PROTEIN PURIFICATION & CHARACTERIZATION
April 13-26
William Brennan, Jr., Penn State University College of Medicine
Richard Burgess, University of Wisconsin-Madison
James Kadonaga, University of California, San Diego
Daniel R. Marshak, Cold Spring Harbor Laboratory
This course is intended for scientists who are not familiar with techniques of protein isolation and characterization. It is a rigorous program that includes laboratory work all day and a lecture with discussion session every evening. Each student will become familiar with each of the major techniques in protein purification by actually performing four separate isolations including: (i) a regulatory protein from muscle tissue; (ii) a sequence-specific, DNA-binding protein; (iii) a recombinant protein overexpressed in E. coli; and (iv) a membrane-bound receptor. A variety of bulk fractionation, electrophoretic, and chromatographic techniques will be employed including: precipitation by salts, pH, and ionic polymers; ion exchange, gel filtration, hydrophobic interaction, and reverse phase chromatography; lectin affinity, oligonucleotide affinity, and immunofinity chromatography; polycrylamide gel electrophoresis, two-dimensional gel electrophoresis and electroblotting; high performance liquid chromatography. Methods of protein characterization will be utilized including immunological and biochemical assays, peptide mapping, amino acid analysis, protein sequencing, and mass spectrometry. Emphasis will be placed on strategies of protein purification and characterization rather than on automated instrumental analysis. Guest lecturers will discuss protein structure, modifications of proteins, methodologies for protein purification and characterization, chemical synthesis of peptides and applications of protein biochemistry to cell and molecular biology. Last year’s lecturers included: R. Aebersold, P. Casey, B. Erickson, J. Garrels, L. Glenshach, G. Hart, A. Kornberg, J. Kuret, N. Pace, Y. Paterson, G. Rose, J. Rothman, and N. Tong.
Tuition, Room and Board.....$1,605

CLONING & ANALYSIS OF LARGE DNA MOLECULES
April 13-26
Hadi Abderrahim, Cell Genesys, Inc.
Bruce Birren, California Institute of Technology
Sue Klepholz, Cell Genesys, Inc.
Doug Vollrath, Whitehead Institute
This course will cover the theory and practice of manipulating and cloning high molecular weight DNA. The course will focus on the use of yeast artificial chromosome (YAC), bacterial artificial chromosome (BAC) and bacteriophage P1 cloning systems for library construction and techniques of pulsed field gel electrophoresis (PFGE). Lectures and laboratory work will include an introduction to yeast genetics, the isolation and manipulation of high molecular weight DNA from a variety of sources, and preparative and analytical PFGE. YAC, BAC, and P1 clones will be produced and characterized by a number of approaches, including hybridization, recovery of YAC ends, physical mapping and PCR-based methods. A variety of size standards for PFGE will be prepared and their separation on many different types of PFGE gel boxes will be compared. Lectures by outside speakers on topics of current interest will supplement the laboratory work.
Tuition, Room and Board.....$1,605

EARLY DEVELOPMENT OF XENOPUS LAEVIS
April 14-22
Richard Harland, University of California, Berkeley
Hazel L. Sive, Whitehead Institute
This course will provide extensive laboratory exposure to the biology and manipulation of embryos from the frog, Xenopus laevis. The course is particularly suited for investigators who have a current training in molecular biology and knowledge of developmental biology, but have had no experience with Xenopus. Intensive laboratory sessions will be supplemented by daily lectures from experts in both experimental and molecular embryology. Six main areas will be covered: (i) care and handling of adults and embryos, (ii) stages of embryonic development and anatomy, (iii) whole mount in situ hybridization and immunocytochemistry, (iv) microinjection of eggs and oocytes, (v) micromanipulation of embryos, and (vi) induction assays. Guest lecturers include: J. Gerhart, B. Harris, R. Keller, M. Wickers and M. Whitman.
Tuition, Room & Board.....$1,305

CONSTRUCTION & ANALYSIS OF TWO-DIMENSIONAL GEL PROTEIN DATABASES
April 13-20
B. Robert Franz Jr., Cold Spring Harbor Laboratory
James I. Garrels, Cold Spring Harbor Laboratory
Gerald I. Latter, Cold Spring Harbor Laboratory
Scott D. Patterson, Cold Spring Harbor Laboratory
The course will present the practical aspects of constructing and analyzing a protein database through quantitative analysis of two-dimensional gels. The instructors will lecture on methods of 2D gel electrophoresis, strategies and methodologies for database construction, analysis of protein databases, and methods for characterization and identification of proteins in two-dimensional gels. In the hands-on part of the course, students will build and analyze a protein database from existing 2D gel images. Topics in database construction will include data acquisition, protein quantitation, matching of proteins across sets of gels. Topics in data base analysis will include retrieval of quantitative data and annotations for known proteins, searches for common expression profiles, and statistical analysis to determine relatedness of protein samples. Guest speakers and instructors will cover applications in cell regulation, medical research, protein identification in 2D gels, and connections to genome sequencing projects. This course is intended for those who have prior experience with two-dimensional gels. Experience with computers is unnecessary.
Tuition, Room and Board.....$1,185

Application Deadline: January 15, 1993
Application/Information may be obtained from:
REGISTRAR
POSITIONS OPEN

ASSISTANT PROFESSORSHIPS
IMMUNOLOGIST, PLANT SYSTEMATIST

The Department of Biological Sciences at California State University (OSU), Chico, invites applications for two tenure-track assistant professorships beginning 1993-1994 academic year.

IMMUNOLOGIST Candidate must have a doctoral degree, a specialization in medical immunology, demonstrated knowledge of bacteriology and animal virology, experience with traditional and molecular immunological techniques, and demonstrated ability to develop a research program, teaching experience at the undergraduate level, and a strong interest in teaching excellence. Responsibilities include teaching and laboratory courses in microbiology and virology, graduate and lower division courses in biology and microbiology.

PLANT SYSTEMATIST Candidate must have a doctoral degree, a demonstrated knowledge of plant systematics, experience with classical and modern research methods in systematics, be able to develop a research program in plant systematics/evolution, teaching experience at the undergraduate level, and a strong interest in teaching excellence. Responsibilities include teaching a field-oriented basic research course in reproduction, a graduate course in systematics/evolution, and lower division biology courses for majors and general education students, and maintaining herbarium. Applicants should submit a letter of application, curriculum vitae, a statement of teaching philosophy, complete academic transcripts, copies of reprints, and three letters of reference.

Mail or FAX materials to:
Science Classified Advertising
1369 H Street, N.W., Room 814
Washington, DC 20005
Telephone: 202-326-6555
FAX: 202-682-0816

RATES: Ads are $42 per line; $420 minimum. One line equals 52 characters and spaces; centered headings equal 52 characters and spaces. A 2% cash discount is granted to all prepaid ads.

Ads from Outside the U.S.: A discount of $30 will be offered to advertisers making payment in U.S. dollars by check or money order drawn on U.S. banks. Contact Annemarie Vis at +1-213-424-6985, 24-hour FAX, and phone.

Credit Cards: Science accepts MasterCard and Visa. Discount does not apply to credit cards.

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

POSITIONS OPEN

PLANT EVOLUTIONARY BIOLOGIST
REED COLLEGE

The Reed College Biology Department invites applications from Ph.D.s with postdoctoral experience for a tenure-track faculty appointment at the ASSISTANT PROFESSOR level beginning with the 1993-94 academic year. The successful candidate is expected to teach a one-semester upper division lecture/laboratory course in plant evolution, ecology, and diversity and to participate in a team-taught introductory biology course. Candidates should have a demonstrated ability to develop a research program in plant evolutionary biology. Knowledge of both population and community levels is preferred. The successful candidate must establish an active research program and supervise senior thesis research. We seek an individual committed to teaching and research in the undergraduate environment. Reed College is a selective liberal arts institution with a distinguished record of educational accomplishment and a strong commitment to scholarship. Final budget approval is expected by the closing date. Applications including curriculum vitae and three recent letters of reference should be sent by 1 January 1993 to:

Dr. Robert H. Kaplan, Chair
Biology Search Committee
Reed College
Portland, OR 97202

Reed College is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

GENETICIST

Applications are invited for a full-time, tenure-track appointment at the ASSISTANT PROFESSOR level in Biology, Rider College, beginning fall 1993. Applicants should have broad training in the discipline with eukaryotic molecular genetics emphasis. The successful candidate will have a demonstrated ability in teaching and commitment to developing a research program involving undergraduates. Postdoctoral experience desirable. Apply by sending a letter of interest, curriculum vitae, and names and addresses, and telephone numbers of three references to G. J. M. 1993 will be given through consideration. Applications from women and minority candidates are encouraged.

THE UNIVERSITY OF CALIFORNIA, SAN DIEGO, DEPARTMENT OF CHEMISTRY invites applications for tenure-track faculty positions in all fields of CHEMISTRY and BIOCHEMISTRY at the AS- SISTANT PROFESSOR level. A background in one or more of the following areas is desirable: physical chemistry and applied mathematics, computational chemistry, proteins and enzyme mechanisms, structural biology, molecular biology, biochemistry, theoretical chemistry, and chemical biology. Applicants must have a Ph.D. and a demonstrated ability for creative research and teaching at the undergraduate and graduate levels. Salary is competitive with other major research institutions and based on University of California pay scale. Open position subject to availability of funds. Candidates should send curriculum vitae, a list of publications, reprints of up to five recent publications, a research statement, and a list of references to: Chairman, Staffing Committee, University of California, San Diego, Department of Chemistry--0382, La Jolla, CA 92093--0382. Prompt response is recommended but all applications received by January 31, 1993 will be considered.
Listed below are a few of the excellent opportunities for conducting research that are now available with leading scientists at the National Institutes of Health.

Biochemistry and Signal Transduction  
Stephen B. Shears, PhD  
The cell signaling roles of inositol polyphosphates and newly discovered inositol pyrophosphates are being characterized through studies of their metabolism and function. Current work in the laboratory includes enzyme purification and characterization, molecular biology and signaling studies with intact cells. Candidates should have less than five years postdoctoral experience. Laboratory of Cellular and Molecular Pharmacology (OE-21), MD 7-10, P.O. Box 12233, Research Triangle Park, NC 27709.

Cellular and Molecular Immunology  
Sharon M. Wahl, PhD  
Regulatory mechanisms that control activation, differentiation, and apoptosis of mononuclear phagocytes are being investigated. The phenotypic and functional changes in mononuclear phagocytes associated with inflammation and infectious diseases are being characterized and the regulation of these events by cytokines, growth factors, and immunomodulators is being studied. Experience in molecular biology is desirable. Laboratory of Immunology (OE-21), NIDR, Building 30, Room 331.

Cellular and Molecular Neurobiology  
Vittorio Gallo, PhD  
Neurotransmitter receptors in glial cells are studied using molecular, biochemical and pharmacological techniques. The expression of genes encoding receptor subunits is studied in cell culture to understand neurotransmitter receptor functional properties and their role in development. Experience in molecular or cellular biology is required. Laboratory of Cellular and Molecular Neurophysiology (OE-21), NICHD, Building 36, Room 2A21.

DNA Mutagenesis  
Roger Woodgate, PhD  
The molecular mechanisms of mutagenic DNA repair in prokaryotic and eukaryotic cells are currently under investigation. Prokaryotic research is focused on the roles of the Umu-like family of mutagenesis proteins. Future projects include the isolation and characterization of genes necessary for mutagenic repair of DNA in eukaryotic cells. Experience in cloning and expression of recombinant proteins in eukaryotic cells is desirable. Section on Viruses and Cellular Biology (OE-21), NICHD, Building 6, Room 1A13.

Molecular Neurobiology and Neuroendocrinology  
William C. Wetsel, PhD and Andres Negro-Vilar, MD, PhD  
Investigations in molecular neurobiology include the study of the regulation of gene expression, RNA splicing, protein processing and trafficking, peptide secretion, and intracellular signaling. Particular emphasis is placed on the molecular and cellular mechanisms which underlie these events. Candidates should have experience in molecular biology, cell biology, and biochemistry. Laboratory of Molecular and Integrative Neuroscience (OE-21), NIEHS, P.O. Box 12233, Building 101, Room C4-07, Research Triangle Park, NC 27709.

Retrovirus and Cellular Gene Regulation  
David Derse, PhD  
The cis- and trans-acting components of transcriptional and post-transcriptional gene regulatory pathways are being examined in retrovirus model systems. Current studies are focused on characterizing cell type-specific and inducible DNA-binding proteins that control eukaryotic transcription. The structures, functions and mechanisms of Tat and Rev proteins from human and non-human lentiviruses are also under investigation. Laboratory of Viral Carcinogenesis (OE-21), NCI, Frederick Cancer Center, Building 560, Room 21-49, Frederick, MD 21702-1201.

Additional Postdoctoral Fellowship Opportunities  
For an on-line listing of additional postdoctoral openings you may access the NIH EDNET Bulletin Board's POSTDOC conference via modem (1,3014922221 or 1,8003582221). The settings for modem access are "7,Even,1." When connected to NIH, type in "rvt100" at the connect message, "F5E" at initial, and "AJLI" at account.

Those interested in receiving information on other postdoctoral opportunities in NIH research laboratories, as well as information on clinical training opportunities, may contact the Office of Education, Building 10, Room 1C129. Phone: 301-496-2427.

To Apply  
If you hold a PhD, MD, or equivalent degree and would like to be considered for one of these positions, please send a cover letter, curriculum vitae, bibliography, and statement of research interests to the address listed with each position. In addition, please arrange to have letters of recommendation sent from three scientists who can provide an evaluation of your qualifications.
POSITIONS OPEN

ENVIRONMENTAL MICROBIOLOGIST
TENURE-TRACK

The Department of Biological Sciences, University of Cincinnati, is seeking a ten-ure-track, full-time assistant professor in the area of microbial biogeochemistry. The successful candidate will be expected to develop a vigorous, externally funded research program, to interact with colleagues, and to participate in expanding the curriculum in microbial biogeochemistry. Application deadline is January 1, 1993.

FACULTY POSITIONS
IN MOLECULAR PHARMACOLOGY
UNIVERSITY OF SOUTHERN CALIFORNIA
School of Pharmacy

Two tenure-track ASSOCIATE/ASSISTANT PROFESSOR positions exist in the Department of Pharmacology. Candidates must have Ph.D. in a biological or chemical discipline. This is an excellent opportunity for new PhDs. The position is open to all areas of research in pharmacology, with a preference for those that are neurochemical or behavioral. Interested candidates should submit a letter of application, curriculum vita, and three letters of recommendation to: Dr. D. L. Caron, Chairperson, Department of Pharmacology, University of Southern California, School of Pharmacy, Los Angeles, CA 90035. Equal Opportunity Employer.

CELL BIOLOGY
ASSISTANT PROFESSOR

The Department of Biological Sciences, University of Cincinnati, is seeking an enthusiastic and creative, dynamic, and dedicated individual for a tenure-track, assistant professorship in the area of cellular and molecular biology. The position is expected to begin at the beginning of the academic year. The successful candidate will be expected to develop a vigorous, externally funded research program, to interact with colleagues, and to participate in expanding the curriculum in biological sciences. The position requires a Ph.D. in a biological or related discipline. Interested candidates should submit a letter of application, curriculum vita, and three letters of recommendation to: Dr. D. L. Caron, Chairperson, Department of Biological Sciences, University of Cincinnati, Cincinnati, OH 45221. The University of Cincinnati is an Equal Opportunity/Affirmative Action Employer.
The International Center for Tropical Agriculture

SENIOR SCIENTISTS ON MANAGEMENT OF NATURAL RESOURCES

Forest Margins is one of CIAT’s four research programs working on a holistic view of environmental problems. Production and conservation are integrated with social and political processes. Its activities focus on the development of ecologically stable and economically viable forms of land use to improve the productivity of forests and agricultural lands, as a way of reducing deforestation pressures from existing settlers. An interdisciplinary team, operating in the context of participatory action-research studies, is being assembled for that purpose, including positions in:

**Applied Agricultural Anthropology/Rural Sociology**

The specialist will characterize and monitor the behaviour of existing systems, emphasizing farmer and community decision-making under trade-offs between short-term gains and long-term conservation of the resource base. The social scientist will also evaluate causes of deforestation and seek alternatives at a range of levels from indigenous knowledge to land use. Links will be made to policy analyses across different population pressures and social organizations. Field experience in participatory research is highly desirable.

**Multispecies Production Systems**

The biological scientist will evaluate existing farming-forest systems to identify non-sustainable management practices and to uncover or develop alternatives. Links will be made to strategic research on sustainability indicators. The specialist will also design and evaluate strategies for the sustainable development of a range of systems in agricultural and forestry lands. Farmers’ relations to agroindustry and market opportunities will be assessed. Field experience in on-farm research is required.

Ph.D. in a relevant field, a publication record in refereed journals, demonstrated experience in multidisciplinary research and practical knowledge of tropical agriculture are strongly desirable for both positions. Excellent command of English is required, and competence in Spanish or Portuguese are assets.

Application letters for each position must include Curriculum Vitae, names and full addresses of three referees, three reprints, and be addressed to Dr. Filemon Torres, Deputy Director General, CIAT, A.A. 6713, Cali, Colombia, before 30 December, 1992. Positions to be filled in January, 1993, or when a successful candidate is identified.

CIAT is a nonprofit organization with almost 100 internationally recruited scientists earning competitive salary packages and having privileges and immunity similar of those of U.S. organizations. It is based in Cali, Colombia, an attractive, hospitable, medium-sized city at the foothills of the Andes. The climate is pleasant; housing, schooling and health services are excellent, as well as the communication systems, which include daily national and international flights.

---

**Wadsworth Center for Laboratories and Research**

**Staff Scientist Positions**

Applications are invited for staff positions at the Wadsworth Center which is a multidisciplinary basic research and public health laboratory. Core technical facilities in Biochemistry, Ultrastructural Analysis, Immunology, Molecular Genetics and Information Resources ensure state-of-the-art equipment and laboratory services. Participation in the graduate program of the School of Public Health, State University of New York, provides an opportunity for academic interaction in graduate education. The level of appointment is commensurate with experience. The successful candidates will be expected to establish an externally-funded research program in their area of expertise.

**CELL/MOLECULAR BIOLOGY OF DRUG RESISTANCE.** An investigator experienced in drug-cell interactions and the molecular mechanisms of acquired drug resistance in mammalian cells is sought. Areas of basic research interest include the molecular biology of drug transport and metabolizing systems in transformed cells. The position will complement ongoing studies at the Center on drug resistance in several biological systems.

**Dr. John Galivan, Search Committee Chair**

**PROKARYOTIC GENETICS/NUCLEIC ACID DYNAMICS.** Candidates should have research interests in some combination of nucleic acid-protein interactions, DNA rearrangements, genetic recombination, RNA splicing and/or molecular evolution. Experience in using genetic and biochemical approaches essential; backgrounds in microbial genetics, protein and/or nucleic acid chemistry highly desirable.

**Dr. Marlene Belfort, Search Committee Chair**

**HUMAN MOLECULAR GENETICS.** A molecular geneticist is sought with experience in all aspects of DNA analysis of human specimens. Individual will interact with medical community to provide diagnostic reports and regulatory oversight of clinical testing laboratories. A productive research program in the area(s) of the molecular genetics of human disease chromosome and/or gene structure, or gene expression is expected.

**Dr. Kenneth Pass, Search Committee Chair**

Applicants, who must have a doctoral degree and two years post-doctoral experience, should send curriculum vitae with a description of career goals and the names of three referees to the attention of the appropriate Search Committee Chair at the Wadsworth Center for Laboratories and Research, New York State Department of Health, P.O. Box 509, Albany, New York 12201-0509.
The Cancer Institute of New Jersey (CINJ), a recent recipient of an NCI Cancer Center Planning Grant, seeks highly qualified cancer clinicians and researchers. All faculty will hold primary appointments in The Cancer Institute with a joint appointment in the Department of Medicine, Pharmacology, or other relevant discipline.

**Medical Oncologist**
Assistant/Associate Professor Level. Outstanding candidate with an MD or MD, PhD primarily devoted to clinical research. The individual should have experience in the design and conduct of clinical trials.

**Medical Oncologist**
Assistant/Associate Professor Level. Outstanding candidate with an MD or MD, PhD primarily devoted to laboratory research in the areas of molecular biology, immunology, or pharmacology. The individual will have finite clinical responsibilities.

**Clinical Pharmacologist/Medical Oncologist**
Assistant/Associate Professor Level. Outstanding candidate with an MD, MD-PhD, or PhD primarily devoted to the design and pharmacokinetic monitoring of clinical research trials.

**Bone Marrow Transplant/Stem Cell Biologist**
Assistant/Associate Professor Level. Outstanding candidate with an MD or MD, PhD primarily devoted to research and patient care in the area of bone marrow transplantation. The Robert Wood Johnson University Hospital is nearing completion of an 8-10 bed bone marrow transplantation unit.

**Fellowships in Medical Oncology**
Available for July 1, 1993. Outstanding applicants who have completed a residency in internal medicine will be eligible for this guaranteed two year training program which will include a year of clinical experience followed by a year devoted to formal training in basic or clinical research.

Submit CV by February 15, 1993 to: Michael A. Gallo, PhD, Interim Director, The Cancer Institute of New Jersey, Kilmer Square, 100 Albany Street, Suite 201, New Brunswick, NJ 08901. UMDNJ, New Jersey's university of the health sciences, is an Affirmative Action/Equal Employment Opportunity Employer, m/f/hv, and a member of the University Health System of New Jersey.

---

**ANNOUNCING APPLICATIONS FOR THE VARICELLA-ZOSTER VIRUS POSTGRADUATE FELLOWSHIPS**
Two $50,000/Year Awards
The VZV Research Foundation announces an international competition for two postgraduate fellowships to study the pathogenesis of the varicella-zoster virus (VZV) and associated sequelae.

Applicable research areas include: virus host interactions; neuron growth; nerve cell interactions; post-herpetic neuralgia and pain management.

Each $50,000 grant includes $35,000 annual salary plus benefit allowance, and research allowance for the sponsoring lab. Second year support is contingent on satisfactory progress.

Foundation requires mentor letter of intent and evidence of external funding for research on VZV or allied field.

Applications available October 1, 1992.
Fellows will be notified April 1, 1993.
Funding starts July 1, 1993.

For application, write: Fellowship Committee-S, The VZV Research Foundation, Inc., 40 East 72nd Street, New York, NY 10021.

The VZV Research Foundation, established in 1991, is the only non-profit organization fighting all manifestations of VZV. Guided by 24 international physicians and scientists.

---

**CARDOVOASULAR PHYSIOLOGIST**
The Division of Pediatric Cardiac Surgery at Temple University School of Medicine, St. Christopher's Hospital for Children is seeking an individual in the area of fetal and neonatal cardiovascular research. Qualifications should be suitable for appointment. Level commensurate with experience. Candidate should be able to direct basic research program in area of cardiopulmonary physiology and experimental cardiopulmonary surgery of the fetus and neonate. Experience and demonstrated capability of directing clinical fellows and graduate students in basic research projects is essential.

The successful candidate must have research background utilizing biochemical and physiological approaches to study local vascular regulatory mechanisms during development. Interest in cell signaling aspects of local humoral factors (i.e. arachidonic acid metabolites and related compounds) and protein kinase C mediated signal transduction mechanisms in the developing microvasculature is preferred. Candidate must have Ph.D., 3 years postdoctoral experience in physiology or related field, experience with large and small animal models, and demonstrated history of productivity and ability to secure extramural funding. A minimum of 30 publications in competitive peer review journals and a minimum of 7 years post graduate experience is preferred. Please send CV to: Dr. Pierantonio Russo, Section Chief, C.T. Surgery, St. Christopher's Hospital for Children, Erie at Front Street, Philadelphia, PA 19134-1095. Temple University is an equal opportunity/affirmative action employer and strongly encourages applications from women and minorities.
A Geneticist (Plants) position in the Plant Physiology and Genetics Research Unit, Urbana, IL, housed in the Department of Agronomy facilities, University of Illinois. The incumbent will serve as Assistant Curator/Curator of the Maize Genetics Cooperation--Stock Center. The incumbent will be responsible for coordinating the maintenance, categorization, and expansion of the maize genetics collections in the stock center, and for providing seed samples of stock upon request. The incumbent will also be responsible for supporting research conducted at the stock center. Work will be conducted cooperatively with scientists within the USDA/ARS, the University of Illinois, and the community of maize researchers worldwide. Professional experience in maize genetics is required. Additional knowledge, abilities and skills will be required. U.S. Citizenship is required. Salary range is $25,798–$50,516 (GS 9/11/12; Category IV). Starting date is approximately April 1993. Applicants must contact the Personnel Office (301-344-1858) for required forms and application procedures; indicate Adv. No. 3N001. Closing date is November 30, 1992. For more information about this position, contact Martin M. Sachs, 217-244-0864; FAX: 217-244-7703; E-mail: msachs@e-ux1.cso.uiuc.edu. ARS is an equal opportunity employer.

UNIVERSITY COLLEGE LONDON
CHAIR OF PSYCHOLOGY

Applications are invited for one of the two established Chairs of Psychology tenable at UCL and based in the College's large and well-resourced Department of Psychology. The Chair will be vacated on the retirement of Professor R J Audley and the new appointment is expected to be effective from 1 October 1993 (negotiable). Professor T Shallice holds the other established Chair of Psychology in the Department, which also houses the Ergonomics Research Unit (headed by Professor J B Long), the endowed Freud Memorial Chair of Psychoanalysis (held by Professor P Fonagy), two other titular Professors and over 30 other academic staff. The Department also has strong links with the MCR Cognitive Development Unit (headed by Professor J Morton).

We are seeking to appoint an individual with a strong commitment to, and an outstanding record of achievement in research—preferably, but not necessarily, in the areas of experimental, physiological or clinical psychology. Research in the Department spans a wide spectrum. Current areas include cognition and its neuropsychological, computational and clinical aspects; basic perceptual processes; and speech.

Informal enquiries may be made to and further particulars obtained from Professor T Shallice (Department of Psychology, University College London, Gower Street, London WC1E 6BT—Tel: 071-380-7651). Applications, including a full curriculum vitae and the names of three referees, should be addressed to the Provost, University College London, Gower Street, London WC1E 6BT, to be received no later than 27 November 1992. Salary (negotiable) within the professional range. Equal Opportunities Employer.
ASSISTANT PROFESSOR(S) IN (1) BIOCHEMISTRY/MOLEULAR BIOLOGY AND (2) ORGANIC CHEMISTRY. The Department of Chemistry is seeking applications for two 9-month tenure-track positions, one in Molecular Biology and one in Organic Chemistry. The successful candidate must have a Ph.D. with evidence of extensive training in both molecular biology and biochemistry and postdoctoral experience, and will be expected to actively pursue extramurally funded research program in the area of chemical and biochemical approaches to problems in molecular biology. Appointment is contingent on final administrative approval and is part of a continuing expansion within the area of Cell and Molecular Biology in the SyrCuse University Department of Biology. Appointment is most likely to be made at the ASSISTANT PROFESSOR level, but more senior candidates are also welcome to apply. Applicants should carry out an independent research program and participate in teaching of graduate and undergraduate students. Applications should include curriculum vitae, a brief description of proposed research and the names of three scientists willing to write letters of recommendation. Applications should be sent by December 15, 1992 to: Chair, Molecular Biology Search Committee, Lyman Hall, 108 College Place, SYRACUSE UNIVERSITY, SYRACUSE, NY 13244-1270. Affirmative Action/Equal Opportunity Employer; women and members of all ethnic groups are especially encouraged to apply.

ORNOTHOLIGIST

The University of Kansas Department of Systematics and Ecology and Museum of Natural History welcomes applications for (i) ASSISTANT PROFESSOR AND CURATOR OF ORNOTHOLIGY starting 1 July 1993. We seek a productive researcher in avian systematics who can contribute actively to graduate and undergraduate teaching, and in curations of ornithological collections. Annual salary: $38,000 to $42,000. Application deadline is 1 December 1992. A complete position description, send a letter of application; a statement of goals in research, teaching, and curating; curriculum vitae; reprints of recent publications; and three letters of recommendation to Dr. William E. Duellman, Chairman, Ornithology Search, Museum of Natural History, University of Kansas, Lawrence, KS 66045-2454. Telephone: (913) 864-4560. FAX: (913) 864-5335. Application deadline 18 December 1992 (postmarked). Equal Opportunity/Affirmative Action Employer.

NEUROBIOLOGIST

The Biology Department of the University of Pennsylvania invites applications for a tenure-track ASSISTANT PROFESSOR position at the level of ASSISTANT PROFESSOR. We are particularly interested in candidates conducting the cellular, genetic or molecular mechanisms of development in the nervous system, with an emphasis on molecular neurobiology. Candidates are expected to have demonstrated excellence and productivity in research and must have, or be in the process of obtaining, a Ph.D. degree with a strong record of accomplishment in basic research. Individuals with expertise in developmental biology, cell growth regulation, genome structure, neuroendocrinology, or gene expression are particularly encouraged to apply. Applications should include curriculum vitae, reprints, a statement of research interests, and three letters of recommendation sent directly to: Search Committee, Department of Biology, University of Pennsylvania, Philadelphia, PA 19104-6018. Review of applications will begin December 11, 1992. The University of Pennsylvania is an Equal Opportunity/Equal Employment University.

DEVELOPMENTAL BIOLOGIST

The University of Scanton, an independent Jesuit University, invites applications for a tenure-track ASSISTANT PROFESSOR position in developmental biology. The successful candidate will teach an upper division laboratory course in developmental biology and participate in the General Biology courses for majors and non-majors. Excellent communication and teaching skills and a commitment to research program that will involve undergraduate students are expected. Applicants should have curriculum vitae, a description of research interests, and three letters of reference by January 30, 1993 to: Chair, Faculty Search Committee, Faculty Search Committee, Department of Biology, University of Scanton, Scranton, PA 18510-4625. The University of Scanton is an Affirmative Action/Equal Opportunity Employer and Educator.

MICROBIOLOGIST

The Department of Biology at Tennessee Technological University invites applications for a full-time, nine-month, tenure-track Assistant Professor or Associate Professor in Microbiology. The position is expected to begin Fall 1993. The successful applicant must have a Ph.D. in microbiology or related field and a strong background in research and teaching. The candidate will be expected to teach general microbiology, Genetics, and Microbial Ecology courses at the undergraduate level and an upper division course in Microbial Physiology. We are particularly interested in applicants with research experience in molecular genetics, microbial population biology, or environmental microbiology. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience. Salary is commensurate with rank and experience.
Postdoctoral Fellow in Molecular Hematopoiesis

Amgen is an innovative leader in the discovery, development and marketing of human therapeutics. Our advanced research in biotechnology has resulted in such breakthrough products as EPOGEN (recombinant human Erythropoietin) and NEUPOGEN (recombinant human Granulocyte Colony Stimulating Factor).

We currently seek a postdoctoral fellow with a recent Ph.D. in Molecular/Cellular Biology. This individual will have experience in cDNA cloning, PCR, and other molecular biology analytical skills. Some cell culture experience and an interest in hematopoiesis would be desirable. The selected fellow will be involved in an interactive program studying the molecular regulation of hematopoietic stem cell migration, proliferation and differentiation.

Amgen offers a very competitive compensation and benefits package in addition to a stimulating work environment. If you have the necessary qualifications and would like to be part of an organization that places its highest value on the contributions of its people, send your resume to: Amgen Inc., Staffing Dept. (Mail Code 10-1-A-411), Job Code# S: 505, Amgen Center, Thousand Oaks, CA 91320-1789. Amgen is an equal opportunity employer.

Principals only, please.

POSTDOCTORAL FELLOWSHIPS at the WOODS HOLE OCEANOGRAPHIC INSTITUTION

* Applied Ocean Physics & Engineering
* Biology * Marine Chemistry & Geochemistry
* Marine Geology & Geophysics
* Physical Oceanography

Applications are invited from new or recent doctorates in science or engineering with interests in physical oceanography, meteorology, marine chemistry, marine geology and geophysics, biological oceanography, or applied ocean physics and engineering. Recipients of awards are selected on a competitive basis, with primary emphasis placed on research promise.

* Marine Policy and Ocean Management

Research fellowships are offered in the social sciences or natural sciences with emphasis on economics and law. Topics of special current interest include marine biological diversity, marine reserves, sea-level change, advanced marine technologies, historic shipwrecks, and Arctic affairs. Other research interests also may be appropriate.

Fellowships are awarded for one year (extendable up to two years in special circumstances) with a stipend of $34,500 plus group health insurance and a modest research budget. Recipients are encouraged to pursue their own research interests independently or in association with resident staff. Completed applications must be received by January 15, 1993 for the 1993-94 awards. Awards will be announced in March. Write for application forms to: Dean of Graduate Studies, P.O. Box 3, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts 02543.

WOODS HOLE OCEANOGRAPHIC INSTITUTION
An equal opportunity affirmative action employer

GREAT PEOPLE DOING GREAT THINGS.

Great companies make a difference. Burroughs Wellcome Co. employees are among the brightest and most innovative individuals—people who know how to work as a dedicated team. If you are looking for an opportunity that cannot be equaled, come discover what greatness means at Burroughs Wellcome Co.

Research Scientist I

A laboratory research position is currently available to conduct in vivo and in vitro experimental studies in cardiovascular drug discovery. Specifically, these preclinical studies are intended to identify and characterize compounds that are antagonists of endothelin receptors or inhibitors of endothelin synthesis.

Candidates need a four-year college curriculum with a major concentration in biological or biochemical sciences PLUS two years of experience in cardiovascular receptor research OR a Master's degree in a biological or biochemical science with an emphasis on cardiovascular receptor research. Candidates selected for interview will take an on-site scientific writing assessment.

At Burroughs Wellcome Co., you will enjoy a compensation and benefits package that is among the best in the pharmaceutical industry, along with the advantages of being part of an innovative pharmaceutical leader. Please send your resume, indicating POS. #64129-29 in your cover letter, by November 23, 1992, to: Burroughs Wellcome Co., Recruiting and Staffing, 3030 Cornwallis Road, Research Triangle Park, NC 27709.

For information on other job opportunities with Burroughs Wellcome Co., call our Job Information Line at (919) 248-8347.

BURROUGHS WELLCOME CO.
An Equal Opportunity Employer
ASSISTANT PROFESSOR of Biology—Tenure-track position in physiology to begin August 1993. Ph.D. with teaching experience required. Teaching load of 9 hours will include upper-division Vertebrate Physiology with Lab, Anatomy and Physiology for Allied Health students, and supervision of undergraduate research. Xavier University (X.U.) is a Jesuit, liberal arts, coed institution with a strong emphasis on quality teaching at the undergraduate level. Applicants should send a letter of application with curriculum vitae, list of three references (with telephone numbers), and unofficial transcripts, and have three letters of recommendation from professional colleagues. Search Chair, Department of Neuroscience, 215 Stenner Hall, University of Pennsylvania School of Medicine, Philadelphia, PA 19104–6074. Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR of Biology—Tenure-track position in cell biology to begin August 1993. Ph.D. with teaching experience required. Teaching load of 9 hours will include upper-division Vertebrate Physiology with Lab, Anatomy and Physiology for Allied Health students, and supervision of undergraduate research. Xavier University (X.U.) is a Jesuit, liberal arts, coed institution with a strong emphasis on quality teaching at the undergraduate level. Applicants should send a letter of application with curriculum vitae, list of three references (with telephone numbers), and unofficial transcripts, and have three letters of recommendation from professional colleagues. Search Chair, Department of Neuroscience, 215 Stenner Hall, University of Pennsylvania School of Medicine, Philadelphia, PA 19104–6074. Equal Opportunity/Affirmative Action Employer.
Chairperson,
Dept. of Physiology
TEMPLE UNIVERSITY SCHOOL OF MEDICINE is seeking a Chairperson, Department of Physiology. Individual must have a doctoral degree, extensive experience in research, teaching and administration and academic qualifications to be appointed as a tenured professor. Must be respected for research accomplishments, and have a record of significant publications in peer reviewed journals and of continuing successful competition for peer-reviewed research. Must have had administrative experience in directing a major research program, section or department. Must have served on substantive school-wide or university-wide committees. Must be able to manage the multiple needs of an academic department which has responsibility for teaching graduate students and professional students in medicine, dentistry and allied health professions. Should have a broad perspective on the educational process, and the interrelation of basic and clinical science departments in a medical school. Must also have a commitment to faculty development in both teaching and research. Send curriculum vitae and bibliography to Ms. Betty Berdel, Office of the Dean, TEMPLE UNIVERSITY SCHOOL OF MEDICINE, 3400 N. Broad Street, Philadelphia, PA 19140. Temple is an affirmative action/equal opportunity employer and strongly encourages applications from women and minorities.

Biochemist

What do you have to do to get a position in science that provides challenge, variety, depth, freedom of research, supportive colleagues and mentors, interesting fields of investigation, and respect? Simple. Come to Unilever.

Because we understand and value the scientific process, we provide our scientists with a stimulating, multi-disciplinary, research environment, state-of-the-art instrumentation, and all the tools they need to research and develop new products and technologies.

As our work continues, we are now seeking a Biochemist to join our Biochemistry and Microbiology Department and participate in R&D programs in the household products area. To qualify, you must possess a PhD in Biochemistry or a related field, along with a strong background in protein chemistry and enzymology. Experience with biochemical catalysis or surfactant science is a plus. Excellent interpersonal, communicative and organizational skills are also required.

We offer a competitive salary and benefit package and a convenient location, situated directly across the Hudson River from New York City. For consideration, send your resume to: Mr. Jim Conti, Manager, Employee Relations, Unilever Research U.S., 45 River Road, Edgewater, NJ 07020. Equal Opportunity Employer.
DEPARTMENT OF MICROBIOLOGY AND
THE COMPREHENSIVE CANCER CENTER

Applications are invited at the Assistant, Associate or Professor levels for a vacant faculty position in Molecular Immunology jointly supported by the Department of Microbiology and the Ohio State University Comprehensive Cancer Center. Research areas of special interest include molecular biology of macrophage activation, regulation of cytokine gene expression, signal transduction mechanisms and processing/presentation of antigens. The successful applicant is expected to develop and maintain an internationally recognized, molecular-oriented research program in cancer immunology and to participate in graduate and undergraduate teaching. An attractive package for set-up is available. This position is one of several new cancer-related positions that will be filled to expand the research program of the O.S.U. Comprehensive Cancer Center coincident with the establishment of the Arthur G. James Cancer Hospital and Research Institute.

Applicants should submit a curriculum vitae, statement of current research interests and future plans and the names of three references to Bruce S. Zwillling; Chair, Immunology Search Committee, Department of Microbiology, The Ohio State University, Columbus, OH 43210; Tel. 614-292-3310 or FAX 614-292-1538. Review of applications will begin immediately and continue until the position is filled. Women and minority candidates are very strongly encouraged to apply. The University is an Affirmative Action/Equal Opportunity Employer.

THE JAMES... THE NEXT GENERATION OF HOPE
Designated by the National Cancer Institute as a Comprehensive Cancer Center

LA TROBE UNIVERSITY
BUNDOORA, MELBOURNE, VICTORIA, AUSTRALIA
School of Biological Sciences
Applications are invited for appointment to the Chairs of Microbiology and Zoology in the School of Biological Sciences.

CHAIR IN MICROBIOLOGY
(Reference No. 150-01-69)
The Department of Microbiology has research strengths in environmental microbiology, microbial genetics, molecular microbiology, animal virology, microbial cell biology and microbial ecology.
Applicants should be distinguished microbiologists with an established record in research and funding and should be prepared to undertake vigorous development of an area of research compatible with existing strengths of the Department, but with special concern for applying the latest advances in knowledge in areas such as molecular biology, biotechnology and ecological and environmental studies.

CHAIR IN ZOOLOGY
(Reference No. 150-01-68)
The Department of Zoology has thirteen academic staff engaged in teaching and research, five research fellows and three honorary academics. The Department has strong research interests in insect ecology; taxonomy; conservation and physiology; analytical electron microscopy and microprobe analysis of epithelial transport; muscle physiology; vertebrate and invertebrate behaviour and ecological; marsupial reproductive and developmental biology; coral physiology; respiratory physiology; vertebrate paleontology; and biogeography.
Applicants must have a proven capacity for academic leadership, a demonstrably broad knowledge of the discipline and a distinguished record of research and scholarship at the whole animal, organ or cell level in any field of ecological or physiological zoology.
Salary: A$77,900.
The appointee will be expected to have experience in, and participate in, teaching to undergraduate students and supervision of postgraduate research.
Further information may be obtained from the Dean of Biological Sciences, Professor R. W. Parish (telephone (613) 479 2228) or from the Secretary to the Selection Committee (telephone (613) 479 1295).
Applications should quote the reference number and include a curriculum vitae and the names and addresses of three referees. The application, marked 'In Confidence', should be forwarded to the Secretary to the relevant Selection Committee, La Trobe University, Bundoora, Victoria 3083, Australia, by 12 December, 1992.
La Trobe University is an Equal Opportunity Employer and provides a smoke free work environment.

POSITION ANNOUNCEMENT
Dean of School of Forestry
and Director of the Montana Forest and Conservation Experiment Station
The University of Montana at Missoula
The University of Montana seeks applications and nominations for the position of Dean of the School of Forestry and Director of the Montana Forest and Conservation Experiment Station at Missoula.
The School of Forestry has academic programs in Forestry Resources Management, Recreation Management, Range Resources Management, Wildlife Biology and Wilderness Studies. The school enrolls, nationally and internationally, approximately 600 undergraduate and 125 graduate (Master's and Ph.D.) students. The Montana Forest and Conservation Experiment Station administers research programs that are national and global in scope. In all, there are 33 teaching and research faculty and another 30 research staff.
The job description and selection criteria may be obtained from:
Dr. David Strobel
Associate Graduate Dean and Chair of the Search Committee
The University of Montana, Missoula, MT 59812
(406) 243-2572, FAX (406) 243-4593.
Review of applications begins January 18, 1993, and will continue until a candidate is found.
Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

OHIO STATE UNIVERSITY

0865 C1992
To apply, send curriculum vitae and three letters of recommendation to:

Dr. John Swanson
Chief
Laboratory of Microbial Structure & Function
Rocky Mountain Laboratories
National Institute of Allergy & Infectious Diseases
National Institutes of Health
903 South Fourth Street
Hamilton, MT 59840

**National Institutes of Health**

**Molecular Geneticist**

The Laboratory of Microbial Structure & Function, Rocky Mountain Laboratories, Hamilton, Montana, Public Health Service invites applications for an immediate opening. Applicants must have a Ph.D., M.D., D.V.M., or equivalent experience, plus postdoctoral research experience. Salary begins at $37,000 and is commensurate with experience. The applicant must have backgrounds in pathogenic bacteriology and molecular genetics, and he/she should be knowledgeable in the techniques necessary for study of triplex DNA. The successful applicant will join a research group involved in studying a variety of genes of *Neisseria gonorrhoeae*, especially the opa gene family and its control.

RESEARCH PHYSICIST/ASTROPHYSICIST

GS-1310/1330-11/12

$32,423 to $38,861

(salary dependent upon qualifications)

The Office of Strategic Phenomena of the Naval Research Laboratory's Space Science Division is seeking physical and computational scientists with an interest in pursuing practical problems of natural background radiation as viewed from space. Resumes are invited from scientists, especially recent Ph.D.'s, interested in modeling and simulation of such backgrounds and in the analysis of experimental data. The principal objective is support of the Strategic Defense Initiative, but some non-SDI data will be included and non-SDI applications will be pursued to a limited extent.

The primary mission is to develop and maintain the means by which phenomenology data are to be archived, distributed, and analyzed by the community of designers, experimenters, and scientists working in the area of ballistic missile defense. In the case of modeled data, this extends to the means by which realizations (such as simulated scenes) are generated and validated for use in the design, simulation, and testing of surveillance sensors and defensive systems concepts.

Qualifications: PhD or equivalent experience in Physics, Astrophysics, or Atmospheric Physics is required.

Interested applicants should submit a Standard Form 171 by 30 November 1992 to:

**NAVAL RESEARCH LABORATORY**

Human Resources Office (Code 1812)

Attn: 41-054-92 (PT)

4555 Overlook Avenue, SW

Washington, DC 20375-5000

(202) 404-8305/6

AN EQUAL OPPORTUNITY EMPLOYER • U.S. CITIZENSHIP REQUIRED

---

**1993 Summer Courses at the Marine Biological Laboratory**

**Biology of Parasitism: Modern Approaches (June 13 - August 14)**

This course, for students, postdocs, and faculty focuses on the molecular basis of parasite function and the host/parasite interaction, with special emphasis on the most recent and exciting developments in this area. The course has four sections: cell biology, immunology, molecular biology, and biochemistry. Each section includes daily lectures from course faculty and outside speakers, and intensive laboratory experimentation. Limited to 20 students.

Director: John C. Boothroyd, Stanford University; Associate Director: Richard Konmiercki, University of Toledo

**Embryology: Cell Differentiation and Gene Expression in Early Development (June 18 - July 30)**

An advanced level course intended for graduate students, postdoctoral fellows, and other research scientists who wish a current treatment of major issues in the experimental analysis of developmental biology of the embryo, and the diverse intellectual approaches now useful in this field. Limited to 24 students.

Director: Eric H. Davidson, California Institute of Technology; Michael Levine, University of California, San Diego; and David R. McClay, Duke University

**Marine Ecology: Concepts, Techniques, and Applications of Molecular Probes (June 14 - July 25)**

An intensive course for graduate students, postdoctoral fellows, and established investigators who wish to learn the techniques of molecular biology and their application to physiological and ecological investigations. Lectures and discussions will accompany the laboratories and will focus on the technologies being learned and applications to specific problems in marine ecology. Limited to 24 students.

**Microbial Diversity (June 13 - July 29)**

An intensive laboratory and lecture course intended for graduate or postdoctoral students as well as established investigators who desire to become competent in microbiological techniques for isolating and working with a broad range of microbes. Limited to 20 students.

Directors: Martin Dworkin, University of Minnesota; and John Breznak, Michigan State University

**Neural Systems and Behavior (June 13 - August 6)**

Intended for graduate and postdoctoral students as well as established investigators. The central theme of this course is the neural bases and ontogeny of behaviors. Twenty students participate in intensive laboratories/lectures which combine state-of-the-art neurobiological techniques with behavioral and developmental analyses.

Directors: Ronald Calabrese, Emory University; and Martha Constantine-Paton, Yale University

**Neurobiology (June 13 - August 14)**

For 12 pre- and postdoctoral fellows who intend to work in cellular and molecular neurobiology. Postdoctorals and students at an advanced stage of their graduate training are particularly encouraged to apply. The themes will be the functions of neural cells, the molecules involved in these functions, and the organization of molecular components required to generate cellular activity.

Directors: Leonard K. Kaczmarek, Yale University; and Irwin Levitan, Brandeis University

**Physiology: Cellular and Molecular Biology (June 12 - July 24)**

For a class of 36 graduate students, postdoctoral fellows, and established investigators who desire to learn the methods and research strategies used to study physiology at the cellular and molecular levels. Recent college graduates on their way to graduate school and physicians reentering laboratory research are also encouraged to apply. Interested students may apply for two weeks of postcourse research starting July 26.

Director: Thomas D. Pollard, Johns Hopkins University

**Application Deadline:** March 2, 1993

Partial financial aid is available to qualified applicants.

**CONTACT:** Dorianne Chrysler • Admissions Coordinator
Office of Sponsored Programs • Marine Biological Laboratory
Woods Hole, MA 02543 • (508) 548-3705, x401
ASSOCIATE OR ASSOCIATE PROFESSOR, BIOCHEMISTRY. The Department of Chemistry and Biochemistry of Oklahoma State University invites applications for a tenure-track opening in biochemistry or structural biology at the Associate or Assistant Professor level. Minimum qualifications include a Ph.D. in biochemistry, in an area of molecular biology, or closely related field, one year of postdoctoral experience, and excellent credentials in, as well as a strong commitment to, both research and teaching. Applicants must have an active, funded research program, while candidates at the Assistant Professor level must show promise of building a strong, vigorous research program which includes active supervision of graduate students in research. Minority and women candidates are strongly encouraged to apply. Applications will begin November 16, 1992, and will continue until an appointment is made. Applicants should submit complete curriculum vitae that includes research and teaching experience, a description of ongoing and future research plans, and a statement of teaching interests. Applicants should also have at least three letters of reference sent to: Dr. Artho Collins, Chair, Department of Chemistry and Biochemistry, University of Oklahoma, Norman, OK 73019. The University of Oklahoma is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITIONS IN RADIATION ONCOLOGY
The newly established Division of Cancer Biology in the Department of Radiation Oncology at Emory University School of Medicine invites applications for tenure-track, basic science faculty positions at the ASSISTANT, ASSOCIATE, or FULL PROFESSOR levels. Faculty members will also have the opportunity to participate in the student training and teaching programs of the Emory University Graduate School Division of Biomedical and Biomedical Sciences. Areas of emphasis include, but are not restricted to, DNA damage and repair, mutagenesis, oncogenes, oxygen radical toxicity, radiobiology, and mechanisms of tumor progression/metastasis. Collaborations are anticipated with faculty in the basic science and clinical departments, as well as with the Winship Cancer Center of Emory University. Competitive salaries, start-up funds, and resources have been committed for these positions. Ph.D. or M.D. degree required. Faculty rank commensurate with demonstrated background and potential. Applications will be accepted until the position is filled. Applications together with curriculum vitae and a statement of research interests and the names of three references should be sent to: Paul W. Doetsch, Ph.D., Department of Biochemistry, Emory University School of Medicine, Rollins Research Center, Atlanta, GA 30322–3050. Emory University is an Equal Opportunity/Affirmative Action Employer.

ANALYTICAL CHEMISTRY: The College of Staten Island, a senior college of the City University of New York (CUNY), invites applications for a tenure-track position at the ASSISTANT or ASSOCIATE PROFESSOR level. The Chemistry Department participates in the CUNY Ph.D. programs in Chemistry and Biology and hosts several research institutes. A Ph.D. is required for this position, with postdoctoral experience preferred. Candidates should have research expertise in an area that complements the Department's programs in polymer science, nanotechnology, and NMR. Sustained commitment to undergraduate teaching, scholarship, and service, and to establishing a vigorous research program, is required. Beginning in June 1993 the College will occupy buildings on a new campus equipped for first-rank programs in research and teaching. Applicants for this September 1993 anticipated opening should submit curriculum vitae, list of publications, descriptions of research and teaching interests, and names and addresses of at least three references by January 4, 1993 to: Dean Fred Naider, The College of Staten Island/CUNY, Room 502, 130 Stuyvesant Place, Staten Island, NY 10301. Equal Opportunity/Affirmative Action Employer.

BIOPHYSICAL CHEMISTRY OPENING AT THE UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN. The Department of Chemical and Biological Engineering invites applications for the position of Professor (or Associate Professor) in Physical or Other Areas of Chemistry. Applicants should have a Ph.D. in chemistry or a closely related field. Promotion and tenure are based upon excellence in scholarship and teaching. Review of applications begins December 1, 1992. Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR OF BIOLOGY
The Department of Biology at Loyola College invites applications for an entry-level, tenure-track position to begin Fall 1993. I would be an inner liberal arts college with a strong commitment to quality teaching. Applicants should have a Ph.D. degree and both teaching and research experience. Responsibilities include teaching, undergraduate research courses given each year, and advising students each semester. Courses to be taught include a sophomore-level genetics course, a molecular genetics course, an introductory biology course, and an upper-division course. A Ph.D. is required for this position. Please send curriculum vitae, statement of teaching and research interests, and names of three references by December 10, 1992 to: Donald Keefe, Chairman, Department of Biology, Loyola College, 4601 North Charles Street, Baltimore, MD 21210-9200. Loyola College is an Affirmative Action/Equal Opportunity Employer.


PROFESSOR/ASSOCIATE PROFESSOR SKELETAL/CYTOLOGIC/MOLECULAR DEVELOPMENTAL BIOLOGY
The Orthopaedic Research Laboratory at Thomas Jefferson University is inviting applications from established investigators in the field of skeletal biology to complement a growing research unit. The senior faculty member will carry out his own research at the extramurally funded research program, and participate in the building and strategic planning of the research unit. The tenured appointment offers highly competitive salary and generous research and administrative funds. Applicants are encouraged to apply. Send curriculum vitae and names of three references to: Dr. Rocky S. Tuan, Professor, Director of Orthopaedic Research, Department of Orthopaedic Surgery, Thomas Jefferson University, Philadelphia, PA 19107.

USD/UNATIONAL PARK SERVICE
SUPERVISORY ECOLOGIST: Great Smoky Mountains National Park, Smoky Mountain National Park (USLMC), D.O. Box 33932, Shreveport, LA 71130–3932. USLMC is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT/ASSOCIATE PROFESSOR OF BASIC MEDICAL SCIENCE
The Division of Basic Medical Sciences, Mercer University, invites applications for a tenure-track position. A Ph.D. faculty member experienced in molecular/cellular biology and with academic training in one of the traditional basic medical sciences. Duties include participation in a problem-based medical curriculum and to develop an independent research program. Consideration will be given only to applicants with training and experience beyond the Ph.D. degree. Applicants must have at least three references and a brief description of research interests to: Dr. Robert J. Moon, Chairman, Division of Basic Medical Sciences, Mercer University School of Medicine, Macon, GA 31207. An Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply.

ENDOWED CHAIR DIABETES RESEARCH
The Department of Medicine, Baylor College of Medicine invites applications for the Rutherford Chair Professor for Diabetes Research. The applicant must have established a nationally recognized program in diabetes-related research. Applications of M.D. investigators who are well recognized in the field and currently are associate professors or professors are sought for this prestigious position. A letter of interest, curriculum vitae, and the names of at least three recent references should be sent to: Glenn R. Cunningham, M.D., Acting Chief, Division of Endocrinology and Metabolism, Baylor College of Medicine, One Baylor Plaza, Room 537B, Houston, TX 77030.

ASSISTANT DIRECTOR FOR EDUCATION, Laboratory Animals Section, The Humane Society of the United States. Doctoral degree and teaching experience in the life sciences preferred. Dedication to animal protection and to reform in the use of animals in education and training, particularly at the post-secondary level. Good writing and speaking skills. Approximate start date: January 4, 1993. Send resume, references, to: Martin Grossman, HSUS, 2100 L Street, NW, Washington DC 20037.
The U.S. Department of Energy sponsors
GLOBAL CHANGE DISTINGUISHED POSTDOCTORAL FELLOWSHIPS

Research opportunities in technical areas related to four high priority themes: climate modeling and prediction, global water and energy cycles, global carbon cycle, and ecological systems and population dynamics.

- U.S. citizens & permanent resident aliens
- Doctoral degree within last three years
- Tenable at various university and federal laboratories, including those of DOE and NASA
- Stipend: $35,000
- Deadline: February 15, 1993

For application materials contact:
Global Change Postdoctoral Fellowships
Science/Engineering Education Division
Oak Ridge Institute for Science and Education
P.O. Box 117
Oak Ridge, TN 37831-0117
(615) 576-9934

UNIVERSITY OF CALIFORNIA, LOS ANGELES
UCLA DEPARTMENT OF ATMOSPHERIC SCIENCES

The Department of Atmospheric Sciences at UCLA is seeking to fill a faculty position in the area of atmospheric chemistry and radiation. The position is tenure track at the Assistant Professor level with a 9-month salary up to $40,000, a substantial set-up package, including housing assistance, is available. Salary and set-up depend on the qualifications of the candidate and are contingent on the availability of resources. The start date is July 1, 1993, or as early as possible thereafter.

Candidates will be expected to establish a teaching and research program in atmospheric chemistry and/or radiation focusing on issues related to Global Change. Teaching ability is essential for a faculty appointment at UCLA. Research emphasis on theoretical modeling and analysis, or laboratory experimentation, is preferred. Opportunity exists for interactions with a broader program in atmospheric modeling for climate change, stratospheric ozone depletion, ocean-atmosphere coupling and biogeochemical cycles.

Applications should include a curriculum vitae, publication list, and three or more names and addresses of people familiar with the applicant's work. Files submitted by January 15, 1993 will be given full consideration. Applications should be directed to: Professor Richard Turco, Search Committee Chair, Department of Atmospheric Sciences, University of California, Los Angeles; 405 Hilgard Avenue; Los Angeles, California 90024-1565. Telephone: 310-825-6936; FAX: 310-206-5219. UCLA strongly encourages applications from women and minorities in building a diverse faculty. UCLA is an affirmative action/equal opportunity employer.

Tenure track position, Assistant Professor, Biology Department, Providence College available September 1993. Qualifications include a Ph.D. in botany with strong background in taxonomy, morphology, and plant ecology, demonstrated or potential for excellence in teaching at the undergraduate level and a commitment to continued scholarship and research. Salary commensurate with experience. Teaching responsibilities include a rigorous course in introductory botany, field botany, contribution to the team taught general biology course for majors, departmental and interdepartmental non-major courses. Course development in areas of expertise, establishment and maintenance of a productive research program that may involve graduate participation, active involvement in departmental activities such as student advising, curriculum review and development, as well as committee work are also expected. The Biology Department, currently with eight full time faculty members and 150 undergraduate majors, offers programs of study leading to BA and BS degrees, a minor and numerous double majors and individualized programs. Most biology majors pursue post baccalaureate graduate or professional study in the biological sciences or health professions.

Providence College is a Roman Catholic, four year, liberal arts college located under the auspices of the Dominican Friars. Its main objective is the intellectual development of its students through the disciplines of the sciences and humanities, equipping them to become productive and responsible citizens. Applicants should submit curriculum vitae including names and addresses and telephone numbers of three references along with a cover letter by December 4, 1992 to Dr. Carol B. Crafts, Chairperson, Biology Department, Sowa 236, Providence College, Providence, RI 02918. Providence College is an equal opportunity employer and educator.

EcoScience Corporation

EcoScience is a rapidly expanding biotechnology company dedicated to the development of ecologically compatible pest control products. Join us at our new Worcester headquarters, in one of these challenging positions:

Manager of Plant Studies
A challenging and demanding position for a scientist/manager who will direct our Plant Studies laboratory. We seek an accomplished individual with a strong entrepreneurial spirit and commercial sense who will report directly to the V.P. of Research and Development. Current projects include mycoherbicides for aquatic and terrestrial weeds, post-harvest disease protection of fruits, and biologics for greenhouse and ornamental markets. You will be involved with new product development, form and manage operating budgets, make external scientific presentations, and interface extensively with other R & D groups. Experience as a bench scientist and research administrator and effective communication skills a must. Ph.D. in plant-related science preferred with 5 years at a managerial level. Degrees in microbiology or molecular biology acceptable.

Post-doctoral Program
EcoScience is looking for ambitious individuals to join two of our new programs in a post-doctoral capacity. Appropriate backgrounds include a Ph.D. in a relevant subject and significant research accomplishment.

Mycoherbicides
In collaboration with a leading academic laboratory, we are planning a mycoherbicide program targeting terrestrial weeds to complement our active aquatic weed control program.

Fungal Molecular Biology
We have established a leading program in the commercial development of pesticides using naturally occurring fungi as active ingredients. The effort is now being expanded to include fungal genetic engineering.

Please send resume/curriculum vitae to: Personnel Director, EcoScience, One Innovation Drive, Worcester, MA 01605. An equal opportunity employer.
Baxter Diagnostics, Inc., located in Miami, FL, has an open fellowship position for a Clinical Research Associate to work with the Research and Development team for the Dade Division. Baxter Diagnostics is the recognized world-wide leader in the area of Hemostasis testing and providing clinical laboratory control products.

Activities for this new fellowship position will include coordinating clinical research investigations during the early phases of the new product development cycle, on-site coordination in critical phases of the clinical investigation, overseeing the desired publication of research results, and ensuring that business goals are met during these clinical investigations. The successful candidate will have either an MD or PhD degree, and a keen interest in Clinical Hemostasis/Coagulation. This position is a one-year fellowship with an option to renew for an additional year. Salary and benefits will be commensurate with experience.

Baxter Diagnostics, Inc. offers excellent R&D facilities on the Florida "Gold Coast", along with excellent company benefits. Please submit cover letter, CV, and references to Baxter Diagnostics, Inc., Dade Division, Mail Station #609, P.O. Box 520672, Miami, FL 33152. Equal Opportunity Employer. We conduct pre-employment drug screening.

Baxter Diagnostics Inc.
Executive Director
ILSI Risk Science Institute

The International Life Sciences Institute (ILSI), a worldwide nonprofit, scientific foundation, seeks an executive director for its Risk Science Institute (RSI). The RSI was established in 1985 to improve risk assessment methodology by strengthening the scientific principles on which assessments are based through the direct support of research efforts and the sponsorship of other scientific activities involving scientists from academia, government, and industry.

The RSI executive director is responsible for identifying critical areas where research is needed to improve the methodology of assessing human health risks and where the Institute might foster cross-disciplinary cooperation. Operationally, the executive director is responsible for directing and managing RSI’s scientific programs, investigator-initiated research and the institute’s education and training activities, including an aggressive publication agenda. The executive director provides oversight and guidance for grants with outside agencies, including units of the U.S. government. In addition to scientific duties, the executive director’s responsibilities include proposing and administering a yearly budget, personnel management and development, and identifying and maintaining funding sources for RSI’s programs.

The successful candidate must possess a relevant doctoral degree such as an M.D. or Ph.D. in toxicology, pharmacology, or related science, and have at least ten years of progressively responsible scientific and managerial experience. The individual selected should also have outstanding communication skills, including public speaking, writing, editing, and interpersonal skills; a knowledge of government grants and contracts procedures and of regulatory affairs; and an ability to analyze and critique scientific documents.

Interested candidates should submit a curriculum vitae to International Life Sciences Institute, Attn: Human Resources, 1126 16th. Street, NW, Washington, D.C. 20036.

Head, Department of Veterinary Pathobiology

The College of Veterinary Medicine, Texas A&M University, is seeking applicants for the position of Department Head of Veterinary Pathobiology, which consists of the former Department of Veterinary Microbiology and Parasitology and Department of Veterinary Pathobiology. Qualifications must include one or more of the following degrees or their equivalents: Ph.D., D.V.M., M.D. A distinguished record of teaching, service, and research, and outstanding administrative skills is required. The Department of Veterinary Pathobiology supports the instructional, research, patient care, and outreach programs of the College, in the disciplines of genetics, immunology, microbiology, parasitology, and pathology. The department includes 35 tenure-track faculty members and more than 70 graduate students and residents. Courses are offered in the undergraduate, professional, and graduate degree programs of the College. Active clinical and/or research programs are conducted in bacteriology, cell biology, immunology, molecular genetics, pathology, parasitology, toxicology, and virology, as applied to diseases of avian, aquatic, wildlife, food animal, and companion animal species, as well as humans. The Department Head has administrative responsibilities for departmental teaching, research, and service activities. The Department Head is also expected to provide leadership in the development of interdisciplinary programs that capitalize on the opportunities for collaboration between the agricultural and biomedical components of Texas A&M University and other institutions. Important interactions involve the College of Agriculture and Life Sciences, the College of Medicine, the Texas Agricultural Experiment Station, the Texas Agricultural Extension Service, the Texas Veterinary Medical Diagnostic Laboratory, the National Training Center for the Pest-Safety Inspection Service, and the Institute of Biosciences and Technology. The successful candidate will be encouraged to continue a personal program of scholarly activity. Applicants should submit a letter of interest, a curriculum vitae, and the names of three references by December 1, 1992, to Dr. William J. Banks, Search Advisory Committee Chair, Dean’s Office, College of Veterinary Medicine, Texas A&M University, College Station, TX 77843-4461. Inquiries may be directed to Dr. Banks at (409) 845-3876 (phone), or (409) 862-4016 (fax). This search will continue until a suitable candidate is identified.

Texas A&M University is an Equal Opportunity Affirmative Action Employer/Educator.

Life Scientists
Du Pont Agricultural Products
Key Players in Traditional and Non-Traditional Crop Protection Markets

Seeking motivated scientists to join World Class Agricultural Products Organization.

Du Pont respects and needs employees of diverse backgrounds, talents and perspectives.

Postdoctoral and permanent (B.S., M.S., and Ph. D. candidates) positions are available in the areas of plant cell transformation, analytical chemistry, agronomy and computer programming. We also seek individuals trained in physiology, biogentic chemistry, biochemistry and molecular biology, with an interest in applying their skills in multidisciplinary approaches to the control of insects, weeds & plant diseases.

Du Pont Agricultural Products offers competitive salaries and an impressive benefits package. If you are a highly motivated individual with a desire to work within a thriving professional research environment, please submit your resume and salary history to: Du Pont, Human Resources, PSS-0075, Wilmington, Delaware 19896.

POSTDOCTORAL OPPORTUNITIES in Microbial Genetics

The National Science Foundation Center for Microbial Ecology at Michigan State University conducts multidisciplinary research on microorganisms in natural and controlled environments, including soil, water and engineered systems. Presently four positions are open in the areas of Environmental Control of Gene Expression, Biotransformation and Gene Flow and Molecular Evolution. We are looking for individuals with a background in microbial genetics, interested in studying the structure, function and regulation of microbial genes involved in stress-response, lignin degradation and aromatic pollutant degradation.

Interested individuals are encouraged to submit a curriculum vitae and names of three references to the postdoc coordinator, Dr. Frans J. de Bruijn, at the address given below. MSU is an affirmative action/equal opportunity employer.

CENTER FOR MICROBIAL ECOLOGY
MICHIGAN STATE UNIVERSITY
540 Plant & Soil Sciences Building
East Lansing, MI 48824-1395
Phone: (517) 353-9021 Fax: (517) 353-2917
Bitnet Address: debruijn@MSU.BITNET
POSITIONS OPEN

CHAIR
DEPARTMENT OF PATHOLOGY

The University of Washington invites applications for a Professor and Chair of the Department of Pathology. Candidates should be recognized scientific leaders with a vision for advancing programs in experimental and clinical pathology, who are committed to basic research, clinical training, and education in academic setting. Applications (which should include curriculum vitae and the names of three references) should be sent to: Dr. Roger Engler, Search Committee, Department of Pathology, University of Washington, Seattle, WA 98195.

PROGRAM DIRECTOR FOR WEATHER RESEARCH

The Office of Oceanic and Atmospheric Research/ National Oceanic and Atmospheric Administration is seeking applicants for the position of Program Director for Weather Research. That is a Senior Executive Service Position, pay range $90,000 to $112,000. Duties: the incumbent serves as the senior Program Director for development of a NOAA-wide program in weather research. As such, he/she develops and advocates policies with other federal agencies to further the interests of weather research and coordinate NOAA's missions in weather forecasts and warnings. Serves as spokesperson for the U.S. Weather Research Program to improve utilitarian use of NOAA's new observing systems and to foster NOAA responsibilities to the Committee on Earth Science Environment. This position is located in Silver Spring, MD. Applicants must submit an application package by November 23, 1992 to: National Oceanic and Atmospheric Administration, Personnel Division—OA2/SSMC/ Room 249118, Silver Spring, MD 20910. For a listing of additional qualification requirements and additional information call Debbie Schie (301) 713-0530. Refer to Vacancy #: NOAA 92-12DS. DOC is an Equal Opportunity Employer.

DIRECTOR, PROGRAM IN MOLECULAR AND CELLULAR BIOLOGY
University of Massachusetts at Amherst

Applications are invited for the position of Director of the Graduate Program in Molecular and Cellular Biology (MCB)/Professor. The program has 60 faculty members and modern research support facilities. The faculty are drawn from a wide variety of biological and chemical disciplines at UMass and nearby Amherst, Mount Holyoke and Smith College. The Director provides intellectual and administrative leadership for the program and represents the MCB community in broader initiatives, including research, teaching and outreach efforts. Candidates should have a distinguished record of scholarly accomplishment and will be expected to maintain a vigorous research program. The Director will have a tenured appointment in an appropriate department. Rank and salary will be commensurate with experience. The position is available Fall 1993. Applications should be complete by December 15, 1992, however, all candidates will be considered until the position is filled. Curriculum vitae and names of at least four references should be submitted to: Search Committee, MCB Program 435 Morrill Hall North, University of Massachusetts, Amherst, MA 01003. The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.

The CINCINNATI MUSEUM OF NATURAL HISTORY seeks a CURATOR OF PALEONTOLOGY to oversee the Museum's fossil collections, establish an acquisitions program, and contribute to educational programs and development of exhibits. Research area, salary and curatorial level are negotiable. Ph.D., museum experience, and an established record of research and funding are desirable. Ideally, applicants will take advantage of the rich Paleozoic fossils in the Cincinnati region. Send letter of interest, curriculum vitae and three letters of recommendation by 1 January 1993 to: Dr. Robert Kennedy, Cincinnati Museum of Natural History, 1720 Gilbert Avenue, Cincinnati, OH 45202. An Equal Opportunity Employer.

SEARCH CONTINUED

CHAIRPERSON
DEPARTMENT OF CHEMISTRY DUQUESNE UNIVERSITY

The Department of Chemistry at Duquesne University invites applications and nominations for the position of Chairperson. Duquesne University is a private, Catholic institution located in Pittsburgh, Pennsylvania with a total enrollment of 8400 students. The Department, which currently has 13 faculty and approximately 30 graduate students, offers the B.S., M.S., and Ph.D. degrees in Chemistry and Biochemistry. We are seeking an individual with nationally recognized research accomplishments and a commitment to undergraduate and graduate education. The successful candidate will demonstrate the ability to provide leadership and vision in a growing department's search and educational programs. The area of expertise, rank, and salary are open. Applications should consist of a cover letter, curriculum vitae, and names and addresses of four references. Review of applications will begin December 15, 1992. Direct inquiries and applications to: Search Committee, c/o Dr. J. W. Hauser, Interim Chair, Department of Chemistry, Duquesne University, Pittsburgh, PA 15282. Equal Opportunity/Affirmative Action Employer.

BOTANY CURATOR: Oversee museum collection, curate, and work with exhibits, in education departments. Individuals with Ph.D. encouraged to apply. Deadline for receipt of complete application is January 15, 1993. For application details, minimum qualifications, and state application forms contact: Personnel, New Mexico Museum of Natural History and Science, 1801 Mountain Road NW, Albuquerque, NM 87104, or telephone: 505-841-8837. New Mexico State Government does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in employment or provision of services.

POSITIONS OPEN

MOLECULAR BIOLOGIST

The Division of Cardiovascular Disease of the University of Alabama at Birmingham invites applications for a FACULTY MEMBER to work with hypertension research group. Must be expert in cardiovascular gene regulation and transgenic animal models of cardiovascular disease. Apply to: Hypertension Program of the Division of Cardiovascular Disease, University of Alabama at Birmingham, UAB Station, Birmingham, AL 35294, Attention: Donna Cline. An Equal Opportunity/Affirmative Action Employer.

ANATOMY/PHYSIOLOGY/MICROBIOLOGY

The American University of the Caribbean School of Medicine, in Montserrat, West Indies, seeks to fill teaching positions in the above area. Excellent salary and benefits. Send resume to: P.O. Box 400, Montserrat, West Indies. FAX: (809) 491-2913.

MOLECULAR BIOLOGY OF CANCER

Tenure-track appointments at the ASSISTANT and ASSOCIATE MEMBER level are available at Memo-リアル Sloan-Kettering Cancer Center in both the cellular and molecular biology of human cancer. Among areas of interest are regulation of growth and differentiation, signal transduction, oncogene activity and suppressor genes. Cell cycle regulation.

Candidates with M.D. and/or Ph.D. degrees should have a successful record of research achievements and the capacity to establish an independent research program. Attractive start-up packages are available to establish the successful candidates’ laboratories. Collaborations with basic and clinically based laboratory investigators at the Cancer Center are encouraged.

Interested applicants should forward curriculum vitae, bibliography, the names of three references and a re- search statement to:

John Mendelsohn, M.D.
Memorial Sloan-Kettering Cancer Center
1275 York Avenue
New York, NY 10021

TENURE-TRACK FACULTY POSITIONS

UCLA SCHOOL OF MEDICINE

Outstanding applicants employing molecular and cellular techniques to study fundamental biological processes in the context of human disease are encouraged to apply. Departmental appointments, basic or clinical, will be made according to the research interests of the applicant.

Submit curriculum vitae, list of references, and a brief description of research interests to search committee co-chairmen: S. Larry Zakursky, Department of Biochemical Chemistry, or Stephen T. Rabin, Department of Microbiology and Immunology, 5748 MacDonald Research Laboratories, UCLA School of Medicine, 10833 Le Conte Avenue, Los Angeles, CA 90024-1662. Priority will be given to applications received by January 10, 1993. UCLA is an Affirmative Action/Equal Opportunity Employer.

TENURE FACULTY POSITIONS

The Department of Molecular Pathology, University of Texas M. D. Anderson Cancer Center, invites applications for a tenure-track position at the Assistant Professor level. The M. D. Anderson Cancer Center, an internationally renowned facility, is located in the Texas Medical Center within southwest Houston together with 2 medical schools, a graduate school and several other internationally recognized biomedical facilities. Applicants must hold a Ph.D., M.D. or M.D./Ph.D. degree and have at least 3 years of postdoctoral research training. Salaries/benefits and research start-up support are nationally competitive. Submit curriculum vitae, description of research interests and 3 letters of reference to: Dr. Ralph B. Arlinghaus, Chairman, Department of Molecular Pathology (Box 89), The University of Texas, M. D. Anderson Cancer Center, Houston, TX 77030. Equal Opportunity/Affirmative Action Employer. SMOKE-FREE ENVIRONMENT.
Quality Biotech Inc. is a leading, international biotechnology service company engaged in contract research and biosafety testing for the biopharmaceutical industry. As part of our expansion, the following openings are available:

**Virology**

**DIRECTOR**—Requires a PhD, 5-10 years of relevant experience, a record of independent scientific leadership, an accomplished supervisory background and excellent communications skills.

**RESEARCH ASSOCIATES**—Requires MS/BS, 2+ years of academic/industrial experience and a strong background in virology/cell biology.

The successful candidates will be involved in the development and implementation of novel assays for the detection of retroviral and other contaminants in cell substrates and products using state-of-the-art techniques such as PCR, DNA hybridization, marker rescue assays, etc.

Quality Biotech is located in the Greater Philadelphia region - an area rich in scientific, cultural and recreational diversity. We offer excellent opportunities for professional growth, a competitive salary, relocation assistance, medical and dental benefits, tuition reimbursement and 401(k) and flex benefit plans. Please send resume and salary history to: Quality Biotech Inc., Human Resources-AI, 1667 Davis Street, Camden, NJ 08104. An Equal Opportunity Employer

---

**Postdoctoral Fellows/Research Scientists**

*Children's Hospital Oakland Research Institute*, an expanding, well-funded, multidisciplinary biomedical research organization, has several excellent opportunities for talented Ph.D. scientists in the following disciplines:

**Signal transduction.**

A position is available to investigate the interaction of integrins with the cytoskeleton and the role this plays in regulating integrin function and signal transduction mechanisms. Research will involve biochemical, morphological, and molecular biology approaches. #20356

**Red blood cell membrane phospholipids.**

Projects involve biochemistry, cell biology and molecular biology approaches to study factors regulating phospholipid molecular species composition in normal red blood cells, during red cell maturation and in pathologic red blood cells. Expertise in phospholipid biochemistry and molecular biology desirable. #20358

**Cystic Fibrosis.**

Current studies include the regulation of chloride channel activity in the apical membrane and possible roles for the CFTR in intracellular membranes. Experience with tissue culture is essential; experience with in vivo protein labeling, electrophysiology, or the use of fluorescent indicators to measure intracellular ions is desirable. #20232

**Mass spectrometry.**

Research primarily involves structural characterization of important biological materials produced by researchers at the institute or by local biotechnology companies. A strong background in HPLC and mass spectrometry obtained during Ph.D. studies is needed; knowledge of the new Electrospray technique is desirable. Four mass spectrometers, two GC/MS instruments, a FAB/thermospray instrument and an HPLC/Electrospray instrument are available in the department. This position provides good entry-level scientific training in a rapidly expanding field. #20357

**Regulation of fetal and adult hemoglobin genes.**

Research involves the use of factors to induce fetal globin gene expression and includes clinical trials of agents to treat sickle cell anemia and thalassemia. Experimental systems include human erythroid cell culture, transient and stable expression systems with cell lines, a large animal model, transfections, RNA analysis and footprinting. Previous experience with molecular biology techniques (DNA & RNA isolation and quantization) and experience in establishing a variety of experimental techniques is desirable. #20224

The Institute, located in the San Francisco Bay Area close to the U.C. Berkeley campus, has a staff of 75 engaged in various basic and clinical research programs. Opportunities exist for outstanding scientists ultimately to develop independent research programs. Salaries and fringe benefits are highly competitive. Appointments will be made at the Postdoctoral Fellow or Research Assistant level, depending on qualifications and experience. Forward resume and references to Human Resources, 747 52nd St., Oakland, CA 94609. Indicate Job #. (510) 428-3420. EOE.
**POSITIONS OPEN**

**JUNIOR OR SENIOR FACULTY POSITIONS.** Department of Anatomy & Cell Biology, University of Colorado, College of Physicians and Surgeons. The Department of Anatomy and Cell Biology invites applications for its Junior and Senior faculty positions. The search is open and developmental biologists are especially encouraged to apply. Successful candidates should have demonstrated ability to carry out an independent research program. One position is tenure-track. Submit letter indicating interest to: Michael D. Gershon, M.D., Department of Anatomy and Cell Biology, 630 West 16th Street, New York, NY 10032.

**GENETICS RESEARCH PROGRAM**

A faculty position is available at the Barbara Davis Center for Childhood Diabetes at University of Colorado Health Sciences Center. The successful applicant must have an M.D. or Ph.D. and will be expected to establish a research program in the genetics of human autoimmunity within an expanding Center with basic and clinical investigations exploring the immunobiology of Type 1 diabetes. Experience in the genetics of mammalian genetics is highly preferred. Appointee (Assistant, Associate, or full Professor) will be at a level commensurate with qualifications and experience. Please send curriculum vitae, names of three references, and a short description of research interests to: Martin A. Lafferty, Ph.D., Research Director, Barbara Davis Center, UCHSC, 4200 East 9th Avenue, Box 8140, Denver, CO 80262. The University of Colorado Health Sciences Center is committed to Equal Opportunity and Affirmative Action.

**CELL BIOLOGIST**

The Department of Anatomy, Indiana University School of Medicine announces a TENURE-TRACK FACULTY POSITION (rank open). We seek an individual who has demonstrated excellence in fundamental problems in cell biology. Preference will be given to applicants whose work complements existing research interests in our department; including: bone matrix biology and regulation of osteoblast/osteoclast function, polarized cell structure/function in the renal tubule, cytoskeletal function, cellular nutrition. Teaching: participate in one lecture/lab/team-taught course (Neurobiology, Gross Anatomy or Histology) and develop graduate cell biology topic(s) in area of interest. Send curriculum vitae, names of three references, and address of three references to: Dr. David B. Burr, Chairman, Department of Anatomy, Indiana University School of Medicine, 525 Barnhill Drive, Indianapolis, IN 46202-5120. Review process to begin December 1, 1992. Indiana University is an Affirmative Action/Equal Opportunity Employer (M/F).

**FACULTY POSITION IN BIOORGANIC CHEMISTRY.** The Division of Bioorganic Chemistry and Molecular Pharmacology in the Department of Molecular Biology and Pharmacology at the Washington University School of Medicine invites applications for a tenure-track faculty position. Candidates with records of creativity in bioorganic chemistry who wish to participate in an interdisciplinary program in bioorganic chemistry should forward curriculum vitae, a short summary of current and future research plans and the names and addresses of three references to: Search Committee, Division of Bioorganic Chemistry and Molecular Pharmacology, School of Medicine; 660 South Euclid Avenue, Box 8020; St. Louis, MO 63110. Washington University School of Medicine is an Affirmative Action/Equal Opportunity Employer and strongly encourages the representation of women and minority groups on its faculty.

**POSTDOCTORAL(S) in Muscle Physiology/Lo- comotion.** Positions for energetic individuals. My laboratory studies muscle function during locomotion using kinematics, muscle mechanics, histology, electrophysiology, EMGs, and neurophysiology. Skills in these and computer programming and electronics helpful. PENN houses the PA State College, specializing in cellular aspects of muscle contraction. Please send curriculum vitae to: Dr. Larry Rome, Biology Department, University of Pennsylvania, Philadelphia, PA 19104. FAX: (215) 898-8780.

**POSITIONS OPEN**

The Department of Chemistry of Yale University seeks applications from Ph.D. candidates interested in academic positions as non-ladder LECTURERS in undergraduate chemistry laboratories. Responsibilities include the organization of the course, supervision of teaching assistants, and the preparation of educational materials. The appointment is effective July 1, 1993. Candidates should submit a resume and three letters of recommendation to: W. E. Merckle, Department of Chemistry, Laboratory, Box 6666, 225 Prospect Street, New Haven, CT 06511-8118. The deadline for applications is January 15, 1993. Yale University is an Affirmative Action/Equal Opportunity Employer.

**MUSCLE PHYSIOLOGIST**

The Bowman Gray School of Medicine of Wake Forest University invites applications for a full-time, joint FACULTY POSITION in the Department of Physiology and Pharmacology and Department of Internal Medicine. We are seeking an individual who has demonstrated competence in the use of molecular biological approaches to conduct research in muscle function and aging. This is an excellent opportunity to interact with a multidisciplinary research group in the study of physical performance and aging. Candidate should have a Ph.D. and a strong research background in independent research. Academic rank will be commensurate with the experience and accomplishments of the candidate. Submit curriculum vitae to: Walter Ettenger, M.D., Medical Center Boulevard, Winston-Salem, NC 27157. Women and minority candidates are encouraged to apply. Wake Forest University is an Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITION**

Available immediately to investigate molecular mechanisms of tumor growth regulation by interferons, including the role of cell cycle regulatory factors such as RB protein, cyclins and CDC2 kinases (see Proc. Natl. Acad. Sci. USA., 89, 6599-6603, 1992). Molecular biology and/or experience in protein purification is essential. Send curriculum vitae and three references to: Rakesh Kumar, Ph.D., Department of Medicine/Oncology, University Medical Center, P.O. Box 850, Hershey, PA 17033.

**POSTDOCTORAL POSITION**

**HARVARD MEDICAL SCHOOL**

**CYTOKINE REGULATION OF EOSINOPHIL GENES.** Postdoctoral or Research Associate position available for Ph.D. in molecular biology to characterize the promoters and enhancers of eosinophil genes, to identify potential transcription factors involved in eosinophil gene expression and maturation. Send curriculum vitae and three letters of reference to: Dr. Steven J. Ackerman, Infectious Disease Division, Research East 219, Beth Israel Hospital, 330 Brookline Avenue, Boston, MA 02215.

**POSTDOCTORAL POSITION**

**HARVARD MEDICAL SCHOOL.** Available immediately. Organize and maintain library of eosinophil molecules as part of a multidisciplinary group examining the diagnostic and therapeutic potential of radioconjugates. Salary based on experience (NIH Guidelines). Must be a U.S. citizen or permanent resident. Please contact: Dr. A.I. Kassis, SWRLI, 50 Binney Street, Boston, MA 02115. Telephone: 617-432-3905. An Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION**

**HARVARD MEDICAL SCHOOL.** Available immediately. Organize and maintain library of eosinophil molecules as part of a multidisciplinary group examining the diagnostic and therapeutic potential of radioconjugates. Salary based on experience (NIH Guidelines). Must be a U.S. citizen or permanent resident. Please contact: Dr. A.I. Kassis, SWRLI, 50 Binney Street, Boston, MA 02115. Telephone: 617-432-3905. An Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION**

**HARVARD MEDICAL SCHOOL.** Available immediately. Organize and maintain library of eosinophil molecules as part of a multidisciplinary group examining the diagnostic and therapeutic potential of radioconjugates. Salary based on experience (NIH Guidelines). Must be a U.S. citizen or permanent resident. Please contact: Dr. A.I. Kassis, SWRLI, 50 Binney Street, Boston, MA 02115. Telephone: 617-432-3905. An Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION IN MOLECULAR BIOLOGY.** The Department of Molecular Biology at the University of California, Irvine, invites applications to study molecular aspects of the fungal Candida albicans. Projects include the mechanisms of differentiation and pathogenesis of the organism and the structure/function and interactions of a series of putative cell wall transglutaminase and elongation factor three. The candidate should be experienced in molecular genetics and biochemistry, and have experience in yeast molecular genetics desirable. Send curriculum vitae and names of three individuals to be contacted for references to: Dr. William A. Fonzi, Department of Microbiology & Molecular Genetics, University of California, Irvine, CA 92717-4025. Affirmative Action/Equal Opportunity Employer.

**SIGNALLING BY INTEGRINS**

**POSTDOCTORAL POSITION**

Available to study signal transduction pathways and cellular mechanosensitive processes. Applicants should have experience with biochemical and molecular approaches. Send curriculum vitae and the names of three references to: Dr. L. Derfyl Quarles, Box 8036, DUMC, Duke University School of Medicine, Durham, NC 27710. Duke University School of Medicine is an Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITION**

**HARVARD MEDICAL SCHOOL.** Available immediately. Organize and maintain library of eosinophil molecules as part of a multidisciplinary group examining the diagnostic and therapeutic potential of radioconjugates. Salary based on experience (NIH Guidelines). Must be a U.S. citizen or permanent resident. Please contact: Dr. A.I. Kassis, SWRLI, 50 Binney Street, Boston, MA 02115. Telephone: 617-432-3905. An Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION**

**HARVARD MEDICAL SCHOOL.** Available immediately. Organize and maintain library of eosinophil molecules as part of a multidisciplinary group examining the diagnostic and therapeutic potential of radioconjugates. Salary based on experience (NIH Guidelines). Must be a U.S. citizen or permanent resident. Please contact: Dr. A.I. Kassis, SWRLI, 50 Binney Street, Boston, MA 02115. Telephone: 617-432-3905. An Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL FELLOWSHIP**

University of Hawaii, Biotechnology Program, Pacific Biomedical Research Center, full-time, federal funds, to begin January 1993, continuation pending availability of funds, annual stipend $28,000 to $30,000. The incumbent will investigate the molecular biology of hydrogen producing bacteria and cyanobacteria. Particular emphasis directed at purification of hydrogenases and development of genetic systems in hydrogen-producing strains. Ph.D. and experience in molecular biology is required. Send letter of application, curriculum vitae, publications, and names of three references to: Dr. Edward Bylina, Pacific Biomedical Research Center, 4666 Hawaii Boulevard, Honolulu, HI 96822. Telephone: (808) 956-4757. All applications must be received by December 15, 1992. The University of Hawaii is an Equal Employment Opportunity/Affirmative Action Employer.
GENE DEVELOPMENTAL BIOLOGY
CELL
STRUCTURAL MOLECULAR BIOLOGY
MOLECULAR VIROLOGY, IMMUNOLOGY AND AIDS
STRUCTURAL AND COMPUTATIONAL BIOLOGY
SIGNAL TRANSDUCTION AND MEMBRANE BIOLOGY
LIPID METABOLISM AND CARDIOVASCULAR BIOLOGY

The Graduate School at BAYLOR COLLEGE OF MEDICINE has created a graduate program in CELL AND MOLECULAR BIOLOGY stressing basic research in the above areas. Students accepted for studies leading to the Ph.D. will receive financial support. For further information please contact Dr. Savio L.C. Woo, Director at the following address:

Graduate Program in Cell and Molecular Biology
Baylor College of Medicine
The Graduate School
One Baylor Plaza Room S-101
Houston, Texas 77030
Phone: (713) 798-6557

PathoGenesis

PathoGenesis is a newly formed company dedicated to the discovery, diagnosis and treatment of infectious agents that are associated with chronic disease. We are developing new research programs related to the following organisms: Retroviruses, Mycobacteria, Nosocomial Infections, and Chlamydia.

Several positions for Ph.D.-level Scientists and Senior Scientists are available.

Molecular Biologists
• with extensive experience in DNA cloning and sequencing.

Cell Biologists
• with an interest in elucidating the pathogenesis of microbial and viral disease.

Virologists
• with experience in isolation and characterization of retroviruses.

Microbiologists
• with interest and experience in microbial pathogenesis & mechanisms of drug resistance.

Chemists
• with a strong background in medicinal chemistry and an interest in novel methods of drug discovery and development.

PathoGenesis is located in Seattle and offers competitive salaries and a benefits program that includes insurance and stock options. Send your resume to:

PathoGenesis
201 Elliott Avenue West
Suite 150
Seattle, WA 98119
Attn: Director of Personnel

equal opportunity employer
W.M. Keck Foundation Graduate Fellowships
University of Colorado at Boulder

The University of Colorado at Boulder and the Center for the Study of Earth from Space (CSES)/CIRES are offering two fellowships for the academic year 1993-1994 to first-year graduate students with degrees or strong backgrounds in physics, mathematics, or chemistry to pursue studies in interdisciplinary earth sciences in the Departments of Geological Sciences, Geography, or Environmental, Population, and Organismic Biology. Applicants must have a strong analytical training, proven scholarship, and demonstrate interest in pursuing a Ph.D. with a focus in global change research. Research should address broadscale questions from a theoretical point of view or experimentally with techniques such as remote sensing.

Stipends include tuition and half-time financial support for 12 months. Applications for entrance to the graduate program and for the W.M. Keck Foundation Fellowships should be addressed to one of the above departments at the University of Colorado at Boulder, Boulder, Colorado 80309-0449. The deadline for receipt of applications is January 15, 1993.

For further information, address inquiries to: Professor Alexander F. H. Goetz, Director, Center for the Study of Earth from Space, Campus Box 449, University of Colorado at Boulder, Boulder, CO 80309-0449.

The University of Colorado, Boulder, has a strong institutional commitment to the principle of diversity. In that spirit, we are particularly interested in receiving applications from a broad spectrum of people including women, members of ethnic minorities and disabled individuals.
The Division of Injury Sciences, Department of Anatomy, Cell Biology and Injury Sciences of the UMDNJ-New Jersey Medical School, seeks distinguished candidates for faculty appointments at the Assistant Professor level. Candidates should possess a doctoral degree and demonstrated academic productivity in the areas of cell biology, biochemistry, physiology or immunology as related to studies of the host defense response to injuries, sepsis or shock. Resumes and additional information may be sent to: Dr. John H. Siegel, Chairman, Anatomy, Cell Biology and Injury Sciences, 185 South Orange Avenue, Newark, NJ 07103; telephone (201) 455-4414 or FAX (201) 504-7489. UMDNJ, NJ's university of the health sciences, is an Affirmative Action/Equal Employment Opportunity Employer, m/f/h, and a member of the University Health System of New Jersey.

ASSISTANT PROFESSOR
LANDSCAPE ECOLOGY
UNIVERSITY OF MINNESOTA

The Departments of Horticultural Science and Landscape Architecture invite applications for a joint, 12-month tenure track position in landscape ecology at the rank of assistant professor beginning July 1, 1993. Teaching responsibilities in Landscape Architecture include advising graduate students and, typically, teaching two courses each year, a course on ecological concepts for sustainable landscape design and a landscape design course as a partner to a landscape architect. Teaching responsibilities in Horticultural Science include advising graduate students and, typically, teaching one course per year in the theory and practice of establishing and maintaining sustainable plant systems. Research responsibilities could include areas of inquiry such as understanding how managed plant communities, in both urban and agricultural settings, affect landscape structure and function; understanding the ecological implications of planting systems in both landscape and production settings; or defining biological and environmental parameters for the integration of sustainable plant communities into design landscapes. Minimum qualifications include a Ph.D. in a biological field related to horticulture or ecology, demonstrated effectiveness in research, and demonstrated effectiveness in teaching-related activities. Desired qualifications include evidence of background in landscape ecology, consulting or teaching related to landscape design or planning; evidence of successful program initiation, development, completion, and publication in refereed journals; practical experience in horticulture, agriculture or design; and clear potential for collaborative work and future scholarly contribution. Applicants should submit a curriculum vitae, a statement of teaching and research interests as related to this position, and the names, addresses, and telephone numbers of three references to: Chair, Landscape Ecology Search Committee, Department of Horticultural Science, University of Minnesota, 305 Alderman Hall, St. Paul, MN 55108. Application materials must be received by December 31, 1992.

DEAN
College of Sciences

General Description
As the chief academic officer of the College, the Dean is responsible for all instruction, research, and public service programs within the College. The Dean reports to the Provost and Vice President for Academic Affairs.

Institutional Context
Old Dominion University is a state-assisted, doctoral-granting institution which enrolls nearly 17,000 students, including 5,500 graduate students. The University is located in Norfolk, one of seven cities making up the Hampton Roads region of Virginia, a major seaport and recreation area with a population in excess of 1.4 million people. The Norfolk Naval Base, the largest naval base in the world, is three miles from the campus. Major federal research installations that focus upon space, aeronautics, oceanography, and nuclear physics are nearby. The College of Sciences consists of the departments of Biological Sciences, Chemistry and Biochemistry, Computer Science, Geological Sciences, Mathematics and Statistics, Oceanography, Physics, and Psychology. The College offers a wide range of undergraduate and graduate programs, including doctoral programs in nine areas. A full-time faculty of 135 generated over $7 million of external research funding during fiscal year 1991.

Responsibilities
The Dean is expected to provide dynamic leadership in teaching, research, and professional service. The person selected should be able to stimulate a collegial, intellectual environment, promote the continued development of nationally recognized research programs, and work productively with faculty, staff, and students. The Dean should be able to represent the College within the University and the professional community as well as to outside agencies and the general public.

Qualifications
Candidates should have an earned doctorate, a record meriting appointment as a full professor in a department of the College, and administrative experience at the level of academic department chair or the equivalent. Candidates must have a strong commitment to academic excellence and an ability to work with diverse constituencies.

Applications/Nominations
Application materials, including a resume and the names, addresses, and telephone numbers of five references, should be sent to:

Dr. Ernest J. Cross, Jr., Chair
College of Sciences Dean Search Committee
Old Dominion University
Norfolk, Virginia 23529-0011
(804) 683-2560

Initial screening of applicants will begin December 1, 1992, but applications will be accepted until the position is filled.

Old Dominion University is an Affirmative Action Equal Opportunity Employer and complies with the Immigration and Naturalization Act of 1986.

Agouron Pharmaceuticals, Inc.

RECEPTOR STRUCTURE BASED
DRUG DESIGN

Agouron Pharmaceuticals, Inc., a recognized pioneer and leader in the field of rational drug design, is located in San Diego, California in the midst of a dynamic and challenging environment of academic and industrial research centers. We are seeking talented Ph.D. scientists to join our multidisciplinary team in the following areas:

- **BIOCHEMISTRY — CODE N1**
  Requires expertise in quantitative analysis of molecular interactions. Traditional assays of inhibitor binding will be extended to innovative studies of binding thermodynamics. Protein-protein interactions will also be analyzed. Senior scientists are encouraged to apply.

- **PROTEIN EXPRESSION AND PURIFICATION — CODE N2**
  Requires a broad range of molecular biology talents, including expression vector design and modern purification techniques. Prior experience with insect and/or mammalian cell expression is a plus. Postdoctoral experience is expected.

The successful candidate for each of the above positions must be willing to interact closely with colleagues in a wide range of scientific disciplines.

We offer competitive salaries and benefits in a superb location. Please send resumes (cited to the position for which you are applying) and the names of references in confidence to:

Human Resources

AGOURON PHARMACEUTICALS INC.
3565 General Atomics Court, San Diego, CA 92121
POSTDOCTORAL POSITION in Cancer Biology to examine the role of reactive oxygen and nitrogen oxide in tumor metastasis. Study effects of oxidant stress on either integrin function or the metastasis suppressor gene NMDA. Experience in cell or molecular biology required. Send curriculum vitae and names of three references to: Dr. A.M. Fulton, Department of Pathology, University of Maryland, 10 South Pitt Street, Baltimore, MD 21201.

POSTDOCTORAL POSITION supported by NIH grant, available January 1993, to study molecular biology of coagulation factors VII and X. Study to involve PCR, recombinant DNA, site-directed mutagenesis, documentation of antigenicity, and post-prediction of protein crystal structure-function correlates related to interactive sites, computer-assisted molecular modeling, and design of inhibitory peptides. Send curriculum vitae and names of three references to: Dr. J. Kamps, USDA Forest Service, Northeastern Forest Experiment Station, Forest Road, Delaware 48, MD 20786. Telephone: (301) 369-4476; FAX: (301) 363-1437. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to investigate the infection of American elm with Ophiostoma ulmi, the causative agent for Dutch elm disease: to determine host plant defense mechanisms or elicitors of the host defense response. Ph.D. in Plant Molecular Biology or related plant sciences. Knowledge of plant biochemistry and tree physiology is desirable. Applicants must have experience in cell or molecular biology required. Send curriculum vitae and names of three references to: J. C. Kamlay, USDA Forest Service, Northeastern Forest Experiment Station, Forest Road, Delaware 48, MD 20786. Telephone: (301) 369-4476; FAX: (301) 363-1437. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION, AGRO/LANDSCAPE ECOLOGY. Interagency study in Iowa on effects of landscape structure on bird abundance, species composition, and nest predation in midwestern agriculturesystems. Applicant must have a Ph.D. or equivalent in ecology or related field, background in avian ecology, good oral and written communication skills, and evidence of research productivity. GIS knowledge and supervisory experience desirable. Salary based on experience; research expenses fully funded. Position begins ASAP; preferably by January 1993; ends spring 1995. Send résumé, transcripts, letters of reference to: LOUIS B. BEST, Department of Animal Ecology, Iowa State University, Ames, IA 50011; Telephone: (515) 294-7477.

INTERNATIONAL LABORATORY OF MOLECULAR BIOLOGY FOR TROPICAL DISEASE AGENTS
NINE POSTDOCTORAL RESEARCH FELLOWSHIPS FOR EGYPTIAN NATIONALS
The program is funded by USAID for the "Transfer of Technology in Tropical Biology to Egypt." Primary objective is the development of recombinant vaccines and rapid diagnostic kits for rinderpest and other livestock diseases. Applicants must be Egyptian nationals and have a D.V.M. and/or Ph.D. in Molecular Biology, Microbiology, Biochemistry or related field. Upon completion, candidates are required to serve in a modern molecular biology laboratory at Abbassiya, Egypt. Send curriculum vitae and 3 letters of recommendation to: Dr. T. Yilmaz, V.M.: Microbiology, University of California, Davis, CA 95616-8268 (FAX: 209-525-2801) Equal Opportunity, Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIPS MOLECULAR BIOLOGY OF CARDIAC MUSCLE
HARVARD MEDICAL SCHOOL
Applications are invited for postdoctoral positions, available immediately, at the Cardiovascular Division at Brigham and Women's Hospital, Harvard Medical School. Successful applicants will join a laboratory of extraordinarily diverse, creative and imaginative investigators investigating the molecular and cellular biology of cardiac muscle. A strong background in molecular biology is essential. Salary and Harvard appointment commensurate with qualifications and experience. Send curriculum vitae and the name and telephone number of three references to: Dr. Thomas W. Smith, Cardiovascular Division, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115.

PROTEIN CRYSTALLOGRAPHY
Applications are invited for POSTDOCTORAL POSITIONS in the laboratory of Dr. John Kurtz, the current recipient in an NSF crystallographic investigator's grant. The project involves in DNA replication and in cellular signal transduction. A strong background in protein biochemistry and recombinant DNA techniques is desired. Candidates with training in protein engineering or computational methods who wish to learn protein crystallography are also encouraged to apply. This laboratory is well equipped for crystallography (area detector and mini-supercancer computer) as well as molecular biology and protein purification.

Send curriculum vitae to: John Kurtian, Laboratories of Molecular Biophysics, Box 3, The Rockefeller University, 1230 York Avenue, New York, NY 10021. An Equal Opportunity Employer.

POSTDOCTORAL POSITION
A postdoctoral position to work on the phenotypic alterations of the blood vessel wall after injury is available at Elf Sanofi, a subsidiary of Elf Aquitaine, in Toulouse, France.

The research project aims at evaluating the variations of thrombogenicity of the vascular endothelium, concomitant adhesion, sepsis or occurring after regeneration following vascular injury.

LO: Please call if you have a background in pharmacology, cell biology or biochemistry but also a good knowledge of the basic methods in molecular biology (Northern blotting, PCR, ...). Cell culture will be an important component of the experimental work.

The research group is headed by Dr. J. M. Herbert and includes approximately 30 people who work on various aspects of vascular pharmacology, biochemistry and cell biology.

Duration of the fellowship is one year and it might be renewable for a second year.

Applications, including curriculum vitae, bibliography and name of two references should be sent to:

Ms. Mélisende Bart
1899 L Street, N.W., Suite 500
Washington, D.C. 20036

POSTDOCTORAL FELLOWSHIP: To partici-
pat in investigations of cytoskeleton structure and func-
tion during human cell destruction by the parasite, Entamoeba histolytica. Ongoing experimental approaches include: preparative 1-2 D PAGE, protein microse-
nip electrophoresis, PCR, recombinant DNA, and cell-
cell interaction studies. Candidates with experience in one or more of these are preferred. American minorities and/or women encouraged to apply. Please send a copy of your curriculum vitae and names of three references to: Dr. Gordon Bailey, Department of Microbiology and Immunolo-
gy, University of Maryland, 2201 Westview Drive, Atlanta, GA 30310.

FELLOWSHIPS IN TROPICAL BIOLOGY
Smithsonian Tropical Research Institute
Predoctoral, postdoctoral, senior postdoctoral, and 10-week graduate students fellowships are available to conduct research at the Smithsonian Tropical Research Institute (STRI) in the Republic of Panama. With a multinational staff of 30 scientists, STRI is an interna-
tional center for advanced study in tropical biology (ecology, paleontology, evolution, behavioral ecology, plant physiology and molecular evolution) and archaeology. STRI provides logistical support for visitors at its facilities: housing and laboratories on Barro Colorado and near Soberania National Park (tropical moist forest); at marine stations on the Atlantic and Pacific coasts; and a research library and laboratory complex in Panama City. For application instructions, contact the office of fellows.

Office of Fellowships and Grants
Smithsonian Institution, Drawer TB
L'Enfant Plaza, Suite 7300
Washington, DC 20060

Telephone: (202) 327-3271
Deadline: 15 January annually.

Awards are based upon merit, without regard to race, color, religion, sex, national origin, age or condition of handicap of the applicant.

POSTDOCTORAL FELLOWSHIP Biophysics and Cardiac Electrophysiology
A postdoctoral fellowship is available at the University of Colorado Health Sciences Center, 4200 East Ninth Avenue, Denver, CO 80262. UCHSC is committed to Equal Employment Op-
portunity and Affirmative Action.

POSTDOCTORAL RESEARCH FELLOW to work in laboratory at V.A. Medical Center on project involving aging of stochastic tissues. Experience in cell biology and molecular biology desirable. U.S. citi-
zenship required. Available February 1, 1993. Send cur-
cum vitae and three references to: Dr. Salmon Azhar, GRECC 182B, V.A. Medical Center, 3801 Miranda Avenue, Palo Alto, CA 94305.

1993 SUMMER FELLOWSHIPS MOUNT DESERT ISLAND BIOLOGICAL STATION
The Mount Desert Island Biological Laboratory (MDIBL), an internationally renowned marine facility for biomedical and comparative physiological research, invites applications for fellowships in the following categories:

 Young Investigator Fellowships, sponsored by an NSF-EPSCoR grant and privately donated fellowship funds, are offered to early-career scientists with a doctorate and evidence of independent research. Fellowship amount is based on individual needs and can include a stipend, laboratory space, housing, and funds for supplies and travel.

Undergraduate Student-Faculty Fellowships sponsored by the Pew Charitable Trusts, Burroughs-Wellcome and the Grass Foundation are available for student/faculty pairs with the following qualifications: (1) undergradu-
ate students with a minimum of 1 year of both biology and chemistry; (2) faculty members with Ph.D. actively teaching biology at the undergraduate level. A few student or faculty awards may be made.

Applications may be obtained by calling the office at 207-393-0105 or write to: MDIBL, P.O. Box 35, Salisbury Cove, ME 04672.

Young Investigator applicants write to Department YIF. Deadline for completed applications is 8 January 1993. Undergraduate Student-Faculty applicants write to: Department USFF. Deadline for completed applications is 7 December 1992.
MOLeCULAR HEMATOLOGY/ONCOLOGY TRAINING PROGRAM
The Beth Israel Hospital/Harvard Medical School

The Hematology/Oncology Division of the Beth Israel Hospital, Harvard Medical School, has established a program for training M.D.s, Ph.D.s or M.D., Ph.D.s in hematology/oncology research. The primary focus of the program is basic research in molecular hematology/oncology. In addition, M.D.s and M.D./Ph.D.s will have the opportunity to design a flexible clinical program leading to board eligibility in hematology and/or oncology.

Faculty Includes:
Steven J. Ackerman, Ph.D. Regulation and function of eosinophil specific genes
Steven Balk, M.D., Ph.D. Molecular immunology of MHC-like molecules; mucosal lymphocytes
Kenneth Bauer, M.D. Biochemistry of hypercoagulable states
Glenn Bubley, M.D. DNA alkylation, repair and mutagenesis, prostate cancer
Clyde Crumpacker, M.D. Molecular biology of HIV
Harold F. Dvorak, M.D. Biology of tumor growth and stroma generation
J.Paul Eder, M.D. Topoisomerases and chemotherapy resistance
Bing Lim, M.D., Ph.D. Hematopoietic specific genes and stem cells
Benjamin G. Neel, M.D., Ph.D. Non transmembrane tyrosine phosphatases; retinoic acid receptor abnormalities in cancer
Anne Nicholson-Weller, M.D. Biochemical mechanisms of complement regulation
Robert Rosenberg, M.D., Ph.D. Endothelial cell biology and hemostasis
Lowell E. Schnipper, M.D. Genetic instability in cancer; mechanisms of resistance to antineoplastic therapy
Howard Steinberg, Ph.D. Hematopoesis
Daniel Tenen, M.D. Myeloid gene regulation, retinoids and AML
Peter F. Weller, M.D. Immunobiology of eosinophils; mechanisms of inflammation

Applicants please send Curriculum Vitae and three letters of recommendation to Dr. Lowell Schnipper, Chief, Oncology Division, Beth Israel Hospital, 330 Brookline Avenue, #DA-601, Boston, MA 02215, FAX: (617) 735-3915.

ASSISTANT RESEARCH ASTROPHYSICIST CENTER FOR PARTICLE ASTROPHYSICS
University of California at Berkeley

The Center for Particle Astrophysics, an NSF Science and Technology Center, invites applications for the position of Center Fellow.

The Center is investigating the dark matter problem through four lines of experimental attack: using conventional and cryogenic detectors to detect the interaction of dark matter particles in the laboratory; studying the diffuse radiation from the early universe (particularly the 3K microwave background); using distant supernovae to determine how much dark matter exists; and studying the role of dark matter in the evolution of large-scale structure. The Center Fellowship is intended to provide a young experimentalist with the opportunity to bring fresh insight (particularly from other fields of physics) to bear on dark matter. This two year position will start in January 1994, with a possible extension for a third year.

Candidates should have a Ph.D. in Physics or Astronomy. Salary will be commensurate with experience. Interested applicants should submit a statement of their research interests, a curriculum vitae, and arrange for letters of support from three referees who are familiar with their work. These items and a letter of application should be sent to:
Professor Bernard Sadoulet
Center for Particle Astrophysics
301 Le Conte Hall
University of California
Berkeley, CA 94720

The closing date for applications will be December 31, 1992. The University of California is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT/ASSOCIATE PROFESSOR MICROBIAL PATHOGENESIS MOLECULAR IMMUNOLOGY
The Department of Microbiology and Immunology at West Virginia University School of Medicine is currently recruiting tenure-track faculty members in the areas of microbial pathogenesis (2 positions) and immunology (1 position) with demonstrated research skills in molecular biology. Successful candidates will be expected to develop independent and funded research programs in these areas. Research interests in microbial pathogenesis that complement the current faculty interests on spirrochetes and rickettsial disease, and in molecular immunology that complement faculty interests in antigen presentation, developmental immunology, immunotoxology, mechanisms of intracellular resistance, and mucosal immunity are preferred. Applicants must have a Ph.D. degree, post-doctoral experience and significant research productivity in the application of molecular biological techniques to current problems in microbiology and immunology. The department is well equipped and a P-3 laboratory is available in the department. Teaching responsibilities of the department include professional and allied health students as well as graduate students. Appointment at the Associate Professor level requires a demonstrated record of extramural research funding. A highly competitive salary and start-up package is available. Deadline for applications is December 1, 1992. Submit a curriculum vitae, summary of current and future research, and names of three references to: John B. Barnett, Ph.D., Chair, Department of Microbiology and Immunology, West Virginia University Health Sciences Center, P.O. Box 9177, Morgantown, WV 26506-9177.

HEALTH SCIENTIST ADMINISTRATORS OFFICE OF RESEARCH INTEGRITY
The newly organized Office of Research Integrity (ORI), Public Health Service (PHS), Department of Health and Human Services (HHS) in the United States Government, invites applications for the positions of Health Scientist Administrator at the GS-13/14 grade level, with a current salary range of $46,210 to $70,987 per annum.

The ORI has the primary responsibility for the implementation of PHS policies and procedures regarding research integrity in the extramural and intramural biomedical and behavioral research community. This involves the review, oversight and conduct of investigations of possible allegations of scientific misconduct, as well as prevention and education activities designed to promote integrity in research.

The ORI offers the opportunity for intellectually challenging use of analytical, scientific, and investgatory skills. Scientists with a research and/or research administration background in university, institute, Government, or private research organizations are encouraged to apply.

The complete vacancy announcement which lists the technical qualifications required, and the Application for Federal Employment (SF 171), are available by letter or by telephone call to 301-443-6900. Completed applications must be received no later than November 30, 1992 at the following address:
Office of the Assistant Secretary
for Health Personnel Operations Office
Room 17A-07
5600 Fishers Lane
Rockville, Maryland 20857

PHS is an Equal Opportunity Employer. The Office of the Assistant Secretary for Health is a smoke-free work place. Relocation expenses will not be paid.

Affirmative Action/Equal Opportunity Employer
**Research Officer (Saskatoon, Saskatchewan)**

The Plant Biotechnology Institute of the National Research Council of Canada in Saskatoon has a continuing staff position for a Research Officer. The scientist will work in the legume biotechnology group on the development and use of transgenic plants. Major duties will be the planning, managing and reporting of independent research within the context of an integrated group project, but participation in overall project planning and promoting interaction between the project and external partners is expected. Duties also include supervision and evaluation of laboratory personnel.

Applicants must have a Ph.D. in plant biotechnology or related discipline, with emphasis on plant molecular genetics. A good understanding of molecular biology, biochemistry and genetics in relation to crop improvement and a strong record of publication are expected. Experience in production of transgenic plants and in molecular identification of plant genes or regulation of gene expression in plants is required. The position requires high levels of scientific creativity and judgement, the ability to function both individually and as a team member or leader and good skills in verbal and written communication in English.

**SALARY RANGE:** Commensurate with qualifications.

*Ceux qui désirent recevoir une copie de cette annonce en français peuvent communiquer avec l'agent de dotation à l'adresse ci-dessous.*

Apply in writing, before November 30, 1992, giving complete details of education and experience to: The Recruitment and Staffing Section, National Research Council of Canada, Ottawa, Ontario, K1A 0R6. In reply, please quote PB-91-16.TPC.

---

**THE UNIVERSITY OF MICHIGAN**

**MOLECULAR GENETICS OF PROTEIN FOLDING**

The Institute of Gerontology and the departments of Biological Chemistry and Pathology announce the availability of joint tenure-track faculty positions at the assistant/associate professor level, to investigate protein folding, assembly and trafficking by modern molecular genetic or biochemical approaches. One position is in the general area of protein folding mechanisms; while other positions focus on folding and assembly of motion-facilitating molecules in skeletal muscle or of proteins involved in signal transduction in immune cells.

Each successful candidate is expected to develop a vigorous, independent research program and to participate in undergraduate/graduate teaching in the appropriate department.

The University of Michigan provides an excellent research environment as well as competitive salary and fringe benefits.

Applications should include curriculum vitae, list of publications, summary of past research and statement of plans for future work, as well as the names, addresses, telephone and fax numbers of at least three individuals who may be contacted as references.

Completed applications should be sent to:

Dr. Ari Gahni
Chair of the Search Committee
The University of Michigan
Institute of Gerontology
300 N. Ingalls

Review of applications will begin on November 15, 1992 and continue until suitable candidates are identified.

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

---

**DIRECTOR, CLINICAL MICROBIOLOGY**

Rush Medical College and the Clinical Laboratory Services at Rush-Presbyterian—St. Luke’s Medical Center are seeking a top quality professional to assume a key position as Director of Clinical Microbiology.

The Clinical Microbiology laboratory consists of the units of General Microbiology, Virology, and Special Microbiology. The successful candidate will direct the clinical and technical aspects of the laboratory and will also participate in educational programs for pathology residents and for medical technology, doctoral (Ph.D.) and postdoctoral students.

The candidate should have a strong commitment to service, research and education and be expected to develop a strong, independent research and/or R&D program and to teach in the University.

Specific areas of responsibility within the laboratory, professional rank in the Rush Medical College, and salary will be dependent upon the candidate’s training and expertise. Applicants must possess an M.D. and/or Ph.D. or equivalent degree.

Preference will be given to applicants who are Board Certified or eligible or equivalent.

Applicants should submit a curriculum vitae, a statement of research interests, and the names of three references to:

Alan L. Landay, Ph.D.
Chairman, Search Committee
Department of Immunology/Microbiology
Rush-Presbyterian—St. Luke’s Medical Center
1653 West Congress Parkway
Chicago, IL 60612

Application deadline is: February 1, 1993

*An Equal Opportunity/Affirmative Action Employer*
University of Pittsburgh

SENIOR VICE CHANCELLOR FOR THE HEALTH SCIENCES

The University of Pittsburgh invites applications and nominations for the position of Senior Vice Chancellor for the Health Sciences. The Senior Vice Chancellor for the Health Sciences reports directly to the Chancellor, and works closely with the Provost, the President of the University of Pittsburgh Medical Center, the Senior Vice Chancellor for Health Administration, and the Senior Vice Chancellor for Business and Finance in directing the academic, fiscal, and administrative affairs of the University.

The Senior Vice Chancellor for the Health Sciences is responsible, through the deans, for the undergraduate, graduate, and professional programs in the six schools of the health sciences, as well as the affiliated hospitals and centers. Included in these responsibilities are the academic, research, and clinical programs in the Schools of Dental Medicine, Health and Rehabilitation Sciences, Medicine, Nursing, Pharmacy, and the Graduate School of Public Health.

The University seeks a person who understands the evolving biomedical environment as it relates to academics, research, and clinical care, and has the vision to lead the health sciences of the University of Pittsburgh into the 21st century. A qualified candidate shall have established leadership skills and the ability to deal creatively and effectively with the organizational, financial, and managerial responsibilities of the office. Requirements include an earned doctorate, eligibility for senior faculty appointment by virtue of sound scholarly accomplishments, and demonstrated success in health sciences administration.

The University of Pittsburgh is an independent, state-related research university and a member of the Association of American Universities. The University consists of 17 undergraduate, graduate, and professional schools on the Pittsburgh campus, plus four regional campuses, serving some 35,000 students. The health science complex is located on the main campus of the University and is set in the civic and cultural center of Pittsburgh, recently cited as "one of the most livable cities in the United States".

The University offers an excellent salary, benefit, and retirement package.

Letters of application or nomination with resume should be sent, by 15 December 1992, to:
Chairperson
Search Committee for the Senior Vice Chancellor for the Health Sciences
479 Crawford Hall
University of Pittsburgh
Pittsburgh, Pennsylvania 15260

The University is an affirmative action/equal opportunity employer.
**RESEARCH ASSOCIATE/SCIENTIST** position with Molecular Geiatrics, Incorporated. Position involves isolation, characterization and mapping microsatellite repeat polymorphic DNA markers from human genomic and cDNA libraries; construction and generation of transgenic mice models of the human genotype; linkage mapping of human inherited disorders. Requires M.S. in bio-genetics with two years of experience in cytogenetics and molecular genetics on development of genetic polymorphic markers. Salary is $36,000 per year; working hours are 40 per week, Monday through Friday. Send two copies of curriculum vitae and names of three persons to: J. Kee, 1048 10th Street SW, Washington, D.C. 20001.

**ASSISTANT PLANT PATHOLOGIST** EXTENSION PLANT PATHOLOGIST AT WSU—Mt. Vernon Position is available April 12, 1993. This is a tenure-track, 75% research - 25% extension appointment to conduct research on diseases of vegetables and vegetable seed crops important in the Pacific Northwest. Candidate will assume leadership in planning and implementing research and extension vegetable programs in plant pathology. The position is recommended in applied plant pathology is required. Interest and background in fungal disease and disease control required. Ph.D. in Plant Pathology or related field is required. Salary will be commensurate with training and experience. Position located at Washington State University's Mount Vernon Research and Extension Unit, Mount Vernon, WA. Send résumé, copies of publications, transcripts, and the names and addresses of four individuals willing to send letters of reference by January 15, 1993, to: Dr. Gary Chargetar, Search Committee Chair, WSU Puyallup Research and Extension Center, 7612 Pike One Way, Puyallup, WA 98371-4978 (Telephone 206/840-4500 or Fax: 206/840-4671). WSU is an Equal Opportunity/Affirmative Action Educator and Employer. Members of ethnic minorities, women, Vietnam-era or disabled veterans, persons with disabilities, and/or persons between the ages of 40 to 70 are encouraged to apply. (WSU Search No. 854)

**TECHNICAL WRITER** SYNTRIO Corporation, a biotechnology-based animal health company with research laboratories in San Diego, California is presently looking for a Technical Writer. The selected individual will be responsible for collaborating with patent counsel and staff scientists to draft patent applications. Additional activities include writing scientific articles for refereed journals, and competitive grant proposals. The position requires excellent writing proficiency, strong organizational ability and exceptional interpersonal skills. An advanced degree in molecular biology (Ph.D. preferred) and a commitment to writing is required. We offer a competitive compensation package in an outstanding professional environment. For consideration, please submit your résumé, references, and a sample of your writing to: Labora tes & Directories, Syntrio Research Laboratories, 3535 General Atomics Court, San Diego, CA 92121.

**BIOLOGIST** M.S. in cell biology/microbiology or related discipline and three to five years of laboratory experience conducting preclinical in vivo drug efficacy studies in tumor and normal tissue systems. Good writing skills and knowledge of cellular and molecular biology is required. Experience in image analysis, radiotracer experiments, and organ culture are desired. Duties will include experimental design, data analysis, and some laboratory supervision. Southern Research Institute offers a competitive salary and benefits package. To apply, send curriculum vitae to: Mr. G. Dwayne Johnson Human Resources Representative Southern Research Institute Department 667 P.O. Box 195350 Birmingham, AL 35255-5305 Equal Opportunity/Affirmative Action Employer.
The quality of R&D depends on the quality of the resources.

As part of Schering-Plough’s Safety Evaluation Center, you will be a senior staff member in General Toxicology participating in drug safety activities supporting all of our pharmaceutical product registrations. Your responsibilities will include the definition of project requirements, overseeing SEC and contract projects, interpretation of results and preparation of written reports. You will serve as a staff consultant on Toxicology issues and represent Drug Safety on a corporate-wide therapy team.

The successful candidate will possess a Ph.D. in Toxicology or related discipline, board certification in toxicology and at least 8 years’ relevant experience in industrial pharmaceutical toxicology. Effective written and verbal communication skills are essential. Desirable work experience includes interaction with government regulatory authorities, leadership for multidisciplinary tasks and participation in mechanistically oriented research.

We offer highly competitive salaries and an excellent benefits package. Please send resume to: W. Decker, Schering-Plough Research Institute, 60 Orange Street, Bloomfield, NJ 07003. We are an equal opportunity employer.

Senior Principal Scientist

The Department of Pathology at Harvard Medical School and the Division of Human Retrovirology of the Dana-Farber Cancer Institute are jointly recruiting an Assistant Professor in the area of immunology and virology with a particular emphasis on human retrovirology. The successful candidate will be expected to develop an independent research program and must have the ability to compete for independent funding. The candidate must have a Ph.D. and/or an M.D. degree and several years post-doctoral training with a major commitment to original and independent laboratory research with specific experience in the area of virus-host cell interactions. She/he is expected to participate in research training and in the medical student and/or graduate student education programs of the Department of Pathology.

Candidate should send a C.V. and statement of research interests to Dr. Martin Hirsch, Chair, Search Committee, Professor of Medicine, Massachusetts General Hospital, 32 Fruit Street, Boston, MA 02114. Harvard Medical School and The Dana-Farber Cancer Institute are affirmative action/equal opportunity employers. Women and minorities are encouraged to apply.

Senior Principal Scientist

There are a number of components to success in the pharmaceutical research process. The most important is our people. At Schering-Plough, we hire the best talent in our industry. Then, we provide them with the technical resources they need to do their best work; the most advanced instrumentation; the latest computerized systems; modern lab facilities. Finally, we spend over $500 million annually on R&D, and are completing a $100 million R&D facility.

Commitment of this scope has helped us achieve over $3 billion in annual sales around the world.

Schering-Plough Research Institute
FRENCH “ACADEMIE DES SCIENCES” PROFESSORSHIPS

In order to foster international cooperation between academic and industrial research, the French Académie des Sciences, the Centre National de la Recherche Scientifique and Elf Aquitaine will open several one-year professorships in France for the 93-94 academic year.

These openings are reserved for research professionals, typically at the Associate to Full Professor level, and may be held in conjunction with a sabbatical leave. They include generous benefits, such as housing arrangements and travel expenses, depending upon the candidate’s experience.

The scientific domains involved cover Elf Aquitaine’s activities in oil, chemical and pharmaceutical research:

- Earth Sciences, with an emphasis on surface seismology, sedimentology, organic and mineral geochemistry and the physics of oil-related fluids, including interactions with rocks.
- Chemical Sciences, with an emphasis on polymers, halogen and biochemistry, catalysis, and process engineering research.
- Life Sciences, with an emphasis on studies dealing with thrombosis, the cardio-vascular and the central nervous systems.

Prearranged agreements with French academic laboratories are eligible for these professorships, and they will be appreciated although not mandatory.

There are no citizenship restrictions. Mastery of French is not required, although some familiarity with French culture would be helpful.

Additional information can be obtained from the following contacts:

- For North America-based candidates: J. BODELLE, Vice President Research & Development Elf Aquitaine, Inc. 1889 L Street, N.W., Suite 500 Washington, D.C. 20036
- For other candidates: C. JABLON, Chief Scientist Elf Aquitaine, DRDIE Tour Elf, Cedex 45 92078 Paris-La-Defense, FRANCE

Formal applications should include a detailed résumé, a description of the research project and any other relevant information in order to select the most qualified candidates. They should be sent to the above addresses before January 31st, 1993. They shall be processed in confidence and the professorships are scheduled for announcement before the end of April 1993.

CELL BIOLOGIST
DIVISION OF CELL AND DEVELOPMENTAL BIOLOGY
DEPARTMENT OF MOLECULAR AND CELL BIOLOGY
UNIVERSITY OF CALIFORNIA AT BERKELEY

The Department of Molecular and Cell Biology at the University of California at Berkeley invites applications from outstanding candidates for a tenure-track Assistant Professor position in the Division of Cell and Developmental Biology. Candidates with research interests that utilize modern approaches for the study of the function of cells and their components are especially encouraged to apply. Areas of particular interest include: Cell cycle regulation, signal transduction, hormone biology, growth control, membrane physiology, nuclear structure, cytoskeletal architecture, extracellular matrix, cell-cell communication, intracellular protein transport and organelle assembly. This position can commence as early as 1 July 1993.

Applications should include a cover letter clearly stating an intent to apply for this position, a detailed curriculum vitae, an up-to-date list of all publications and one copy of each of three of the most significant papers, a brief statement (1-2 pages maximum) of research objectives and teaching interests, and three letters of evaluation (to be sent directly from three individuals who are most familiar with the candidate's accomplishments and potential).

Please note the closing date for receipt of all letters of intent is December 15, 1992. Applications should be submitted to:

Cell and Developmental Biology Search Committee Department of Molecular and Cell Biology University of California at Berkeley Room 299, Life Sciences Addition (LSA) Berkeley, CA 94720

The University of California at Berkeley is an Affirmative Action/Equal Opportunity Employer. Women and individuals from ethnic minorities traditionally under-represented in the biological sciences are especially encouraged to apply.

PRESIDENT, INSTITUTE FOR HEALTH SCIENCES

St. Luke’s-Roosevelt Hospital Center, a 1,315-bed teaching hospital on Manhattan’s West Side and an affiliate of the Columbia University College of Physicians and Surgeons, invites nominations and applications for a President of its Institute for Health Sciences. The Institute is an independently funded, non-researching science and research unit of the Hospital Center that promotes and conducts biomedical research, provides research training, and supports a suitable physical and intellectual environment in which to conduct research.

The President must be an M.D. or Ph.D. with a strong record of achievement in clinical or basic research, must have demonstrated significant administrative or leadership experience at a senior level in a research setting, and should have an interest in continuing his/her own research. The candidate’s academic credentials should qualify him/her for a senior faculty appointment at Columbia University College of Physicians and Surgeons. The President will be charged with overseeing the further growth of the Institute, with setting its direction for the future, and with enhancing its independent financial base. The President will be expected to foster an appropriate intellectual and academic environment for productive research, develop and supervise a grants management office, allocate research space and oversee the Institutional Review Board, and supervise all aspects of the Institute’s administration and operation. To carry out these responsibilities, the President will report to the President and CEO of the Hospital Center, and report to the Dean, College of Physicians and Surgeons, Columbia University in his or her capacity of Associate Dean for Research.

The Hospital Center offers an excellent salary and benefits program. Please forward curriculum vitae to:

Sigurd H. Ackerman, MD
Chair, Committee to Search for a President
Institute for Health Sciences
St. Luke’s-Roosevelt Hospital Center
1111 Amsterdam Avenue
New York, NY 10025

SUNY Purchase is a liberal arts and fine arts college of some 3,500 students (1500 in residence) located 30 miles north of New York City near White Plains in Westchester County. The College of Letters and Science is the largest academic unit of the College, with 85 full time faculty offering 15 majors and several interdisciplinary programs.

NORTHEAST REGIONAL ASSISTANCE CENTER FOR SCIENCE AND MATHEMATICS EDUCATION

The State University of New York (SUNY) at Purchase seeks a Director for its highly successful Center (part of a college/school collaborative, the SUNY Purchase Westchester School Partnership). The Director will be responsible for maintaining current programs and developing new initiatives for elementary and secondary mathematics and science teachers and students. The Director will hold a concurrent faculty appointment in the Division of Natural Sciences and will be expected to teach undergraduates part time. A Ph.D. in either mathematics or in a physical or biological science is preferred. This position requires the candidate to be both an ambassador for mathematics and science education and a successful grant-writer. Applications for this state-supported, eleven-month position will be reviewed as received. Send resume and three letters of recommendation.

UNDERREPRESENTED MINORITIES PROGRAM

SUNY Purchase is participating in a state-wide program to appoint underrepresented minorities to its permanent faculty. Candidates can be from any discipline taught at the College in the Natural Sciences, Social Sciences or Humanities. Candidates should have the Ph.D. by September 1, 1993. This tenure-track Assistant Professor position starts September, 1993 with competitive salary and a possibility for housing on campus in a faculty-in-residence program. Screening for applications will begin on December 1 and will continue until an appointment is made.

SUNY Purchase is an AA/EOE. Send all applications to Affirmative Action Office, SUNY Purchase, Purchase, New York 10577
The University of Idaho invites applications or nominations for the position of Dean of the College of Agriculture. The college consists of 11 academic and research departments, the School of Home Economics, four district offices, seven research and extension centers, and 42 county extension offices. The College of Agriculture was established in 1901 and currently has more than 800 students (including more than 200 graduate students) and 620 staff and faculty on the main campus in Moscow and throughout the state.

The Dean of the College of Agriculture is the chief administrator of the college and, along with the three Associate Deans/Directors for research, extension, and academic and international programs, is responsible to the Provost and President for the implementation of policies defined by the college or university faculty and approved by the appropriate authority. The Dean is responsible for establishing an environment that stresses academic excellence, for managing personnel and budgets, and for fostering interactions with the agricultural community. Primary qualifications for the position include sufficient credentials to hold a tenured full professorship; a successful teaching record; outstanding leadership in research or extension activities; a proven record of external funding; outstanding communication skills; proven administrative capabilities as shown by success as the chair of an academic department or equivalent position in academe, business or government; a demonstrated commitment to the land-grant philosophy; and the vision and capability to address the challenges facing agriculture, natural resources, and family and community development.

The position is available July 1, 1993. Search and selection procedures will be closed when a sufficient number of qualified applicants has been identified, but not earlier than January 1, 1992. Applications (including a letter of application, a curriculum vitae, a general statement on administrative philosophy, and the names of five references) or nominations are to be submitted to Professor David Oliver, Chair, College of Agriculture, Dean Search Committee, Department of Bacteriology and Biochemistry, University of Idaho, Moscow, ID 83843. Telephone: (208) 885-7164.

The University of Idaho is an Affirmative Action/Equal Opportunity employer and educational institution.

**NOVEX**

NOVEX has rapidly become a leading manufacturer of pre-cast electrophoresis gels and related life-sciences separations products. We are committed to bringing innovative, time-saving separations products and excellent service to the research market in order to maintain rapid growth and market leadership.

**Development Director**

The successful candidate will have a Ph.D. in chemistry or biochemistry and 5+ years experience in product development management. Fundamental knowledge of separations techniques, and practical experience with electrophoresis is essential. Knowledge of polymer chemistry is desirable. Excellent communication skills and a multi-disciplinary approach are essential for effective partnerships with marketing and manufacturing.

Please send your resume in confidence to: Rita McFayden, NOVEX, 4202 Sorrento Valley Blvd., San Diego, CA 92121

**DIRECTOR AND PROFESSOR**

**Division of Biology**

**Kansas State University**

The Division of Biology seeks an individual to lead a dynamic teaching and research unit. A unit in the College of Arts and Sciences, the Division has 60 faculty/staff, 50 graduate students, 25 postdoctoral researchers, 17 support staff, and 400 undergraduate majors. Undergraduate degrees are offered in Biology, Microbiology, and Fisheries and Wildlife Biology. Extramural funding and the Kansas Agricultural Experiment Station support a strong research program at the masters, doctoral, and postdoctoral levels.

The director will be responsible for administrative leadership and future development in research, instruction, and service. In addition to evidence of administrative ability, essential qualifications include a record of outstanding accomplishment in research and teaching appropriate to the rank of professor. Candidates should submit a statement of career goals, a current curriculum vitae, and the names, addresses, and telephone numbers of three persons who can provide information on the applicant's qualifications. Applications or nominations should be addressed to Dr. R. J. Robel, Chair, Biology Directorship Search Committee, c/o Dean of Arts and Sciences, Kansas State University, Manhattan, Kansas 66506-1005. Applications must be received by December 20, 1992.

**KSU is an Equal Opportunity/Affirmative Action Employer**

**NANOTECHNOLOGY**

Reprint

Engineering a Small World: From Atomic Manipulation to Microfabrication

This 42-page special section, reprinted from the 29 November issue of *Science*, is your entry to the expanding world of small-scale engineering. It's a field that spans microelectronics, materials science, chemistry, molecular biology, and microscopy. In this special section, ten illustrated articles by research leaders and by science journalists present the full scope of this small world.

For each copy, send $4.00 plus $.50 for postage to:

*Science*  
Attention: Corrine Harris  
1333 H Street, N.W.  
Washington, DC 20005  
Telephone: 202-326-6527  
Visa and MasterCard orders accepted by  
FAX: 202-682-0816  
All orders must be prepaid.  
Payment in U.S. dollars only. Bulk rates available.

The University of Idaho, Dean, College of Agriculture
IMMUNOCHEMIST AND CELL(MOLECULAR) BIOLOGIST. Two-tenure-track faculty positions are available immediately. Excellent basic science environment. We seek individuals interested in human autoimmune, cell-cell and cell-matrix adhesion. Submit curriculum vitae to: L. A. Díaz, M.D., Department of Dermatology, Medical College of Wisconsin (MCW), 8701 W. Wisconsin Ave., P.O. Box 8, Milwaukee, WI 53226. Telephone: 414-266-4087. FAX: 414-266-4955. MCW is an Affirmative Action/Equal Opportunity Employer.

ANESTHESIOLOGY SCIENTIST
Application invited for tenure-track or tenured position in the Anesthesiology Department at the University of California at San Francisco (UCSF) for M.D. and/or Ph.D. Scientist. Candidate must develop and sustain independent research program in basic anesthesiology research. Opportunities exist for collaborating with established scientists working on molecular or cellular mechanisms in neurosurgery, cardiovascular disease, and pharmacology/toxicology. Salary and benefits are commensurate with qualifications and experience. Send curriculum vitae to: David H. Wong, Pharmac.D., M.D., Long Beach VA Medical Center, 5901 East 7th Street, Anesthesiology Service 130A, Long Beach, CA 90802-1776. UCI is an Affirmative Action/Equal Opportunity Employer.

WALLAC, INC. (formerly Pharmed LKB Nuclear, Inc.), a world leader in nuclear counters (Beta and Gamma), seeks a PRODUCT SPECIALIST for a new product line position in Molecular and/or Cellular Biology, along with practical experience in receptor-ligand assays, cell proliferation studies and immunoassays, would be very helpful. Computer experience a must. Responsibilities will include the development, organization and presentation of seminars of a technical nature in the pharmaceutical and academic community. Will interface with R & D for product development and with marketing department for marketing. Resume and letter to: Inga Graf, Director of Human Resources, Wallac, Inc., 9238 Gaithersburg Rd., Gaithersburg, MD 20877. Wallac, Inc. is an Equal Opportunity Employer.

MICROBIOLOGIST/PLANT BIOLOGIST. Tenure-track position teaching microbiology, botany and additional courses. Our facilities support cell/tissue culture, DNA, biochemical genetics and environmental research. Greenhouses and terrestrial field sites available. Send curriculum vitae, transcripts, teaching and research interests and three letters of reference to: Search Chair, Biodiversity, Agricultural College, Adelphi University, Garden City, NY 11530. Closing date: 15 Jan 1993. Equal Opportunity Employer. Women and minorities are encouraged to apply.

SENIOR SCIENCE WRITER SPECIALIST
California Institute of Technology is seeking a Senior Science Writer Specialist to be responsible for writing science news releases, promoting Caltech to the science media, working in concert with the media relations director on a wide range of assignments, researching, writing, and promoting news releases on scientific subjects related to Caltech. Send resume to: Caltech spokesperson on South California earthquakes; organizing and managing press conferences; and answering inquiries from the media. This position requires a B.S. degree in a scientific major and a minimum of four years of science writing experience, experience working with science media is essential. Must be able to express complex subjects in clear and readable lay language, handle several projects at once, and possess excellent interpersonal skills. Carnegie Mellon University is an Equal Opportunity Employer. Interested candidates should submit a resume and letter with salary requirements to: Caltech Employment Department Position #566 1201 East California Boulevard Pasadena, CA 91125 Caltech is an Equal Opportunity Employer. Women, minorities, veterans, and disabled persons are encouraged to apply.

GLYCOPROTEIN CHEMIST
Interferon Sciences (ISS), a leading biopharmaceutical company located in central New Jersey, has FDA approval to manufacture natural human interferon. The R&D department has a position available for a Ph.D. or M.S. with experience in the isolation and quantitation of monosaccharides, and determination of carbohydrate sequence in glycoproteins. Knowledge and experience in protein purification and characterization is a plus. ISS offers an excellent compensation package. Inquiries are encouraged from candidates who should send résumé to: Personnel Department (KFB), Interferon Sciences, Inc., 783 Jersey Avenue, New Brunswick, NJ 08901. An Equal Opportunity Employer.

RESEARCH VIROLOGIST
Position in veterinary virology and immunology available immediately with rapidly growing biotechnology firm, located just outside Des Moines, Iowa. Candidates must possess M.S. or Ph.D. degree, preferably with 5 plus years of work experience. Required skills: cell culture manipulation, virus and antibody assays, experimental design and ability to utilize latest virological and immunological technology. Please send résumé to: Human Resources, Ambico, Inc., Box 522, 902 Sugar Grove Avenue, Dallas, CA 90603.

IMMUNOBIOLOGY RESEARCH INSTITUTE DEPARTMENT OF MOLECULAR BIOLOGY
Regulation of Gene Expression in T Lymphocytes
A postdoc and a junior-level staff person are being sought to study a recently cloned gene expressed preferentially in activated T cells at Immunobiology Research Institute, a small, focused research and development company fully supported by the resources of Johnson & Johnson. These individuals will map cis-acting DNA regulatory elements and trans-acting proteins that confer tissue-specific expression in T cells, as well as participate in studies investigating expression of the gene in discrete T cell subsets and during development, and in studies of gene function. We offer an excellent salary and benefits package, a campus-like setting in close proximity to New York and Philadelphia, and the opportunity to join a group of outstanding scientists bringing together individual areas of expertise to achieve common goals in basic research and drug development. For consideration, send your résumé to: Human Resources, Immunobiology Research Institute, Room 22 East, P.O. Box 999, Annandale, NJ 08801–0999. We are an Equal Opportunity Employer.

A Johnson & Johnson company

M.S. IN BIOTECHNOLOGY. A 2-year graduate program in biotechnology. It includes extensive training in cell biology and recombinant DNA methodologies and either co-op experiences with industry or a thesis. Financial assistance is available. Please apply to: Program Director, Biotechnology M.S. Program Johnson Controls Building The University of Tennessee Knoxville, TN 37996–0830

CARNEGIE MELLON
Graduate Study in Engineering and Public Policy (EPP) leads to a research-based Ph.D. specializing in policy issues in areas such as: energy and environmental policy, computer and other digital technologies, energy and environmental systems (including climate change), technical issues in international security; manufacturing and industrial policy; and risk analysis. Applicants must hold B.A. or B.S. in engineering, physical sciences, or math. Education or experience beyond the B.S. very desirable, but not required. We are seeking outstanding students to join our interdisciplinary program. Carnegie Mellon, Pittsburgh, PA 15213.

RESEARCH VIROLOGIST
ENTEROVIRUS SECTION
RESPIRATORY AND ENTERIC VIRUSES BRANCH
Division of Viral and Rickettsial Diseases, Center for Infectious Diseases, Centers for Disease Control
The Centers for Disease Control (CDC) is seeking qualified applicants for a staff position in the Enterovirus Section, Respiratory and Enteric Viruses Branch, Division of Viral and Rickettsial Diseases, Center for Infectious Diseases. The persons appointed will direct and provide scientific assistance on enteroviruses, including molecular studies of genetic and antigenic variation and its role in human disease, immune response to infection and for development of diagnostic technology. Research virologists with molecular biology and sequencing experience are being sought. Qualifications preferred include a doctoral degree, significant scientific accomplishments in one or more areas of relevant research, and the ability to provide leadership for support staff. Salary range is $38,861 to $60,070 per annum, depending on qualifications. Further information can be obtained from: Mark A. Pallansch, Ph.D., Chief, Enterovirus Section, Respiratory and Enteric Viruses Branch, CDC, 1600 Clifton Rd. (404) 639-2749. Fax: (404) 639-6484. Interested candidates also may send their curriculum vitae in confidence along with the names of three professional references by February 1, 1993 to: Janie L. Oddy, Personnel Management Office, Centers for Disease Control (D01), Atlanta, GA 30333. CDC is an Equal Opportunity Employer and provides a smoke-free work environment.

RiboGene, Inc.
RiboGene is a biotechnology company developing commercial applications of its proprietary cell-free protein synthesis technology. This growing company has openings for experienced scientific staff at both the Ph.D. and non-Ph.D. levels in the areas of:
- protein biochemistry
- cell biology
- molecular biology
- assay development
- product characterization

SENIOR RESEARCHER. Develop research program to increase commercial value of soybean grain; work with existing basic and applied researchers. Three-year term, non-renewable (adjunct faculty); continuation after three years dependent on funding. Ph.D. required, postdoctoral experience preferred. Contact: Dr. C. L. Barsky, Department of Agronomy, Ohio State University, Wooster, OH 44691; Telephone: 216-263-3887.

STAFF SCIENTIST
RESPONSE TECHNOLOGIES, INC. is a progressive national network of outpatient cancer treatment centers, which specializes in high dose chemotherapy. We are currently seeking a Staff Scientist for our Memphis headquarters. An extensive hematopoietic background is needed to coordinate the development of stem cell laboratory. Please call for more information, 1-800-422-2589, and send your résumé to: RTI Human Resources, 2001 Charleston Avenue, Suite 4, Nashville, TN 37203. Equal Opportunity Employer.

ASSOCIATE SCIENTIST AND POSTDOCTORAL POSITIONS
Available in the laboratory of Dr. Kenneth M. Baker to study the molecular and biochemical mechanisms of angiotensin II-mediated signal transduction and the regulation of expression of angiotensin II receptors. Molecular and biochemical background required. Send curriculum vitae and the names and addresses of three references to: Human Resources Department (KMB), 100 North Academy Avenue, Danville, PA 17822–1529.

1082

SCIENCE • VOL. 258 • 6 NOVEMBER 1992
The American Physical Society

SENIOR MANAGEMENT OPPORTUNITIES

The American Physical Society (APS) is the world’s leading membership organization dedicated to the dissemination of physics information and the strengthening of physics education. To assist the Society accomplish these goals, two Ph.D. physicist management professionals are sought to fill the positions of Associate Executive Secretary and Director of Physics Profession Programs. Both of these positions will be based at the new American Center for Physics in College Park, Maryland, scheduled to open during the fall of 1993.

The primary function of the Associate Executive Secretary (AES) is to support the Executive Secretary in the general management of Society affairs. The AES has direct responsibility for the Meetings, Membership, Special Publications and Honors programs; is responsible for interacting with the APS subunits and assisting their activities; and acts as editor of the Bulletin of the American Physical Society and of APS News. This position requires extensive familiarity with the physics research community -its leaders, its institutions, and its practices. Strong background and demonstrated accomplishments in management and administration are essential.

The primary function of the Director of Physics Profession Programs is to administer, guide and support the Education program and the Women and Minorities in Physics programs and to be a liaison to other scientific organizations. The Director provides staff support for the APS Committee on Education and several other committees; directs fund-raising efforts for select Education and other projects; and manages the staff of the Physics Profession Programs department. This position requires significant experience in physics education and familiarity with physics research. Strong skills in program management, an interest in the issues of concern to the Physics Profession Programs, and staff supervisory abilities are necessary.

APS offers competitive salaries and an outstanding benefits package. For consideration send cover letter, resume and professional references to:

Dr. N. Richard Werthamer, Executive Secretary
The American Physical Society
335 East 45th Street
New York, NY 10017
EOE

DIRECTOR
NATIONAL CENTER FOR RESEARCH RESOURCES,
NATIONAL INSTITUTES OF HEALTH

The National Center for Research Resources (NCRR) is seeking applicants for the position of Director, National Center for Research Resources. This position is located in Bethesda, Maryland, and is a permanent full-time position with a salary range of $90,000 to $121,100 per annum commensurate with qualifications. Physicians may be eligible for Physician Comparability Allowance ranging with $5,000 to $20,000 per year.

A recruitment bonus of up to 25 percent of base pay may be available to a non-federal selectee for this position.

A relocation bonus of up to 25 percent of base pay (subject to approval) may be available to a permanent Federal employee who must relocate to accept this position.

The Director, NCRR is responsible for providing leadership and guidance in the development and support of multi-categorical research resources needed for health-related research. Plans, directs, coordinates, and administers the Center’s programs to provide the most effective and efficient support for the health research activities of the PHS research institutes and other public and private organizations involved in biomedical research. Applicants for this Senior Executive Service position must have a Doctor of Medicine degree, Doctor of Veterinary Medicine degree or Ph. D. in one of the health sciences (or equivalent combination of experience and training). Send applications to Ms. Patsenia Wiggins, NCRR, 9000 Rockville Pike, Building 31, Room 3B40, Bethesda, MD 20892. For application forms and a copy of the requirements contact Ms. Wiggins at NCRR on (301)496-1524. Deadline for applicants is 11/27/82.

Public Health Service Commissioned Officers interested in performing duties of the position within the Commissioned Corps may submit a resume to the above address.

NIH is an Equal Opportunity Employer

CARDIOVASCULAR PHARMACOLOGY RESEARCH INVESTIGATOR

This position will be based in our new state-of-the-art research facility in Upper Providence Township, Pennsylvania. Responsibilities include establishing independent research utilizing cellular approaches to limit restenosis or atherosclerosis. Ph. D. in Pharmacology, Physiology or related discipline and a minimum of 2 years post-doctoral experience is required. Must have strong written and oral communication skills with a working knowledge of vascular inflammation or atherosclerosis. Drug discovery experience and expertise in cell biology, cell adhesion or monocye biology is desirable.

At Sterling Winthrop, you’ll enjoy a highly competitive salary and a comprehensive flexible benefits package, including outstanding career opportunities. For confidential consideration, forward your resume and salary requirements to:

Sterling Winthrop Pharmaceuticals Research Division
A Division of Sterling Winthrop Inc.
A Subsidiary of Eastman Kodak Co.

For more information, please call.Initial intake: 4/29/82.
POSITIONS OPEN

MOLECULAR CELL BIOLOGY
The W. Alton Jones Cell Science Center is a not-for-profit research institution with established programs in growth factors, signal transduction, molecular carcinogenesis and developmental biology. We are seeking two investigators with established reputations in molecular cell biology and a commitment to excellence in basic research. Areas of interest are transcription, cell cycle control or neurodevelopmental biology, however, overall scientific excellence is the primary criterion. Individuals with an interest in combining these disciplines with environmental health sciences are encouraged to apply. Appointments will be at the SENIOR SCIENTIST level and will carry salary guarantees and a liberal start-up package. Submit curriculum vitae, a statement of research interests and the names of three references to: Faculty Search Committee, c/o Personnel Office, W. Alton Jones Cell Science Center, Lake Placid, NY 12946. The W. Alton Jones Cell Science Center is an Affirmative Action/Equal Opportunity Employer.

ANNOUNCEMENTS

LOOKING FOR A RESEARCH POSITION?

Biotechnology
Job Search
Specialized Recruiting
d/Placement

We get results for you!
Call today for a free consultation
1-800-252-0499
FREE RESUME GUIDE—A $50 VALUE

PROPOSALS SOUGHT FOR IN VITRO SCREENING OF VAGINAL VIRUCIDES. The Contraceptive Research and Development (CONRAD) Program is seeking proposals to evaluate the anti-HIV activity of spermicidal and other compounds supplied by CONRAD. Application deadline is February 1, 1993. For information, contact: Lee E. Claypool, Ph.D., CONRAD Program, 1611 North Kent Street, Suite 806-A, Arlington, VA 22209, Telephone: (703) 524-4744.

MEETINGS

LITE WORKSHOP
LIGHT IN THERMAL ENVIRONMENTS
Sponsored by NSF, RIDGE & NASA
January 10–12, 1993
Woods Hole, Massachusetts

Discoveries of light emitted by high temperature, deep ocean hot springs, and of novel photoreceptors in shrimp living at the hot springs raise questions of the source of light and its possible biological exploitation. This workshop is intended to gather scientists from a broad range of disciplines to examine these issues. Space is limited; some funding is available. Write a one-page letter of interest to: A. Norton, RIDGE Office, Woods Hole Oceanographic Institution, Woods Hole, MA 02543 by 22 November 1992.

COURSES AND TRAINING

CAREER CHANGE OPPORTUNITY

This unique program offers the candidate with an earned doctorate in the sciences the opportunity to obtain the Doctor of Optometry (O.D.) degree in two calendar years. Employment opportunities exist in private practice, industry, education, and research. Contact: Dr. D. Chauwney, Program Director, Accelerated Program, New England College of Optometry, 300 High Street, Boston, MA 02115.
GENERELEASER

PCR* READY DNA IN 10 MINUTES

POWER PREP

- Minimal sample: 1ul
- Ideal for batch preps
- Directly in tubes
- Directly on thermocyclers
- On blood, tissue, cultures etc.

FOR A FREE SAMPLE CALL BioVentures, Inc. 800-235-8938
or FAX 615-896-4837 or CIRCLE READER SERVICE No. 21

*PCR is covered by patents owned by Hoffmann LaRoche

Amplification of HLA DRB producing a 272 bp product.
M=BioMarker Low
1=GeneReleaser treated 120 day old whole blood stored at 4C.
2=Same as 1 without GeneReleaser.
3=GeneReleaser treated 120 day old whole blood stored at -20C.
4=Same as 3 without GeneReleaser.
RPM
Rapid Pure Minipreps

12 PREPS
12 MINUTES

- Economical plasmid preps in world-record time— with spin...
- No phenol / chloroform extractions
- "Geneclean-Quality" pure plasmid DNA for cutting, cloning, sequencing, amplification
- No syringe expense or excess plastic waste
- All manipulations performed simultaneously in a microcentrifuge
- No vacuum manifolds or other dedicated equipment required

Cat.No. RPM60, RPM120
and RPM600

The figure shows 12 separate RPM minipreps of a 7.2 kb plasmid grown in TG3 cells. 5 of 50 id. of each prep was separated through an 0.8% agarose gel containing ethidium bromide.

Call BIO 101 or nearest distributor to order, or for further information.

BIO 101 pays all shipping and handling costs in the USA. Order today and receive it tomorrow or the next day.

Request a catalog of all of our products.

DISTRIBUTORS: AUSTRALIA - Bresatec, Ltd. Tel: (08)234-2644 FAX: (08)234-2699 AUSTRIA - R.u.P. Margareten G.m.b.h. Bio-Trade Tel: +43-1-489 18 19 FAX: +43-1-489 18 19-30 BENELEX - Westburg BV Tel: 033 95 00 44 FAX: 033 95 12 22 CANADA - BioCan Scientific Tel: (416)828-2455 FAX: (416)828-9422 FRANCE - Ozyme Tel: 01 30 27 01 30 FAX: 01 30 27 01 30 GERMANY - Danova G.m.b.h. Tel: 040 32 30 74 FAX: 040 32 30 74 JAPAN - Funakoshi Co., Ltd. Tel: 033594-1616 FAX: 033594-1633 SWEDEN - Kebo Lab AB Tel: 08-62 13 400 FAX: 08-62 13 470 UK - Stratech Scientific Ltd. Tel: 0858-481884 FAX: 0858-481895 ITALY - Stepbiol s.r.l. Tel: 051-265466

Circle No. 56 on Readers' Service Card