

The AAAS Annual Meeting and Science Innovation Exposition

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American Association for the Advancement of Science

Planary and Ropical Lectures.

PLENARY LECTURES

6:30-7:30 PM

Keynote Lecture

THURSDAY FEBRUARY 16 Bruce Babbit, U.S. Secretary of the Interior

FRIDAY FEBRUARY 17 Edward O. Wilson, Harvard Univ Unity in Biodiversity

SATURDAY, FEBRUARY 18

President's Lecture:

Francisco J. Ayala, Univ of California-Irvine The Myth of Eve: Molecular Biology and **Human Origins**

SUNDAY, FEBRUARY 19TH Daniel S. Goldin, National Aeronautics and Space Administration

MONDAY, FEBRUARY 20 Wallace S. Broecker, Lamont-Doherty Earth

Abrupt Climate Change: Is One Hiding in the Greenhouse?

Topical Lectures

1:00-2:00 PM

FRIDAY, FEBRUARY 17, 1995

Integrated Ecological Economic Modeling and Adaptive Management of Complex Systems

Robert Costanza, Maryland Int'l Inst for **Ecological Economics**

The Engineer's Role in Sustainable Development

Henry J. Hatch, Law Companies Group, Inc.

The Chemical and Biological Weapons Conventions

Matt Meselson, Harvard Univ

Sarton Lecture: Darwinism Comes to America: A Reappraisal of Scientific Responses

Ronald L. Numbers, Univ of Wisconsin-Madison

The Science & Techology Component of the 4th World Conference on Women Gertrude Mongella, Secretary General, 4th World Conference on Women

SATURDAY, FEBRUARY 18, 1995

Neutrons: Probing the Structures and **Dynamics of Complex Materials** Robert J. Birgeneau, Massachusetts Inst of Tech

The Impact of Recombinant DNA on Agriculture and Society George Brown, U.S. Congress

The Loss of Linguistic Diversity, Its Cost for Linguistic Science

Kenneth Hale, Massachusetts Inst of Tech

SUNDAY, FEBRUARY 19, 1995

Education Reform

Bruce Alberts, Natl Academy of Sciences

New Directions in Engineering Education

Eleanor Baum, The Cooper Union

Human Genome Diversity: Science and **Ethics**

L.L. Cavalli-Sforza, Stanford Univ

Cryptanalysis in World War II - Working with Alan Turing

Peter Hilton, SUNY-Binghamton

High Resolution Astronomy: Seeing the Unseen

Harold A. McAlister, Georgia State Univ

Overview of the U.S. Fusion Program Marshall Rosenbluth, Univ of California-San Diego

1995 McGovern Award Lecture in the **Behavioral Sciences**

Robert Wurtz, Natl Eye Inst

MONDAY, FEBRUARY 20, 1995

Benefits of Long-Term R&D to Industry and National Well-Being Mary Good, U.S. Dept of Commerce

How Much Land Can Ten Billion People Spare for Nature?

Paul Waggoner, Conn Agricultural Exp Station

Telemedicine — A New Health Care **Delivery System**

Jay Sanders, Medical College of Georgia

The Changing Patterns of Oral Disease Harald Löe, Natl Inst of Dental Research

Science and People of Color Walter Massey, Univ of California

Can Integrated Assessment Link Science and Policy for a Sustainable Future? Robert S. Turner, Oak Ridge Natl Lab

The Case of Orangutans and Other **Great Apes**

Terry Maple, Zoo Atlanta

TUESDAY, FEBRUARY 21, 1995

Precision Farming: The Next Revolution in Agricultural Management? Pierre C. Robert, Univ of Minnesota

Pheromones

Ring Carde, Univ of Massachusetts

Science Innovation

Douglas C. Wallace, Emory Univ Schl of Med

Science, the New Frontier: A Design for the Future

Harvey Brooks, Harvard Univ

Mathematics Education

Uri Treisman, Univ of Texas-Austin and Robert Moses, The Algebra Project

Hotel Reservation — Call Now!

For reservations, call the appropriate hotel below and ask for the reservations desk. To Qualify for AAAS convention rates, you must tell the reservations clerk that you're attending the AAAS Annual Meeting. All rooms are subject to 13% occupancy tax. After 17 January, rooms and prices are subject to availability.

Marriott Marguis:

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AAAS rates: \$112/single, \$122 double

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Exhibitors

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1995 EXHIBITORS

(Partial listing as of December 1, 1994)

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American Institute of Physics

American Psychological Association

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The Ecumenical Roundtable on Science,

Technology, and the Christian Faith

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Student Pugwash

Union of Concerned Scientists

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U.S. Department of Energy - OTD

U.S. Environmental Protection Agency – CERI

U.S. Office of Naval Research

Yale University Press

Also planning to exhibit

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Boeing/McDonnell Douglas

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Harvard University Press

Island Press

Lamont-Doherty Earth Observatory

Materials Analytical Services

National Library of Medicine/EPA

The New York Botanical Gardens

Omni International

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Space Telescope Science Institute

TCI Software

Exhibit Hours

 Friday, February 17, 1995
 5:00 PM
 - 7:00 PM

 Opening Reception
 5:00 PM
 - 6:30 PM

 Saturday, February 18, 1995
 10:00 AM
 - 4:00 PM

 Sunday, February 19, 1995
 10:00 AM
 - 4:00 PM

 Monday, February 20, 1995
 10:00 AM
 - 3:00 PM

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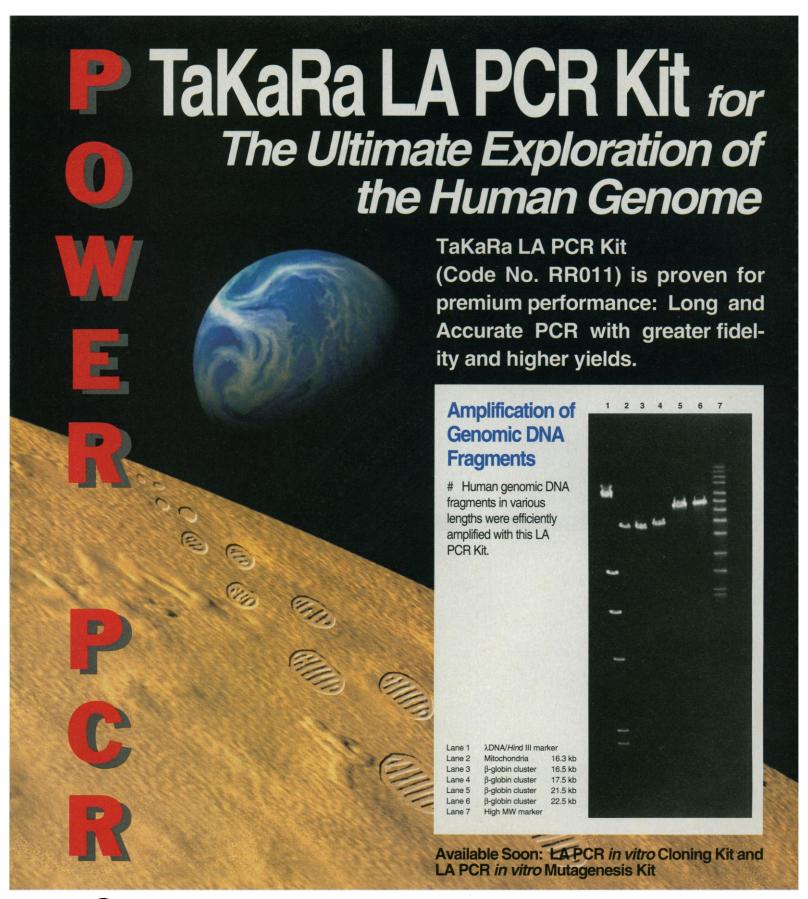
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*Special = Postdoctoral, K			1:00 - 7:00 PM (general meeting) Marriott Marquis — Convention Level

Important Notes

- [1] Special rates: To qualify for the student rate, you must present your valid student ID card to the Cashier upon payment. To qualify for the postdoctoral or K-12 teacher rates, you must provide the name and phone number of your department chairperson or principal in the space provided. Registrations received without appropriate verification will be charged at the Regular rates
- [2] Membership dues indicated herein are at the 1994 rates. Although dues increased on January 1, 1995, the 1994 rates are guaranteed through 21 February 1995 for registrants of the Annual Meeting; \$50 of dues plus international postage are allocated to *Science*. Please allow 4-6 weeks for receipt of your first issue of *Science*. Canadian rate includes GST #125488122.
- [3] Registration payments are nonrefundable except in the event of duplicate or over payments. All refunds will be processed after the meeting.
- [4] Checks must be in United States currency and must be payable on a U.S. bank.





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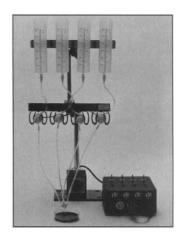
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PRODUCTS & MATERIALS



Bath Perfusion System

The BPS-4 is a convenient system for perfusing the cell bath in a small chamber or petri dish. It is comprised of four 60-cc reservoirs. Fluid flows by gravity and is controlled via pinch valves. Fluid mixing is reduced by incorporating a four-channel manifold that allows each channel to flow into a common output tube 1 to 2 cm before introduction to the cell bath. Valves are controlled via three-position hand switches or via a pulse control that makes the system compatible with programmable data acquisition systems. Each valve is on a separate channel and can be turned on sequentially or simultaneously. Adams and List Associates. Scientific Instruments for Basic Research. Circle 138.

Cell Cycle Research Products

A line of cell cycle research products offers researchers the tools necessary to investigate cell cycle control or identify potential antimitotic and anti-cancer drugs. The product line includes: pp34^{cdc2} Kinase, a central component in the cell cycle of eukaryotes; Olomoucine, a potent and specific inhibitor of pp34^{cdc2}/ cyclin B complex; cdc2 Protein Kinase Peptide Substrate; a rabbit polyclonal antibody that recognizes the active, dephosphorylated form of pp34cdc2; and an agarose that binds tightly to cell cycle-dependent protein kinases. Promega. Circle 139.

Nucleic Acid Extraction Kit

The NucleoTraPCR system features a specially activated silica matrix for the direct purification of polymerase chain reaction products greater than 120 base pairs without the need for prior agarose gel electrophoresis. Phenol extraction and alcohol precipitation of the DNA are not necessary. The DNA is eluted in low salt media or distilled water and is ready for a variety of manipulations including restriction analysis, sequencing, ligations, or labeling reactions. The Nest Group. Circle 140.

mRNA Isolation System

The Straight A's mRNA Isolation System is a rapid method to purify poly(A)+ RNA based on Novagen's Magnetight Oligo (dT) Particles. The system is suitable for a wide range of material including plant tissue, animal tissue, and cultured cells, and is especially effective with low abundance sources of mRNA. The entire protocol requires less than 1 hour. One round of binding and elution yields mRNA of sufficient purity for complementary DNA synthesis and other standard applications. The oligo(dT) particles can be reused repeatedly with no loss of binding capacity. Novagen. Circle 141.

Monoclonal Antibodies

Monoclonal antibody (mAb) 124.3 is now available for immunohistochemical analysis in human tissue sections of bcl-2 oncoprotein, an integral protein of the mitochondrial inner membrane that is frequently overexpressed in lymphoid malignan-

cies. The mAb F39.4.1 reacts specifically in human tissue sections with androgen receptors, which play an important role in prostrate tumor genesis. The mAb 34BE12 for immunostaining of high molecular weight cytokeratins in routinely processed human tissues recognizes cytokeratins 1, 5, 10, and 14, corresponding to molecular weights of 68, 58, 56.5, and 50 kD. The antibody can be used to stain formalin-fixed, paraffin-embedded, or frozen tissue sections. BioGenex. Circle 142.

Anti-HA is a mAb (hybridoma cell line 12CA5) that recognizes a nine—amino acid peptide epitope from the hemagglutinin protein of influenza virus. Boehringer Mannheim. Circle 143.

Photosynthesis Measurement System

The LI-6400 Portable Photosynthesis System features open path CO_2 and H_2O analyzers mounted in the sensor head, providing immediate measurements of the leaf chamber environment. The LI-6400 is an open system that maintains steady-state conditions in the leaf chamber. The CO_2 mole fraction, humidity, chamber



temperature, and light levels can all be controlled. High speed measurement electronics allow measured and computed variables to be displayed in real time. Plots of the variables can also be viewed as the data are collected. The open hardware and software architecture allows the LI-6400 to be reconfigured to meet nearly any gas exchange application. LI-COR. Circle 144.

Literature

Efficient Detection of Biomolecules by Autoradiography, Fluorography, or Chemiluminescence is a booklet that details all the current methods for the detection of labeled biomolecules using autoradiography film. Amersham Life Science. Circle 145.

Eppendorf Centrifuges and Accessories is a catalog that introduces a 24-place microcentrifuge that offers a choice of three interchangeable rotors, along with other instruments. Brinkmann Instruments. Circle 146.

Molecular Biology Catalog features hundreds of new products, including a line of purification kits for DNA of various sizes, a kit for easy removal of low molecular weight contaminants from DNA solutions, and kits to derivatize and label oligonucleotides for use as nonradioactive probes. Pierce. Circle 147.

SFE Applications Guide informs analysts of the range of materials that can be prepared by supercritical fluid extraction (SFE) (instead of organic solvent-based extraction procedures) and describes conditions that can be used as starting points for preparing specific samples. Supelco. Circle 148.

Hand-Held Multi-Channel Analyzer for Nuclear Spectroscopy describes a battery-operated, portable device for characterization and identification of radioisotopes that can perform gamma, alpha, and x-ray spectroscopy. Quantrad Sensor. Circle 149.

Small Volume Syringes is a brochure on a line of syringes with volumes from 0.5 to 10 μ l. Hamilton. Circle 150.

Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by *Science* or AAAS is not implied. Additional information may be obtained from the manufacturers or suppliers named by circling the appropriate number on the Readers' Service Card and placing it in a mailbox. Postage is free.

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POSITIONS OPEN

NEMATOLOGY/PLANT PATHOLOGY

The Department of Plant Pathology and the Southern Experiment Station-Waseca, University of Minnesota, invites applications for an ASSISTANT PROFESSOR in Nematology/Plant Pathology; 12-month, tenure-track appointment. The successful candidate will develop a research program that will emphasize soybean cyst nematode (SCN) including biological and ecological investiga-tions. Assisting with other nematode crop production problems will be encouraged when appropriate. Collabo rative research examining cultural, biological, mechanical and chemical control of SCN in Minnesota is of interest. Project leadership and the active seeking of external funding is expected. Advising of graduate students is expected. Some classroom teaching at St. Paul is possible. Minimum qualifications: a Ph.D. in plant pathology, nematology, entomology or agronomy. Minimum experience: three years of experience with plant parasitic nematodes in field research settings. Desired qualifications: course work and field research emphasizing SCN and soybean production systems, ability to communicate effectively to diverse audiences, documented collaborative research, on farm research, evidence of ability to obtain external funding, interest in and understanding of long-term ecological systems, and two years of postdoctoral experience. Salary is commensurate with qualifications and experience. The position will be available June 1, 1995. Applications should include a curriculum vitae, all transcripts, one page summary of goals in context of this position and three letters of reference. Please send applications to:

> Dr. James H. Orf Chair, Nematologist Search Committee 411 Borlaug Hall University of Minnesota St. Paul, MN 55108

All materials must be postmarked no later than February 15, 1995. The University is an Equal Opportunity Educator and Employer.

BIOCHEMISTRY/MOLECULAR BIOLOGY MEHARRY MEDICAL COLLEGE

Faculty positions are available in 1995 in the Department of Biochemistry, at the level of ASSISTANT or ASSOCIATE PROFESSOR. Applicants must have a Ph.D. or M.D. degree, or both, and appropriate formal postdoctoral research experience. Joint appointments in clinical science departments are possible. We are seeking individuals who have potential or demonstrated competence in the use of molecular biological or biophysical approaches to conduct research in molecular medicine, or on fundamental biochemical/cell biological problem(s). Selected individuals must also be capable of, and committed to making significant contributions to teaching and administrative functions of the Department of Biochemistry. Successful applicants will be expected to develop maintain a funded research program of high quality and to substantially participate in the graduate and professional (medical, dental and allied health) school teaching programs of the Department. Applicants should send curriculum vitae, a statement on teaching interests, names of four individuals who may be contacted for reference, and a summary (not exceeding four pages) of potential research project(s) to: Ifeanyi J. Arinze, Ph.D., Chairman, Department of Biochemistry, Meharry Medical College, Nashville, TN 37208. An Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR DEPARTMENT OF WILDLIFE ECOLOGY UNIVERSITY OF WISCONSIN-MADISON

The Department of Wildlife Ecology at the University of Wisconsin-Madison seeks applicants for 12-month, tenure-track position as ASSISTANT PROFESSOR. A Ph.D. in wildlife ecology/ecosystem management/land-scape ecology or closely related field is required, and post-doctoral research and teaching experience are desirable. The successful applicant is expected to conduct independent and interdisciplinary research in quantitative animal ecology in the context of ecosystem management, and to teach two courses each year. Send curriculum vitae, college transcripts, three to five letters of reference, and statement of research and teaching interests by March 1, 1995, to: Dr. Robert L. Ruff, Chair, Department of Wildlife Ecology, 226 Russell Labs, University of Wisconsin, Madison, WI 53706. Telephone: 608-262-2671. The University of Wisconsin is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

COMPARATIVE PHYSIOLOGIST DEPARTMENT OF PHYSIOLOGY AND BIOPHYSICS UNIVERSITY OF ILLINOIS AT

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Applications are invited for a full-time tenure-track position at the ASSISTANT PROFESSOR level. Preferences will be given to individuals with interests in comparative or adaptational physiology and utilizing physiological, biochemical, cellular and/or molecular approaches in their research. Successful candidates must hold a Ph.D. degree with postdoctoral experience, and would be expected to develop a vigorous, independently funded research program, and to contribute to undergraduate/ graduate teaching. The appointee will join a strong department with broad interests and expertise in molecular, cellular, and systems/integrative physiology. The University of Illinois has a state-of-the-art Biotechnology Center with service facilities in molecular biology, protein analysis, cell culture and transgenic animals. Competitive salary and start-up funds are available. Deadline for receipt of applications is February 21, 1995. Interviews may take place before February 21, 1995, but all applications received by this date will be fully considered. Applicants should submit a brief statement describing research interests and plans, curriculum vitae, list of publications, and the names and telephone numbers of at least three references to: Dr. Arthur DeVries, Search Chairperson, Department of Physiology and Biophysics, University of Illinois, 524 Burrill Hall, 407 South Goodwin Avenue, Urbana, IL 61801. The University of Illinois is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are highly encouraged to apply.

Trent University invites applications for a tenure-track position as a geneticist in the Department of Biology at the rank of **ASSISTANT PROFESSOR** to start July 1, 1995. A completed Ph.D. is required. Preference will be given to applicants with demonstrated ability in undergraduate teaching combined with an active research program. Area of specialization should be in plant and/or animal population genetics, microbial or fungal genetics or molecular genetics as applied to ecology. Research interests should complement those of existing faculty. The successful applicant will have the opportunity to supervise graduate students (M.Sc. or Ph.D.) within the interdisciplinary Watershed Ecosystems Graduate Program, and will be expected to apply for external funding support for their research. Trent is a small liberal arts and sciences university located in the Kawartha Lakes region of central Ontario. The successful candidate will share in teaching courses on introductory biology, cell biology and/or population genetics and evolution. This person will also be expected to develop an upper-year half-course in an area of specializadevelop an upper-year nan-course in an area of specializa-tion beginning in the second year of the appointment. The salary scale for the floor of the Assistant Professor rank is currently \$41,816 per annum. Send letter of application, brief statement of research interests and teaching experience, curriculum vitae and the names and addresses (including FAX numbers and Email addresses) of three referees to: Dr. J. F. Sutcliffe, Chair, Department of Biology, Trent University, Peterborough, Ontario K7L 7B8 Canada. Email enquiries: BMOUNTNEY @TRENTU.CA. Closing date for applications is March 1, 1995. Trent University is an Employment Equity Employer, and especially invites candidacies from women, aboriginal persons, visible minorities and disabled persons. In accordance with Canadian immigration regulations, this advertisement is directed to Canadian citizens and permanent residents of Canada.

ASSISTANT/ASSOCIATE PROFESSOR DEPARTMENT OF BIOCHEMISTRY

A FACULTY POSITION is available in the Biochemistry Department at Boston University School of Medicine. We are particularly interested in individuals who study gene expression or signal transduction as they relate to cell growth, differentiation and development. Applicants should have a Ph.D., M.D., or M.D./Ph.D. degree and experience appropriate for the level of the position. Please send a résumé, a brief statement of research interests and the names of three references to:

Chair, Search Committee Department of Biochemistry Boston University School of Medicine 80 East Concord Street Boston, MA 02118

Boston University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

POSITIONS OPEN

ASSISTANT PROFESSOR GRADUATE CENTER FOR TOXICOLOGY UNIVERSITY OF KENTUCKY

The Graduate Center for Toxicology, University of Kentucky Chandler Medical Center, seeks candidates to fill a full-time, tenure-track faculty position at the level of ASSISTANT PROFESSOR. Requirements include: a Ph.D., or equivalent degree, at least two years of postdoctoral training, and a productive record of quality research. Responsibilities include development of an independent research program, teaching at the graduate level and mentoring of toxicology graduate students. Applicants using molecular biologic approaches to address problems of environmental toxicology as they apply to human health will be considered. While any specialty area will be considered, special consideration will be given to candidates working on mechanisms of DNA repair and oncogene and tumor suppressor gene expression. Current areas of emphasis and opportunities for collaboration in the Graduate Center for Toxicology include mechanisms of carcinogenesis, gene regulation, drug metabolism and transport, immunotoxicology and neurotoxicology. A competitive start-up package and research space in the newly constructed Health Sciences Research Building are available. Please send a curriculum vitae, a brief summary of research plans and the names of three references to: Dr. Mary Vore, Director, Graduate Center for Toxicology, 204 Funkhouser, University of Kentucky, Lexington, KY 40506. Review of applications will begin January 16, 1995. The University of Kentucky is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

ASSISTANT/ASSOCIATE PROFESSOR TENURE-TRACK

Applications are invited for a tenure-track ASSIST-ANT/ASSOCIATE PROFESSOR for appointment in 1995. This position is 90% research, 10% teaching and service, and supported by a generous start-up package including technical support. Required qualifications: Ph.D. or Ph.D./D.V.M. in a biomolecular discipline, postdoctoral experience, potential to establish a competitive independent research program, and participate in the training of Ph.D. and M.S. students. Applicants at the Associate level are expected to have established an extramurally funded research program. Areas of research interest for this position broadly encompass molecular and cellular models of mammalian disease. Applicants studying infectious bacterial, viral, or eukaryotic agents and/or those individuals studying other mammalian disease models including the study of immune function are encouraged to apply. Interested applicants should send a summary statement concerning their research program including grant applications currently planned or submitted. In addition, applicants should send a curriculum vitae, three selected reprints, and arrange for three letters of reference to be sent to: Chair, Search Committee, Veterinary Molecular Biology, Montana State University, Bozeman, MT 59717-0360. Screening will begin January 10, 1995, and continue until a suitable candidate is identified. Americans with Disabilities Aat/Equal Opportunity/Affirmative Action/Veterans Preference.

INVERTEBRATE AND INSECT SYSTEMATICS HARVARD UNIVERSITY

The Department of Organismic and Evolutionary Biology seeks to appoint two new faculty members at the ASSISTANT or ASSOCIATE PROFESSOR level. These positions will be filled by specialists in the systematics and evolution of a group of insects and an invertebrate group other than insects or mollusks. The successful candidates will assume curatorial responsibilities for a portion of the collections in the Museum of Comparative Zoology, as well as teach at the undergraduate and graduate levels. We encourage applications from those with broad interests in phylogeny and comparative biology, including those using morphological or molecular approaches.

lar approaches.
Applicants should submit, by 10 February 1995, a curriculum vitae, a statement of research and teaching interests, and copies of representative publications, and should also arrange to have three letters of recommendation sent to: Professor Michael J. Donoghue, Harvard University Herbaria, 22 Divinity Avenue, Cambridge, MA 02138.

Harvard University is an Affirmative Action/Equal Opportunity Employer. We encourage applications from women and minority candidates.

POSITIONS OPEN

BIOLOGICAL LIMNOLOGIST

The University of Nevada, Las Vegas Department of Biological Sciences and its Limnological Research Center (LRC) announce a tenure-track position, starting August 1995, for an ASSISTANT PROFESSOR in Biological Limnology. The successful candidate will establish and maintain a rigorous, independently funded research program, teach at upper-division and graduate levels and contribute to the administration of the LRC. Nevada and the desert Southwest present unique and diverse limnological opportunities, with habitats ranging from the Colorado River mainstream/reservoir system to low-elevation salt lakes, and sub-alpine ponds and riparia. Preference will be given to those with expertise in photosynthetic systems, microbial interactions or systems ecology. Ph.D. required. Please submit a statement of professional interests in research and education, a curriculum vitae, select reprints and three letters of reference to: The Department of Biological Sciences, c/o Dr. Peter L Starkweather, University of Nevada, Las Vegas, 4505 Maryland Parkway, Las Vegas, NV 89154-4014. Review of completed applications will begin January 30, 1995. University of Nevada, Las Vegas is an Equal Opportunity/Affirmative Action Employer.

PH.D. MOLECULAR BIOLOGIST Assistant Professor, Associate Professor or Professor

The Department of Dermatology at the University of Colorado Health Sciences Center (UCHSC) School of Medicine seeks a Ph.D. scientist experienced in molecular biology/genetics and with a record of productive research. The role of this person will be to pursue an independent area of research pertinent to cutaneous biology, to collaborate with other investigators in the department, and to supervise a molecular biology laboratory within the departmental research labs.

This person will have a primary faculty appointment and research laboratory in the Department of Dermatology and a secondary appointment in an appropriate basic science department. Salary and faculty rank commensurate with experience and credentials. Transitional funding for three years available.

Individuals wishing to pursue this opportunity should send inquiries and curricula vitae to: J. Clark Huff, M.D., Department of Dermatology, 4200 East 9th Avenue, Box B153, Denver, CO 80262.

UCHSC is committed to Equal Employment Opportunity and

UCHSC is committed to Equal Employment Opportunity and Affirmative Action.

The Chemistry and Geochemistry Department at Montana Tech of the University of Montana is seeking a full-time, tenure-track environmental geochemist at the AS-ISTANT PROFESSOR level to begin in August of 1995, subject to the availability of funds. Minimum qualifications include a Ph.D. in environmental chemistry or geochemistry and the ability to teach undergraduate and graduate courses in general chemistry and geochemistry. Individuals who excel in teaching and who can establish a vigorous research program at both the undergraduate and Master's level in environmental geochemistry are encouraged to apply. Preference will be given to candidates who can contribute to our Master's geochemistry program. The Department of Chemistry and Geochemistry offers an ACS accredited B.S. degree in chemistry and a Master's degree in Geochemistry. Montana Tech is situated in the historic mining community of Butte in the heart of the Rocky Mountains. Applicants should submit a résumé, curriculum vitae, a statement of research interests, and the names of three references to: Dr. Doug Coe, Head, Department of Chemistry and Geochemistry, Montana Tech of the University of Montana, 1300 West Park Street, Butte, MT 59701-8997 by March 1, 1995. Equal Employment Opportunity/Affirmative Action Employer.

IMMUNOLOGY—ASSISTANT PROFESSOR

Full-time, TENURE-TRACK POSITION to teach and conduct research in Immunology; anticipated vacan-cy. Teaching responsibilities also include general biology and microbiology. Requires Ph.D. and demonstrated research success; college teaching experience preferred. Applications must be received by February 20, 1995. Send letter of application stating teaching and research interests, curriculum vitae, and the names of three references to: Office of Personnel Services, Rhode Island College, Providence, RI 02908—Attention: Immunologist Search. TDD No. 401-456-8216. An Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

Plant Molecular Biologist-ASSISTANT PROFES-SOR. The Department of Plant Biology, University of New Hampshire, invites applications for a tenure-track position in Plant Molecular Biology at the level of Assistant Professor. Expertise in molecular aspects of plant pathogenesis is desirable, although quality candidates in other areas are encouraged to apply. The successful candidate will be expected to develop an independent and collaborative research program that attracts external funding. Research relevant to economically important plants will be particularly welcome. A strong commitment to undergraduate and graduate teaching is expected. Teaching responsibilities will include a molecular techniques course and up to two other courses in the Plant Biology Department and/or the interdepartmental Biology Program. Applicants must have postdoctoral research experience in plant molecular biology. Submit application with curriculum vitae, undergraduate and graduate transcripts, list of publications, a description of future research and teaching interests, and three letters of recommendation to: Professor Subhash C. Minocha, Chair, PBIO-PMB Search Committee, Department of Plant Biology, University of New Hampshire, Durham, NH 03824-3597. Telephone: 603-862-3840; FAX: 603-862-4757; Email: sminocha@christa.unh.edu. Application deadline March 3, 1995. Hiring is contingent upon eligibility to work in the United States. Women and minorities are especially encouraged. University of New Hampshire is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR OF BIOLOGY BEAVER COLLEGE (Suburban Philadelphia)

The Department of Biology invites applications for a tenure-track ASSISTANT PROFESSOR position beginning fall 1995. Responsibilities will include an upper-level course in Neurobiology for Biology and Psychobiology majors, a two semester course in general biology, and ability to teach histology (although other teaching combinations which meet departmental needs may be considered). The successful candidate must have an earned doctorate, and be broadly trained in the neurosciences. A dedication to teaching pre-professional, Biology, and Psychobiology majors, as well as an interest in engaging undergraduates in research are expected. For full consideration, by February 10, 1995, submit a letter of intent including research goals and teaching interests, curriculum vitae, and three letters of recommendation to:

Dr. Archie J. Vomachka, Chair, Department of Biology, Beaver College, Glenside, PA 19038. Beaver College is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION IN PHYSIOLOGY UNIVERSITY OF MICHIGAN

The Department of Physiology at the University of Michigan Medical School invites applications for a tenure-track position at the ASSISTANT/ASSOCIATE PROFESSOR level. We seek a person utilizing modern techniques of cell and molecular biology to understand physiological processes at the integrative level. The individual must be able to participate effectively in the departmental graduate and medical student teaching program in an area of integrative and/or medical physiology. Candidates should have a Ph.D., M.D., or equivalent degree and a minimum of two years of postdoctoral experience. Applications including a complete curriculum vitae, description of research interests, plans for future research, and names of three references should be sent to: John A. Williams, M.D., Ph.D., Professor and Chair, Department of Physiology, 7744 Medical Science II, University of Michigan, Ann Arbor, MI 48109-0622. The University of Michigan is an Affirmative Action/Equal Opportunity Employer. Minorities and women are especially encouraged to apply.

Physiologist. ASSISTANT PROFESSOR of Anatomy/Physiology at Montana State University-Billings. Tenure-track position to begin Fall Semester 1995. For a detailed vacancy announcement contact the Human Resources Office at the address/telephone number listed below. Review of applications to begin February 20, 1995. Submit cover letter with statement of teaching philosophy and research interests, curriculum vitae, copies of transcripts and three letters of recommendation to: Search No. 95-9, A & P Screening Committee, Human Resources/EEO-AA Office, MSU-Billings, 1500 North 30 Street, Billings, MT 59101-0298. Telephone: 406-657-2278; FAX: 406-657-2120. ADA/Affimative Action/Equal Employment Opportunity.

Biogen is a dynamic young biotechnology company principally engaged in developing genetically engineered human pharmaceuticals. Now in our 16th year, we are one of the few profitable biotech companies in the U.S. Revenues come from five products - including Intron (R)A alpha interferon and hepatitis B vaccines and diagnostics - sold throughout the world by licensees or affiliates. Current research is directed toward the discovery and development of proprietary products to treat inflammation, cardiovascular disease, AIDS and certain cancers.

Senior Scientist – Bioprocess Development

We currently seek a senior level molecular biologist in the area of CHO cell line construction and development. This position involves construction of cell lines with high productivities for our Process Development department. Work includes vector construction, transfection, and initial screening of cell lines with an emphasis on design of new host/vector systems using molecular genetic techniques. Candidates will work closely with scientists involved with media development regarding strategies to improve and maximize protein expression for cell lines needed for GMP manufacturing. To qualify candidates must have a PhD in Molecular Biology and 5-10 years' experience in vector and cell line construction for CHO cell lines in an industrial setting. Strong collaborative and communication skills are essential as well as evidence of external collaborative activities.

Senior Process Scientist – Drug Delivery

This achievement-oriented scientist will utilize a strong working knowledge of polymer/protein chemistry and biophysical characterization techniques to manage external collaborations associated with our drug delivery program. Specific responsibilities involve directing formulation research and development work, as well as overseeing various drug delivery programs aimed at increasing the value of our therapeutic products through internal Research and Development and external collaboration. Candidates must have a PhD in Chemistry, Pharmacology or Biochemistry and a strong publication record in projects dealing with interactions of polypeptides and drug delivery systems. Applicants must also possess 3 years' experience actively managing collaborations involving drug delivery of therapeutic proteins with other companies.

Scientist – Quality Control
Utilizing hands-on experience developing a wide range of biochemical methods, this proven scientist will develop, document and validate new assays for the purpose of quantitating products and raw materials produced in the manufacturing of proteins. These methods will include chromatographic, colorimetric, electrophoretic and general chemical assays. This individual will also supervise the transfer of release testing methods to our quality Control group. To succeed, candidates must have a PhD in Chemistry or Biochemistry, 5 years' industrial experience and a strong understanding of GMPs. A working knowledge of the development and validation of analytical methods involving protein chemistry, chromatography, spectroscopy, computers, lab automation, statistical analysis, experimental design, quality control and quality assurance is also required. Direct experience in assay development for biochemical products a must.

Biogen offers what few companies in our industry can - Professional Challenge, Stability, Profitability, and Growth. In addition, our compensation and benefits package is one of the best in the industry, and is designed to attract and retain the finest talent available. If you are one of the best, you have an opportunity to join us now. Please forward your resume to: Joe Mini, Dept.-SCI, Biogen Inc., 14 Cambridge Center, Cambridge, MA 02142, FAX: (617) 679-3595. Biogen is An Equal Opportunity Employer.



POSITIONS OPEN

HAMPDEN-SYDNEY COLLEGE

The Biology Department invites applications for a non-continuing one-year appointment as VISITING ASSISTANT PROFESSOR beginning August 15, 1995. The successful applicant will teach Introductory Biology lectures and laboratories and will offer one or two advanced courses in cell or molecular biology. Fields presently represented in the department are Microbiology/Botany, Ecology, Cellular/Developmental, Vertebrate Anatomy and Physiology, Molecular/Genetics and Paleobiology/Invertebrate Zoology. Candidates must demonstrate interest or have experience in undergraduate teaching and have a Ph.D. expected by August 1995. A letter of application stating educational philosophy (no longer than one page), a résumé and three letters of reference should be sent to: William A. Shear, Chairman, Department of Biology, Hampden-Sydney College, Hampden-Sydney, VA 23943; FAX: 804-223-6374 by February 10, 1995. Application material received after this date will not be considered. An Equal Opportunity Employer/Affirmative Action.

ASSISTANT/ASSOCIATE PROFESSOR

Tenure-track faculty position, Department of Pharmacology and Experimental Therapeutics, Loyola University Chicago, Stritch School of Medicine. The Department of Pharmacology and Experimental Therapeutics is seeking to fill a tenure-track ASSISTANT PROFESSOR or ASSOCIATE PROFESSOR position. The candidate should have a Ph.D. and/or M.D. degree, postdoctoral experience, and a strong commitment to excellence in research and teaching. Evidence of originality, scientific accomplishment, and the ability to develop a productive, independent research program, is essential. Salary is competitive, and based on experience and qualifications. Start-up support will be provided for early development. Candidates should send their curriculum vitae, three letters of recommendation, representative reprints, and a synopsis of their current and future research interests to: Dr. Israel Hanin, Chairman, Department of Pharmacology and Experimental Therapeutics, Loyola University Chicago, Stritch School of Medicine, 2160 South First Avenue, Maywood, IL 60153. Telephone: 708-216-3261; FAX: 708-216-6596. An Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR, BIOCHEMISTRY

The Oregon State University Department of Biochemistry and Biophysics invites applications for a full-time, TENURE-TRACK APPOINTMENT (nine-month). We seek an outstanding scientist with demonstrated post-doctoral research productivity in biochemistry, who will pursue excellence in teaching general biochemistry and related subjects to undergraduates and graduates. The appointee is expected to develop an active, extramurally supported research program that complements the research interests of the present faculty. To apply, send a letter of interest; curriculum vitae; a concise statement of research plans; copies of two representative publications; names, addresses, and telephone numbers of three professional references; and have the three reference letters sent to: Professor Philip N. McFadden, Biochemistry and Biophysics, 2011 ALS, Oregon State University, Corvallis, OR 97331-7305. Completed applications received by February 20, 1995, will be assured of consideration. Oregon State University is an Affirmative Action/Equal Opportunity Employer, and is responsive to dual-career outples.

ASSISTANT/ASSOCIATE PROFESSOR. The Center for Study of Gene Structure and Function at Hunter College of the City University of New York is a rapidly growing NIH-funded research consortium. It includes faculty members in three departments: Biological Sciences, Chemistry, and Biopsychology. Applications are invited for one or two tenure-track faculty appointments in any of these departments. Research areas include molecular biology, biochemistry, immunology, eukaryotic microbiology, neurosciences, structural biochemistry, physical biochemistry, synthetic chemistry or NMR spectroscopy. Candidates must have a Ph.D. degree with post-doctoral training and demonstrated evidence of productivity. Successful candidates will be expected to set up a funded research program, train doctoral candidates and participate in teaching. Submit curriculum vitae, research plans, and the names of three references to: Erwin Fliessner, Dean, Division of Sciences and Mathematics, Hunter College, Room 312HN, 695 Park Avenue, New York, NY 10021. Minorities underrepresented in science are particularly urged to apply.

POSITIONS OPEN

The Department of Biological Sciences, Lock Haven University invites applications for tenure-track positions in Microbiology and Zoology at the INSTRUCTOR/ASSISTANT PROFESSOR level. Earned doctorate and university level teaching experience preferred. Candidates for both positions are expected to teach introductory-level biology for majors and non-majors, science seminars and to supervise undergraduate research. Microbiologist: broad background applied microbiology, will teach introduction to microbiology and immunology. Zoologist: field oriented invertebrate zoologist, will teach introduction to zoology and possibly a specialty course. Send a letter, résumé, transcripts, and the names, addresses and telephone numbers of three references by February 1, 1995, to: Chair, Search Committee, Department of Biological Sciences, Lock Haven University, Lock Haven, PA 17745. Lock Haven University is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates and persons with disabilities are encouraged to apply.

HUMAN GENETICS DEPARTMENT UNIVERSITY OF UTAH FACULTY POSITION TENURE-TRACK – ANY LEVEL

Current faculty interests include: Genetics of Human Disease; Developmental Genetics; Human Genome Project; Molecular Genetics of Gene Regulation; and Population Genetics. Send curriculum vitae and brief description of research interests to: Raymond F. Gesteland, Department of Human Genetics, University of Utah School of Medicine, Salt Lake City, UT 84112. FAX: 801-585-3910; Email: rayg@genel. med.utah.edu. The University of Utah is an Equal Employment Opportunity/Affirmative Action Employer and encourages applications from women and minorities.

FACULTY POSITION

The Department of Medicine at the University of Pennsylvania School of Medicine invites applications from physician/scientists for a FACULTY POSITION within the Section of Diabetes. Candidates are sought who will develop or maintain an excellent research program related to Diabetes in the broadest sense. Areas of potential interest include, but are not limited to, hormone action, signal transduction, genetics, metabolism, membrane protein targeting, and secretion. Academic rank and financial support will be commensurate with the needs and experience of the successful candidate. Please send curriculum vitae, a brief description of research interests, and three letters of recommendation to: Morris J. Birnbaum, M.D., Ph.D., Howard Hughes Medical Institute, Room 322, Clinical Research Building, 422 Curie Boulevard, Philadelphia, PA 19104-6148.

The University of Pennsylvania is an Affirmative Action/Equal Opportunity Employer, and applications from women and minorities are welcomed.

FACULTY POSITION. The Department of Microbiology and Immunology, and the Program in Molecular Medicine of the University of California, San Francisco (UCSF) School of Medicine, are seeking outstanding candidates to fill a tenure-track or tenured position. In addition to departmental affiliation, the position includes membership in the Program in Biological Sciences, the excellent campus-wide graduate program. The search will consider candidates with demonstrated creativity and research productivity in viral replication and pathogenesis. Rank will be commensurate with level of experience. Interested candidates should send a curriculum vitae and a statement of future research plans, and have three letters of recommendation sent by January 31, 1995, to: Virology Search Committee, c/o Joan Junkin, Department of Microbiology & Immunology, Box 0414, University of California, San Francisco, San Francisco, California 94143. UCSF is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

Department of Psychiatry, University of Pennsylvania, has two FACULTY POSITIONS available for program in neurobiology and behavior. Positions are at either the junior/senior level depending on candidates' qualifications. Candidates must be M.D., Ph.D. with training in genetics and experience in endocrinology, molecular pharmacology and neuroanatomy. Please send letter of intent and curriculum vitae to: Peter C. Whybrow, M.D., Chairman, Department of Psychiatry, University of Pennsylvania, 305 Blockley Hall, 418 Guardian Drive, Philadelphia, PA 19104-6021. Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

CHAIRPERSON DEPARTMENT OF BIOLOGY

The College of Arts and Sciences at Appalachian State University invites applications for the position of CHARPERSON of the Department of Biology. The position will be available beginning July 1, 1995. The successful candidate will have both administrative and academic responsibilities and will assume leadership of a department with 19 faculty, 640 undergraduate and 25 graduate majors. Salary is commensurate with experience and qualifications; areas of specialization are open. Women and minorities are encouraged to apply.

Qualifications include an earned doctorate in an appropriate discipline, professional development appropriate for the rank of associate or professor, demonstrated academic administrative ability, distinguished record of effective teaching, research and professional service, commitment to obtain external support, ability to work effectively with colleagues, and strong interpersonal skills.

Appalachian State University, a member of the University of North Carolina System, is a comprehensive university located in the heart of the Blue Ridge Mountains. With an enrollment of 11,500 students, Appalachian offers baccalaureate degrees and graduate programs at the Master's level. The primary mission of the university is undergraduate instruction with scholarship and professional service complementing the instructional mission. To apply, send letter of application, a current curriculum vitae, statement of professional goals, and the names, addresses, and telephone numbers of three or more references by 5:00 pm, February 15, 1995, to: Dr. Richard N. Henson, Chairperson, Biology Chairperson Search Committee, c/o Office of the Dean, College of Arts and Sciences, 201 I.G. Greer, Appalachian State University, Boone, NC 28608. For telephone inquiries: 704-262-2677. Appalachian State University is an Equal Opportunity Employer.

CHAIR OF MICROBIOLOGY UNIVERSITY OF MARYLAND

The College of Life Sciences at the University of Maryland-College Park invites applications for the position of CHAIR of the Department of Microbiology. The Department of Microbiology consists of 12 faculty with research and teaching interests including prokaryotic molecular biology, virology, immunology, ecology, and pathogenic microbiology. We seek an individual to provide academic and administrative leadership for expansion of our teaching and research programs. Candidates should be internationally recognized for their professional accomplishments and will be expected to direct an extramurally funded research program. Candidates should provide a letter of application accompanied by a curriculum vitae, and arrange to have four letters of reference sent directly to the address below. Review will begin on January 15, 1995, and continue until a suitable candidate is identified. The anticipated starting day for this position is July 1, 1995. Applications should be sent to: Search Committee Chair, Department of Microbiology, University of Maryland, College Park, MD 20742-4451. The University of Maryland is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are encouraged to apply.

CHAIR, ANIMAL SCIENCES UNIVERSITY OF MISSOURI-COLUMBIA

An individual is sought to chair a unit of 33 faculty and 75 graduate and postdoctoral students whose primary research emphasis is in reproduction and nutrition. Qualifications include a Ph.D., an ability to communicate with various constituency groups of the state's animal industries, a commitment to diversity and demonstrated excellence in either research, teaching or extension, ideally in an area that complements existing programs. The closing date is March 1, 1995, or whenever a suitable candidate is identified. Send nominations and applications to:

Joe Kornegay, D.V.M., Ph.D. Chair, Search Committee S108 Animal Sciences Research Center University of Missouri Columbia, MO 65211

Applications should include a curriculum vitae, a detailed letter of intent and the names of at least three references. Individuals from underrepresented groups including minorities, women and people with disabilities are encouraged to apply.

VICE PRESIDENT FOR PROGRAMS Associated Western Universities, Inc. Salt Lake City, Utah

Associated Western Universities, Inc. (AWU), a consortium of 62 colleges and universities with headquarters in Salt Lake City, invites nominations and applications for **Vice President for Programs**. Since 1964, AWU has worked in partnership with government and industry to develop an integrated and effective spectrum of science and engineering education programs. In 1994, with sponsorship of \$21 M, these programs supported 3,000 faculty and students from high schools, colleges, and universities throughout the U.S. Many of these academic scientists participated in research at one of more than 50 federally- and industrially-funded facilities.

The Vice President for Programs reports to the President and has responsibilities which include: planning, implementation, and management of all programmatic activities; acquisition of external sponsorship; establishing and maintaining effective communications with program partners; and sustaining a corporate culture of commitment and effectiveness.

The successful candidate will possess proven leadership ability in managing people and multiple projects and in working as a productive team member. A well-developed academic, laboratory, industrial, and/or sponsored programs network is essential. Teaching and/or academic or research and development management experience are a plus. A strong background in science or engineering is required; an advanced degree is preferred.

Salt Lake City is a major commercial, cultural, medical, and transportation center, with renowned winter sports and summer recreational opportunities. The corporate office has a staff of 30, while the Northwest Division of AWU in Richland, WA has a staff of 17. AWU also has a small office in Washington, DC.

AWU offers excellent salary and benefits, commensurate with qualifications and experience. The position is available immediately. Applications received before February 28, 1995 will be given full consideration. Send resume, salary requirement, and three references to:

Search Committee for Vice President Associated Western Universities, Inc. 4190 S. Highland Drive, Suite 211 Salt Lake City, UT 84124



AWU is an Affirmative Action/Equal Opportunity Employer

Molecular Biologist/Virologist

A postdoctoral scientist position for either a foreign applicant (Fogarty Visiting Fellowship Program) or a U.S. citizen (Intramural Research Training Appointment) is available immediately to study molecular mechanisms of turmogenesis at the Laboratory of Immunopathology, National Institute of Allergy and Infectious Diseases. Research projects are aimed at identification and characterization of disease genes associated with murine AIDS (MAIDS)-lymphomas and B-cell lymphomas of ecotropic viruses-congenic NFS mice. Experience in molecular biology, especially in genomic- and cDNA-library construction, and less than five years postdoctoral experience are required. Salary range \$25,000 - \$32,000 will be commensurate with experience.

Qualified and interested candidates should send curriculum vitae and names and addresses of three (3) references to:

Dr. Herbert Morse or Dr. Xiaobei Liao Laboratory of Immunopathology NIAID - National Institutes of Health Building 7, Room 302 7 Center Drive MSC-0760 Bethesda, MD 20892-0760



Phone: 301-496-4436/6379 Fax: 301-402-0077

Applications must be received by February 28, 1995

NIH is an Equal Opportunity Employer

Post-Doctoral <u>Virologist</u>

The Lindsley F. Kimball Research Institute of the New York Blood Center invites applications from Virologists for a Postdoctoral position in research on hepatitis C virus. As an active participant in the Laboratory of Virology and Parasitology, which includes 13 postdoctoral scientists working on independent projects related to the immunology and molecular biology of HCV, HIV, and the filarial parasite of Onchocerca volvulus, the incumbent will conduct studies on In Vitro replication, receptor studies and transfection with genomic clones.

The Lindsley F. Kimball Research Institute comprises 17 laboratories carrying out autonomous research programs in diverse fields of biomedical research. Available immediately, This positions commands a negotiable salary and an excellent comprehensive benefits package. Please send CV with 3 letters of recommendation to: Jeffrey Slemmer, Department of Human Resources, New York Blood Center, 150 Amsterdam Avenue, New York, NY 10023. An Equal Opportunity Employer M/F/D/V.

Job Opportunity Hotline 1-800-835-0058

&Lindsley F. Kimball

Research Institute
A Division of the New York Blood Center

DIRECTOR, NATIONAL TOXICOLOGY PROGRAM

For over 65 years, Battelle staff have designed and carried out vital, challenging, and rewarding research programs. Battelle's Health Division is engaged in important work in the areas of Pharmaceutical Product Development, Agrochemical Product Development, and Public Health Research. We are currently seeking candidates for the position of Director, National Toxicology Programs. In this role, the candidate selected will serve as Program Manager and Principal Investigator for studies under contracts with the National Institute of Environmental Health Sciences.

Prime responsibilities include the technical and fiscal management of toxicological studies conducted through the National Toxicology Program, the preparation of technical and business proposals for future work, the supervision of performance under current contracts, leadership responsibilities for technical and professional staff, and communications with NTP staff. Requirements include a Ph.D. in Pharmacology or Toxicology, evidence of independent research through a formal post-doctoral training program, American Board of Toxicology certification, significant experience leading large-scale rodent toxicology programs, and demonstrated capability for effective communication through conference presentations and journal publications. Previous experience (10+ years) conducting studies for the NTP is desirable.

This exciting and unique leadership opportunity is located at Battelle's Columbus, Ohio research center and world headquarters. Battelle offers opportunities for professional growth and development in addition to a comprehensive package of compensation and benefits. If interested, please send resume/CV and cover letter to: NTP Search Committee, c/o Christopher Dunford, Dept. 175, Battelle, 505 King Avenue, Columbus, OH 43201-2693. Battelle is an Affirmative Action Action/Equal Opportunity Employer M/F/D/V.



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POSITIONS OPEN



CHAIR Department of Molecular and Human Genetics Baylor College of Medicine

Baylor College of Medicine invites applications and nominations for the position of CHAIR of the Department of Molecular and Human Genetics. The Department includes programs in fundamental basic science, human genetics research (with a Human Genome Center), and a clinical genetics service with extensive clinical laboratories. The clinical service relates to other clinical departments at Baylor, providing unparalleled opportunities for interactions among the clinical and basic sciences. Graduate and postgraduate training programs include a Fellowship program leading to certification by the American Board of Medical Genetics. The College is seeking an individual of international distinction who will continue the Department's tradition of academic excellence and scientific achievements. Applications and nominations should be received by March 1, 1995, and should include a full curriculum vitae sent to: Dr. Janet S. Butel, Search Committee Chair, Division of Molecular Virology, Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.

PROFESSOR OF APICULTURE

The Department of Entomology invites applications for a PROFESSOR of Apiculture, rank open, to begin 1 September 1995. Successful candidate will conduct an outstanding research, teaching, and extension program in apiculture. Research (50%) could address pathology, physiological, ecological, behavioral, systematic, or genetic topics. Teaching (25%) will include a course on the biology of the honey bee with a laboratory on beekeeping for undergraduates, and a course or seminar in a specialty area. Extension effort (25%) will lead a program in beekeeping, including pest and disease control, honey production and processing, colony management, and crop pollination. Applicants must have a Ph.D. in entomology or related field; broad training and research, teaching, and/or extension experience in honey bee biology; strong commitment to the beekeeping industry. Applicants should forward curriculum vitae; separate statements of interest and experience in (1) research, (2) extension, (3) extension, and (4) experience in beekeeping; reprints (less than five); and names and addresses of four references by 1 April 1995 to: Dr. Donald A. Rutz, Chair, Department of Entomology, Comstock Hall, Cornell University, Ithaca, NY 14853-0901. Cornell University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

A POSTDOCTORAL POSITION is immediately available at a competitive salary on an NIMH-supported project utilizing the LP-BM5 model of HIV-1 infection to study retrovirus-induced impairment of learning and memory. Studies involve behavioral, neuropharmacological, and molecular biological techniques. Candidates possessing expertise in one or more of these areas and interested in HIV-1/retroviral research should send curriculum vitae and names of three references to: Ian A. Paul, Ph.D., Department of Psychiatry and Human Behavior, Division of Neurobiology and Behavior Research, Box 127, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216. FAX: 601-984-5899. Email: iapaul@fiona.umsmed.edu. The University of Mississippi Medical Center offers Equal Opportunity in Employment and Education/Male/Female/Disabled/Veterans.

POSTDOCTORAL POSITION available immediately to study molecular mechanisms in presynaptic regulation using confocal microscopy of individual isolated brain nerve terminals. Background in biochemistry and/or molecular neuroscience desirable. Send curriculum vitae to: Robert A. Nichols, Ph.D., Department of Pharmacology, Medical College of Pennsylvania and Hahnemann University, 3200 Henry Avenue, Philadelphia, PA 19129. FAX: 215-843-1515. An Equal Opportunity Employer.

POSITIONS OPEN



JOHN AND EMMA BONICA ENDOWED CHAIR FOR ANESTHESIOLOGY AND PAIN RESEARCH UNIVERSITY OF WASHINGTON

The Department of Anesthesiology and the Multidisciplinary Pain Center at the University of Washington School of Medicine are seeking candidates to occupy the JOHN AND EMMA BONICA ENDOWED CHAIR FOR ANESTHESIOLOGY AND PAIN RESEARCH. Opportunities exist to interact with outstanding research programs in molecular, cellular, and systems neurobiology as well as behavioral, clinical neurosciences, and health services research at the University of Washington. Applicants should have an established, active research program in a relevant area of basic or applied research and be qualified for appointment at the rank of Associate Professor or Professor. In addition, interactive leadership and mentoring potential is essential.

Letters of application, including a curriculum vitae, bibliography, a brief statement of research interests, and the names of three references should be sent to: Thomas F. Hornbein, M.D., Chairman of the Bonica Search Committee, Department of Anesthesiology, RN-10, University of Washington, Seattle, WA 98195 before July 1, 1995.

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

DIRECTOR, Hematopathology Program. The University of Texas M. D. Anderson Cancer Center is seeking an individual to direct an interdisciplinary (Divisions of Pathology, Laboratory Medicine, and Medicine) program in Hematopathology. The candidate must be Board-certified with subspecialty training, preferably with certification in a discipline (Hematology, Hematology-Oncology, Hematopathology) aligned to the goals of the interdisciplinary program. These include (1) leading a clinical investigative program in leukemia/lymphoma, (2) directing patient-care diagnostic services dealing with hematology/hematopathology, (3) coordinating a training program for residents and Fellows. It is expected that the candidates are prepared to play a major role in research dealing with these goals.

Send curriculum vitae and inquiries to: David G. Tubergen, M.D., Chairman, Search Committee, Department of Pediatrics, Box 87, UTMD Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, TX 77030.

The University of Texas M. D. Anderson Cancer Center is an Affirmative Action/Equal Opportunity Employer. Smoke-free environment.

POSTDOCTORAL POSITION HARVARD MEDICAL SCHOOL BETH ISRAEL HOSPITAL Transcriptional Regulation of Eosinophil Genes

POSTDOCTORAL POSITION available immediately for new or experienced Ph.D. in molecular biology to characterize the promoters and enhancers of eosinophil genes, to isolate, clone and characterize transcription factors which regulate eosinophil-specific gene expression, and to study the role of these factors in lineage commitment, differentiation and functional maturation of these granulocytes. Genes being studied include those encoding the IL-5 receptor alpha subunit, granule-associated proteins such as eosinophil peroxidase, and CLC protein. Experience in gene regulation and/or transcription factor research desirable. Send/FAX curriculum vitae, three reference letters and two reprints to: Steven J. Ackerman, Ph.D., Infectious Diseases, RE219, Beth Israel Hospital, 330 Brookline Avenue, Boston, MA 02215. FAX: 617-667-3299.

POSTDOCTORAL POSITION: Immediate opening. Peptide Chemist to synthesize peptides for Alzheimer Research Project and Membrane Crystallization Project. Dr. Gerald Fasman, Graduate Department of Biochemistry, Brandeis University, Waltham, MA 02254. Telephone: 617-736-2370; Email: Fasman@binah.cc.brandeis.edu. Brandeis University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

EXECUTIVE DIRECTOR OF OTS

The Organization for Tropical Studies (OTS) is seeking an **EXECUTIVE DIRECTOR** to lead the world's premier organization in training graduate students and promoting research in tropical field biology and the wise use of natural resources. Candidates should have demonstrated leadership in three areas: fund raising, administration, and academic program development. The successful candidate must have significant cross cultural professional experience and communication skills. A Ph.D. in the biological sciences and proficiency in Spanish are desirable.

ological sciences and proficiency in Spanish are desirable. OTS is an international consortium of 55 U.S. and Central American institutions. The Executive Director is based in the North American Office at Duke University, Durham, North Carolina, USA. The majority of the programmatic activities take place at three field stations in Costa Rica

Application review will begin May 15, 1995, for the position which will start July 1, 1996. Send résumé, letter of interest, and names of five references to: Dr. Gordon Orians, Chair, OTS Search Committee, Department of Zoology, University of Washington, Seattle, WA 98195. Duke University is an Equal Opportunity/Affirmative

POSTDOCTORAL SCIENTIST Drug Metabolism/Molecular Genetics

Action Employer.

Pfizer, a Fortune 100 company and multi-billion dollar industry leader, is focused on discovering and developing innovative pharmaceutical therapies that improve the quality of life around the world.

Your experience in molecular biology and/or characterization of drug metabolizing enzymes, could qualify you for this unique opportunity to study cytochrome P450 enzyme(s) in both a corporate and an academic setting. The selected candidate will spend 18 months with Dr. James Halpert at the University of Arizona Health Sciences Center in Tucson, Arizona. This collaborative effort will focus on cloning, expression and enzymatic characterization of novel isoforms of cytochrome P450. The goal of this research is to develop enzyme models in animal species critical to the development of new drug applications. Publication and presentation of data will be encouraged.

In addition to the opportunity to interact with one of the world's finest corporate scientific communities, we offer a competitive salary, medical and dental insurance coverage, travel funds for attending scientific conferences and relocation assistance. For confidential consideration, send your curriculum vitae and the names of three references to: Mr. David Meyers, Employee Resources, Pfizer Inc., Central Research Division, Eastern Point Road, Groton, CT 06340.

An Equal Opportunity Employer/Male/Female/Disabled/Veterans.

POSTDOCTORAL ASSOCIATE in Ecology/Evolution for work linking herbivory with pollination. Independent research and interaction with stimulating colleagues is encouraged. Candidate should have completed Ph.D.; knowledge of electrophoresis desirable, but not required. Send a curriculum vitae and three letters of recommendation by 15 February 1995 (for best consideration), to: Dr. Sharon Strauss, Department of Evolution and Ecology, University of California, Davis, CA 95016. The University of California is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION at the University of Pittsburgh, School of Medicine, Department of Medicine to study the molecular mechanisms involved in regulation of Na+,K+-ATPase (sodium pump) genes with a focus on gene coding for A3 isoform, the role of distant regulatory regions, and characterization of DNA elements and protein involved. Applicants should have a strong background in molecular biology. Submit curriculum vitae and three references to: Dr. Edward J. Benz, Jr., Chairman, Department of Medicine, University of Pittsburgh, Pittsburgh, PA 15261. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study oxidative stress and antioxidant protection in vascular cell function. Experience in molecular biology and cell culture techniques desirable. Send curriculum vitae and names, addresses, and telephone numbers of three references to: John F. Keaney, Jr., M.D., Whitaker Cardiovascular Institute, 80 East Concord Street, Boston, MA 02118.

DNA/PROTEIN SEQUENCE DATABASE SPECIALIST

Sandoz Research Institute is looking for an expert in DNA and Protein Sequence Analysis Databases and Software. The successful candidate will be part of a systems support team with a focus on servicing the drug discovery effort at Sandoz, both locally and internationally. The position (Systems Analyst II) will support Sandoz research scientist's usage of both DNA and Protein Sequence Databases and Analysis Software and local Internet services.

An M.S. or Ph.D. degree in Molecular Biology, Protein Chemistry or the equivalent and about 3-5 years of expertise in sequence analysis software packages (e.g., GCG, Atlas, BLAST) is required. A broad spectrum of expertise with on-line databases (e.g., Genbank, SWISS-PROT, PROSITE) and a high level of familiarity with the Internet and associated services are also necessary. Experience with desktop analysis packages and UNIX is desired. Good communication skills and a user focus are musts.

Positions at Sandoz offer personal satisfaction, professional opportunity and challenge, competitive salaries and an excellent benefits package. Our campus-like facilities are conveniently located in northern New Jersey. For consideration, please refer to Position #3040 and forward your curriculum vitae and the names and addresses of three references to:

SANDOZ PHARMACEUTICALS CORP

Staffing Department
Building 122/3
East Hanover, NJ 07936-1080
An Equal Opportunity Employer M/F/D/V



bringing research to life

HUMAN POPULATION GENETICIST

The Laboratory of Neurogenetics of the National Institute on Alcohol Abuse and Alcoholism of the National Institutes of Health is seeking a human population geneticist for a tenured position at a level comparable to the associate or full professor. The successful candidate will join a productive research staff on projects related to large scale automated genotyping and genetic linkage and transmission analysis of alcoholism and related psychopathologies. In addition, the successful applicant will assume an active role in training graduate and post-doctoral fellows, and establish independent research projects in anthropoligical, evolutionary, population, and statistical genetics. Applicants should have experience with design and management of large databases that integrate pedigrees, molecular genetic markers, and clinical records. Experience with projects involving automated DNA genotyping, in using genetic analysis software packages (e.g., SAGE, Linkage, etc.), and in development of original methods and research designs is also necessary. Send curriculum vitae, including bibliography, statement of research interests, and names and addresses of three references to: David Goldman, MD, Laboratory of Neurogenetics, NIH/NIAAA, 12501 Washington Avenue, MSC 8205. Bethesda, MD 20892-8205.

Science Advertising Calendar of Events

Mark Your 1995 Calendar for These Exciting Advertising Opportunities

3 February

Editorial Focus, Gordon Research Conference.

10 February

Bonus Distribution to the AAAS Annual Meeting in Atlanta, Georgia, 17-20 February 1995.

24 February

Special Advertising Section, Euroscience at Work: Career Opportunities in European Biotechnology and Pharmaceuticals.

3 March

Bonus Distribution to the Biotechnology/ Pharmaceutical Job Fair, 10-11 March, New Jersey. Bonus Distribution to the American Physical Society meeting, 22-24 March, San Jose, California.

10 March

Editorial Focus, Molecular Biology: Cellular Regulation I. Bonus Distribution to the American Association for Cancer Research meeting, 19-21 March, Toronto, Canada. Bonus Distribution to USGEB, 30-31 March, Fribourg, Switzerland.

17 March

Special Advertising Section, Careers in Biotechnology and Pharmaceuticals: Beyond Discovery.

Bonus Distribution to two Biotechnology/Pharmaceutical Job Fairs: 24-25 March, La Jolla, California and 28-29 April, Cambridge, Massachusetts.

For Recruitment Advertising: Call (202) 326-6541, FAX (202) 682-0816. Recruitment Advertising Internet Address: science_classifieds@aaas.org

For Product Advertising: Call (202) 326-6542, FAX (202) 682-0816.

Science

Research Scientist

Bio-Rad Laboratories is a world leader in the fields of life science research products, clinical diagnostics and analytical instruments. Our continued growth has created a need for a dynamic scientific professional to work in our Lab Products Division.

The successful candidate will have a BS/MS or equivalent in a biological science with 2+ years laboratory experience. Must have good working knowledge of current methods of electrophoresis, chromatography and associated techniques including the analysis and purification of proteins and nucleic acids and isoelectric focusing.

For consideration, please send your resume to: Bio-Rad Laboratories, 2000 Alfred Nobel Dr., Dept. 017, Hercules, CA 94547. An EEO/AA Employer.



Bio-Rad Laboratories

POSITIONS OPEN

APOLIPOPROTEIN E

POSTDOCTORAL POSITIONS are available to study the role of apoE and apoA1 in cellular lipid metabolism and the endocytic processing of apoE in Alzheimer's disease. Experimental approaches involve gene knockout animals, molecular genetics, and cell biology. Ph.D. and/or M.D. with experience in neurobiology or lipoprotein biochemistry preferred. Curriculum vitae and names of two references to: David L. Williams, Department of Pharmacology, SUNY Stony Brook, Stony Brook, NY 11794-8651. SUNY Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer.

POSTDOCTORAL POSITION IN MOLECULAR GENETICS

Available immediately for an individual proficient in molecular biology. Preference will be given to applicants with experience in large DNA work (YAC, BAC, Pl cloning/analysis). Candidate will work with an international multidisciplinary team on genetics of complex cardiovascular disease. Please forward curriculum vitae, personal statement, three references to: Dr. K. Lindpaintner, Department of Medicine, BWH, Harvard Medical School, 75 Francis Street, Boston, MA 02115. FAX: 617-264-6830.

POSTDOCTORAL POSITION in Molecular Endocrinology: Positions available immediately for mechanistic studies regarding regulation of insulin-like growth factor (IGF) and IGF binding protein gene expression. Current studies focus on the identification and functional analysis of novel DNA/protein interactions mediating hormonal effects on transcription. Background in molecular biology (recombinant DNA, DNA/protein interactions, analysis of mRNA) required. Experience with proteins and cell culture desirable. Send curriculum vitae and names of three references to: Terry G. Unterman, M.D., Endocrine Section (M/C 640), Department of Medicine, University of Illinois College of Medicine at Chicago, 840 South Wood Street, Chicago, IL 60612. An Affirmative Action/Equal Employment Opportunity.

POSTDOCTORAL ASSOCIATE(S) to determine how metabolites and ions regulate the activity of intracellular Ca²⁺ channels. Studies will focus initially on the Ca²⁺ release channel/ryanodine receptor in malignant hyperthermia, an inherited syndrome that results from a mutation in this protein (see American Journal Physiology 266: C1729-C1735, 1994; *ibid.* 267: C1253-1261, 1994). Candidates should have training in electrophysiology; expertise in single channel analysis would be highly advantageous. Enquiries to: Dr. Charles F. Louis, Department of Veterinary PathoBiology, University of Minnesota, Room 295, 1988 Fitch Avenue, St. Paul, MN 55108. Telephone: 612-624-4202. The University of Minnesota is an Equal Opportunity Educator and Employer.

POSTDOCTORAL ASSOCIATE

POSTDOCTORAL POSITION in lab studying cognitive effects of developmental brain damage. Two current NIH-funded projects concern perinatal exposure to cocaine and lead, respectively. Ph.D. required. Preference given to candidate with expertise in the areas of cognition and statistics. Send curriculum vitae and three letters of recommendation to: Dr. B. J. Strupp, Department of Psychology and Division of Nutritional Sciences, Cornell University, Savage Hall, Ithaca, NY 14853-6401. FAX: 607-255-1033. Email: BJS13@ CORNELL.EDU. Telephone: 607-255-2694. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW RESEARCH ASSOCIATE

Applications are invited for POSTDOCTORAL/RE-SEARCH ASSOCIATE positions to study the role of metabolic factors in the regulation of blood vessel growth at the whole animal, cellular, and molecular levels. Candidates must have a Ph.D. or an M.D. with an interest in physiological research and training in cellular and/or molecular biology of vessel growth regulation. Salary will be commensurate with experience and credentials. Interested applicants should send a curriculum vitae, a statement of research interests and names of at least three references to: Dr. Tom Adair, Department of Physiology and Biophysics, University of Mississippi Medical Center, Jackson, MS 39216. The University of Mississippi Medical Center is an Equal Opportunity Employer/Male/Female/Disabled/Veterans.

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP EYE DEVELOPMENT

Position available to study the basis of cell determination during early development of the vertebrate eye. Work involves a range of embryological and molecular techniques, including the use of retrovirus vectors. Requires a solid background in molecular biology. Candidates from outside the eye field are especially encouraged to apply. Send curriculum vitae, including summary of research experience, names and addresses of three references to: Dr. Olof Sundin, Wilmer Eye Institute, Johns Hopkins University School of Medicine, 600 North Wolfe Street, Baltimore, MD 21287-9289. Johns Hopkins University School of Medicine is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION: NIH-funded studies on the characterization and molecular etiology of membrane estrogen receptors. Will entail a broad range of techniques including protein modification characterizations, PCR, sequencing, RIA, oocyte RNA injection, immunocytochemistry, and cell culture. Available immediately; salary depends on qualifications. Send curriculum vitae and three letters of reference to: Dr. Cheryl S. Watson, Human Biology, Chemistry and Genetics Department, University of Texas Medical Branch, Galveston, TX 77555-0645. Email: cswatson@utmb.edu. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study the mechanism of lysophospholipid absorption in the intestine (Am. J. Physiol., 267: G80-G86, 1994). Applicants should have a strong background in biochemistry. Experience with fluorescence and cell culture is desirable. Send curriculum vitae and names of three references to: Dr. J. Wylie Nichols, Department of Physiology, Emory University School of Medicine, Atlanta, GA 30322. Emory University is an Equal Employment Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study the mechanism of drug metabolism by cytochrome P-450 in an established multidisciplinary laboratory. Ph.D. in Chemistry or Biochemistry essential. A strong background in enzyme kinetics, enzymology and methods of physical chemistry is required. Send résumé and three references to: L. Waskell, M.D., Ph.D., Department of Anesthesia, UC San Francisco, VA Medical Center, San Francisco, CA 94121. FAX: 415-750-6946. An Equal Opportunity Employer.

POSTDOCTORAL/RESEARCH FACULTY Theoretical, Computational, and Experimental Chemistry and Physics

We are looking for exceptionally able (1) theoretical/computational chemists or physicists with a strong background in quantum or classical dynamics, intense lightmatter interactions, quantum control of chemical dynamics, or related areas, (2) experimentalists, particularly with a background in one or more of the following: ultrafast lasers, atomic and molecular beams, laser generated X-rays, charged particle beams, or X-ray physics. Current research interests in our group include (1) theoretical and experimental quantum control of chemical dynamics with femtosecond lasers, (2) development of multi-terawatt femtosecond lasers and their application to high field chemistry and physics, (3) ultrafast, short wavelength electron and X-ray diffraction as applied to imaging molecular quantum dynamics. For a description of current group activities and personnel see our World Wide Web site, http://www-wilson.ucsd.edu/ or send Email with no text to wilsjob@ucsd.edu. To apply, please send a curriculum vitae to: Prof. Kent R. Wilson, Department of Chemistry 0339, University of California, San Diego, La Jolla, CA 92093-0339. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP

Available Immediately: POSTDOCTORAL FEL-LOWSHIP for Ph.D. or M.D. to participate in NIH-sponsored research on the role of polypeptide growth factors in cerebral ischemia. Experience in experimental models of brain ischemia and/or molecular biology techniques desirable. Interested candidates should send curriculum vitae, a brief statement of research interests and names and telephone numbers of three references to: Seth Finklestein, M.D., CNS Growth Factor Research Laboratory, Massachusetts General Hospital/Harvard Medical School, MGH East, 149 13th Street, 6th Floor, Charlestown, MA 02129.

POSITIONS OPEN

NIH PREDOCTORAL/POSTDOCTORAL FELLOWSHIPS ONCOBIOLOGY

Several FELLOWSHIP POSITIONS are available in an interdepartmental oncobiology training program based at Boston University School of Medicine. Potential research topics include: oncogenes and other transcription factors in the regulation of cell growth; intracellular signaling pathways in normal and malignant tissues; novel approaches to tumor therapy; effect of adhesion molecules and growth factors on tumor progression; nutritional regulation of tumor metastasis; and induction of apoptosis in malignant tissues. Training faculty includes: Drs. D. Beller, Arthritis; J. Blusztain, Pathology; S. Broitman, Microbiology; G. Chou, Microbiology; D. Faller, Medicine; D. Graves, Oral Biology, A. M. Rothstein, Microbiology; M. Murnane, Pathology; J. Murphy, Molecular Medicine; H. Ryser, Pathology; T. Rothstein, Hematology; J. Sharon, Pathology; D. Sherr, Toxicology; and G. Sonenshein, Biochemistry.

Qualified applicants should send a curriculum vitae, a brief statement of research interests, and three letters of reference to: Oncobiology Training Program, Department of Microbiology, 80 East Concord Street, Boston, MA 02118. The Department of Microbiology and Boston University are committed to Affirmative Action/Equal Employment Opportunities and strongly encourage applications from women and minorities.

POSTDOCTORAL FELLOW THE JOHNS HOPKINS SCHOOL OF MEDICINE PEDIATRIC HEMATOLOGY

A POSTDOCTORAL POSITION is available to investigate the control of fetal hemoglobin (HbF) production in normal adults and in beta-hemoglobinopathies (thalassemia, sickle cell disease). The level of HbF is genetically determined and varies over a wide range. Some physiologic conditions and pharmaceutical agents clevate HbF levels and decrease the severity of thalassemia and sickle cell disease. We have mapped a gene controlling HbF production to a small region (~1 Mb) of the X-chromosome. Future studies will involve isolation of the gene and examination of its function in cell and animal models. Send curriculum vitae and references to: Dr. George Dover, Ross Research Building, Room 1125, The Johns Hopkins School of Medicine, 720 Rutland Avenue, Baltimore, MD 21205. Telephone: 410-955-3886.

POSTDOCTORAL RESEARCH ASSOCIATE

The Ecosystems Center at the Marine Biological Laboratory is seeking a POSTDOCTORAL RESEARCH ASSOCIATE to join a research project developing an "Estuarine Biotic Integrity Index" based on higher trophic levels. Successful applicant will work closely with estuarine ecologists at sites around the United States to establish causal relationships between upland land use and fish communities in estuaries. Must have Ph.D. in aquatic ecology with strong background in community and ecosystem ecology, statistics and ability to work well in collaborative research. Knowledge of field and statistical methods for developing Biotic Integrity Indexes, and fish communities and ecosystems is essential. Familiarity with eelgrass ecosystems and SCUBA certification an asset. Applications accepted until position is filled, applicants available to start by April 1995 preferred. Send cover letter describing research experience and goals, curriculum vitae, copies of publications and names of three references to: Human Resources, MBL, Woods Hole, MA 02543. Telephone: 508-548-3705, x422; Email: resume@mbl.edu. An Equal Opportunity/Affirmative Action/ Non-smoking workplace.

The Johns Hopkins University School of Hygiene and Public Health invites applications for fully funded PRE- and POSTDOCTORAL TRAINING POSITIONS in immunotoxicology and environmental immunology. This interdepartmental, NIEHS-sponsored program provides comprehensive coursework and research opportunities on the effects of environmental agents on the immune response.

Inquiries should be directed to: Dr. Noel R. Rose, Department of Molecular Microbiology and Immunology, or to Dr. Joseph B. Margolick, Department of Environmental Health Sciences, JHU School of Hygiene and Public Health, 615 North Wolfe Street, Baltimore, MD 21205.

AMERICAN ASSOCIATION FOR CANCER RESEARCH 86th Annual Meeting



Donald S. Coffey, Program Chairperson Metro Toronto Convention Centre, Toronto, Ontario, Canada March 18-22, 1995

Titles of Major Sessions

(Confirmed Chairpersons in Parentheses)

SPECIAL LECTURES

G.H.A. Clowes Memorial Award Lecture (Bert Vogelstein)

Presidential Address (Edward Bresnick)
American Cancer Society Award Lecture
(Frederick P. Li)

Richard and Hinda Rosenthal Foundation Award Lecture (Ellen S. Vitetta)

Cornelius P. Rhoads Memorial Award Lecture (Eric S. Lander)

Bruce F. Cain Memorial Award Lecture (Kenneth R. Harrap)

PLENARY SESSION Integrated View of the Cancer Cell (Donald S. Coffey)

SYMPOSIA

Growth Factors, Their Receptors and Differentiation (Angie Rizzino)

Oligonucleotide-mediated Modulation of Mammalian Gene Expression (Kevin J. Scanlon)

Biomarkers of Carcinogenesis (David Sidransky)

DNA Repair Pathways: Recent Surprises (Philip C. Hanawalt)

Mechanistic Basis of Ethnic Differences in Cancer Risk (Kenneth Olden)

Genetic Susceptibility to Cancer (Kenneth W. Kinzler)

Combinatorial Libraries for Cancer Research and Drug Discovery (Sydney E. Salmon)

Telomeres and Telomerases (Carol W. Greider and Jerry W. Shay)

Immunotherapy: Tumor Vaccines (David A. Berd)

Glycosylation Defining Malignancy (Senitroh Hakomori)

New Strategies and Targets for Chemotherapy (Joseph R. Bertino and Eddie Reed)

The Biology of Radiation Oncology (H. Rodney Withers and C. Norman Coleman)

Genes, Development and Cancer (Eric N. Olson)

Dietary Intervention in Hormonal Carcinogenesis (Diane F. Birt and Lovell A. Jones)

Translational Research in Breast Cancer (Marc E. Lippman)

DNA Methylation (Peter A. Jones and Stephen B. Baylin)

Genetic Approaches to Invasion and Metastasis (Robert S. Kerbel and Patricia S. Steeg)

The Role of Stromal-Epithelial Interactions in Growth and Neoplasia (Leland W. K. Chung)

Contribution of Environmental Factors to Cancer (Kenneth Olden)

Stem Cell Transplantation and High Dose Chemotherapy (Peter J. Quesenberry)

Signal Transduction and Gene Control and Development (James E. Darnell)

Natural Products in Chemoprevention of Cancer (Michael B. Sporn)

The Cell Cycle and Tumor Suppressor Genes (Thea D. Tlsty)

Transcription Factors in Development and Neoplasia (Frank J. Rauscher III)

Gene Therapy in Cancer Clinical Trials
(Jonathan W. Simons)

Graft *versus* **Tumor Effects** (Richard J. O'Reilly)

Angiogenic Control of Tumor Growth (Judah Folkman and Adrian L. Harris)

Extracellular Matrix, Gene Expression and Cell Signalling (Hynda K. Kleinman)

Apoptosis (Alan R. Eastman)

Cancer Prevention and Intermediate Biomarkers (Peter Greenwald)

CONTROVERSY SESSIONS

Breast Cancer Prevention: What Will We Advise Women with BRCA1? (Louise C. Strong)

Does the Current Body Burden of Dioxin
Pose a Risk to the Health of the North
American Population? (Alan Poland)

What Are the Limits and Benefits of Protein Specific Antigen as a Screening Tool? (John Trachtenberg)

Is Mammography Before Age 50
Beneficial? (Virginia L. Ernster)

Is Bone Marrow Transplantation
Indicated for Breast Cancer? (Nancy
E. Davidson)

Are Estrogens Implicated in Breast Cancer? (Lovell A. Jones)

MEET-THE-EXPERT SUNRISE SESSIONS

Pediatric Malignancies (Joseph V. Simone) A Primer on Analyzing Clinical Trials (Steven Piantadosi)

Farnesyl Transferase as a Target for Therapy (Alexander W. Wood)

Multidrug Resistance (Victor Ling)
Is a Mutagenic Event Involved in
Initiation? (Ann R. Kennedy)

Everything You Always Wanted to Know About Prostatic Cancer but Were Afraid to Ask (John T. Isaacs)

Colon Cancer (Ronald N. Buick)

The Use of Hematopoietic Cells to Support High-Dose Chemotherapy (Elizabeth J. Shpall)

Multivariate Determinants of Radiocurability (Richard P. Hill)

Glutathione and Associated Enzymes in Anticancer Drug Response (Kenneth D. Tew)

Gene Therapy for Urological Cancers (Jonathan W. Simons)

Chemical and Viral Etiologies of Liver Cancer: Application of Mechanistic Knowledge to Prevention Interventions (John D. Groopman)

Human AH Receptor and Human Responses to Dioxins (Allen B. Okey)

Organ-specific Carcinogenesis (Location, Location, Location) (Cheryl Lyn Walker)

Pharmacokinetic/Pharmacodynamic Relationships in Cancer Chemotherapy (Merrill J. Egorin)

Cellular and Molecular Biology Underlying Relationships Between Major Forms of Human Lung Cancer (Stephen B. Baylin)

Prostate-specific Gene Expression in Transgenic Mice (Norman M. Greenberg)

Tyrosine Kinases and Phosphatases Molecular Determinants of Multidrug Resistance (Elizabeth W. Newcomb)

METHODS WORKSHOPS*

General, In Situ, and Quantitative PCR (Saraswati Sukumar)

Gene Targeting and Gene Trapping in Mice (Janet Rossant and Andras Nagy)

EDUCATIONAL WORKSHOPS*

Molecular Modeling to Medical Monitoring: The Development of New Anticancer Agents (Daniel D. Von Hoff)

Gene Therapy (Albert B. Deisseroth)
Genetic Instability in Cancer (Lawrence A.

Cytochrome P450 (Colin R. Jefcoate)

*Additional application and registration fee required

Further Information: AACR Office • Public Ledger Building • Suite 816 • 150 S. Independence Mall West • Philadelphia, PA 19106-3483
TELEPHONE (215) 440-9300 • FAX (215) 440-9313

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS IN CARDIOVASCULAR DEVELOPMENT, UCSF

NIH-funded fellowships available in early and perinatal cardiovascular development (e.g., cardiac morphogenesis, endothelial function, gene regulation, signal transduction) in a multidisciplinary group of molecular biologists/physiologists. Candidates must have a Ph.D. or M.D., interest in basic molecular biological/physiological research, and commitment to an academic career. U.S. citizenship or permanent residency status required. Applicants send curriculum vitae, statement of research interests/goals, and three references to: Michael A. Heymann, M.D., 1403 HSE, Box 0544, University of California, San Francisco, CA 94143-0544. The University of Califomia, San Francisco is an Equal Opportunity Employer.

POSTDOCTORAL FELLOW/JUNIOR FACULTY. To conduct research in the area of neuromuscular control of the gastrointestinal tract. The candidate should have an excellent background in pharmacology with technical skills in one or more of the following areas: electrical recordings from single fibers and neurons, patch clamp techniques; cell and molecular biology. The candidate should also have a Ph.D. degree in physiology or pharmacology and research experience at the postdoctoral level. The position and faculty title (at Harvard Medical School) will be commensurate with the candidate's qualifications. Contact: Dr. Raj K. Goyal, Division of Gastroenterology, Beth Israel Hospital, DA-501, 330 Brookline Avenue, Boston, MA 02215. Women and minorities are encouraged to apply. We are an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW/RESEARCH AS-SOCIATE position in behavioral neuropharmacology available to study the mechanisms of antidepressant drug action. Studies involve the use of schedule-controlled behavior and the assessment of correlative neuropharmacological/molecular measures. Candidates should have a Ph.D. in pharmacology, psychobiology, or related field. Send curriculum vitae and three reference letters to: James M. O'Donnell, Ph.D., Pharmacology Department, Louisiana State University Medical School, 1501 Kings Highway, Shreveport, LA 71130. An Affirmative Action Employer.

RESEARCH ASSOCIATE: Desire Ph.D. with experience in HIV molecular biology to be a research associate in a laboratory-based program on the pathogenesis of HIV. Person will help direct laboratory-based program involved in studies in humans and primates of natural history and immunology of HIV. Experience with PCR, cloning, sequencing and other molecular biologic assays with HIV essential. Experience with making vaccinia constructs is also desired. Contact: Lawrence Corey, M.D., University of Washington, c/o Pacific Medical Center—ZB-30, 1200 12th Avenue South, Room 9301, Seattle, WA 98144. The University of Washington is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOW/RESEARCH AS-SOCIATE position available immediately to investigate mechanisms of oxidant-mediated cell injury. A doctorate in biochemistry, biophysics, physiology, or related discipline is required. Experience with ion-sensitive fluorophores, molecular biology, or signal transduction mechanisms is desirable. Send curriculum vitae and names of three references to: Dr. Mike Hart, Division of Pulmonary and Critical Care Medicine, Indiana University School of Medicine, 1001 West 10th Street, OPW 425, Indianapolis, IN 46202. FAX: 317-630-6386. An Equal Opportunity Employer.

NASA PLANETARY BIOLOGY INTERNSHIPS

The Marine Biological Laboratory, Woods Hole, Massachusetts, invites applications from graduate students and seniors accepted to graduate programs for awards of \$2,200 plus travel to participate in research at NASA centers and collaborating institutions for approximately eight weeks. Typical intern programs include: global ecology, remote sensing, microbial ecology, biomineralization, origin and early evolution of life. Application Deadline: March 1, 1995. For information/applications contact: Lorraine Olendzenski, Planetary Biology Internship, Department of Biology, Box 3-5810, University of Massachusetts, Amherst, MA 01003-5810. Email: pbi@bio.umass.edu; Telephone: 413-545-3223. An Equal Opportunity/Affirmative Action Institution.

POSITIONS OPEN

POSTDOCTORAL FELLOW—Ph.D. biological science. Training in general laboratory procedures, including tissue culture; virus culture; gel electrophoresis; immunoprecipitation, protein purification; column chromatography; and enzyme/protein kinase assays. \$31,990.40 per year. Job location—Frederick, Maryland. Qualified applicants mail curriculum vitae/résumé with copy of ad to: DEED, 1100 North Eutaw Street, Room 212, Baltimore, MD 21201. Job Order No. 9480822.

POSTDOCTORAL FELLOW. Position available spring 1995 to conduct research on the role of macrophages in atherosclerosis using molecular biological and transgenic mouse techniques. Experience in molecular biology necessary. Must be U.S. citizen or permanent resident. Send curriculum vitae and references to: Dr. I. Tabas, Department of Medicine, Columbia University, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.

RESEARCH SCIENTIST BIOPHYSICS/CARDIOLOGY

Studies biophysical principles in cardiological applications; conducts research on effects of pharmacologic agents on heart and vascular functions; uses ischemic heart models to study mechanism of myocardial ischemic and reperfusion injuries; investigates mechanism of action of pharmacologic agents on cardiac cell membranes using ESR spectroscopy with nitroxide spin labels; uses spin trapping technique to measure free radicals in heart tissue; investigates role of pharmacologically generated nitric oxide in vascular relaxation and myocardial protection; studies myocardial injury mechanisms by applying in vivo ESR and whole heart ESR loop-gap resonators; analyzes and develops cardioplegic solutions for improved cardiac preservation; prepares scientific papers and proposals for re-search funding. M.D. or Ph.D. in biophysics and two years of experience with cardiological biophysics. Prior education, training and/or experience must have included the job duties described above. 40 hours per week; \$35,000 per year. Submit two copies of résumé, evidence of scientific publications, ability to obtain external research funding and evidence of U.S. citizenship or legal authorization to work in the United States which is not limited to a particular employer, citing No. 950069, to: Mr. Robert Osterkil, Jobs, Employment and Training ervices, 201 East Washington Avenue, Room 211X, Madison, WI 53702.

PROJECT DIRECTOR High-Throughput Automated DNA Sequencer R&D

Third Wave Technologies, a leading new biotechnology company is pioneering the development of novel reagents and instruments for research and clinical applications. Third Wave is actively seeking a PROJECT DI-RECTOR and SENIOR SCIENTIST to join its dynamic team in the development of a high-throughput, fully automated DNA sequence analysis system. A Ph.D. or equivalent, supervisory experience, strong communication skills and a proven track-record of innovation are required. Industry experience is preferred. Our comprehensive salary and benefits package includes a stock option plan. For confidential consideration, mail or FAX curriculum vitae to: Third Wave Technologies, Inc., Attention: SEQ, 2800 South Fish Hatchery Road, Madison, WI 53711. FAX: 608-273-6989.

CLINICAL APPLICATIONS CELL BIOLOGIST—University of California at San Diego/Gene Therapy Program. In collaboration with the Director of the Clinical Applications Laboratory, will be responsible for developing/coordinating large multidisciplinary projects; contributing to gene delivery protocols and developing methodologies to transition research into clinical grade processes and products. Requires Ph.D. in Biological Science or equivalent combination of education/experience; knowledge of the field to contribute to originality/innovation in research results. Prefer working knowledge of process engineering and the appropriate laws governing the manufacture of human pharmaceuticals. Supervisory skills desirable. Salary commensurate with experience. Apply by February 27, 1995, referencing Job No. 106855-S, to: UCSD Human Resources, 10280 North Torrey Pines Road, Suite 266, La Jolla, CA 92093-0967. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

TOXICOLOGIC PATHOLOGIST DIVISION OF EXPERIMENTAL AND APPLIED RESEARCH

The Coulston Foundation (CF) is seeking applications for a TOXICOLOGIC PATHOLOGIST in the Division of Experimental and Applied Research. CF is a not-for-profit foundation comprised of White Sands Research Center and the former New Mexico Regional Primate Research Laboratory. CF has established government and privately sponsored research in toxicology, virology, immunopharmacology, and other safety and drug efficacy programs. The position serves as head of Comparative Pathology including the histopathology laboratory and supports the pathology requirements of all elements of the foundation. Participation in research programs conducted by the foundation will be encouraged. Candidates should be at the doctorate level and Board-certified in a pathology reporting software is desirable and strong writing and communication skills are essential. Salary is commensurate with education and experience. We have excellent benefits and are located at the base of the Sacramento Mountains in beautiful southern New Mexico. Send curriculum vitae, names of three references to: Director of Human Resources, Coulston Foundation, 1300 LaVelle Road, Alamogordo, NM 88310 USA. We are an Equal Opportunity/Affirmative Action Employer.

STAFF NMR SPECTROSCOPIST: The Department of Chemistry of the College of Staten Island of the City University of New York (CUNY) seeks candidates for the position of Grant Associate—Research, available immediately. The NMR Spectroscopist will instruct, assist, and collaborate with departmental users in spectrometer operation, new-experiment development, and offline data processing, with an emphasis on multidimensional high-field NMR geared toward polymer and biopolymer applications. Current support staff includes a facility manager, electronics technician, and computer specialist. Instrumentation includes a Varian Unityplus 600 MHz high-resolution spectrometer, Unityplus 300 WB and Unity 200 instruments equipped for both solidand solution-state experiments, and both SUN and SGI workstations for advanced data analysis and molecular modeling. Requirements: Ph.D. in chemistry or related field, thorough familiarity and track record with 3D/4D techniques for solution NMR and macromolecular structure determination; working knowledge of the chemistry of polymers and biopolymers; and the ability to solve problems in conjunction with a diverse group of scientists. Grant-funded position with a salary range of \$25,000-\$40,000 commensurate with qualifications; independent research opportunities; excellent fringe benefits. Send curriculum vitae and names and addresses of three references to: Dr. Ruth E. Stark, Department of Chemistry (6S) The College of Staten Island/CUNY, 2800 Victory Boulevard, Staten Island, NY 10314. Equal Opportunity/Affirmative Action/ADA Employer.

ANIMAL COMMUNITY ECOLOGIST EVERGLADES NATIONAL PARK South Florida Natural Resources Center

The position of Animal Community Ecologist at Everglades National Park, South Florida Natural Resources Center will be advertised in the near future. This is a permanent position, GS12/13, salary range \$40,298 to \$62,293. Non-federal government employees may apply. This position involves responsibility for the design, management and implementation of a broad scientific program within a resource framework that will assist park management in understanding the ecological functioning of key consumer populations in the Everglades. Experience in quantitative data analysis, including term series methods and computer model implementation is preferred. For information on applying, call South Florida Natural Resources Center at 305-242-7800.

RESEARCH PROGRAM MANAGER, Center for X-ray Lithography, University of Wisconsin-Madison. Manage/coordinate day-to-day research operations of the Center: Pre- and post-award contracts work; budget, procurement, and staff management; patent administration. Minimum baccalaureate in physical sciences or engineering and three years of technical managerial experience in an industrial, governmental, or university laboratory setting. Reply by February 13, 1995, to: J. W. Taylor, Associate Director, Center for X-ray Lithography, UW-Madison, 3731 Schneider Drive, Stoughton, WI 53589-3097. The University of Wisconsin is an Affirmative Action/Equal Opportunity Employer.

NeXagen is a Boulder, CO based biotechnology company leading the discovery and development of novel oligonucleotide-based therapeutic agents for the treatment of several major diseases. Recently, we announced our intention to merge with Vestar, Inc. of San Dimas, CA. The new company, to be named NeXstar Pharmaceuticals, will be a fully integrated pharmaceutical firm with exciting potential for the future. NeXstar will have product sales of over \$40 million, a proven clinical and product development capability, and a fundamental and patent protected drug discovery technology. We are currently seeking a Senior Pharmacologist to join our team in Boulder.

MOLECULAR PHARMACOLOGIST

We are seeking a Senior Pharmacologist with training and experience in the areas of in vitro and molecular pharmacology. Candidates should have a Ph.D. and extensive experience in tissue culture techniques. Experience in development of cell-based assay systems designed to detect activation of intracellular signaling pathways is highly desirable. Responsibilities will include supervision of a tissue culture laboratory and collaboration with other scientists to develop cell-based in vitro assays for assessment of bioactivity associated with specifically evolved oligonucleotide compounds.

NeXagen offers a competitive salary and benefits package. Interested candidates may submit their resume and cover letter to: Human Resources - Position 158,

NeXagen, Inc. 2860 Wilderness Place Suite 200 Boulder, CO 80301

NeXagen is an Equal Opportunity Employer





Betz PaperChem, Inc., a leading supplier of specialty process chemicals for the pulp and papermaking industries, is seeking a Research Scientist to join our corporate R&D department in Jacksonville, Florida.

Needed to conduct independent and collaborative research in the area of microbial ecology. Requires a PhD in Microbiology (or related field) and at least one year of post doctoral research experience. The ideal candidate will have experience in using molecular techniques to understand interaction in microbial communities and/or in the process of biofilm formation.

For consideration, reply with resume and salary history to: Kevin Marvel, Employment Specialist, Betz PaperChem, Inc., 7510 Baymeadows Way, Jacksonville, FL 32256. EOE M/F/D/V.



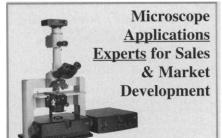
MOLECULAR TOOL, INC.

Molecular Tool is a biotechnology company located in Baltimore, Maryland committed to the development and commercialization of highly integrated, DNA-based systems for the analysis of genetic variations

GROUP LEADER. The company has an opening for a Group Leader in core technology. Candidates must have a Ph.D. in biochemistry or molecular biology and experience in managing an interdisciplinary team of Ph.D. and MS level scientists. The selected candidate will be expected to develop and maintain independent research projects related to the analysis of genetic polymorphisms.

BIOCHEMIST/MOLECULAR BIOLO-GIST. Molecular Tool also has an exciting opportunity for a Ph.D. Biochemist with 0-2 years postdoctoral training to join its technology development group. Candidates must have a Ph.D. in biochemistry or a related field and experience in nucleic acid biochemistry and enzymology. Postdoctoral research experience in DNA polymerases is a plus. The selected candidate will work with a multidisciplinary team on the development and implementation of DNA diagnostic products.

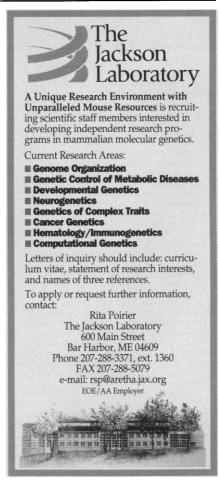
Situated on the Hopkins Bayview Research Campus, Molecular Tool provides a stimulating scientific environment which encourages individual initiative and creative thinking. We also offer competitive salary and benefits packages. Interested candidates should send a resume together with the names of three professional references to Human Resources, Molecular Tool, Inc., Alpha Center, 5210 Eastern Avenue, Baltimore, MD 21224. No phone calls please.



f you know microscopes - especially applications in light microscopy – then you are invited to contact Edge, inventors of Multiple Oblique™ illumination with realtime 3D imaging. This breakthrough technology is behind the Edge® R400 microscope and additional exciting products to come. We are seeking applications experts for sales positions in the U.S. We appreciate selling experience, but place more emphasis on your knowledge of biological & materials applications for light microscopes. Our team includes in-house and outside sales professionals as well as degreed researchers. Edge is the only American manufacturer of light microscopes

Contact Linda Wagner during Pacific Time business hours at (800) 597-EDGE or (310) 396-9333, or fax (310) 396-9003.







MEMORIAL SLOAN-KETTERING CANCER CENTER

Department of Human Genetics Assistant Member/Associate Member

This Department focuses on the genetic basis of malignancy, the identification of cancer susceptibility genes, genetic epidemiology, genetic counseling for familial cancer, and animal models of human diseases and gene therapy.

Two tenure-track Faculty positions are available and will be well supported

Young investigators (Ph.D., M.D., or M.D./Ph.D.) who have a record of productive research experience and who are interested in any aspect of Human Genetics are encouraged to contact Dr. L. Luzzatto, Chairman of the Department of Human Genetics, MSKCC, Box 110, 1275 York Avenue, New York, NY 10021, USA (Fax number 212-717-3374 and telephone number 212-639-6165). Please supply full curriculum vitae, bibliography, a statement of research intent, and the names of three academic referees. Response to applications will be prompt.

MSKCC is an Equal Opportunity/ Affirmative Action Employer

VICE PROVOST FOR RESEARCH AND GRADUATE STUDIES

UNIVERSITY OF HOUSTON

The University of Houston invites nominations and applications for the position of Vice Provost for Research and Graduate Studies. The creation of this position reflects the University's strong and continuing commitment to being a premier research university. We are seeking an individual who will be the strongest possible advocate for research, both within the university and before external agencies, foundations, and industrial concerns. The major responsibility of the Vice Provost is to provide leadership to the university research community, and includes the formulation and implementation of all campus-based research policies, as well as their integration with our graduate programs. The position involves substantial budgetary responsibility.

The Vice Provost will be expected to foster interactions and joint efforts with industry, stimulate novel research initiatives, and encourage and facilitate partnerships among different academic units. Candidates for this position must therefore have a working knowledge of funding sources, including industrial and corporate sources, and be familiar with the national research infrastructure. Demonstrated leadership abilities are expected as well. The Vice Provost for Research and Graduate Studies will thus play a major role in propelling the University of Houston into the ranks of the nation's best research universities.

The Vice Provost, in conjunction with the deans, will also be responsible for enhancing the quality and effectiveness of graduate-level teaching and research and for providing the vision and direction needed to develop new programs.

Candidates must have an earned doctorate, a record of achievement in research, and direct experience in the administration of research. Knowledge of trends and opportunities influencing research, as well as demonstrated success in securing extramural funds, are essential

The search committee will begin reviewing applications and nominations on February 15, 1995. The search will remain open until the position is filled. The desired date of appointment is July, 1995. Letters of application, including a letter detailing qualifications for the position, should be forwarded to:

Professor James L. Gibson, Chair Vice Provost for Research and Graduate Studies Committee c/o Senior Vice President for Academic Affairs/Provost University of Houston Houston, Texas 77204-2162

The University of Houston is the major university serving the country's fourth largest city, and is made up of fourteen colleges and more than 40 research centers/institutes. The University is a comprehensive state teaching and research university which also has the distinctive mission of being an urban university. The University of Houston is an Equal Opportunity/ Affirmative Action Employer. Minorities, women, veteran, and persons with disabilities are encouraged to apply.

POSTDOCTORAL TRAINING PROGRAM IN THE PHYSIOLOGY OF REPRODUCTION

The Center for Reproductive Physiology at the University of Pittsburgh School of Medicine has positions available for postdoctoral fellows (Ph.D. and/or M.D.) to obtain two years of advanced training in the study of the cell biology and physiology of reproduction in higher primates and other mammals. The program, which is supported by an Institutional National Research Service Award (NIH), is directed by a steering committee comprising both basic and clinical scientists. The training faculty and their research interests include: J.A. Amico - oxytocin gene expression and secretion; **B.J. Attardi** - gonadotropin mRNA regulation; **S.L. Berga** - neuroendocrine control of human reproduction; J.L. Cameron - metabolic determinants of GnRH pulsatility; D.B. DeFranco - molecular biology of steroid hormone receptor regulation; J.A. DeLoia - molecular analysis of early mam-malian development; D.S. Guzick - models of human reproduction and its disorders; G.E. Hoffman - cellular analysis of hypothalamic RF systems; E.S. Levitan - cell biology of pituitary hormone secretion; G.R. Marshall spermatogenesis; M.K. McLaughlin - ovarian hormones and the cardiovascular system; T.M. Plant- inhibin and neurobiology of primate puberty; S.M. Pomerantz - endocrine control of behavior; K.D. Ryan - female puberty; T.G. Sherman-regulation of neuropeptide gene regulation; S. J. Winters - neuroendocrine control of the testis; A. J. Zeleznik - cell biology of the primate ovary.

Candidates must meet NRSA US citizenship and residency requirements. Address curriculum vitae, and names of three referees to: Tony M. Plant, Ph.D., Director, Center for Research in Reproductive Physiology, Department of Cell Biology and Physiology, University of Pittsburgh School of Medicine, W1451 Biomedical Science Tower, Pittsburgh, PA 15261.

Chair, Department of Medical Sciences School of Veterinary Medicine University of Wisconsin-Madison

The School of Veterinary Medicine, University of Wisconsin-Madison, invites applications and nomi-nations for the position of Chair of the Department of Medical Sciences. The DVM or equivalent degree is strongly preferred; in addition, an advanced degree, clinical specialty board certification, and demonstrated administrative skills are desirable. Candidates should have an outstanding record in teaching and research and a record of accomplishment which will qualify them for appointment at the rank of Associate or full Professor, with tenure. The School of Veterinary Medicine is located on the campus of the University of Wisconsin in close proximity to outstanding programs in the biological sciences and other disciplines within the College of Agricultural and Life Sciences, School of Medicine, School of Pharmacy, School of Nursing and School of Engineering. The Department of Medical Sciences is comprised of 22 full time faculty, three faculty associates, and ten residents. These faculty and residents are distributed among the disciplines of Large Animal Medicine, Food Animal Production Medicine, Theriogenology, and Small Animal Medicine (including subspecialities in Dermatology, Internal Medicine/Cardiology, Neurology, and Oncology). Salary will be commensurate with qualifications and experience. Applications should include a statement interest, curriculum vitae, and the names of four references and should be sent to: Dr. Dale Bjorling, Chair, Search Committee, School of Veterinary Medicine, University of Wisconsin-Madison, 2015 Linden Drive West, Madison, WI 53706; Telephone (608) 263-4808; FAX (608) 263-6573. The closing date for receipt of applications is April 1, 1995. Unless confidentiality is requested in writing, information regarding applicants and nominees must be released upon request. By state law, names of finalists for this position are a matter of public record. The University of Wisconsin-Madison is an equal opportunity affirmative action employer.



The Albany College of Pharmacy invites nominations and applications for the position of Associate Dean for Academic Affairs.

The Associate Dean for Academic Affairs reports to the President and provides leadership in all matters for the baccalaureate program and the post-baccalaureate Doctor of Pharmacy program and the six year entry-level program currently in development. The responsibilities of the Academic Dean include curriculum development; faculty recruitment and development; fiscal management of Departments budgets; supervision of research efforts; program evaluation of instruction; an the day-to-day operation of the instructional aspects of the College.

The successful candidate should possess an earned doctorate, preferably in the pharmaceutical disciplines; strong interpersonal skills and effective communications ability both verbal and written; a strong commitment to excellence in teaching and research; proven leadership and administrative abilities; and an enthusiastic approach to the problems and issues of pharmacy practice and the future of pharmaceutical education.

Applicants should send a letter of application, a complete curriculum vitae including teaching, research and administrative experience, and the names of three references to:

Claire M. Lathers, Ph.D., F.C.P.
President and Dean
Albany College of Pharmacy
Union University
106 New Scotland Avenue
Albany, New York 12208

Submit on or before March 15, 1995.

The Albany College of Pharmacy is an Equal Opportunity Employer



NAS THE NATIONAL NAE RESEARCH IOM COUNCIL

and the

National Oceanographic & Atmospheric Administration announce

Postdoctoral Research Associateship Awards

in the field of

Marine Mammal Population Dynamics

tenable at the

National Marine Fisheries Service's Woods Hole Laboratory

Woods Hole, MA

Opportunities for research emphasize:

- Development and testing of methods for determining the status of marine mammal populations, simulation testing of adaptive management strategies, quantifying population habitat requirements and spatial structure, application of geographical information systems, and modeling life history dynamics.
- Development, testing, and application of analytical methods suitable for providing a sound basis for scientific advice on issues pertaining to managing marine mammals under the terms of the Marine Mammal Protection Act, the Endangered Species Act, and the International Whaling Commission.

Two categories of applicants are sought, both with strong analytical backgrounds, and including either advanced mathematical modeling and statistics experience, or strong at-sea data collection experience.

Awards are for 1 year, renewable for a total tenure of 3 years. Annual stipend for recent Ph.D, recipients is \$32,000. Additional support is provided for relocation and professional travel, and a health insurance program is offered.

For further information on research opportunities, qualified applicants should contact:

Dr. Tim D. Smith Northeast Fisheries Science Center Woods Hole, MA 02543 Phone: (508) 548-5123 Fax: (508) 548-5124

Internet: tsmith@whsun1.wh.whoi.edu

Applications, submitted directly to the NRC, are accepted on a continuous basis throughout the year. Those postmarked by January 15 will be reviewed in February, by April 15 in June, and by August 15 in October.

FOR APPLICATION MATERIALS CONTACT:

NATIONAL RESEARCH COUNCIL Associateship Programs

> (TJ-2094/NO) 2101 Constitution Avenue Washington, DC 20418 FAX: (202) 334-2759

Qualified applicants will be reviewed without regard to race, creed, color, age, sex or national origin.

Е W

DEPARTMENT OF PHARMACEUTICAL SCIENCES

Due to expansion of the College of Pharmacy, the Department of Pharmaceutical Sciences currently has four tenure track openings for Assistant/Associate Professors in the following areas:

Medicinal Chemistry • Pharmacology • Toxicology

The candidate will be expected to participate in both the undergraduate and graduate teaching programs and to establish an active, funded research program in the candidate's area of expertise. The department currently has 17 full-time faculty and a large masters and doctoral program in pharmaceutical sciences with specialization in medicinal chemistry, toxicology and pharmacology.

Facilities include an AAALAC accredited animal facilities, modern analytical instrumentation, and tissue culture laboratories.

The Department is particularly interested in, but not limited to, candidates with research interests in the areas of neuropharmacology/molecular pharmacology, immunotoxicology, environmental toxicology, natural products chemistry and synthetic drug chemistry. An undergraduate degree in Pharmacy is desirable, but not required.

Application letters with curriculum vitae, statement of research interests and names of three references should be sent to:

> Dr. S. William Zito, Professor and Chair, Dept. of Pharmaceutical Sciences St. John's University, 8000 Utopia Pkwy., Jamaica, NY 11439.

St. John's University is an equal opportunity employer and encourages applications from women and minorities.

THE CENTER FOR ENVIRONMENTAL RESEARCH AND CONSERVATION COLUMBIA UNIVERSITY

CERC, a consortium program of Columbia University, The American Museum of Natural History, The New York Botanical Garden, The Wildlife Conservation Society, and Wildlife Preservation Trust International, announces the establishment of seven new faculty positions in the areas of organismal biology, public health, ethno-environmental science, and environmental economics. The CERC is a new multidisciplinary institute aimed at promoting education, training, and research in biodiversity conservation by integrating the knowledge and methods of both the biological and social sciences.

Appointments to CERC will be joint with a relevant department at Columbia and will be five-year term positions at the Assistant Professor level.

Each candidate is expected to teach at least one core course in the undergraduate or graduate curriculum of CERC as well as seminars in his/her area of specialty as it relates to conservation and biodiversity studies. Each candidate is also expected to maintain a vigorous research program supported by extramural funding. A willingness to develop integrative and multidisciplinary research and teaching is essential.

For terms beginning with the academic year 1995-96, applications are invited in the following fields:

Public Health/Environmental Science: CERC and the Division of Environmental Sciences, School of Public Health, seek a scientist with research and teaching activities focused on the interactions between population biology and/or ecology and public health. We are particularly interested in candidates whose research centers on the associations between the loss of animal and/or plant species and environmental quality.

Environmental Economics: CERC and the School of International and Public Affairs seek an economist with demonstrated expertise in issues of sustainable economic development. In particular, we seek candidates with a research focus on analyses of long-term costs and benefits of sustainable agricultural practices and/or analyses of the economic value of maintaining biodiversity in both fragile and non-fragile ecosystems.

Ethno-environmental Science: CERC and the Department of Anthropology seek an ethnobotanist, ethnozoologist, or other ethno-environmental scientist who studies the relationship between people and either plants or animals. This can include, but is not necessarily limited to, studies of how people manage the biological resources in their environment; the production and consumption of foods, medicines, and domestic and wild animals; and the marketing and economic evaluation of non-timber forest products.

All appointments will be effective July 1, 1995. Please submit a curriculum vitae, a statement of research and teaching interests, and three letters of recommendation to: Dr. Don J. Melnick, Director, Center for Environmental Research and Conservation, Columbia University, 405 Low Library, New York, NY 10027. Priority will be given to applications received by February 15, 1995.

Columbia University is an equal opportunity/affirmative action employer and strongly encourages applications from women and minorities

CANCER RESEARCH INSTITUTE CLINICAL INVESTIGATOR AWARD IN CANCER IMMUNOLOGY

The Cancer Research Institute is announcing the availability of its Clinical Investigator Award to support qualified scientists working in the field of clinical cancer immunology. The award is \$50,000 per year for 4 years and may be used at the recipient's discretion for salary, technical assistance, supplies, or capital equipment. The Cancer Research Institute does not provide funds for indirect costs. The deadline for receiving applications is March 1, 1995. Funding for the Clinical Investigator Awards will commence on July 1, 1995.

Candidates must hold a doctoral degree and be a tenuretrack Assistant Professor at the time of award activation. The Institute has no citizen restrictions, and research supported by the award may be conducted at non-profit medical schools and research centers in the United States or abroad.

For application details, please contact:

Ms. Lynne Harmer, Grants Administrator Cancer Research Institute 681 Fifth Avenue New York, NY 10022-4209

Phone: 212-688-7515 Fax: 212-832-9376

The Research Triangle Institute (RTI) has openings for individuals with supervisory experience in:

- Xenobiotic Metabolism and Pharmacokinetics
- Nose-only Inhalation Metabolism.

A Ph.D. in chemistry, pharmacology, or closely related discipline; thorough theoretical understanding and excellent laboratory, communication (oral and written) and collaborative/personal relationship skills are required.

The successful candidate will be involved in all aspects of research programs including design of studies, supervision/conduct of the research, organization/interpretation of data, and preparation of research reports and manuscripts.

RTI offers a scientifically stimulating environment in a multidisciplinary research organization. Ongoing programs in organic, bioorganic and medicinal chemistry, toxicology and life sciences offer opportunities for collaborative research. The Research Triangle Park is noted for both its science and its quality of life.

Please send your resume, a description of your pertinent experience and research goals, and the names of 3 references to:



Research Triangle Institute Office of Human Resources (BOC-H) P.O. Box 12194 RTP, NC 27709.

An Equal Opportunity/Affirmative Action Employer (M/F/D/V)



CEDARS-SINAI MEDICAL CENTER.

ENDOWED CHAIR IN ATHEROSCLEROSIS RESEARCH

"The Division of Cardiology and Department of Medicine at Cedars-Sinai Medical Center and UCLA School of Medicine is looking to recruit an MD/Ph.D. scientist with expertise in basic research in Vascular Biology (atherosclerosis/thrombosis/lipoprotein biology or gene therapy). The position will include an endowed named Chair, generous laboratory space, state of the art core facilities and substantial funding for at least 5 years"

Contact: Drs. P.K. Shah at (310) 855-4876 or Dr. James Fagin at (310) 855-4774; Cedars-Sinai Medical Center, Division of Cardiology, Room 5314, Cedars-Sinai Medical Center, Los Angeles, California 90048

Massachusetts

DARWIN FELLOWS

UMass Amherst announces 2 new postdoctoral lectureships in organismic and evolutionary biology. More than 60 faculty members in 10 departments are committed to the study of organismic and evolutionary biology, offering unique training and research opportunities for recent Ph.D.'s. Our 2-year lecture/research positions allow independent research with a faculty member and experience developing and teaching a 1semester course in evolution, genetics, ecology or comparative anatomy. 1st year salary: \$20,000. 2nd year salary: \$25,000. To apply, send: CV; 3 letters of reference; 1page description of course you propose teaching; 1-page proposal of your independent research; and letter of support from your proposed UMass Amherst faculty sponsor. Call 413-545-0928 for a list of faculty research interests and more information. Send materials to:

Darwin Fellows, Morrill Science Center University of Massachusetts Amherst Amherst, MA 01003-5810

Application review begins: 3/15/95 Interviews begin: 4/15/95 Positions remain open until successful candidates are selected. Start date: 9/1/95

The University of Massachusetts Amherst is an Affirmative Action/Equal Opportunity Employer

CHAIRPERSON, DEPARTMENT OF NEUROSCIENCE AND PRESIDENT OF NRI

The School of medicine of the University of North Dakota and NRI, an independent neuroscience research institute, invite applications for the joint position of chairperson of the Department of Neuroscience and President of NRI.

The Department of Neuroscience, with a tradition of excellence in undergraduate and graduate medical education, includes divisions of behavioral science and psychiatry, neurology, neurosurgery and neuroradiology, and operates a fully accredited four-year psychiatry residency program.

NRI is an independent research institute with an Association Agreement with the School of Medicine and a mission to conduct and foster research in the neurosciences.

The position requires an individual with established skill in medical education and administration, and a demonstrated commitment to research. Board certification in a neuroscience discipline with five years of academic and clinical experience in the specialty are necessary. The candidate should be eligible for appointment as professor. Excellent opportunities for the development of basic and clinical research activity in the neurosciences are available. Salary and fringe benefits are competitive.

Those interested in applying for the position should send their complete cv to: Dr. Thomas E. Norris, Chair of the Search Committee, School of Medicine, University of North Dakota, P.O. Box 9037, Grand Forks, North Dakota, 58202-9037. Nominations consisting of name, telephone number and address should be sent to Dr. Norris. Review of applications will begin upon their receipt. Applications should be submitted prior to February 28, 1995.

The University of North Dakota and NRI are equal opportunity/affirmative action institutions.

ANTIMICROBIAL PEPTIDE DEVELOPMENT

IntraBiotics is a young biopharmaceutical company addressing the crisis in infectious disease caused by resistance of pathogens to existing antimicrobials. The company's mission is to develop novel, peptide antimicrobials active against a broad range of bacteria and fungi. Openings exist for Director, Scientist and Research Associate positions in the following

Microbiology: Responsible for identification and evaluation of product candidates for *in vitro* efficacy and cytotoxicity. Requirements: Director/Scientist positions: Ph.D. Microbiology and significant industry experience in anti-microbial research and development. RA positions: BS or MS in Microbiology with relevant work experience.

Pharmacology/Toxicology: Responsible for design and execution of program of *in vivo* efficacy and toxicity testing and pharmacokinetic analysis. Requirements: Director position: Ph.D. Biological Sciences, with industry experience in antiinfectives, monitoring contract studies, and knowledge of FDA requirements.

Product Development/Peptide Chemistry: Responsible for production and characterization of peptide antimicrobials, development of analytical methods, and design and analysis of congeners. Requirements: Director/Scientist positions: Ph.D. Protein Chemistry or Biochemistry with industrial research and development experience in peptide chemistry. RA positions: BS or MS degrees with relevant work experience.

Formulation Development: Responsible for development of systemic and topical formulations. Requirements; Director/ Scientist positions: Ph.D. Chemistry or Biochemistry, and industrial experience in peptide and/or protein formulations. RA positions: BS or MS in Chemistry with relevant work experience.

The successful candidates will have strong motivation to transfer their substantial experience to the rapidly changing environment of a start-up company. The ability to work effectively as part of an interdisciplinary team is key to all positions. The company offers significant equity participation and competitive salaries and benefits.

Please send CVs in confidence to: Human Resources-SCIad, IntraBiotics Pharmaceuticals, Inc., 490 San Antonio Road, Palo Alto, CA 94306.

INTRABIOTICS

MOLECULAR VIROLOGY

Postdoctoral Position

Positions are available to study the molecular pathogenesis of influenza virus. The research involves virus assembly in relation to influenza pathogenesis or the molecular basis of host range restriction of the virus. The candidate will receive training in state-of-the-art molecular and immunological techniques, including reverse genetics, that are being used to address these questions. Interested individuals should send their curriculum vitae and the names of three references to:



Dr. Yoshihiro Kawaoka Dept. of Virology and Molecular Biology

St. Jude Children's Research Hospital 332 N. Lauderdale P.O. Box 318 St. Jude Children's P.O. Box 318 Research Hospital Memphis, TN 38101-0318

An equal opportunity, affirmative action employer. Women and minority candidates are encouraged to apply.

Postdoctoral Research at The Wistar Institute

The Wistar Institute, an independent research organization located on the campus of the University of Pennsylvania, currently seeks five postdoctoral applicants.

Postdoctoral Researcher 1 - Conduct molecular virology studies of herpes simplex virus latency utilizing a mouse model system. We are also studying the use of HSV in gene therapy and cancer therapy. Reply to Dr. Nigel Fraser.

Postdoctoral Researcher 2 – X-ray crystallographic studies on proteins involved in transcriptional regulation and cell cycle control. Reply to Dr. Ronen Marmorstein.

Postdoctoral Researcher 3 - RNA editing of the gene transcripts for the GluR ion channel of mammalian brain is being studied by molecular genetic analysis. Seminars in Cell Biol. 4:285 (1993); Proc. Nat'l. Acad. Sci. USA 91:11457 (1994). Reply to Dr. Kazuko Nishikura.

Postdoctoral Researcher 4 - Study the molecular mechanism of T cell development in mice. Reply to Dr. Lisa Spain.

Postdoctoral Researcher 5 - Work on signal transduction in mouse development. Current area of interest focuses on genetic analyses of mice lacking SRC-family tyrosine kinases. Reply to Dr. Paul Stein.

Interested applicants are requested to send a C.V. and three references to the appropriate faculty member's attention: The Wistar Institute, 3601 Spruce Street, Philadelphia, PA 19104. Equal Opportunity Employer. Minority candidates are strongly encouraged to apply.



POSTDOCTORAL POSITIONS

National Institute of Allergy and Infectious Diseases

National Institutes of Health Announcement No.: PA-14

Postdoctoral Positions are available to study antigen processing/MHC recognition and NK recognition; structure/function of integrins; $\gamma\delta$ T cells; and transcription factors of immune relevance, Applicants must have less than three years of postdoctoral experience. Salary range \$25,000 to \$30,000, depending on experience.

Qualified and interested candidates should send curriculum vitae and names and addresses of three (3) references to:

John E. Coligan, Ph.D.
Chief, Laboratory of Molecular Structure
National Institute of Allergy and
Infectious Diseases
National Institutes of Health
Twinbrook II
12441 Parklawn Drive, Room 103
Rockville, MD 20852-1727



(301) 496-3213 phone (301) 402-0284 fax

"NIH is an Equal Opportunity Employer"



CHIEF SCIENTIST

The Department of Energy's Office of Civilian Radioactive Waste Management is seeking an outstanding individual to serve in a Senior Level position, as Chief Scientist for our Project Office in Las Vegas, Nevada. The Chief Scientist will serve as senior scientific and technical advisor for the Yucca Mountain Site Characterization Project and the Director, Office of Civilian Radioactive Waste Management on matters directly related to the characterization of the Yucca Mountain Site, overseeing scientific activities, and reviewing and evaluating technical recommendations and site suitability evaluations for Yucca Mountain.

A bachelor's degree or equivalent in physical science, engineering or mathematics which includes at least 24 semester hours in the physical or engineering sciences field such as mechanics, dynamics, properties of materials and electronics, is required. An advanced degree is preferable, Candidate must have extensive specialized experience related to the conduct of scientific investigations in support of complex radioactive waste management programs of national significance.

The salary range for this position is from \$82,401 to \$119,275. Anyone interested in applying should contact Che McKittrick at (202) 586-3990 and request Announcement No. ERD 94-03A SER or obtain information on how to apply. Application must be postmarked by March 15, 1995.

The Department of Energy is an equal opportunity employer.

Members, Advisory Committee On Nuclear Waste (ACNW)

\$444.96 per day for a maximum of 50-100 days per year

The U.S. Nuclear Regulatory Commission is expecting openings in 1995 for ACNW members at its headquarters in Rockville, MD. A variety of engineering and scientific disciplines are needed to conduct the broadly based review process required in the Committee's work. Engineers and scientists with practical experience (a minimum of 20 years work experience) in high-or low-level radioactive disposal programs coupled with broad experience in a pertinent technical field such as engineering, nuclear science and technology, risk assessment, or systems engineering are highly sought.

Please send your resume or Federal application (SF-171), no later than March 15, 1995, to: U.S. Nuclear Regulatory Commission, Attn: Ms. Jude Himmelberg, T-2-D32, (Dept. A-95011), Washington, D.C. 20555. Or call her at (301) 415-7119 for further information.



An equal opportunity employer, M/F/D/V U.S. citizenship required

Wasting Disorders: Molecular and Clinical Aspects February 23–26, 1995 Bonaventure Resort and Spa Fort Lauderdale, Florida

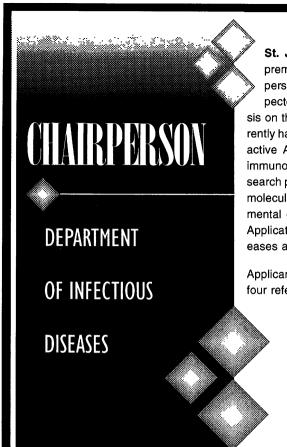
This symposium will provide a current review for the basic scientist and clinician interested in the development and management of mainutrition. The symposium will examine the maintenance and loss of nutritional homeostasis from the point of view of the organism, the organ, the cell, and the molecule.

Invited Speakers:

Bruce Bistrian William J. Evans Steven Heymsfield Kent Lundholm Miriam E. Nelson Michael J. Rennie Hans P. Sauerwein Robert R. Wolfe Joseph Brozek Carl Grunfeld (Chair) Gerald T. Keusch Dwight E. Matthews Maxine Papadakis Irwin Rosenberg Morris Schambelan Vernon Young Peter Durie Mark Hellerstein Donald P. Kotler (Chair) Lyle Moldower F. Xavier Pi-Sunyer Ronenn Roubenoff Jamie Von Roenn Thomas Ziegler

Submission of abstracts for posters is encouraged. For more information regarding brochures, registration and poster abstract forms, please contact:

Leslie Nies, Serono Symposia, USA 100 Longwater Circle, Norwell, MA 02061 Tel: 800-283-8088 or 617-982-9000 FAX 617-982-9481



St. Jude Children's Research Hospital, (Danny Thomas, Founder), a premier center for biomedical investigation, is accepting applications for Chairperson of the Infectious Diseases Department. This individual will be expected to direct an internationally competitive research program with emphasis on the molecular pathogenesis of infectious diseases. The department currently has eleven faculty positions and 8,000 square feet of committed space. An active AIDS clinical trials unit and a consulting service for infections in the immunocompromised patient are in place. Our center has well-established research programs in virology, immunology, biochemistry, genetics, gene therapy, molecular pharmacology, pharmaceutical sciences, tumor cell biology, experimental oncology, bone marrow transplantation and experimental hematology. Applications are encouraged from physicians trained in pediatric infectious diseases and from internists with the appropriate subboard certification.

Applicants should submit a curriculum vitae and the names and addresses of four references to:

A. Thomas Look, M.D. Chairman, Department of Experimental Oncology St. Jude Children's Research Hospital 332 N. Lauderdale Memphis, TN 38105

Memphis, TN 38105 Telephone: 901-522-0514 Fax: 901-531-2032

St. Jude Children's Research Hospital

St. Jude Children's Research Hospital is an equal opportunity employment/affirmative action employer.



Genetic Therapy, a leader in the development of human gene therapy products, is seeking a Research Scientist. Individual will be designing and implementing key studies in support of clinical applications. Individual must have Ph.D. in a scientific discipline and a minimum of 2 years experience in toxicology, pharmacology or related area. Must have strong communication and analytical skills. We are based in the Washington, D.C. area and offer excellent compensation and benefits. FAX or mail résumé to:

Genetic Therapy, Inc. Attn: 13-036-8/SM 938 Clopper Road Gaithersburg, MD 20878 FAX: (301)948-0503

Genetic Therapy, Inc. is an Equal Opportunity Employer

Molecular Virologist

Pro-Virus Inc., a new gene therapy company, is seeking a molecular virologist to head its Core Vector Laboratory. The successful candidate will have the opportunity to participate in the assembly and development of this laboratory. This individual should have a Ph.D. in a biological science and five years post doctoral experience in molecular virology. Direct experience in the construction and evaluation of recombinant viral vectors for gene therapy is essential. Specific experience with adenoviral, retroviral, and/or parvoviral vectors is preferred.

Research Positions

Pro-Virus, Inc., a newly formed gene therapy company, is seeking highly motivated and skilled people to work in our Virology Laboratory. Positions are available for candidates at the BS/MS level in the biological sciences with 3-5 years of laboratory experience. Individuals with experience in some or all of the following areas are encouraged to apply: molecular virology, viral vector construction, mammalian cell culture, virus production and purification, and viral/immunologic assays. Industrial experience is a plus.

Please send resume and salary information to: Pro-Virus, Inc., 1530 East Jefferson Street, Rockville, Maryland 20852, Attn: CH

Pro-Virus, Inc. An Equal Opportunity Employer

Molecular Biologist

National Institutes of Health

Molecular Biologist needed with experience in cloning, sequencing, and expression of rotavirus genes. Also required is experience in the structure - function analysis of rotavirus proteins and elucidation of the role of individual rotavirus proteins in virus replication and morphogenesis. This is a tenured position. Position targeted for EEO recruitment efforts. U.S. citizenship required.

Salary range: \$51,557 to \$67,021

Qualified and interested scientists should send their curriculum vitae and names and addresses of three (3) references to: Joann Martin, NIH, Bldg 31, Room 7A27, 9000 Rockville Pike, Bethesda, MD 20892; Fax: (301) 496-1940

Applications will be accepted for two weeks only after the last publication.

NIH is an Equal Opportunity Employer

Careers in Biotechnology and Pharmaceuticals: Beyond Discovery

17 March 1995

On 17 March, Science will publish a special advertising section titled Careers in Biotechnology and Pharmaceuticals: Beyond Discovery - Science Careers Up and Down the Production Stream. This is a popular annual advertising section dedicated to biopharmaceutical employment matters with bonus distribution to two U.S. job fairs, one on each coast. This section will explore the exciting next phase of the biotech industry. It will look at how the manufacturing, regulatory, and service sectors of the modern biopharmaceutical company are growing, and it will highlight career paths in areas such as:

- Clinical Trials
- Research and Development
- Regulatory Affairs
- Quality Assurance and Quality Control
- Production and Manufacturing
- Formulations and Chemistry
- Validation

Careers in Biotechnology and
Pharmaceuticals: Beyond Discovery
is a "must-read" section for scientists at
every level. Don't miss this chance to be
part of one of the biggest and most industryrelevant advertising sections of the year!

Job Fair Bonus Distributions

This highly visible issue will be distributed at two job fairs:

- Biotech/Pharmaceutical Job Fair, 24-25 March, La Jolla, California.
- Biotech/Pharmaceutical Job Fair,
 28-29 April, Cambridge, Massachusetts.

Benefits of Full Page Advertisements

This section is an excellent opportunity for full page advertisers to get extra attention. Full page recruitment advertisements in the 17 March issue will receive placement throughout this career-related special advertising section. Names of the companies or institutions placing full page advertisements will be listed on an index affixed to the covers of the magazines distributed at the job fairs.

Advertising space reservation deadline: 28 February 1995

To advertise, call:

In the U.S., Janis Crowley at (212) 496-7704 or fax to (202) 682-0816. In Europe, Gordon Clark at (+44) 01223 302 067 or fax to (+44) 01223 302 068.







KUWAIT UNIVERSITY FACULTY OF SCIENCE

The Faculty of Science at Kuwait University seeks qualified candidates in Botany and Microbiology (Applied Microbiology - with experience in environmental aspects; Molecular Biology - with research experience in micro-organisms; Micro Genetics - molecular genetics of Eukaryotic micro-organisms; Plant Pathology - fungal/plant diseases and host parasite relationships; Plant fine structure and Anatomy; Phycology; Plant Ecology - vegetation ecology; Plant Physiology - growth hormones and regulators) with a strong commitment to high quality teaching and research for appointment at the positions of Associate Professor and Assistant Professor.

<u>Required Qualifications</u>: Ph.D. or its equivalent in the required area; research experience and publications; University teaching experience; excellent knowledge of English.

<u>Kuwait University offers</u>: TAX FREE Salary (approximate ranges: Associate Professor - KD 875 - 1035 and Assistant Professor - KD 680 - 840) depending on years of experience and number of accompanying dependents (spouses and children under 18). (1 KD equivalent to approximately US\$3.50). Fringe benefits include furnished air-conditioned accommodations, annual air tickets, free National Health Medical Care, paid mid-term holidays and summer vacations and gratuity. New appointees can apply for financial support for approved research projects. Excellent academic environment.

Contracts effective from September 1995 for a two year initial period.

Application should be accompanied by a complete C.V. including mailing address, phone, fax and e-mail; academic qualifications, teaching, research and professional/work experience, and list of publications in professional journals; names and addresses of three persons well-acquainted with the academic and professional work of the applicant. An English translation of all documents in other languages should be enclosed. For appointment to the position of Assistant Professor, a very good performance in the B.Sc. is required (minimum GPA 3 points of 4). Please send copies of all transcripts.

Applications may be obtained from:

Kuwait University Office 3500 International Dr. NW Washington, DC 20008 Phone (202)363-8055

Applications should be sent by express mail/courier service to:

The Dean, Faculty of Science Kuwait University PO Box 5969 Safat 13060 Kuwait

For inquiries use: Fax (965) 4836127; E-Mail SINNO@KUC01.EDU.KW.

Closing date for receipt of applications: January 31, 1995.



GLOBAL CAREER OPPORTUNITIES



バイエル薬品(株) 中央研究所

管理職候補募集

ドイツ・バイエル社は海外の研究拠点とし て、アメリカに次いで日本に中央研究所を 設立します。日本は、アレルギー及び免疫 分野を担当しますが、ドイツ・アメリカ等 との学術交流が頻繁なため国際感覚豊かで リーダーシップのとれる優秀な研究者を募 集します。

電務内容:自己免疫疾患領域における医薬品探索 のための分子生物学的研究

※当職位には将来の管理職として、研究方針の 策定及びブロジェクトの指揮等のマネジメントの職務が追加される予定です。

応発資額: 上記関連分野の研究者。博士及び企業研究所・海外生活・部下指揮の各経験者 歓迎。日本語·英語必須。

動務地:中央研究所('95年2月開設) 京都府相 楽郡木津町/関西文化学術研究都市木 津南地区

6 遏:弊社規定により優遇、借上社宅制度有、 入社·面談日応談。

區募書頭:履歷書(日·英)、研究概要(日·英各 A4 1枚程度)及び主要論文のコピーを下 記宛お送りください。

選 考:1次/書類審査 2次/面接他

〒 532 大阪市淀川区宮原3-5-36新大阪第2森ビル バイエル薬品(株) リクルーティング(S)係

TEL.06-398-1145 担当 野本・藤本 ※コレクトコールをご利用下さい。 ※弊社は全ての社員及び応募者に公平に対応致します。

> The United Arab **Emirates University** Faculty of Science **Department of Biology**

Faculty Positions

The Department of Biology at the UAE University invites applications for a faculty position in the following areas: 1. Plant Ecology (Biodiversity in the ecosystem, population dynamics), 2. Cell Biology (Molecular level), 3. Molecular Biology (Tissue culture), 4. Plant Physiology (Desert ecophysiology), 5. Developmental Biology, 6. Marine Biology (Invertebrates). 7. Parasitology, 8. Genetics. Candidates must have a Ph.D. and demonstrate interest and potential for excellence in both teaching and research. Excellent command of Arabic and English languages is required. Applications should be received prior to January 15, 1995. Send resume with three references and letter of application to: Secretary General, the UAE University, P.O. Box: 15551. Al Ain, United Arab Emirates, Fax #: (971-3)-645277.



LECTURER IN EUKARYOTIC MOLECULAR GENETICS

Department of Microbiology and Genetics, (3 Year Contract)

You will be expected to contribute to both the undergraduate and postgraduate teaching programme in Molecular Genetics, and to develop a strong research programme. Applications are encouraged from persons with expertise in the Molecular Genetics of higher eukaryotes.

The Department of Microbiology and Genetics is well equipped for research in Molecular Genetics and has strong links with other Departments within the School of Biological Sciences and with AgResearch, HortResearch and the NZ Dairy Research Institute.

You should have a PhD plus postdoctoral experience in Molecular Genetics. Enquiries of an academic nature should be directed to Professor Barry Scott, telephone 64-6-350 4033, facsimile 64-6-350 5637 or e-mail D.B.Scott@massey.ac.nz.

Reference number Sci 118/94 must be quoted.

Closing date: 31 January 1995.

As a condition of application the University reserves the right to make enquiries of any person regarding any candidate's suitability for appointment. It also reserves the right not to make an appointment or to appoint by invitation.

An information package including Conditions of Appointment is obtainable by telephoning 64-6-356 9099 extension 7318.

Applications, including a full curriculum vitae and the names, addresses and fax numbers of three referees should be sent to Mrs V B Bretherton, Personnel Section before the closing date specified.

Equality of opportunity is University policy.

Private Bag 11-222 ● Palmerston North ● New Zealand Telephone 64-6-356 9099, Fax 64-6-350 5615

PALMERSTON NORTH

CAMPUS

The International Livestock Research Institute (ILRI)

Positions available

ILRI is a newly established research Institute, with a global mandate for the advancement of research on animal productivity in developing countries. ILRI is sponsored by of the Consultative Group on International Agricultural Research (CGIAR), which supports sixteen international agricultural research centres worldwide. ILRI combines the priority programs previously conducted by the International Laboratory for Research on Animal Diseases (ILRAD) and the International Livestock Centre for Africa (ILCA) with additional research activities designed to enhance the role of livestock in sustainable agricultural production systems globally.

The following positions are available at the ILRI site in Nairobi.

Immunologist-SC/95/1

An experienced immunologist is required for a senior position in the trypanosomiasis program. The successful candidate will provide leadership to a group of scientists and their technical support staff with active projects on regulation of bovine immune cell functions as they relate to control of parasitaemia and genetically mediated disease resistance. The group is able to capitalize on the opportunities provided by comparisons of responses to infection in cattle of resistant and susceptible genotypes and also in a crossbred trypanotolerance resource population segregating disease resistance. The successful applicant will have a first degree in an appropriate biological science and a PhD with at least 5 years post doctoral experience in an area of contemporary immunology. Experience in molecular immunology, particularly in terms of cytokine function, is essential. Experience in immunology of haemoprotozoan infections of mammals would be an advantage. The successful candidate will have a strong record of research team leadership and good be an advantage. The successful candidate will have a strong record of research team leadership and good interpersonal and communication skills.

Molecular Geneticist-PD/95/1

Molecular Geneticist-PD/95/1
A molecular geneticist is required at post doctoral level to join a group investigating the genetic basis of resistance to infectious disease in livestock with emphasis on trypanosomiasis and helminthiasis. The scientist appointed will assist the group in ongoing efforts to develop linkage maps of ruminant genomes, and in application of markers in disease resistance resource families with the objective of identifying controlling genetic regions. The scientist will share the support of a small group of technologist with others in the molecular genetics team. Appropriate applicants will be young scientist with an interest in genetic control of quantitative disease resistance traits. They will have a first degree in natural sciences and a Ph.D. degree awarded in the previous three years in an area of genetics. The successful applicant will have a strong background in modern molecular genome analysis and computerized data analysis techniques. Familiarity with quantitative trait loci (QTL) analysis software and its application would be advantageous.

These are international staff positions and salary will be paid in US dollars. Relocation, housing, commutation and education allowances are paid, in addition to medical and retirement benefits.

Applicants should send a statement of research interests, curriculum vitae and names and addresses of three referees to: The Director General, ILRI, P.O. Box 30709, Nairobi, Kenya. Informal enquiries may be addressed to Dr. Alan Teale tel. +254-2-630743, fax +254-2-631499, E-mail tealeaj@ilrad.msm.cgnet.com

Applications should be received before February 14th, 1995 and only applicants who reach the final shortlist will be contacted.

ILRI is an equal opportunity employer.



GLOBAL CAREER OPPORTUNITIES

4 4 20





FACULTY OF MEDICINE

The Faculty of Medicine in The University of New South Wales, Sydney, Australia invites applications for two tenured, senior academic positions.

PROFESSOR OF ANATOMY

(Ref. 95/1501)

and

PROFESSOR OF PATHOLOGY

(Ref. 95/1502)

The appointees will be expected to serve as Heads of School for a term or terms if so requested. Subject to consent by the University, professors may undertake a limited amount of private practice or higher consultative work. The University reserves the right to fill any chair by invitation.

Essential Criteria: Applicants should hold high academic qualifications and have a distinguished record of teaching and research in the relevant area. He/she should possess the capacity and willingness to administer a comprehensive academic program and to implement and/or develop EEO/AA policies and principles.

Salary: \$A78,991 per annum. A clinical loading of \$A13,673 is payable to an appointee with medical qualifications registrable in New South Wales.

Further information regarding these appointments is obtainable from Professor W E Glover, Dean, Faculty of Medicine on telephone (61 2) 385 2451, facsimile (61 2) 662 2573.

Details of the positions, together with the conditions of appointment and application procedures are available from Jenny Schembri, Senior Appointments, Human Resources Department, The University of New South Wales, Sydney 2052, Australia, telephone (61 2) 385 2508, facsimile (61 2) 313 6561.

Applications close: 17 February 1995.

PLEASE QUOTE Appropriate Ref 95/1501SCI or Ref 95/1502SCI

51001

Equality of employment opportunity is University policy The University is a smoke free work environment

PRINCE PHILIP CHAIR

CUY'S AND ST THOMAS'S
MEDICAL AND DENTAL SCHOOL
(University of London)

Division of Medical and Molecular Genetics

Notice is hereby given that UMDS wishes to appoint to the Prince Philip Chair, tenable within the Division of Medical and Molecular Genetics, which will become vacant in the Summer of 1995 and which comprises a Department of Molecular Genetic Research and the South Thames Regional Genetics Centre. There are well-equipped specialist laboratories.

The Professor, as Head of Department, will have a role in research and teaching and in managing the integration of the division's fundamental research and clinical practice.

Informal enquiries from those with an interest in Medical and Molecular Genetics are welcomed by Professor Cyril Chantler, Principal, UMDS, Medical School Building, Guy's Hospital, London SE1 9RT. Telephone 0171 955 4222.

Equality of Opportunity is School Policy

FACULTY OF SCIENCE AND ENGINEERING

SCHOOL OF BIOLOGICAL SCIENCES

PROFESSOR OF BIOLOGY (MARINE BIOLOGY)

A\$80 176 pa

Ref 94168N. The University is seeking an outstanding scholar with a distinguished research record for the Chair of Biology (Marine Biology) in the School of Biological Sciences in the Faculty of Science and Engineering.

Biological Sciences forms a single department School, allowing co-operation in teaching and research across traditional departmental boundaries. The Faculty is investing considerably in marine biology, recently appointing three junior staff and building an on campus aquarium, establishing a marine science station in the heart of the South Australian fishing industry at Port Lincoln, and developing a joint course in Aquaculture with TAFE. The University has appointed a new chair in Microbiology, to start in July 1995, with marine interests. The Faculty also contains a School of Earth Sciences, with a strong oceanography group, as well as the National Tidal Facility. Given the proximity of the southern ocean and the high levels of marine biodiversity and endemism in the region, South Australia offers exciting opportunities in Marine Biology.

The appointee should have the capacity to attract both post-graduate and under-graduate students; have a genuine interest in, and capacity for, teaching and preferably have expertise compatible with the general areas of physiological, ecological, behavioural or evolutionary aspects of marine biology. The appointee must be able to provide a strong research focus for new and established academic staff in the School, by providing research and teaching leadership in a way which would maximise the performance of the School in general and the marine biology group in particular.

Further information is available from the Head of Faculty, Dr J W Rice, phone (618) 201 3693, or fax (618) 201 3399. Selection criteria, conditions of appointment, and a detailed statement on the structure and scope of the School of Biological Sciences are available from Ms O Mew, phone (618) 201 3692 or fax (618) 201 3399.

Applications, addressing the selection criteria, quoting the reference number, and giving full details of qualifications and experience and the names, addresses and facsimile numbers of three referees of whom confidential enquiries may be made, should be lodged with the Manager, Human Resources, Flinders University, GPO Box 2100, Adelaide SA 5001, or fax (618) 201 3131 by 12 April 1995.

The University reserves the right not to make an appointment or to invite applications. Equal Opportunity is University Policy.



FLINDERS UNIVERSITY ADELAIDE • AUSTRALIA







MARION MERRELL DOW

Strasbourg R&D Center

Head of Biophysical Sciences

The position of Head of Biophysical Sciences is immediately available with Marion Merrell Dow in its research facility in Strasbourg, France.

The successful candidate will be an experienced scientific manager with the following qualities:

• be an internationally recognized scientist with experience in structural biology and structure-based Drug Design, either through protein crystallography, peptide/protein NMR or computational/theoretical chemistry; • capable of managing a team of highly qualified PhD scientists in the fields of X-ray crystallography, high field NMR and optical/vibrational spectroscopies; • able to work closely in a team-oriented environment with scientists from molecular pharmacology, enzymology and medicinal chemistry towards

the discovery and development of new drug candidates.

In addition, the Head of Biophysical Sciences is expected to play a key role in coordinating structural studies in collaboration with Marion Merrell Dow Centers in Gerenzano, Italy and Cincinnati, Ohio (USA).

Marion Merrell Dow is a global pharmaceutical company which offers an attractive compensation package. The Strasbourg Research Center focuses on research and development of novel compounds for diseases of the central nervous system.

Please send a detailed CV with list of publications and names of 3 referees to M.-J. Bildstein, Human Resources Department, Marion Merrell Dow Research Institute, 16 rue d'Ankara, 67080 Strasbourg Cedex, France.

MDC

Max-Delbrück Center For Molecular Medicine Berlin-Buch

The Max-Delbrück Center for Molecular Medicine (MDC) Berlin-Buch invites applications for an

INDEPENDENT GROUP LEADER POSITION

in the broad field of molecular cardiovascular research in particular related to cardiomyopathies, cardiovascular genetics and vascular biology.

The MDC is a national research center supported by the Federal Government of Germany and the Land Berlin. Scientists in basic research are specifically encouraged to integrate into clinical research programs at the Franz Volbard Cardiovascular Clinic, Free University, and other relevant institutions. The applicant should have an outstanding record of scientific accomplishment.

The position are guaranteed for 5 years. Appropriate laboratory space, funds for laboratory set-up and operations and salary for an additional postdoc position will be provided.

Candidates should submit their curriculum vitae, a list of publications, a short description of their future research objectives, and the names of **three** referees to:

Ernst-Georg Krause Max-Delbrück-Center for Molecular Medicine Robert-Rossle-Str. 10 13122 Berlin, Germany.

Deadline for applications is February 15, 1995.

SCIENCE Advertising Supplement

Euroscience at Work: Career Opportunities in European Biotechnology and Pharmaceuticals 24 February 1995

Euroscience at Work examines the European life science job market. A practical career planning section for life scientists, Euroscience at Work looks at how pharmaceutical companies are adapting to the changing European market and gives an overview of the expanding European biotechnology industry.

Full page recruitment advertisements receive placement throughout this special advertising section. Fractional ads will be highlighted by a new Global Career Opportunities banner in the regular recruitment section of the issue.

Recruitment Advertising Space Reservation Deadline: 7 February 1995

To advertise, call: In Europe, Gordon Clark phone (44) 01223 302067, fax (44) 01223 302068. In the U.S., Janis Crowley phone (212) 496-7704, fax (202) 682-0816.



MEDIA SYSTEM

POSITIONS OPEN

MEDICAL ONCOLOGY

Geisinger Medical Center/Weis Center for Research is seeking a recently trained PHYSICIAN to practice medical oncology and do bench research in molecular genetics. This position is 50% clinical medicine and 50% research. Research time is protected and funded by an endowment. Research funds include budgeted monies for supplies and technical support. Additional support could be obtained by application for internal grants. The Weis Research Center has well established research in signal transduction, cell cycle regulation and cell expression and function of oncogenes. Successful candidates will be Board-certified/Board-eligible in Medical Oncology. Geisinger Medical Center, located in Danville, Pennsylvania, is a 577-bed tertiary care institution providing care for 1.6 million throughout eastern and central Pennsylvania. You can enjoy the advantages of living in a small town with low crime, good schools, and reasonable housing costs while still practicing medicine and developing a research laboratory in a large urban-style academic medical center. Please send your curriculum vitae along with all inquiries to: Geisinger, Albert M. Bernath, M.D., Medical Oncology MO-CS, 100 North Academy Avenue, Danville, PA 17822-2001, or you may fax your curriculum vitae to 777-271-6988. An Equal Opportunity Employer/Minorities/Fenale/Disabled/Veteans.

MOLECULAR BIOLOGY RESEARCH SCIENTIST Molecular Biology of Spontaneous Mutagenesis

A position is available in our laboratory for an experienced molecular biologist with an interest in fundamental mechanisms of mutagenesis, recombination, and DNA repair in bacteria and eukaryotic cells. Our current project involves the use of novel reporter gene techniques to investigate gene functions involved in the occurrence and fixation of spontaneous mutations and transposition events in E. oli cells. The SCIENTIST we seek should have a strong background in molecular biology and bacterial genetics and significant research accomplishments. Our laboratory is a privately endowed nonprofit research foundation located on the north shore of Long Island, about thirty minutes from New York City and Cold Spring Harbor. The position is available immediately and includes full benefits. Inquiries, including a résumé and a brief statement of research interests are welcome to: Dr. J. L. Logan, EPG Research Foundation, 111 East Shore Road, Manhasset, NY 11030. Email: epglabs@igc.apc.org; FAX: 516-365-7522.

PLANT ECOLOGIST

The Environmental Science and Research Foundation is seeking an experienced ECOLOGIST to plan, propose, coordinate and conduct research and to provide assistance and advice on various environmental issues. The Foundation conducts environmental surveillance, a variety of environmental research and environmental public relations programs. A number of universities also assist the Foundation. Currently, most of the work is associated with the Idaho National Engineering Laboratory in southeast Idaho. Preference given to candidates who have Ph.D., demonstrated success in obtaining support from federal agencies, demonstrated verbal and written communication skills, and education and/or experience in other areas; U.S. citizenship required. A letter, résumé, transcripts and three letters of reference should be submitted to: Dr. Doyle Markham, Environmental Science & Research Foundation, P.O. Box 51838, Idaho Falls, ID 83405. FAX: 208-525-7036.

ENVIRONMENTAL SPECIALIST III-NO. 01523

Coordinating the state's research and monitoring program at Rookery Bay National Estaurine Research Reserve. A Ph.D. and experience in research in coastal/estaurine systems is preferred. Apply by January 30, 1995, to: Gary D. Lytton, 10 Shell Island Road, Naples, FL 33962. Telephone: 813-775-8845; Suncom: 721-7087. An Equal Opportunity/Affirmative Action/Veterans Preference Employer.

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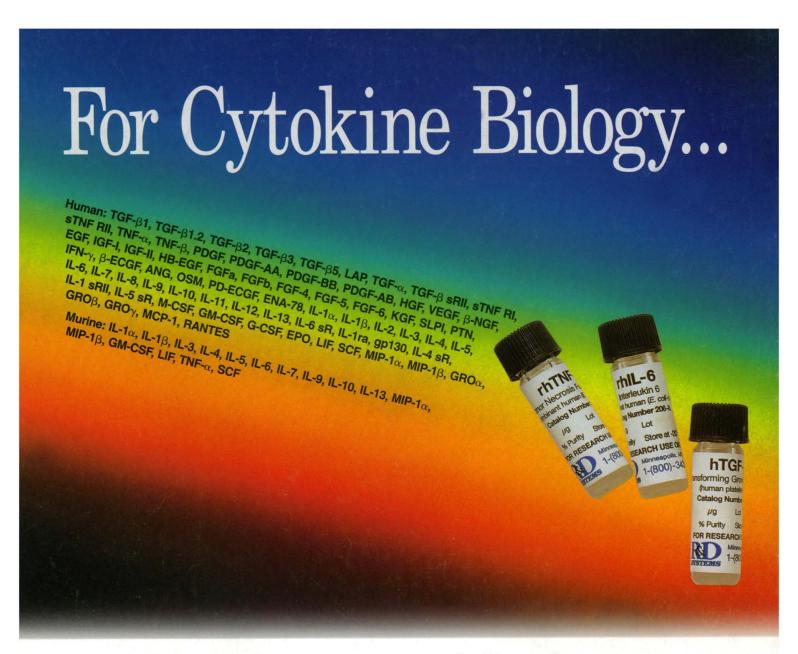
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