graduate programs offered by the department. Send curriculum vitae, names of three references, and a brief statement of research interests to: **Dr. Catherine E. Calkins, Chairman of the Search Committee, Department of Microbiology, THOMAS JEFFERSON UNIVERSITY, 1020 Locust Street, Philadelphia, Pa. 19107.** *Equal Opportunity Employer.*

GS-13/14 Civil Service Position BIOMEDICAL ENGINEER

Ph.D. scientist to manage/conduct research to establish whole-body vibration exposure and mechanical insult criteria. Salary: \$37,599 to \$44,430. Send résumé and Standard Form 171 to: **U.S. Army Aeromedical Research Laboratory, P.O. Box 577, Attention: SGRD-UAX—C, Fort Rucker, Ala. 36362-5000.** For further information, telephone: 205-255-6897/98.

**First International NATO
Advanced Workshop Conference
on
GH PITUITARY CELL STRAINS
AS TOOLS IN MOLECULAR AND
CELLULAR BIOLOGY
Gouvieux-Chantilly, France
4 to 8 November 1985**

The Workshop is co-organized by Drs. A. Tixier-Vidal (Paris) and A. H. Tashjian, Jr. (Boston). Scientific sessions will be centered around invited speakers and invited discussants on the following general topics: cell proliferation (D. Sirbasku); growth hormone and prolactin biosynthesis (F. C. Bancroft, P. S. Dannies); secretion (C. Tougaard, R. B. Kelly); receptors and receptor-effector coupling (P. M. Hinkle, D. Gourdji, H. H. Samuels, A. Schonbrunn); intracellular mediators (M. C. Gershengorn, T. F. J. Martin, M. A. Brostrom, K. Gautvik, A. Sobel, A. H. Drummond); ionic mechanisms (T. J. Rink, A. B. Borle, J. G. Schofield, P. R. Albert); electrophysiology (S. Hagiwara, J. D. Vincent, B. Dufy, S. Ozawa, B. Sakmann); and regulation of specific gene expression (J. D. Baxter, J. Martial, J. D. Wark, R. D. Ivarie). Opportunity is available for a small number of poster presentations chosen by a nine-member Program Committee from submitted abstracts. Poster presenters must cover their own travel expenses as well as room and board (\$230 or \$270). The registration fee for accepted participants is \$125. Persons from North America wishing to apply should write: A. H. Tashjian, Jr., Laboratory of Toxicology, Harvard School of Public Health, 665 Huntington Avenue, Boston, Mass. 02115. All others should write: A. Tixier-Vidal, Collège de France, Group de Neuroendocrinologie, 11 Place Marcelin Berthelot, 75231 Paris, Cédex 05, France. Applications (original plus five copies) must be received by 1 June 1985 and should include: (i) name and position; (ii) curriculum vitae and list of publications; and (iii) a 150-word abstract of your proposed poster presentation. Notification of acceptance or nonacceptance will be made by 1 August 1985.

POSTDOCTORAL APPOINTMENT LIFE SCIENCES

The Pathology Group at Los Alamos National Laboratory is looking for a postdoctoral fellow to participate in a collaborative project with the Division of Viral Diseases, Center for Infectious Diseases at the Federal Center for Disease Control (CDC) in Atlanta, Georgia.

Responsibilities

- The research will last for approximately two years and include developing rapid and highly sensitive physical and biochemical methods for identifying human viruses and other microbiological agents.
- Opportunities also exist for basic studies using biophysical methods for probing the physical organization within the virion of the genomes of several groups of viruses.

Education

Requirements for this appointment include:

- Ph.D. in virology, microbiology, biochemistry or allied discipline;
- excellent academic credentials;
- a strong background and interest in physical methods.

Benefits

- Postdoctoral appointments pay \$27,900 to \$29,376 per annum.
- Appointees receive employee benefits, travel, and moving expenses to Atlanta will be included.

Candidates no more than three years past their Ph.D. are invited to apply. Please send your resume, bibliography, three letters of reference and undergraduate and graduate transcripts to:

Sandra Harding, DIV 85-BU
Personnel Administration Division
Los Alamos National Laboratory
Los Alamos, New Mexico 87545

University
of California



An Affirmative Action/Equal
Opportunity Employer

Immunodiagnosics

Cambridge BioScience Corporation, a biotechnology company specializing in infectious disease diagnostics offers exciting positions in its Hopkinton, Massachusetts laboratories. We are seeking advanced level scientists as well as research associates.

Senior Scientists Molecular Biology

- Ph.D. level with extensive background in recombinant-DNA, cloning and expression, minimum of 2 years postdoctoral or industrial experience.

Virology/Immunology

- Ph.D. level with experience in clinical virology
- Experience in hybridoma development
- Working knowledge of molecular virology

Production Supervisor Quality Control Technician

- Track record in bringing non-isotopic immunoassay kits to market
- Working knowledge of GMP and FDA product documentation
- Technical depth in infectious disease, utilizing EIA

Cambridge BioScience offers a unique and stimulating environment and close working associations with academic institutions. **Qualified applicants should send resume and salary requirement to:**



**Cambridge
BioScience**

**Cambridge BioScience
Corporation
Personnel Department
35 South Street
Hopkinton, MA 01748**

DIRECTOR, UNIVERSITY OF CALIFORNIA CONSORTIUM ON MEXICO AND THE UNITED STATES, AND TENURED FACULTY APPOINTMENT

Nominations and applications are invited for the position of director of the University of California Consortium on Mexico and the United States (UC MEXUS), a nine-campus organized research program which supports and coordinates UC activities in the areas of (i) Mexican studies, (ii) United States-Mexican relations, (iii) Chicano studies, and (iv) collaborative research between UC and Mexican scholars in the humanities, social sciences, biological sciences, physical sciences, and agricultural sciences. It is expected that the Consortium will eventually become a formally recognized Multi-Campus Research Unit (MRU) of the University of California. The director is the chief academic and administrative officer of the program with full executive and financial responsibility for its administration. The director shall report to the president of the University through the chancellor of the Riverside campus, where the Consortium is headquartered. The position is accompanied by a tenured appointment in an academic department appropriate to the final candidate's qualifications.

Qualifications: Candidates should demonstrate distinguished scholarly achievement in a field of interest to UC MEXUS and must be eligible for a tenured, full-time faculty appointment in the University of California. In addition, candidates should possess proven administrative ability and experience in obtaining grants, raising funds, and program development. The ability to interact effectively with a wide variety of faculty and administrative personnel, fluency in Spanish and English, and direct knowledge of Mexico and its institutions are also required.

Application procedure: Applicants should submit their curriculum vitae and other pertinent materials to: Professor Rodolfo Ruibal, Chair, Search Committee, UC MEXUS, University of California, Riverside, Calif. 92521.

Deadline: To ensure consideration, submit materials by 10 May 1985.

The University of California, Riverside, is an Equal Opportunity/Affirmative Action Employer.

Faculty Positions

Biochemistry

The Biochemistry Department of the Mount Sinai School of Medicine of the City University of New York has openings for active investigators with faculty rank from full professor to assistant professor. The Department is particularly interested in added research strength in one or more of the following areas:

- Molecular Biology
- Membrane and lipid biochemistry and enzymology

Please send CV and names and addresses of references to **Dr. Arthur Cederbaum**, Department of Biochemistry, The Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029. An Equal Opportunity Employer.



The Mount Sinai School of Medicine

Macy Fellowships in Science Broadcast Journalism

WGBH-Boston, a major producer of broadcast programs, including NOVA, seeks six proven science writers with a strong record of published writing for a general audience. Successful applicants will be highly skilled journalists willing to risk their talents on a new career in broadcast science journalism.

In return for that commitment, WGBH will train Fellows for a year in the special skills of communicating science stories on radio and television. Training will be rigorous, and will require making programs for broadcast, in a working professional environment.

The Fellowships' second year will begin in January, 1986, and carries a stipend of \$25,000. Applications must be received by July 1, 1985.

For details, please send a letter of interest and a resume to:

David Kuhn, Director
Macy Fellowships
WGBH
125 Western Avenue
Boston, MA 02134



POSITIONS OPEN

ASSISTANT PROFESSOR OF SCIENCE

Biological and/or physical sciences. Assistant professor, Ph.D. by June. Teaching positions in freshman-sophomore general education program. Research encouraged. Positions available September 1985. Deadline for applications: 15 May 1985. Tenure track; salary negotiable depending on credentials. Send résumé and at least three recommendations. Application will NOT be reviewed by Search Committee until recommendations are received. Mail to: **Professor Charles P. Fogg, Chairman, Division of Science, College of Basic Studies, Boston University, 871 Commonwealth Avenue, Boston, Mass. 02215.** An Equal Opportunity/Affirmative Action Employer.

BIOLOGY/VISITING ASSISTANT PROFESSOR: The Department of Ecology and Evolution at the State University of New York (SUNY) at Stony Brook has a 1-year position for a visiting assistant professor beginning September 1985 to teach a course in animal embryology, lecture and laboratories. Requirements: Ph.D. in biological sciences with training in embryology and/or developmental biology. Contact: **Professor Richard K. Koehn, Dean, Division of Biological Sciences, SUNY, Stony Brook, Stony Brook, N.Y. 11794.** SUNY, Stony Brook, is an Affirmative Action/Equal Opportunity Educator and Employer. AK Number 75B-85.

BIOLOGY POSITION

Teach and develop both undergraduate and M.S. level courses in cell biology, histology and ultrastructure, and developmental biology. Experience in electron microscopy required, immunological techniques desirable. One-year appointment which may be convertible to tenure track. Ph.D. required, postdoctoral experience desirable. Submit curriculum vitae and description of research interests, and have three letters sent by 10 May to: **Dr. Jonathan Green, Department of Biology, Roosevelt University, 430 South Michigan Avenue, Chicago, Ill. 60605.** An Equal Opportunity Employer.

BIOLOGY. Tenure-track position to teach animal physiology, human anatomy and physiology, cell biology, introductory biology, and one other course over a 2-year period. Very selective liberal arts and sciences college requires biology Ph.D., demonstrated undergraduate teaching excellence, and interest in research and supervising student research. Résumé and names of three references by 3 May to: **Dr. William Werner, Chairman, Biology Department, Blackburn College, Carlinville, Illinois 62626.** Equal Opportunity Employer.

The Department of Biology at the University of Waterloo invites applications for a tenure-track appointment in **BIOTECHNOLOGY/MOLECULAR BIOLOGY** at the ASSISTANT PROFESSOR level. Preference will be given to recent Ph.D. graduates with experience in one or more of the following areas: isolation, characterization, and manipulation of genes; site-specific mutagenesis; nucleic acid sequencing; construction of expression vectors; chemical synthesis of DNA. The position requires an aptitude for teaching undergraduate and graduate students. Candidates must be prepared to establish a vigorous, independent research program. Send curriculum vitae, a description of future research plans, and names and addresses of three referees to: **Dr. J. E. Thompson, Chairman, Department of Biology, University of Waterloo, Waterloo, Ontario, Canada N2L 3G1.** Effective date of appointment is 1 July 1985. Canadian citizens and landed immigrants will be given preference.

CYTOGENETICIST. Ph.D. at assistant or associate professor level to participate in clinical, teaching, and research program in the Center for Human Genetics. Send curriculum vitae to: **Aubrey Milunsky, M.D., D.Sc., Director, Boston University School of Medicine, 80 East Concord Street, Boston, Mass. 02118.** An Equal Opportunity Employer, M/F.

DEVELOPMENTAL BIOLOGIST. The Department of Embryology of the Carnegie Institution of Washington seeks a staff member (our term for faculty member) beginning in 1986. Send curriculum vitae, a statement of research interest, and have three letters of recommendation sent to: **Director, Department of Embryology, Carnegie Institution of Washington, 115 West University Parkway, Baltimore, Md. 21210.** An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

CELL BIOLOGIST/BIOCHEMIST NEUROBIOLOGIST

Postdoctoral research position is immediately available for Ph.D. with experience in cell biology, biochemistry, or neurobiology to investigate hereditary neuromuscular disorders. Initial research will focus on mechanisms of regulation of cell growth and the developmental expression of surface proteins in nerve, muscle, and related tissues. Applicants should have a Ph.D. and experience in: cell biology and biochemistry; culture of nerve, muscle and fibroblasts; immunological methods for the study of cell proteins. Extensive possibilities exist for collaboration with expert neuromuscular morphologists and with active molecular genetics/recombinant DNA laboratory. Excellent support; salary commensurate with experience. Direct inquiries to: **Dr. Robert H. Brown, Jr., Day Neuromuscular Research Center, Massachusetts General Hospital, Warren 370/374, Boston, Mass. 02114.**

CHAIRMAN DEPARTMENT OF ANATOMY

Applications are invited for the position of **professor and chairperson**, Department of Anatomy, University of South Carolina (USC) School of Medicine, Columbia, South Carolina. Candidates should have a Ph.D., M.D., or both, a commitment to excellence in medical education, and an established research program with a history of extramural funding and administrative experience. Applications, including curriculum vitae, a statement of career goals, and names of three references, should be sent by 17 June 1985 to: **Dr. O'Neill Barrett, Jr., Chairman, Anatomy Search Committee, Department of Medicine, USC School of Medicine, c/o Richland Memorial Hospital, ACC Number 2, Columbia, S.C. 29208.** An Equal Opportunity/Affirmative Action Employer.

STANFORD UNIVERSITY CHAIRPERSON SEARCH ANNOUNCEMENT

DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING STANFORD, CALIFORNIA 94305

The Department of Materials Science and Engineering at Stanford University invites applications from highly qualified individuals to serve as **professor and chairperson**. Qualifications include an earned doctorate or equivalent degree in materials science and engineering or a related field, a strong reputation in materials research, and evidence of ability to provide leadership, coordination, and administration. The department offers B.S., M.S., and Ph.D. degrees and has an outstanding reputation for both teaching and research. The successful candidate should have a research orientation directed towards electronic materials, semiconductor processing, or characterization. *Stanford University is an Equal Opportunity Employer and encourages nominations and applications of women and minority group members.*

Applications will be evaluated between 1 June 1985 and 1 August 1985 and should be sent to: **Professor Robert Sinclair, Chairman, Search Committee, Department of Materials Science, and Engineering, Stanford University, Stanford, California 94305.**

DIRECTOR OF RESEARCH AND ASSOCIATE DEAN. The College of Agriculture and Home Economics, Washington State University, seeks applicants to provide leadership for a combined agriculture and home economics research program. Applicants must have a doctorate in an agricultural or home economics related field, successful research activity, substantial administrative experience, and evidence of understanding of fundamental and applied research. Applications should include résumé and names of five references which should be sent by 15 June 1985 to:

**Dr. J. C. Engibous, Chairman
Department of Agronomy and Soils
Washington State University
Pullman, Wash. 99164-6420**

Washington State University is an Equal Opportunity/Affirmative Action Employer. Women, minorities and handicapped persons are encouraged to identify themselves as such in their applications.

SPECTROSCOPIST

The Navy's largest research, development, test and evaluation activity, located at the foot of the Sierra Nevada has an immediate vacancy for a Research Chemist to conduct studies in

LASER SPECTROSCOPY

This position offers the opportunity to work in a challenging research environment combined with community living in a small town environment.

Applicants with a Ph.D. and the ability and desire to conduct their own basic and applied research programs in laser spectroscopy are encouraged to apply. A background in analytical or physical chemistry is preferred for this position in the INSTRUMENTAL CHEMICAL ANALYSIS BRANCH. Some areas of interest are remote sensing, monitoring of thin-film deposition processes, and combustion diagnostics. The salary range is from \$30,000 to \$45,000 per annum.

Applications accepted until 30 April 1985.



Please submit resumes to:
NAVAL WEAPONS CENTER
Code O92-38-85-1
China Lake, CA 93555-6001

An Equal Opportunity Employer/U.S. Citizenship Required

Faculty Positions in the Molecular Life Sciences

Applications are invited from well qualified candidates trained in the molecular life sciences with a record of creativity in molecular genetics and recombinant DNA research. Scientists at all career levels are encouraged to apply. Preference will be given to applicants with an interest in yeast and site-directed mutagenesis as a tool for exploring questions related to the mechanism of gene expression and the relationship between protein structure and function. An auxiliary interest in lipid metabolism and biotechnology would be an asset. Our objective is to develop strong programmes in these areas.

A vacancy exists at the Assistant Professor level (tenure track). In addition, selected applicants will be nominated for separate appointment(s) as Research Scholars or Senior Scientists of the Alberta Heritage Foundation for Medical Research, an independent Alberta Foundation.

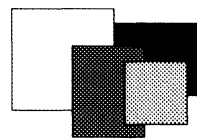
Remuneration will be based upon salary scales in effect at the University and will depend upon the academic rank to which successful candidates are appointed. An Establishment Grant for initial equipment and operating costs is provided by the Foundation. A relocation allowance is also provided.

All qualified individuals are encouraged to apply but preference will be given to Canadian citizens and permanent residents.

Qualified individuals should send curriculum vitae, a detailed description of their research objectives and arrange to have three letters of reference sent by June 1, 1985 to:



Dr. R.S. Roche
Chairman, Search Committee
University Biochemistry Group
c/o Division of Biochemistry
Department of Chemistry
Faculty of Science
The University of Calgary
Calgary, Alberta, Canada T2N 1N4



More Than A
Step Ahead

Research Scientists Biochemistry and Wound Healing

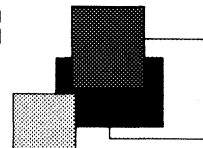
A move to Collagen Corporation is more than a step forward in your career. It's a step into the future of biotechnology. With the successful research, production and marketing of Zyderm®I and Zyderm®II Collagen Implant, we are now leading the way to new applications in the areas of dermatology, plastic surgery, podiatry, dentistry, otolaryngology and orthopedics. If you're looking for a progressive, high-energy environment where creativity counts, join the innovators — at Collagen Corporation.

We are currently recruiting for two Research Scientists (PhD plus a minimum of 3 years' experience) in the areas of extracellular matrix biochemistry and wound healing research. These individuals will be members of our dermal wound healing research team whose objective is to develop biomaterials which will be clinically useful in regulating various aspects of the dermal wound healing process which include controlling deposition of granulation tissue, reepithelialization, scar formation and contraction/contracture.

One position requires a strong biochemical background in collagen and/or glycosaminoglycan research. The other requires significant biochemical research experience in the areas of noncollagenous protein and/or growth factor biochemistry.

Collagen Corporation offers excellent growth potential and attractive salaries and benefits. To apply, please send your resume to D. Webster, Human Resources, Collagen Corporation, 2500 Faber Place, Palo Alto, CA 94303. We are an equal opportunity employer.

Collagen
Corporation



Program Manager - HLA

Genetic Systems, a leader in the field of biotechnology, has need of a Program Manager in HLA.

Ph.D. with post-doctoral experience and publications in immunology will co-direct program to develop monoclonal antibodies to HLA antigens. Requires background in immunogenetics or biochemistry of cell membrane glycoproteins. Experience in histocompatibility, hybridoma technology and cell surface antigens preferred. A background in tumor immunology, relating to monoclonal antibodies and diagnostics is also acceptable. Experience with artificial membranes, liposomes or synthetic antigens a plus. Must have strong organizational skills and interact effectively in a multi-disciplinary team. Expected to develop independent research interests relevant to HLA.

Applications deadline May 1, 1985; desired starting date July 1, 1985.

Genetic Systems offers competitive salaries and excellent benefits. Please send resume to **Karen Hedine, Personnel Manager.**

Equal Opportunity Employer



Genetic Systems

3005 First Avenue, Seattle, WA 98121-1035



The International Atomic Energy Agency seeks **Head of the International Laboratory of Marine Radioactivity** in Monaco.

Required Ph.D. in one field of marine science with comprehensive knowledge and 15 years practical experience in marine radioactivity and problems of marine pollution and related international activities. Duties include administration of the laboratory and responsibility for scientific programme, coordination with other international bodies, and liaison with Government.

Initial contract for two years, tax-free emoluments approx. \$43,500 per annum. Additional allowances for dependents. Travel and removal expenses paid. Six weeks annual leave.

Send Curriculum Vitae with an indication of your nationality under Vacancy Notice No. 85/06 to the Division of Personnel, International Atomic Energy Agency, P.O. Box 100, A-1400 Vienna, Austria.

POSITIONS OPEN

DIAGNOSTIC MEDICAL PHYSICIST. A Central Illinois hospital is seeking diagnostic medical physicist. Responsible for equipment inspection, annual x-ray tube evaluation, technical management of quality control programs and performance of radiation protection functions in addition to instruction of radiology students. Master's degree in medical physics required. Starting salary for this full-time position is \$15.41 per hour. Send résumé to: **Illinois Job Service, 924 East Adams, Springfield, Ill. 62705; attention: Patricia Bailey, Manager.** An employer paid ad. **Reference Number 4348-H.**

DIRECTOR, TOXICOLOGICAL SCIENCES PROGRAM

The University of Maryland is seeking the director of a new university-wide Graduate Program in Toxicology leading to the M.S. and Ph.D. degrees. The program will be fully integrated and coordinated among the university campuses at Baltimore (UMAB), Baltimore County (UMBC), College Park (UMCP), Eastern Shore (UMES), and the Center for Environmental and Estuarine Studies, with core courses being offered in the Department of Chemistry at UMBC. The director will be expected to develop and administer the new program, and maintain an active personal research program. Applicants should hold a doctorate degree and ideally be qualified for the rank of professor (with tenure). A distinguished record of research and education in the toxicological sciences, preferably related to environmental or genetic toxicology, is required. Applicants should submit a résumé and three letters of reference by 13 May 1985 to the chairman of the Search Committee: **Dr. William J. Kinnard, Jr., Dean, University of Maryland, School of Pharmacy, 20 North Pine Street, Baltimore, Md. 21201.**

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

ENVIRONMENTAL CHEMIST

The Connecticut Agricultural Experiment Station has an opening for an **assistant scientist** to investigate processes that determine the transport and fate of toxic organic chemicals in soil and water. The Station seeks practical and fundamental knowledge to better guide future use and disposal of agricultural and industrial chemicals. The scientist will be expected to initiate and conduct high-quality research in both the laboratory and field and to publish in the scientific literature. The position is full-time research supported by Station funds. Ph.D. in physical organic chemistry or closely related field. Strong background in analytical chemistry helpful. Send letter of application, résumé, transcripts, and the names of three references to: **Dr. Charles R. Frink, Chief, Department of Soil and Water, The Connecticut Agricultural Experiment Station, P.O. Box 1106, New Haven, Conn. 06504.** *An Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION (VISITING APPOINTMENT)

Applications are invited for a developmental biologist specializing in cell differentiation to teach courses in cell biology, developmental biology, and embryology. Appointment as temporary 1-year visiting assistant professor for August 1985 through May 1986. Position may develop into a tenure-track appointment, contingent upon funding. Minimum qualifications include Ph.D. Salary depending on qualification. Submit curriculum vitae, transcripts, and five references by 20 May 1985 to: **Chairman, Search Committee, Department of Biology, University of Nevada, Reno, Nev. 89557.**

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

FACULTY POSITION

The University of Michigan, School of Public Health, Department of Environmental and Industrial Health, has a tenure-track position open at the assistant, associate, or full professor level for appointment in the Toxicology Program. Qualifications include doctoral degree, previous research training/experience in a fundamental science applicable to toxicology, demonstrated commitment to research, and ability to obtain research support and to provide quality instruction. Applicants should send curriculum vitae, bibliography, and names of three references to: **I. A. Bernstein, Chairman, Toxicology Search Committee, School of Public Health, The University of Michigan, Ann Arbor, Michigan 48109.** *The University of Michigan is an Equal Opportunity Employer. Applications are especially sought from minority and women candidates.*

POSITIONS OPEN

ECOLOGY AND SOIL SCIENCE

Cedar Creek Natural History Area has research positions open on a NSF-sponsored, long-term ecological research project on the mechanisms of terrestrial succession. These positions, which may last up to 3 years, require a Ph.D., a whole-system perspective, and a desire to participate in a multi-investigator, cooperative study.

- 1) **POSTDOCTORAL SOIL SCIENTIST** to study soil nitrogen dynamics, especially the biology of the organisms involved in N fixation and/or N transformation. Available 1 June 1985.
- 2) **POSTDOCTORAL ECOLOGIST** to study environmental plant physiology or plant population biology. Available 1 June 1985.
- 3) **POSTDOCTORAL ECOLOGIST** to study plant-herbivore interactions. Available 1 June 1985.

Review of applications begins on 3 May 1985. To apply, send curriculum vitae, a statement of research experience and interests, publications, and have three letters of recommendation sent to: **Dr. David Tilman, Department of Ecology and Behavioral Biology, 318 Church Street, SE, University of Minnesota, Minneapolis, Minn. 55455.**

The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

FACULTY POSITIONS IN PHYSIOLOGY

The Department of Physiology at Wright State University (WSU) School of Medicine and College of Science and Engineering invites applications for three faculty positions available at the assistant or associate professor level in the following general areas:

- 1) **ENDOCRINE-BIOPHYSICS** (secretion, ionic channels, intracellular signaling)
- 2) **CARDIAC AND SMOOTH MUSCLE PHYSIOLOGY/BIPHYSICS** (electrogenic and nonelectrogenic transport, pumps, ionic channels, metabolism)
- 3) **EPITHELIAL PHYSIOLOGY/BIPHYSICS** (active and passive transport mechanisms, channels, intracellular ionic activities and metabolism)

Applicants should have a Ph.D. in physiology or related field, or M.D. or M.D./Ph.D., with at least 2 years of postdoctoral experience and be committed to develop or continue a first-rate active research program. Primary teaching responsibilities are in physiology in the School of Medicine and/or in physiology and biophysics in the Biomedical Sciences Ph.D. Program. Compensation commensurate with professional experience and standards of WSU.

Applicants should submit curriculum vitae, the names and addresses of three references, and a statement on present and future research support and interest to: **Dr. Peter K. Lauf, Chairman-Designate, Department of Physiology, Box 927, Wright State University School of Medicine, Dayton, Ohio 45401.** Applications must be received by 15 June 1985 to be considered. *Wright State University is an Equal Opportunity/Affirmative Action Employer.*

Full-time FACULTY POSITION IN CHEMISTRY AND MARINE SCIENCES. Assistant professor level. Starting date: 1 September 1985. Teaching undergraduate introductory college chemistry and introductory marine sciences as well as marine science electives.

Qualifications: Master's degree in chemistry or marine science required; Ph.D. in chemistry or marine sciences, college teaching experience, and boat handling experience preferred. Application deadline: 3 May. Apply to: **Dr. Verge Forbes, Academic Dean, Maine Maritime Academy, Castine, Maine 04420-3200.** *An Equal Opportunity Employer.*

FACULTY POSITION. Assistant professor available 1 September 1985 in University integrated Medical Technology Program. Applicants should possess earned doctorate in immunology or related sciences (master's with outstanding credentials will be considered), and have teaching, research, and clinical laboratory experience. Certification as a clinical laboratory scientist (medical technologist) is strongly preferred; would consider special certification in immunology. Responsibilities include research and teaching at both B.S. and M.S. levels. Submit curriculum vitae, graduate transcripts, publications, and three professional references by 1 June 1985 to: **Loretta Sabol, Secretary of the Search, 104 Pennsylvania Hall, University of Pittsburgh, Pittsburgh, Pa. 15261.** *Affirmative Action/Equal Opportunity Employer.*

Pharmacologist (Japan)

Position is located in the new Pharmaceutical Research Center of Bayer AG in Tokyo or Osaka, Japan. This person will evaluate the physiological effects, determine the pharmacokinetics, and demonstrate the absence of adverse physiological effects of cardiovascular ethical pharmaceutical products.

Requires MD or PhD with a background in pharmacology, physiology or related field with exposure to cardiovascular pharmacology. We require a person with Japanese language capability who wishes to permanently relocate to Japan.

Initial evaluation of candidates will be performed in Berkeley, CA. Please send your curriculum vitae, or call TOLL FREE to briefly discuss the position, within California (800) 227-3219; outside California (800) 227-2720; to: **Dean Gallinatti, Cutter Group, Miles Laboratories, Inc., P.O. Box 1986, Berkeley, CA 94701.** Equal opportunity affirmative action employer.

Cutter

CUTTER Group
Miles Laboratories

RESEARCH POSITIONS

ENZO BIOCHEM, INC., a dynamic company working in areas of biomedical research and development, is offering research positions to persons with proven competence in recombinant DNA, immunochemistry and polymer chemistry.

- **RECOMBINANT DNA**
Competence in recombinant DNA techniques. Experience in bacteriology would be helpful.
- **POLYMER CHEMIST**
Demonstrated expertise in polymer chemistry. A familiarity with biological systems is useful but not essential.
- **IMMUNOCHEMIST**
Experience in novel immunodetection techniques.
- **CELL BIOLOGIST**
Development of *in situ* virus detection and gene expression assays. Expertise in cell culture and histochemical methods would be extremely helpful.

In all disciplines the persons sought must have a Ph.D. degree or equivalent and must be able to demonstrate scholarly and creative competence in their respective areas of specialization.

We offer liberal employment terms and a pleasant working environment.



Please send a resume to:

Personnel Department PO-3
Enzo Biochem, Inc.
325 Hudson Street
New York, N.Y. 10013

GROUP LEADER, RESPIRATORY PHARMACOLOGY

William H. Rorer, Inc., the U.S. pharmaceutical subsidiary of Rorer Group Inc., has an immediate career opportunity for a person with experience in respiratory/pulmonary pharmacology. This newly created position is due to our ever increasing commitment and expansion of our research and development effort.

Primary responsibilities will involve the establishment of appropriate test systems for development of drugs to be used in the treatment of a variety of respiratory diseases. Ideal candidate will possess a PhD with 1-5 years experience in both in vivo and in vitro studies related to respiratory mechanics and pulmonary function. Must have a proven record of technical supervision, communication and interpersonal skills.

Our research facilities are located in an attractive suburban area of Philadelphia. In addition to potential for continued professional growth, we offer an excellent salary and full benefits package. Qualified candidates are invited to write, in confidence, indicating background and salary requirements to KEITH I. JONES.

William H. Rorer, Inc.
500 Virginia Drive
Fort Washington, PA 19034

An Equal Opportunity Employer, M/F



Postdoctoral Fellow SK & F-Investigative Toxicology

The Department of Investigative Toxicology at Smith Kline & French Laboratories is seeking a postdoctoral scientist to work with Dr. Jerry B. Hook in investigating basic mechanisms of renal toxicity. The specific areas of research would include: relationship of drug metabolism to renal toxicity, mechanisms mediating cell specific toxicity within the nephron and the influence of aging on susceptibility to drug-induced renal toxicity. The successful candidate will be expected to publish work in leading scientific journals, present research at local and national meetings and interact and collaborate with other members of the department.

The successful candidate will have:

- a Ph.D. in Pharmacology/Toxicology, Biochemistry, Physiology or related field.
- a growing publication record.
- demonstrated experience in the area(s) of interest.

Our postdoctoral appointments are of 1 year duration and with mutual agreement, renewable for a second year. We offer excellent compensation and benefits and an attractive relocation policy. For confidential consideration, send your CV and names of 3 references to: Mr. Walter B. Flagg, Senior Employment Consultant, 1564 Spring Garden Street, Philadelphia, PA 19101. We are an Equal Opportunity Employer, M/F/H/V.

SK&F
A SmithKline Beckman Company

Collaborative Research, Inc., the respected pioneer of the biotechnology industry, has 2 openings for qualified scientists:

Protein Biochemist

Responsibilities will include development and scale up of purification processes for pharmaceutical proteins, characterization of natural and recombinant-derived proteins, and identification and characterization of novel proteins as potential products. Will interact with research and production groups at CRI. The qualified candidate will possess extensive experience in protein purification, protein/glycoprotein characterization and enzymology. A PhD in Biochemistry or related field and 1-3 years of postdoctoral experience is essential.

Cell Biologist

Responsibilities will involve work in fermentation of mammalian cell cultures producing natural biologicals and recombinant DNA products. A PhD in the Biosciences, 1-3 years postdoctoral training and tissue culture experience are requirements for this position.

Please submit resume to Linda K. Pine, Director of Human Resources.

COLLABORATIVE RESEARCH, INC.

128 Spring Street
Lexington MA 02173
an equal opportunity employer

DNAX Research Institute

Cellular Immunologist/ Cell Biologist

DNAX Research Institute is seeking a senior scientist who will be responsible for directing research programs in immunology and cell biology, involving a major individual research effort as well as project team-related research that includes supervision of other senior scientists and postdoctoral fellows.

Candidates will have approximately ten or more postdoctoral years of increasing responsibility and success in basic independent research in immunology or cell biology. They will be interested in and capable of exploring function of cells of the immune system through sound biochemical and physiological approaches in interaction with first-rate molecular biologists. Ideally, their experience and interests will mesh with ongoing collaborative programs in T-cell molecular biology and isotype regulation. Strong organizational and leadership skills are essential, as are the personal qualities necessary in an academic type of research environment.

DNAX Research Institute, owned and totally supported by Schering Plough Corporation, is located near Stanford University, and has established strong basic research programs combining recent advances in immunology and molecular biology. DNAX conducts its research in an open, academic-like environment, offering its scientists opportunities for frequent interaction with members of its distinguished scientific advisory board and other scientists at universities around the world.

DNAX has an excellent compensation and benefits package. Interested candidates should send a CV, representative publications, a statement of research interests, and the names of three references to: Human Resources Department, DNAX Research Institute, 1450 Page Mill Road, Palo Alto, CA 94304. An equal opportunity employer m/f/h.

POSITIONS OPEN

FACULTY POSITION IN INSECT PHYSIOLOGY

Tenure track (open all levels) for Ph.D. with post-doctoral experience in an appropriate field and demonstrated competence in research. Commitment to excellence in teaching insect physiology and an advanced course in a specialty area. Closing date: 1 June or until position filled. Submit curriculum vitae, transcripts, statement of research objectives and teaching interests, and names of five references to: Professor William S. Bowers, The University of Arizona, Department of Entomology, Tucson, Ariz. 85721.

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

FACULTY POSITION open for a clinical and basic science investigator with strong interest in basic science research. Medical degree; Board-certification preferred. Appointment and salary in Department of Microbiology, with joint appointment in a clinical department. Rank and salary based on qualifications and experience. Clinical and basic studies of host defense mechanisms against microorganisms and cancer. Teaching of medical and graduate students. Send curriculum vitae and names of three references to: Dr. L. J. Olson, Department of Microbiology, University of Texas Medical Branch, Galveston, Texas 77550. An Equal Opportunity/Affirmative Action Employer.

HEAD—DEPARTMENT OF FORESTRY AND NATURAL RESOURCES PURDUE UNIVERSITY

Applications or nominations are invited for the position of professor and head. Candidates must have a Ph.D. in a natural resource discipline, a record of scholarly endeavor, an understanding of research, teaching, and extension, and an appreciation of the challenges and opportunities associated with attracting extramural funds for program support. Demonstration of administrative potential is desirable. Applications, including curriculum vitae and names of three references or nominations, should be sent by 31 May 1985 to: Dean B. J. Liska, Agricultural Administration Building, Purdue University, West Lafayette, Indiana 47907; telephone: 317-494-8394. Purdue University is an Equal Opportunity/Affirmative Action Employer.

HISTOLOGY/ANATOMY

Tenure-track assistant professor to support expanding program in ENVIRONMENTAL AND EVOLUTIONARY BIOLOGY. Duties include teaching histology and general biology in alternating sequence and advising premedical students; potential to develop graduate course in specialty. Successful candidate will be expected to develop active research program, pursue extramural funding, and supervise M.S. and Ph.D. students. Excellent facilities for light and electron microscopy. Starting date August 1985. For initial consideration, application should be received by 12 May 1985. Send letter of application, statement of research goals, curriculum vitae, reprints, and three letters of reference to: **Histology Search Committee, Department of Biology, University of Southwestern Louisiana, Lafayette, La. 70504.**

MOLECULAR BIOLOGIST

The Department of Pathology at the University of Pittsburgh is seeking a molecular biologist with interest and experience in recombinant DNA and cell-transformation methodology for a full-time, tenure-track position at a level commensurate with the candidate's experience. We are looking for a molecular biologist to complement our existing strengths in rat genetics and immunobiology, tissue transplantation, and experimental carcinogenesis. The successful applicant should be able to carry out independent research in one or more of these areas and to interact with our established research groups.

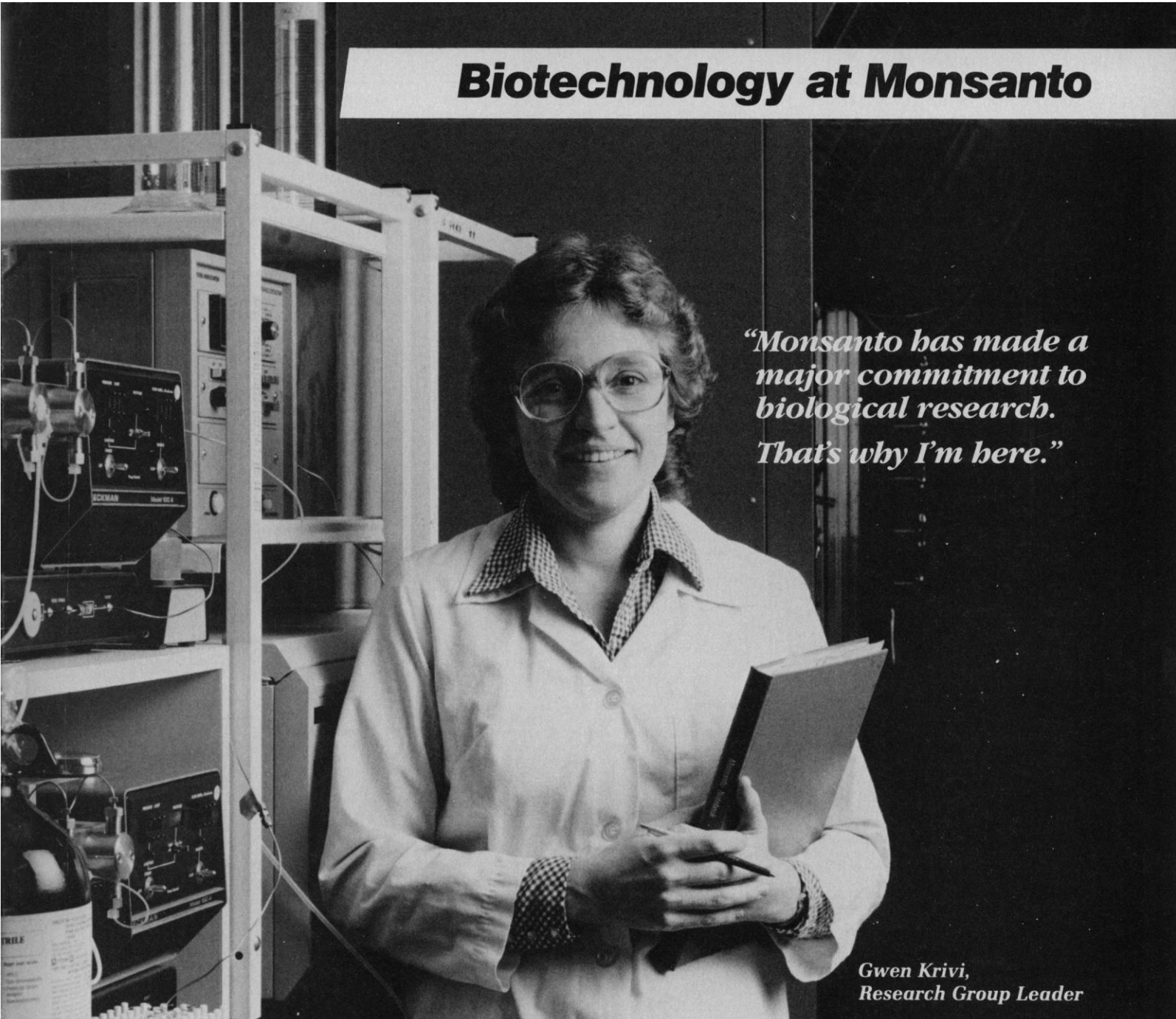
Submit curriculum vitae, the names of three references, and a description of your future research plans to:

University of Pittsburgh
School of Medicine
Department of Pathology
Administrative Office
776 Scaife Hall
Pittsburgh, Pa. 15216
Attention: A. Roman-Koller

Closing date: 15 May 1985.

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

Biotechnology at Monsanto



"Monsanto has made a major commitment to biological research. That's why I'm here."

*Gwen Krivi,
Research Group Leader*

Making proteins which improve the efficiency of animal production through recombinant DNA technology is now scientific fact. And no one knows that better than Gwen Krivi.

Through her research in protein structure and function at Monsanto, she is contributing to the development of methionyl bovine somatotropin (MBS) as a new product to increase milk production in dairy cows.

And to support vital research like Gwen's, Monsanto has made a major, long-term commitment to all phases of biotechnology: molecular biology, genetics, cell biology, biochemistry, im-

munology, fermentation and bioseparation. That commitment is reflected best by the caliber of scientific publications coming from Monsanto in biology and biochemistry.

If all this sounds like the kind of work and kind of place for you, consider a future in biotechnology research with Monsanto. You'll work in the new \$150 million Life Sciences Research Center, which includes 250 laboratories, 123 plant growth chambers, state-of-the-art equipment, and a massive computer complex. And you'll discover a rich opportunity to advance the

field of biotechnology, while you advance your career.

So make it a point to explore the opportunities at Monsanto, and find out what the future holds for you. For more information, write John Bussen at the Life Sciences Research Center.

Monsanto

Box JBS
Mail Code BB5D
Monsanto Company
700 Chesterfield Village Parkway
St. Louis, MO 63198

An Equal Opportunity Employer M/F/H/V

POSITIONS OPEN

INSTRUCTOR OF HUMAN ANATOMY

Texas Chiropractic College is seeking a qualified individual to serve as the primary instructor in the college's dissection laboratories. Applicants must possess a Ph.D. or master's degree. Experience in teaching and cadaver dissection is preferred. Interested persons are invited to respond in writing to:

Dr. D. D. Malik
Acting Dean, Basic Sciences
Texas Chiropractic College
5912 Spencer Highway
Pasadena, Texas 77505

All applications should include current résumé, names, addresses, and telephone numbers of three references, and pre-professional and professional level transcripts.

Texas Chiropractic College is an Equal Opportunity/Affirmative Action Institution.

MASS SPECTROMETRIST. The Department of Chemistry of The Johns Hopkins University has an opening, effective 1 July 1985, for a M.S./B.S.-level graduate with work and/or research experience operating and maintaining a high-resolution mass spectrometer. Knowledge of chemistry and electronics is essential. Responsibilities will also include advising researchers, aiding in experiment design, interpretation of data, and scheduling. Submit current résumé, transcripts, and the names of two of four references to: **Professor Douglas Poland, The Department of Chemistry, The Johns Hopkins University, Charles and 34th Streets, Baltimore, Maryland 21218.**

MEDICAL MICROBIOLOGIST— ASSISTANT PROFESSOR

Two-year renewable term, faculty position beginning fall 1985. The successful applicant must have a Ph.D. or equivalent degree and will be expected to teach microbiology for nurses and physicians assistants, clinical and pathogenic microbiology for advanced undergraduates, and at graduate level in his/her area of expertise. Active research program is required. Preference will be given to applicants whose research utilizes molecular approaches to study medically relevant microorganism and/or recombinant DNA techniques and whose training facilitates effective teaching of modern clinical microbiology laboratory procedures. Send curriculum vitae, statement of research plans, and three references by 1 May 1985 or until position is filled to: **Dr. Richard W. Phippen, Chairperson, Department of Biology and Biomedical Sciences, Western Michigan University, Kalamazoo, Mich. 49008; telephone: 616-383-1674. The University is an Equal Opportunity/Affirmative Action Employer.**

MICROCHEMICAL FACILITY SUPERVISOR

The University of Tennessee, Knoxville, is seeking a supervisor for the central microchemical facility operated by the Biology Consortium. Preference will be given to candidates who have a strong background in the operation and maintenance of biomedical instrumentation as well as computer experience. A working knowledge of peptide and oligonucleotide chemistry is desirable. Applicants should have at least an M.S. degree or equivalent experience in a chemical or biological science.

Duties include facility operations management and support staff supervision. The facility is primarily service oriented but some training and research activities are possible. Instrumentation includes: automated peptide and oligonucleotide synthesizers, protein sequencer, amino acid analyzer, programmable HPLC and atomic absorption spectrometer.

This is a professional nontenure-track position to begin on or before 1 July 1985. Salary: DOE. Send résumé by 15 May 1985 to: **Dr. Wesley D. Wicks, Biology Consortium, WLS M303, University of Tennessee, Knoxville, Tenn. 37996. Equal Opportunity/Affirmative Action Employer.**

MOLECULAR BIOLOGIST

Tenure-track position at the assistant professor level for a molecular biologist. Applicant must have at least 2 years of postdoctoral experience and demonstrated accomplishment in eukaryote gene expression studies. Expertise in recombinant DNA technology essential. Ph.D. or M.D. Send curriculum vitae, a statement of research interest, and the names and addresses of three references to: **Dr. Jeffrey L. Schwartz, Department of Radiation Oncology, Biological Sciences Division, The University of Chicago, Box 440, 5841 South Maryland Avenue, Chicago, Ill. 60637. An Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

MOLECULAR BIOLOGY OR PHYSICAL BIOCHEMISTRY—Our laboratory is investigating the structure and biology of coagulation proteins and plasma fibronectin. Postdoctoral positions (M.D. or Ph.D.) are available for individuals with a background in either (i) molecular biology and protein purification or (ii) physical biochemistry, preferably involving protein structure, conformation, and assembly. This is a challenging research opportunity in a programmatic setting with potential for advancement to faculty rank (University of Wisconsin Medical School). Salary negotiable. Send curriculum vitae plus statement of background, goals, and research interests to: **Dr. Michael W. Mosesson, Department of Medicine, Mount Sinai Medical Center, 950 North 12 Street, Milwaukee, Wisconsin 53233.**

MOLECULAR BIOLOGIST

A research position is available beginning 1 July 1985 for a Ph.D. or D.V.M. with at least 2 years of relevant experience to study the biology and molecular aspects of genetic variation in influenza viruses. Appointment level will be commensurate with training and experience. Experience in small and large animal studies and biological aspects of virus pathogenesis is highly desirable. The applicant should also have experience in monoclonal antibody preparation, DNA sequence analysis, and DNA recombinant methodologies. The successful applicant will be a member of a research group studying the molecular and biological aspects of genetic variation in influenza viruses. Please send curriculum vitae and the names of three references to: **Dr. Robert G. Webster, Department of Virology and Molecular Biology, St. Jude Children's Research Hospital, P.O. Box 318, Memphis, Tennessee 38101.**

An Equal Opportunity/Affirmative Action Employer

NEUROPHYSIOLOGIST. Senior research scientist committed to the supervision of research personnel and everyday running of research projects at the Microsurgical Research Center, including regeneration of mammalian spinal cord and peripheral nervous system. Prior postdoctoral experience in structure-function relationships underlying sensory coding, intra- and extracellular recordings, morphological (LM/EM) and histochemical (single-cell HRP) techniques. Applicants should be experienced in writing grant applications and research papers. Preferred: background in neurophysiology, cutaneous mechanoreception, neuroanatomy (LM/EM), histochemistry. Experience with small computers and animal surgery desirable. Academic rank commensurate with background.

Send curriculum vitae, brief description of research experience, and names of three references to:

**Microsurgical Research Center
Eastern Virginia Medical School
Eastern Virginia Medical Authority
P.O. Box 1980
Norfolk, Va. 23501**

Affirmative Action/Equal Opportunity Employer

PHYSIOLOGIST CELL BIOLOGIST/PHARMACOLOGIST RESEARCH ASSOCIATE OR POSTDOCTORAL FELLOWSHIP

Positions available for scientists to apply appropriate background and skills to study receptors for vasoactive agents, microvascular contractile responsiveness, and autoregulation of blood flow in the optic nerve and retina in reference to pathophysiology of glaucoma—as studied in experimental animals, cultured vascular cells (especially pericytes) and tissue samples. Collaboration/supervision by Douglas R. Anderson (ophthalmologist) and Lincoln Potter (pharmacologist). Send statement of background, curriculum vitae, address, and telephone number to: **Douglas R. Anderson, M.D., Bascom Palmer Eye Institute, University of Miami School of Medicine, P.O. Box 016880, Miami, Florida 33101; or telephone: 305-326-6146, for further information.**

VIROLOGIST

A research position is available beginning 1 July 1985 for a Ph.D. with at least 2 years of postdoctoral experience in work with a group of investigators studying the molecular biological aspects of genetic variation in influenza viruses. Appointment level will be commensurate with training and experience. Please send curriculum vitae and the names of three references to: **Dr. Robert G. Webster, Department of Virology and Molecular Biology, St. Jude Children's Research Hospital, P.O. Box 318, Memphis, Tennessee 38101.**

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

MONELL CHEMICAL SENSES CENTER and THE UNIVERSITY OF PENNSYLVANIA

An individual is being sought to head a major research effort in the NEUROSCIENCES as related to the chemical senses. The successful applicant should have a well-established reputation for research in some aspect of neuroscience and be interested in carrying out research relevant to the chemical senses. Preference will be given to individuals with backgrounds in molecular or cellular neuroscience, but applications from outstanding candidates in any area related to the chemical senses will be welcome. The individual will be appointed a full member of the Monell Chemical Senses Center. Also, he/she will hold a tenured position in an appropriate basic science and/or clinical department at the University of Pennsylvania. He or she will also have full membership in the David Mahoney Institute of Neurological Sciences. Renovated laboratory space in the Monell Building totaling 6,000 net sq. ft. and substantial start-up and operating funds will be available. The program may ultimately involve four to six additional scientists who will be recruited to the Monell Chemical Senses Center and the University of Pennsylvania. Inquiries should include curriculum vitae, list of publications, the names of three appropriate references, reprints or preprints of selected papers, and a brief statement summarizing career goals and accomplishments. It should be sent by 1 June to: **Chairman, Neuroscience Search Committee, Monell Chemical Senses Center, 3500 Market Street, Philadelphia, Pa. 19104. Applications from females and members of minority groups are especially encouraged. The University of Pennsylvania and the Monell Chemical Senses Center are Equal Opportunity/Affirmative Action Employers.**

PHARMACOLOGIST—Multiyear, renewable contract position available for Ph.D., D.O., or M.D. to perform RESEARCH, seek outside support and teach part of medical pharmacology course to medical students. New modern laboratories are available for qualified person with track record and publications. Salary, length of renewable contract, and academic rank commensurate with qualifications. Interested candidates should send curriculum vitae and all supportive evidence (current grant support and grant track record and teaching experience) to: **Search Committee, Dr. Arnold L. Nagler, Associate Dean, Preclinical Medical Education, New York College of Osteopathic Medicine, Old Westbury, New York 11568.**

POSTDOCTORAL POSITION available to study Ca^{2+} channel ligand interactions and regulation in smooth and cardiac muscle. Recent Ph.D. and background in radioligand-binding techniques desirable. Send résumé and names of three references to: **David J. Trigg, Department of Biochemical Pharmacology, School of Pharmacy, State University of New York, Buffalo, N.Y. 14260. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available to study chemotaxis and bactericidal activity of macrophages. Experiments use cytophotometry and computerized image analysis techniques. Experience in these areas of research or related fields of immunology or biophysics desirable. Submit curriculum vitae and three references to: **Dr. Elliot Goldstein, Department of Medicine, University of California, Davis School of Medicine, Davis, California 95616. The University of California is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION to study receptors and their role in the mechanism of steroid hormone action. Research involves biochemical and immunological analyses of receptor structure, phosphorylation, and activity. Candidates should have a Ph.D. or M.D. with some background in protein biochemistry. Submit curriculum vitae and names of three references to: **Dr. David Toft, Department of Cell Biology, Mayo Clinic, Rochester, Minn. 55905. The Mayo Clinic is an Equal Opportunity/Affirmative Action Institution.**

POSTDOCTORAL POSITION to study transmembrane signaling by peptide hormones, particularly, purification of the receptor for growth hormone, growth hormone-induced phosphorylation and regulation of conversion between conformational states of the insulin receptor. Send curriculum vitae and names of three references to: **Dr. David B. Donner, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, N.Y. 10021.**

Plant Biologists

United AgriSeeds has opportunities for researchers with training and experience in plant biology — including genetics, cell biology, and tissue culture. You will have the chance to be part of a program that totally integrates crop improvement research from whole-plant breeding to molecular biology.

United AgriSeeds has a commitment to apply state-of-the-art knowledge in plant biology to crop improvement. We have profitable marketing divisions in corn, soybeans, and wheat, established whole-plant breeding programs, financial strength, and a commitment to become a leading developer and supplier of crop seed in the United States.

If you would like more information on United AgriSeeds' program of applying advanced biotechnology to crop improvement, contact Manager, Research Administration, United AgriSeeds, P.O. Box 4011, Champaign, Illinois 61820.



An Equal Opportunity Employer

VANCOUVER GENERAL HOSPITAL

Ph.D IMMUNOLOGIST

A full time position for a laboratory scientist is available in the Immunology Laboratory, Division of Hematopathology, Vancouver General Hospital. Applicants must have a Ph.D in Immunology or a related field. Preference will be given to those with two years post doctoral research training (or equivalent) in cellular, molecular, or tissue immunology. The Immunology Laboratory provides diagnostic support for renal and bone marrow transplant units, a cell separator unit, performs cell markers by flow cytometry and is the sole HLA typing facility for the Province.

The duties under the Program Director will include test development, quality assurance and active participation in research and education programs. An appointment at an appropriate rank in the Department of Pathology, The University of British Columbia is available.

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

Send Curriculum Vitae, research synopsis and the names of 3 referees in confidence to: G.R. Gray, MD, FRCPC, Head, Division of Hematopathology, Department of Pathology.



VANCOUVER GENERAL HOSPITAL

855 - West 12th Avenue
Vancouver, B.C., Canada V5Z 1M9

Gastrointestinal Research Scientist

G.D. Searle Research and Development Division has an excellent career opportunity for an experienced Gastrointestinal Pharmacologist/Physiologist. The successful candidate will have a Ph.D. in Pharmacology/Physiology, 2 years post-doctoral training and 2-4 years industrial experience. Primary responsibilities include designing and conducting studies using established and new animals models to identify potentially useful agents for treating gastrointestinal disorders. Superior writing and verbal communication skills, as well as prior supervisory responsibility, are required.

Searle R&D is located in north suburban Chicago. We offer excellent compensation, comprehensive benefits and relocation assistance. For prompt, confidential consideration, send your detailed resume to:

Sheila Copeland #7CB-9
Sr. Employment Counselor
Searle R&D Division
4901 Searle Parkway
Skokie, IL 60077

Equal Opportunity
Employer M/F/H

SEARLE

MICROBIAL TAXONOMIST

WARNER-LAMBERT/PARKE-DAVIS, a world leader in pharmaceutical research has an opening in our Antibiotics and Chemotherapy Department at the Scientist/Senior Scientist level. This position is located in Ann Arbor, Michigan at our modern facilities, adjacent to the University of Michigan campus, which are exclusively devoted to the discovery and development of drugs.

The successful candidate will be responsible for supervising and carrying out the general functions in the culture lab which include: isolation, characterization, preservation and culture development for improved antibiotic production.

Requirements for this position include a MS/Ph.D. in microbiology with specialization in soil microbiology, actinomycetology or taxonomy. At least five years' experience or training in culture isolation and characterization is preferred.

Qualified candidates may send resume and salary requirements in confidence to: **Rose A. Chapman, Human Resources Supervisor, WARNER-LAMBERT/PARKE-DAVIS, Pharmaceutical Research Division, 2800 Plymouth Road, Ann Arbor, Michigan 48105.** An Equal Opportunity Employer M/F/H.

WARNER LAMBERT



The International Atomic Energy Agency is seeking a **Head for its Laboratory at Seibersdorf**, near Vienna. The tasks of the laboratories are:

- Development and demonstration of applications of radioisotope and radiation techniques.
- Transfer of these techniques to scientists from developing countries by in-house training and formal courses.
- Chemical and isotopic analysis of nuclear fuel samples collected by the Agency's safeguards inspectors.

The laboratory is located partly on a self-contained site, partly on the site of the adjacent Austrian Research Centre. Duties of the Head include administration of the laboratory, coordination of its scientific and training activities, and liaison with ARC. Required Ph.D. or equivalent in physics, chemistry or biology with at least 15 years relevant scientific experience with at least 10 years in a senior management position.

Initial contract for two years, tax-free emoluments approx. \$45,000 per annum. Additional allowances for dependents. Travel and removal expenses paid. Six weeks annual leave.

Send Curriculum Vitae with an indication of your nationality under Vacancy Notice No. 85/05 to the Division of Personnel, International Atomic Energy Agency, P.O. Box 100, A-1400 Vienna, Austria.



The International Atomic Energy Agency seeks for the International Laboratory of Marine Radioactivity, located in the Principality of Monaco, a

MARINE ORGANIC CHEMIST

to guide the Laboratory's Organic Chemistry Unit which is engaged in interdisciplinary research and monitoring programmes in the marine environment. Required university degree or equivalent in Marine Science, with both field and laboratory experience. The candidate should have a comprehensive knowledge and experience in trace analysis of organic pollutants in the marine environment including the use of analytical tools such as high resolution gas chromatograph, HPLC, fluorescence spectrometer, etc. 6 years relevant experience required. Initial contract for two years, tax-free emoluments approx. \$28,000 per annum depending on experience and qualifications. Additional allowances for dependents. Travel and removal expenses paid. Six weeks annual leave.

Send curriculum vitae with an indication of your nationality under Vacancy Notice No. 96/84 to Division of Personnel, International Atomic Energy Agency, P.O. Box 100, A-1400 Vienna, Austria.

POSITIONS OPEN

POSTDOCTORAL POSITIONS AVAILABLE IN COAGULATION RESEARCH

Protein Biochemistry: Isolation and characterization of previously undescribed human plasma coagulation inhibitors.

Cell Biology: Synthesis, intracellular storage, and plasma membrane insertion of human tissue factor apoprotein.

Recombinant DNA Technology: Isolation of cDNA's and delineation of gene structures of the proteins mentioned above and other coagulation proteins.

Ph.D. and M.D. candidates accepted. Work will be performed in a new, 1100 sq. ft. laboratory with access to all appropriate equipment and facilities. Salaries from \$17,500, depending upon experience. Curriculum vitae, one letter of reference, and names of two additional references should be sent to: **Drs. G. Broze and J. Miletich, Division of Hematology/Oncology, Box 14109, Washington University School of Medicine, St. Louis, Mo. 63178.**

TRAINING OPPORTUNITY

Postdoctoral position supported through NIH training grant stipend available immediately for qualified M.D., or Ph.D. with a primary interest in transplantation immunobiology (islet cells) and autoimmune endocrine diseases, with an emphasis on diabetes.

Multidisciplinary research training is available in the Departments of Medicine, Immunobiology, and Surgery. Contact: **Daniel H. Mintz, M.D., Program Director; telephone: 305-547-6657, for further information.** Curriculum vitae and three letters of recommendation are required.

POSTDOCTORAL POSITIONS (two) available immediately in the following areas:

- 1) A. E. Brown—Molecular basis for herbicide resistance in photosynthetic bacteria.
- 2) D. M. Bisaro—Geminivirus gene expression in transformed plants.

Preference will be given to candidates with experience in molecular genetics and recombinant DNA technology. Send curriculum vitae and names of references to appropriate faculty member, **Department of Botany, Plant Pathology and Microbiology, Auburn University, Auburn, Ala. 36849.**

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL RESEARCH ASSOCIATE

Biochemistry Ph.D. to work in tumor biology laboratory on biochemical aspects of tumor metastasis. NIH-funded research. Technical facility and experience with electrophoresis are essential. Up to 2 years of relevant postdoctoral experience an advantage. Opportunities for collaboration in molecular immunology and molecular genetics are excellent. Nearby outdoor recreational opportunities are outstanding (Yellowstone National Park is 90 miles away). Salary competitive and commensurate with experience. Please send curriculum vitae and three letters of reference to: **Dr. Jean Starkey, Microbiology Department, Lewis Hall, Montana State University (MSU), Bozeman, Mont. 59717. MSU is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL—RESEARCH ASSOCIATE. Available in July for studies on nuclear structure and function. Project area concerns primary transcripts, heterogeneous nuclear RNA, small nuclear RNA. Background in biochemistry and molecular biology is essential. Training in DNA recombinant technology is desirable. Applicant will join an active research program in recombinant DNA technology. Send curriculum vitae and letters of reference to: **Dr. Oscar Pogo, Head, Department of Cell Biology, Kimball Research Institute, New York Blood Center, 310 East 67 Street, New York, N.Y. 10021. Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE PLANT PROTOPLASTS

Position available immediately, to perform protoplast isolation, culture, and fusion experiments with selected red seaweeds. Broad experience in protoplast, cell and tissue culture techniques in either land plants or algae necessary. Ph.D. and/or broad training in plant physiology/molecular biology preferred. Experience or interest in algal physiology desirable but not necessary. Salary range: \$18,000 to \$20,000. Send résumé and list of references by 15 May 1985 to: **Donald Cheney, Biology Department, Northeastern University, Boston, Mass. 02115. Northeastern is an Equal Opportunity/Affirmative Action/Title IX Employer.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE. Position is available to study the neuroanatomical bases of circadian rhythmicity. The project is a collaborative effort between the laboratories of Drs. R. Y. Moore and L. P. Morin. Salary range is \$15,000 to \$16,000. Send curriculum vitae and names of three references to: **Dr. L. P. Morin, Department of Psychiatry, HSC T-10, State University of New York (SUNY) at Stony Brook, Stony Brook, N.Y. 11794-8101. SUNY, Stony Brook, is an Affirmative Action/Equal Opportunity Educator and Employer. AK Number 67-85.**

POSTDOCTORAL RESEARCH POSITION is available in molecular parasitology to study developmentally regulated proteins of the protozoan parasite Plasmodia. Strong background in recombinant DNA technology required. Starting salary: \$20,000 to \$25,000 based on experience. Position available now. Applicants should send curriculum vitae and the names and addresses of three references to: **Dr. Donald F. H. Wallach, Director of Radiobiology Division, Tufts-New England Medical Center, 171 Harrison Avenue, Box 824, Boston, Mass. 02111. Tufts-New England Medical Center is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL SCIENTISTS. Two positions are available in The Behavioral Medicine Laboratory of our Department of Cardiopulmonary Diseases. The program provides postdoctoral research training and experience for graduates from biobehavioral, biomedical, and veterinary sciences. These positions provide an opportunity to acquire essential skills in several aspects of quantitative behavioral medicine as it applies to atherosclerosis research in socially living nonhuman primates. The annual stipends include provisions for previous years of postdoctoral experience. Interested candidates should respond to: **Personnel Manager, Southwest Foundation for Biomedical Research, P.O. Box 28147, San Antonio, Texas 78284.** Please include curriculum vitae and three references, including supervisory professor. *An Equal Opportunity/Affirmative Action Employer*

RADIOPHARMACOLOGIST/RADIOCHEMIST

The Department of Radiology at the University Hospitals of Cleveland/Case Western Reserve University School of Medicine is seeking a radiochemist (Ph.D.) to head the Section of Radiochemistry for the PETT Facility. Individual must have experience and have done research in radiochemistry, PETT radiopharmaceuticals, and related areas. The duties involve research and the production and processing of radionuclides with emphasis on PETT radiopharmaceuticals. Salary negotiable. *University Hospitals of Cleveland/Case Western Reserve University are Equal Opportunity Employers.* Please send curriculum vitae to: **Dr. Floro Miraldi, Department of Radiology, University Hospitals of Cleveland, 2074 Abington Road, Cleveland, Ohio 44106.**

RESEARCH ASSOCIATE IN ORGANIC CHEMISTRY. Milligram scale synthesis of nitroxides and their applications in biological studies. Job requires a Ph.D. in organic chemistry, synthesis of stable nitroxides, and familiarity with vesicle chemistry. Fluency with ESR, NMR, IR, and UV as well as HPLC is essential. Job involves some instructional responsibility for undergraduate laboratory students. Salary commensurate with qualifications. Send résumé and three letters of recommendation to: **Professor John F. W. Keana, Department of Chemistry, University of Oregon, Eugene, Oregon 97403.** Closing date: 20 May 1985. *An Equal Opportunity/Affirmative Action Employer.*

FLATHEAD LAKE BIOLOGICAL STATION UNIVERSITY OF MONTANA

SYSTEMS ANALYST: A postdoctoral position (Ph.D. required) to develop a simulation model for the purpose of studying effects of lake and stream regulation on nutrient dynamics and productivity of Flathead Lake. Responsibilities also include formatting and analysis of hydrologic and water quality data files. Modeling experience in limnology preferred.

This is considered a permanent, professional-staff position, but is nontenurable. Interested persons are invited to submit a letter of application, curriculum vitae (listing three references), and reprints of selected journal papers to: **Dr. Jack A. Stanford, Director, University of Montana Biological Station, Bigfork, Montana 59911, by 3 May 1985. An Equal Opportunity/Affirmative Action Employer.**

BIOTECHNOLOGY RESEARCH OPPORTUNITIES

The National Research Council is establishing a new Biotechnology Research Institute in Montreal, Canada. This new research institute emphasizes the industrial applications of biological sciences and focuses on the development of new processes and products. It fosters generic research and technology transfer to industry and promotes communication and collaboration amongst industrial, university, federal and provincial government laboratories.

The main areas of research include

- **Fermentation and biochemical and process engineering**
- **Genetic engineering**
- **Cell fusion and molecular immunology**
- **Enzyme Engineering**

A major large scale fermentation facility will allow pilot scale experimentation with new fermentation methods and economic evaluation. The R&D will focus on agrofood, energy and chemical products, pharmaceuticals, waste treatment and forestry.

RESEARCH SCIENTISTS

The Biotechnology Research Institute needs the following researchers:

- *applied microbiologists and microbial physiologists* with a strong background in fermentation and genetics;
- *molecular immunologists* with a background in monoclonal antibody techniques and immunodiagnostic assay systems;
- *bacterial geneticists* with a background in recombinant DNA and vector construction;
- *protein chemists* with a background in protein purification and sequencing, peptide synthesis, computer graphics and conformational studies of proteins; and familiar with the development of methods for the purification and characterization of proteins produced by recombinant DNA methods;

- *cell biologists* with expertise in cell fusion and/or mammalian cell culture;
- *virologists* with a background in viral enzymology, cellular and molecular biology of RNA and recombinant DNA techniques as well as experience in virus detection and handling and development of diagnostic kits.

QUALIFICATIONS

Candidates should have at least 2 years relevant post-doctoral research experience. Many of the positions are at the level of section leaders and project leaders and require additional in depth knowledge of the subject area and several years of research experience.

LOCATION

The Biotechnology Research Institute is located in downtown Montreal in a new \$60 million, 18,000m² complex. It will employ 220 people and will host up to 80 researchers from industries, universities and other research organizations. It will have an annual budget of \$35 million.

LANGUAGES

Both English and French are working languages at the new Institute.

BENEFITS are fully competitive and **SALARY** will be commensurate with qualifications and experience.

PLEASE SEND DETAILED CURRICULUM VITAE IN CONFIDENCE TO THE ADDRESS BELOW
(applications already submitted will automatically be considered).

The Employment Office
National Research Council
OTTAWA, Ontario
K1A 0R6



National Research
Council Canada

Conseil national
de recherches Canada

Canada

POSITIONS OPEN

POSTDOCTORAL/RESEARCH ASSOCIATE POSITION available immediately for a molecular biologist, biochemist, or geneticist with experience in recombinant DNA technology to study chromosomal changes during tumorigenesis. Please send curriculum vitae and names of two or three references to: **Dr. F. V. Schaefer, Chapman Research Institute of Medical Genetics, 5300 East Skelly Drive, Tulsa, Okla. 74135. An Equal Opportunity/Affirmative Action Employer.**

PROGRAMMER/ANALYST needed to coordinate development of medical computing systems. Require M.S. degree in statistics, knowledge of FORTRAN, PASCAL, PL/I on IBM, CDC computers, ability to employ statistical methods to analyze and fine tune application systems, and 6 months of experience in statistical analysis. Salary, \$2,290 per month. Contact: **Utah Job Service, 1234 South Main Street, Salt Lake City, Utah 84147; Job Order Number 11442.**

POSITIONS OPEN

RESEARCH ASSOCIATE

We invite applications for the position of research associate in a basic research laboratory. This position is university-affiliated. Applicants should have a Ph.D. degree in physiology or biochemistry and have at least ten months of postdoctoral experience. Duties would include: (i) isolation and purification of glycolipids, gangliosides, and glycoproteins; (ii) performance of gas-liquid chromatography, high performance liquid chromatography, thin-layer chromatography, and column chromatography; and (iii) carbohydrate and fatty acid analysis. There are no other special requirements. This is a full-time, 40-hour per week position (9 a.m. to 5 p.m.) and the starting salary is \$20,000 per year. Please send résumés to: **Illinois Job Service, 910 Michigan Avenue—Third Floor, Chicago, Illinois 60605, attention: Joan Sykust, Reference Number 4306-T.** An employer paid ad.

POSITIONS OPEN

NATIONAL SCIENCE FOUNDATION (NSF)

NSF, Division of Information Science and Technology, is seeking qualified applicants for the position of **PROGRAM DIRECTOR** for the Information Science Program. The position is in the excepted service and will be filled on either a permanent, rotator, or temporary basis. The per annum salary for the permanent or temporary position will be at the GG/GH-15 level, \$52,262 to \$67,940. Normally, the rotator candidate receives a leave of absence from his/her employer and salary is set in accordance with NSF's Circular Number 167, Rotator Program. The salary range for the rotator position is \$45,000 to \$70,000 (currently limited by statute to \$68,700). Responsibilities include all aspects of proposal development, review and evaluation, grants and program administration, and representation of information science within the Foundation and to the research community. Applicants should have a Ph.D. or equivalent experience in the computer or information sciences with a broad scientific knowledge of mathematical and computer techniques which support understanding of information structures and processes, representation, artificial intelligence, data bases, retrieval, and similar research areas. In addition, 6 to 8 years of successful scientific research experience beyond the Ph.D. is desired. A broad, general understanding of current research in information science and some administrative experience is also desired. For information on how to apply, telephone: **Catherine Handle, 202-357-7840.** Hearing impaired individuals should telephone: **202-357-7492.** For technical information, telephone: **Dr. Charles N. Brownstein, 202-357-9572.** NSF is an Equal Opportunity Employer.

SCIENTISTS/CHEMISTS

PPG Industries, Chemicals Group, has positions available at its Barberton, Ohio Research Center due to new business expansions and continuing growth in existing businesses for those scientists/chemists who possess the appropriate educational background and proven leadership skills in the following research areas:

PLANT METABOLISM SCIENTIST

Opening for a PhD in Weed Science, Agronomy or Biochemistry with research experience in the conduct of pesticide metabolism studies in plants including uptake, translocation and mode of action studies. This individual will be part of an interdisciplinary research group responsible for conducting the plant metabolism studies required for E.P.A. registration of new agricultural chemicals. Research projects will also be carried out to investigate the interaction of herbicides with crops and plants. Applicant must have experience in the use of radiochemical analytical techniques and must possess excellent interpersonal and communication skills.

RESIDUE ANALYTICAL CHEMIST

Opening for an MS or PhD in Analytical Chemistry or Pesticide Chemistry with research experience (University or 1 to 4 years industrial) in pesticide residue analysis. This individual will be responsible for development and adaptation of procedures to analyze for residues of pesticides and metabolites in agricultural commodities and other samples required for pesticide registration. Must have strong background in HPLC and GC analysis with experience desirable with computer data systems, quality assurance methods and instrument maintenance and repair.

PESTICIDE ENVIRONMENTAL FATE SCIENTIST

MS or PhD in Organic, Analytical-Organic or Biochemistry to conduct studies needed to determine the environmental fate of pesticides including hydrolysis, soil metabolism, photolysis, leaching, absorption-desorption and volatility. Candidate must have experience in chromatographic methods (HPLC and TLC) and radiochemical analytical techniques. Strong background in physical organic chemistry is desirable.

For immediate consideration, please send your resume with salary requirements to:

John L. Putzier
Manager Professional Employment
and EEO Programs



PPG Industries
One PPG Place
Pittsburgh, PA 15272

An Equal Opportunity Employer M/F

RESEARCH ASSISTANT(S)

Applications are invited for two research assistant positions. First position requires experience in protein purification, enzymology, and atomic absorption spectroscopy. Second position requires familiarity with radioenzymatic assay, muscle physiography, and care of small rodents. Master's degree in natural sciences preferred for each position. Forty-hour work week. Salary: \$16,000 to \$18,000 per annum. Send résumé with two references by 15 May 1985 to: **Dr. Munir A. Rahmani, Director, MBRS Program, Bethune-Cookman College, Daytona Beach, Fla. 32015; telephone: 904-255-1401, extension 284/314.** An Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE available July 1985. A Ph.D. in cell physiology, cell biology, or biochemical pharmacology with research experience in blood platelet physiology preferred. NIH project will involve study of agonist/antagonist interactions with alpha adrenergic receptors, fibrinogen binding, intracellular calcium modulations, activation of phospholipases, and protein phosphorylations. Experience in the use of radioisotopes and chromatographic techniques essential. Send curriculum vitae and two letters of recommendation to: **Gundu H. R. Rao, Ph.D., Laboratory Medicine and Pathology, Box 198 Mayo Building, University of Minnesota, Minneapolis, Minn. 55455, by 31 May 1985.**

The University of Minnesota is an Affirmative Action Employer and specifically invites and encourages applications from women and minorities.

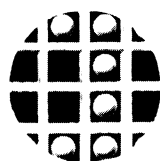
UNIVERSITY OF MINNESOTA

Senior Scientist—Fisheries
Job Requisition Number 2934

The Natural Resources Research Institute, University of Minnesota, Duluth, is seeking a **SENIOR SCIENTIST** to conduct research on **FISHERIES** in northern Minnesota. Area of expertise may be in physiology, genetics, aquaculture, ecology, or population dynamics. Postdoctoral experience preferred. Minimum qualifications: Ph.D. in fisheries or a related science. Salary: \$2,375 to \$3,680 per month; position available 15 June 1985. To receive a standard University application form, write to the address below. Send completed application form along with a letter of application, résumé, and the names and addresses of three references, postmarked by 17 May 1985, to:

Dr. Robert J. Naiman
c/o Employment Information Office
281 Darland Administration Building
University of Minnesota, Duluth
Duluth, Minn. 55812

The University of Minnesota is an Equal Opportunity Employer and Educator.



INVITRON CORPORATION

Invitron Corporation is a new independent company, headquartered in St. Louis, MO., with a leadership position in industrial scale mammalian cell culture, based upon an exclusive license of Monsanto Company proprietary technology. We are currently seeking a:

Biochemist, BS/MS level, with a strong research background to work on the development and implementation of purification techniques for monoclonal antibodies and recombinant proteins; 2-3 years experience in protein chemistry including column chromatography, HPLC, ultrafiltration, electrophoresis and immunoassay is desired.

Our comprehensive compensation/benefits package includes relocation assistance and equity participation.

Qualified applicants should send resume to:

**Dr. Randy Scott
INVITRON CORPORATION
8000 Maryland Avenue #860
Clayton, MO 63105**

Biological Regulatory Affairs

Discover a Tradition of Dedication to the Biologicals Industry

Lederle Laboratories, a leading pharmaceuticals and biologicals company, has an exciting career opportunity for a PhD to coordinate its biological regulatory affairs.

Specific duties of this position include preparing submissions to the FDA regarding biological products, reviewing and updating product files, and handling correspondence that concerns regulatory matters. The candidate we seek will have a doctorate in the biological sciences, preferably Microbiology, and will demonstrate strong oral and written communication skills.

In return, Lederle offers an excellent salary and benefits package and the opportunity to work in a highly professional environment, conveniently located in Rockland County, NY. For prompt and confidential consideration, forward a resume and salary requirement to Mr. Kevin J. Graveline, Professional Employment Coordinator.



American Cyanamid Company
Pearl River, New York 10965
An Equal Opportunity Employer m/f

Virology, Microbiology, Immunochemistry

Kallestad Laboratories, a worldwide industry leader in immunodiagnosics, is searching for bright, talented, highly motivated Ph.D. level individuals with a proven record of achievement in virology, bacterial surface antigen biochemistry, immunochemistry and immunoassay development. The following positions are currently available in Austin, Texas:

- Ph.D. in virology, microbiology, or related area with experience in antigen purification, characterization and immunological techniques. Supervisory experience is desirable.
- Ph.D. in immunochemistry with minimum 2 years experience in immunoassay development. Supervisory experience is helpful.

Successful candidates will assume direct responsibility for a highly visible and challenging position of planning and implementing specific new product research and development projects. We offer competitive salary, fringe benefits and pleasant working environment. Please send detailed resume by April 30, 1985 in complete confidence to:

**C. H. Morris, Ph.D.
Director of Research and Development
Kallestad Laboratories, Inc.
2101 East Ben White Blvd.
Austin, Texas 78741**

Kallestad
LABORATORIES, INCORPORATED

An Equal Opportunity/Affirmative Action Employer M/F

Research Positions

Synergen, Inc., a leading biotechnology company, has openings for well qualified scientists in the following areas:

Protein Chemistry/Biochemistry: Positions available for scientists interested in isolating and characterizing the properties of natural proteins and their variants, or in the large-scale isolation of proteins from recombinant organisms.

Molecular Biology: We seek scientists with expertise and experience in cloning and gene expression.

Virology: We seek molecular virologists with extensive experience in manipulating viral genomes.

SYNERGEN, located in Boulder, Colorado, offers the opportunity to pursue scientific careers in a stimulating, intellectual and physical environment. We seek recent Ph.D.'s with post-doctoral experience and more senior people interested in becoming part of a rapidly expanding science-based company. We offer competitive salaries, generous benefits and the financial stability required for future development. Please send a CV, bibliography and references to:



**Recruitment Director
1885 33rd Street
Boulder, Colorado 80301**

POSITIONS OPEN

RESEARCH ASSOCIATE to work with a small group investigating pulmonary neuroendocrine cells in vivo and vitro, currently endeavoring to classify endocrine subtypes by immunocytochemistry of secretory products and in neuro transmitters present in associated nerves, in the anatomical context of mammalian lungs. Requirements: Ph.D. or M.D. with published research in anatomy and/or cell biology. Knowledge of the peripheral nervous system and technical experience with immunocytochemistry, electron microscopy, and tissue or organ culture highly desirable. One-year appointment available immediately; future continuance depends upon availability of funds. Send résumé to: **Dr. Richard F. Hoyt, Jr., and Dr. Sergei P. Sorokim, Department of Anatomy, Boston University School of Medicine, 80 East Concord Street, Boston, Mass. 02118. An Equal Opportunity Employer, M/F.**

RESEARCH ASSOCIATE CARDIORESPIRATORY PHYSIOLOGIST

Research position in the Department of Pediatrics, University of Tennessee 37920. Possibility of adjunct appointment with sister basic science program at the main campus. Candidate must have a Ph.D. with postdoctoral experience. Experience or interest in developmental clinical or basic cardio-respiratory physiology preferred. Send curriculum vitae to: **Sachchida N. Sinha, M.D., Department of Pediatrics, University of Tennessee Memorial Research Center and Hospital, 1924 Alcoa Highway, Knoxville, Tennessee 37920. An Affirmative Action/Title IX/Section 504 Employer.**

SENIOR RESEARCH ENGINEER to work in Palo Alto. Will formulate and apply numerical methods and computer algorithms for solving large systems of equations representing dynamic response of structures. Will construct models of hardened protective structures for simulating response to shock loading. Knowledge of plasticity theory as a basis for modeling constitutive properties of rock, soil, and concrete is helpful. Require M.S. or Ph.D. in applied mechanics or related engineering field. U.S. citizenship required. Send résumé to: **Dr. Jeremy Isenberg, Weidinger Associates, 620 Hansen Way, Suite 100, Palo Alto, Calif. 94304.**

PHYSICIST—Ph.D. in Physics. Three years experience in the job offered or 3 years experience as a Researcher in atomic, molecular, or solid state physics. Knowledge of the following areas of chemical physics as evidenced by publications in refereed journals: electronic and atomic collision phenomena, electronic structure of molecules and condensed matter, as well as transport theory and kinetics. Experience should also include the use of computers. Will conduct theoretical studies aimed at the detailed elucidation of the actions of ionizing radiations on matter at the molecular level. The work will concern molecular substances of interest to radiation chemistry, biology, or dosimetry. The goal is to determine reliable cross sections for elementary processes involved, to apply them to the modeling of radiation actions, and thus to provide a sound basis for solving certain problems in radiation chemistry, biology, and dosimetry. Work includes the following activities: 1. Develop methods for critical analysis or theoretical evaluation of cross sections for important elementary processes involved in radiation actions, e.g., electron interactions with molecules. 2. Apply the cross-section data to the modeling of radiation actions. Develop methods for the modeling when necessary. 3. Evaluate implications of the results of research to both basic molecular physics and radiation science in general. Write scientific papers and reports describing the results of work for publication. 4. Participate in external activities such as lecturing, committee work, and reviewing of manuscripts for journals and of proposals for funding agencies. Salary: \$3600/mo.—40 hours per week/8:30 a.m.—5:00 p.m. Geographical area of employment: Southwest suburb of Chicago. **SEND RESUME TO: Illinois Job Service, 910 South Michigan Avenue—3rd Floor, Chicago, IL 60605, Attention: Dennis Doligala, REFERENCE #4156-D. AN EMPLOYER PAID AD.**

POSITIONS OPEN

RESEARCH ASSOCIATE IMMUNOLOGY/VIROLOGY

The Division of Hematology, Cornell Medical Center, invites applications for a postdoctoral position in a multidisciplinary research laboratory studying cellular and molecular mechanisms of infection of human immunocytes with viruses, including HTLV-III/LAV. The ideal candidate will be experienced in physicochemical characterization of proteins and investigations of transcriptional and translational regulation. The applicant must have an M.D. or Ph.D. Initial appointment is for 2 years, with the possibility of renewal. Salary dependent on qualifications and experience. Send résumé and names of two references to: **Jeffrey Laurence, M.D., Division of Hematology—Oncology, The New York Hospital—Cornell Medical Center, 525 East 68 Street, New York, N.Y. 10021.**

RESEARCH SCIENTIST II

This is a 2-year funded position for a person who will develop and/or apply pertinent ocean hydrodynamic models in connection with any one of several research programs at University of New Hampshire, including the physical oceanography of the New England Shelf/Gulf of Maine, northern California coast (CODE), Strait of Gibraltar, and the ocean component of the global carbon cycle. The successful candidate will have access to the in-house PRIME and VAX computers and an out-of-house CRAY and the opportunity to analyze existing data sets and assist in the design of future ocean experiments. Doctorate or equivalent professional degree, with research leading to doctorate degree which is closely related to project work; or master's degree and at least three years of research experience which is closely related to project work. Knowledge of computer programming and data analysis techniques, \$21,230 to \$33,000; starting salary normally not to exceed \$23,830. Send résumé directly to: **Dr. Wendell Brown, Ocean Process Analysis Laboratory, James Hall, University of New Hampshire, Durham, New Hampshire 03824, by 24 May 1985. The University of New Hampshire is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

RESEARCH ASSOCIATE to participate in the development, design, construction, commissioning, operation, and analysis of results of large high energy physics experiments, in association with other scientific/technical personnel. Ph.D. required in high energy physics. Forty hours per week; 8:30 a.m. to 5 p.m.; \$24,700 per annum. University affiliated. Résumés to: **Illinois Job Service, 910 South Michigan Avenue, Room 333, Chicago, Illinois 60605; attention: Mrs. S. Chalem, Reference Number 4300-S. An employer paid ad.**

SENIOR MEDICAL TECHNOLOGIST

The George Washington University/Medical Center is seeking an (ASCP) experienced technologist to work in our obstetrics/gynecology area of in vitro fertilization. Experience in seminology, embryology, and tissue culture is required. We offer a generous benefit package with a liberal tuition program. Send résumés to: **E. Massengale, Personnel, 2125 G Street, NW, Washington, D.C. 20052. Equal Opportunity/Affirmative Action Employer.**

PANLABS INTERNATIONAL, INC. STAFF SCIENTIST (Ph.D.) FOR FUNGAL MOLECULAR BIOLOGY RESEARCH

Panlabs International, Inc., is an internationally known service organization having nearly 200 clients in 15 countries. We are looking for a staff scientist to expand the research program in our Seattle Research Division to develop recombinant DNA technology in filamentous fungi. Applications are invited from postdoctoral molecular biologists having experience in any of the following areas: vector development, gene isolation and characterization, and heterologous gene expression. Previous experience with filamentous fungi is not essential.

Please send curriculum vitae, including names of three references, to:

**Dr. David B. Finkelstein
Director of Fungal Research
Panlabs International, Inc.
9725 Third Avenue, NE, Suite 302
Seattle, Wash. 98115
An Equal Opportunity Employer**

Research Associate Ecology

(Post Doctoral Position)

FMC CORPORATION'S Chemical R & D Center, located in Princeton, NJ, has an exceptional position available for an individual to join our environmental toxicology staff from May '85 to May '86 with possibility of renewal.

Major position responsibilities will include: assisting in the conduct of aquatic and avian field studies, developing environmental modeling capability and writing SOP's and reports.

Major position requirements must include: a Ph.D. in ecology, background in aquatic field studies, experience in invertebrate ecology (systematics), population dynamics, fate modeling and knowledge of avian biology.

FMC CORPORATION offers compensation to \$25,000, a full range of corporate benefits, and an exciting and challenging work environment. Interested individuals should send their resume to: **Employment Manager, FMC CORPORATION, Chemical R & D Center, Box 8, Princeton, NJ 08540.**

An Equal Opportunity Employer M/F

FMC

A New Position PRESIDENT

ST. LOUIS SCIENCE CENTER

Museum of Science & Natural History and McDonnell Planetarium which recently merged to form the St. Louis Science Center, is preparing to expand significantly as a member of the tax-supported Metropolitan Zoo—Museum District.

A proposed enlargement of facilities and the current 32 permanent and 22 part-time staff is to be headed by a President, a new position, who would be the Chief Executive/Chief Scientist, reporting to the governing Board of Commissioners.

St. Louis Science Center intends to become a national-class institution emphasizing education, cultural enjoyment and communication about the impact of science and technology on society.

Responsibilities/Qualifications:

- build the new center
- become a spokesman for the science issues
- create an atmosphere of excitement for learning
- provide leadership for fund raising

Salary and benefits are open and consistent with the objective of creating and building a national-class center, and will be based on experience and qualifications.

Letters of interest should be sent to:

**M. C. Throdahl
Chairman, Search Committee
St. Louis Science Center
5050 Oakland Avenue
St. Louis, MO 63110
(314) 652-5500**

An Equal Opportunity Employer

Research Scientists

Triton Biosciences, Inc., a subsidiary of Shell Oil Company, is an emerging force in the development of cancer diagnostics and therapeutics. Our company is built upon a strong base of research expertise, solid support and responsive management. Excellent opportunities exist for innovative PhD scientists with 2-4 years of post doctoral work or industrial equivalent in the following areas:

Recombinant DNA

Requires extensive experience in genomic and cDNA library construction and the screening of such libraries with DNA probes. Knowledge of constructing eucaryotic/procaryotic expression vector systems with emphasis on the characterization of recombinant DNA gene products in such systems is essential.

Immunology

Direct experience in the isolation and characterization of cells of the immune system and characterization of immune system protein growth factors in addition to familiarity with cell fusion protocols, ELISA and RIA assays is required. Experience with recombinant DNA technology and commercial diagnostic applications is highly desirable.

Cell Biology

Significant experience in the growth and characterization of tissue culture cell lines, establishing in vivo bioassay systems and subcellular fractionation is required. Knowledge of immunofluorescent assay development, FACS and histology is desired.

Protein Purification and Characterization

Requires a strong research chemist with experience in protein/peptide purifications. Extensive experience with isolation techniques such as HPLC, column chromatography, and electrophoresis is essential. This position also offers opportunities for scientists with related background in biochemistry, enzymology, or sequence analysis.

Triton is located in the San Francisco Bay area, offers competitive salaries and company benefits including relocation assistance. For prompt consideration, please forward your C.V. with salary requirements and the names of three references to Employee Relations, Box 100S, 1151 Harbor Bay Parkway, Alameda, California 94501.



Triton Biosciences, Inc.

All candidates must have U.S. citizenship or permanent resident VISA status. An Equal Opportunity Employer

ALLERGY RESEARCH SCIENTIST Ph.D. Level

The Pharmaceutical Research Division of Warner-Lambert/Parke-Davis has an immediate opening for a Research Scientist to direct the isolated tissue effort within the Allergy Group of the Immunopharmacology Section. Responsibilities will include the design of models and characterization of anti-allergy drugs using state-of-the-art, computerized equipment. The successful candidate will possess a Ph.D. or equivalent in pharmacology, physiology or immunology and 0-5 years postdoctoral experience in the above. Excellent oral and written communication skills, as well as the ability to function as part of a diversified scientific team are essential.

We offer an exceptional environment in our modern research laboratories adjacent to the University of Michigan campus. To enjoy excellent compensation and benefits, interested applicants should forward resume and salary history to: **Ms. D. Love, Human Resources Supervisor, WARNER-LAMBERT/PARKE-DAVIS, Pharmaceutical Research Division, 2800 Plymouth Rd., Ann Arbor, Michigan 48105.** An Equal Opportunity Employer M/F/H.

**WARNER
LAMBERT**

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- Whenever you write us about your membership or subscription, please attach a Science address label to ensure prompt service.
- **Mail to:** Membership and Subscription Records, AAAS, 1515 Massachusetts Ave., NW, Washington, D.C. 20005.
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- ☐ **Query:** If you have a question, place your address label here and attach this form to your letter.
- **To join or subscribe:** Mail this form with your payment, mark the appropriate boxes, and print your name and address in the space below. (For renewals, attach label.)

- ☐ **Membership rates** (individual only)
- ☐ \$56 USA ☐ \$80 Canada ☐ \$83 Foreign
- ☐ \$121 air-surface delivery via Holland
- ☐ **Subscriber rates**
- ☐ \$93 USA ☐ \$117 Canada ☐ \$120 Foreign
- ☐ \$158 air-surface delivery via Holland

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LABEL
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- ☐ Payment enclosed ☐ Bill me later

Name Please print

Address

City State Zip

SA16R54

POSITIONS OPEN

RESEARCH ASSOCIATE—Postdoctoral position to work on steroidal control of specific myometrial protein synthesis. Experience required in either 2D electrophoresis or cell/tissue culture. Submit résumé and names of three referees to: **Dr. W. Bruce Currie, 438 Morrison Hall, Cornell University, Ithaca, N.Y. 14853. Telephone: 607-256-3030.**

Cornell University is an Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSOCIATE

Well established private research institute located in San Francisco is seeking a molecular biologist with experience in cloning and DNA sequencing. Candidates with a B.A., M.S., or Ph.D. in molecular biology and 1 to 2 years of experience are eligible. Excellent benefits. Please send résumé with salary requirements to: **Personnel, c/o Beatriz Levy, The Gladstone Foundation Laboratories for Cardiovascular Disease, University of California, San Francisco, P.O. Box 40608, San Francisco, Calif. 94140-0608.**

RESEARCH PHYSIOLOGIST

The Naval Aerospace Medical Research Laboratory, Pensacola, Florida, has a temporary and permanent GS-1 position opening in the Vision Sciences Division. The division is responsible for developing and conducting research; development, testing, and evaluation programs concerned with visual requirements in naval aviation; and visual capabilities of naval aviation personnel. The incumbent will join a team of vision scientists studying visual performance requirements related to the naval aviation environment. Tasks may include physiological testing, data analysis, and instrumentation development. A Ph.D. in physiology, biology, or psychology is desirable. The announcements for these positions will be open for the period 15 April through 3 May. To apply for the temporary position contact: **The Recruiting and Examining Office, Consolidated Civilian Personnel Office, Naval Air Station, Pensacola, Fla. 32508-500**, and to apply for the permanent position, contact: **The Office of Personnel Management, Raleigh Area Office, 310 Bern Avenue, Raleigh, N.C. 27611.** *The U.S. Navy is an Affirmative Action/Equal Opportunity Employer.*

RESEARCH SALES REPRESENTATIVE

Self-motivated individual with strong background in biological/biomedical research looking for an exciting and rewarding growth opportunity. This position would enable you to contribute to new research advances through consultative sales of a state-of-the-art quantitative two-dimensional electrophoresis service. Washington, D.C., area, and West Coast territories available. Please send résumé with cover letter to: **Manager/Marketing and Sales, Protein Databases Inc., 405 Oakwood Road, Huntington Station, N.Y. 11746. Telephone: 516-673-3939.**

SENIOR EDITOR

Academic Press, Inc. a major scientific and technical publisher currently seeks an experienced Scientific Editor.

We are seeking a scientifically trained professional physical science/technology editor to participate in maintaining and developing extensive list of journals. The position will be located in New York and requires travel. Candidate must be familiar with several areas of scientific research. Five or more years of publishing experience, plus graduate level degrees in sciences required. This position also requires creative enthusiasm, and offers a role in shaping the future of commercial scholarly publishing.

We offer an excellent starting salary and comprehensive benefit package. Please forward your resume with salary requirements to:



Academic Press
111 Fifth Avenue,
New York, N.Y. 10003
Attn: M. Ricciardi
Equal Opportunity Employer

REQUEST FOR PROPOSALS

REQUEST FOR PROPOSALS

SARRMC, the Southern Appalachian Research-Resource Management Cooperative, in cooperation with the U.S. Department of Agriculture Forest Service Southeast and Northeast Forest Experiment Stations and the Environmental Protection Agency, is seeking proposals for research to determine the role of atmospheric deposition in forest decline. Specifically, research should be of an experimental nature, focusing on red spruce-Fraser/Balsam fir ecosystems. For submission details, send a self-addressed manila envelope to: **Dr. Ann Bartuska, SARRMC Spruce-Fir Technical Coordinator, North Carolina State University Acid Deposition Program, 1509 Varsity Drive, Raleigh, N.C. 27606.** Deadline for requesting information is 10 May 1985.

COURSES

The Center for Electron Microscopy and the University of Illinois announce **FOUR SHORT COURSES**:

- 2 to 5 June 1985, Optimizing Performance of the Scanning Electron Microscope.
- 9 to 12 June 1985, Low-Temperature Biological Specimen Preparation for Electron Microscopy—A View from Europe.
- 14 to 16 June 1985, Performance Optimization and User Maintenance of the Transmission Electron Microscope.
- 17 to 22 June 1985, Preparative Techniques in Biological Transmission Electron Microscopy.

Limited enrollment. For information, contact: **Marcelle Gillott or Richard Crang, Center for Electron Microscopy, 74 Bevier Hall, University of Illinois, 905 South Goodwin Avenue, Urbana, Ill. 61801. Telephone: 217-333-2180.**

GRADUATE STUDY

GRADUATE TRAINING IN NEW ORLEANS

The newly formed Department of Microbiology, Immunology and Parasitology and Louisiana State University (LSU) Medical Center, located in downtown New Orleans, announces the availability of several graduate assistantships for Ph.D. applicants. Our research focus is on molecular virology, cellular immunology, and the use of gene cloning to develop vaccines. Annual stipends of \$7200, as well as tuition waiver are available to qualified students. For further information, write to: **Dr. Adele Spence, Department of Microbiology, Immunology and Parasitology, Louisiana State University Medical Center, 1901 Perdido Street, New Orleans, Louisiana 70112.** *An Equal Opportunity/Affirmative Action Employer.*

FELLOWSHIPS

PRE- AND POSTDOCTORAL FELLOWSHIPS

Pre- and postdoctoral fellowships, supported by a National Institute of Drug Abuse Training Grant, are immediately available for fundamental research in drug abuse. Areas include behavioral, biochemical, clinical, and molecular pharmacology. Drug groups include narcotics, cocaine, nicotine, solvents, minor tranquilizers, and hallucinogens.

Predoctoral students may elect majors in Chemistry, Center for Brain Research, Pharmacology, Psychology, or Toxicology, and should, when inquiring, indicate the department of interest. Inquiries should be directed to: **Dr. M. W. Anders, Department of Pharmacology, University of Rochester School of Medicine and Dentistry, 601 Elmwood Avenue, Rochester, N.Y. 14642.**

The University of Rochester is an Equal Opportunity Employer, and inquiries from women and minorities are encouraged.

POSTDOCTORAL FELLOWSHIP IN HUMAN MOLECULAR GENETICS—Available immediately, 1 July 1985, to study human gene structure and expression. Faculty studies include cloning, expression and gene probe analyses of human and animal genes for lysosomal and heme, biosynthetic enzymes and coagulation factors, as well as studies of oncogenes and carcinogenesis. Experience with protein purification and/or DNA techniques preferred. Send curriculum vitae bibliography, study of research interests, and names of two references to: **R. J. Desnick, Ph.D., M.D., Director of Medical Genetics, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, N.Y. 10029.** *An Equal Opportunity Employer.*

FELLOWSHIPS

POSTDOCTORAL RESEARCH FELLOWSHIP

Position available for postdoctoral fellowship in the study of retrovirus vector transfer of genes into human and mouse hematopoietic stem cells. The laboratory is focused on developing methods for constructing retrovirus vectors that will lead to stable site-directed integration and stable association of specific genes into human bone marrow stromal and hematopoietic stem cells in vitro. Expertise is required in molecular biology to facilitate study of packaging-defective retrovirus mutant vector transfer of plasmid recombinant sequences and construction of variant vectors. The laboratory has three separate units studying long-term human and mouse bone marrow cultures, molecular biology of retrovirus vectors, and in vivo bone marrow transplantation in inbred mice. Work in P3 laboratory facility will be required for human bone marrow studies. Send curriculum vitae and three letters of recommendation to: **Dr. Joel S. Greenberger, Chairman, Department of Radiation Oncology, University of Massachusetts Medical Center, Worcester, Mass. 01605.** *An Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL FELLOWSHIPS FOR RESEARCH TRAINING IN HYPERTENSION

Fellowships are available for postdoctoral training in hypertension to individuals with the M.D. or Ph.D. degree. This multidisciplinary training program provides opportunities for research in pharmacological, physiological, and biochemical approaches to cardiovascular, renal, neural, and endocrine mechanisms in hypertension.

This position is funded by a training grant from the National Institutes of Health. Applicants must, therefore, be citizens or permanent residents of the United States.

For further information contact:

Dr. Leonard Share
University of Tennessee Center
for the Health Sciences
894 Union Avenue
Memphis, Tennessee 38163


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