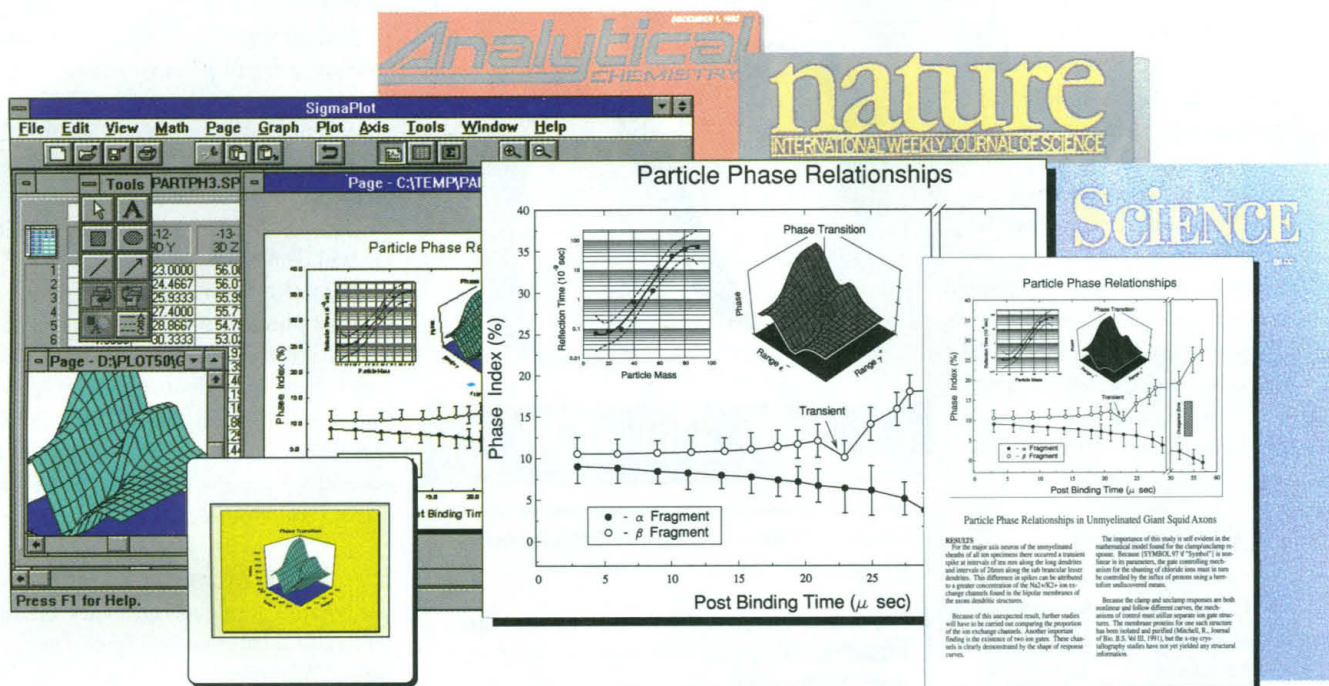


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THE 1995 AAAS ANNUAL MEETING & SCIENCE INNOVATION EXPOSITION

Call for Poster Papers

ATLANTA, GEORGIA • 16-21 FEBRUARY 1995

DEADLINE: 15 NOVEMBER 1994

The poster sessions at the 1995 AAAS Annual Meeting and Science Innovation Exposition are an important and informative way to communicate your research and ideas.

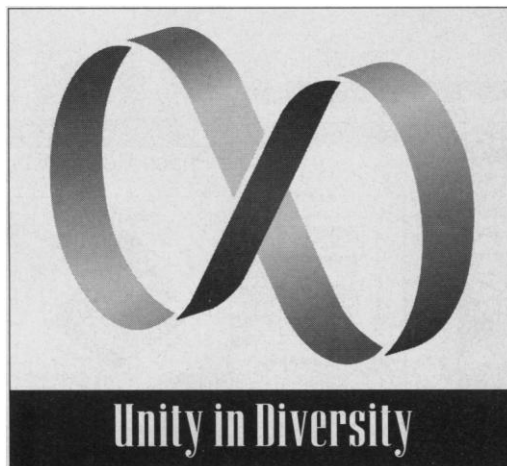
Accepted papers will be assigned a 4' x 8' space on which posters will be displayed. Authors will be required to be present for a designated 2-hour period during the session. Poster sessions will be organized for the following categories: life sciences, physical sciences, social sciences, and education. Please indicate which session you are submitting your poster to when sending it. An individual may be first author on only one poster per category.

Instructions for presenters

DEADLINE: all abstracts must be received by November 15, 1994. Upon acceptance of your poster, you will be advised of the time and place of your session.

ENDORSEMENT: an abstract will be considered *only* if it is endorsed by a member of AAAS. Members may endorse their own abstracts. All individual *Science* subscribers are members of AAAS. Librarians or employees of institutions holding subscriptions to *Science* cannot endorse an abstract unless they also hold an individual membership in AAAS.

FORMAT: refer to the sample for instructions regarding spacing, capitalization, and proper format. At the top of the sheet, type the appropriate session category. The abstract must fit within a 5" x 5" area in the center of an 8.5" x 11" sheet of white paper. Use a typewriter or letter-quality printer with type no smaller than 12 points (10 characters per inch). Justify text along the left margin. Do not double-space or underline text. Below and to the left of the square, type the presenter's name, mailing address, and phone and fax numbers. Below and to the right of the square, type the name, institution, and complete membership number (from *Science* mailing label) of the endorsing AAAS member along with their signature.



**Category (Education, Life, Physical, Social Sciences
If eligible, type "Student Award Entry")**

Skip 4 lines. Type title in Upper and Lower Case Letters. PRESENTING AUTHOR'S FIRST NAME IN UPPER CASE (Institution Name in Upper and Lower Case Within Parentheses). SECOND AUTHOR (Institution Name in Upper and Lower Case Within Parentheses). If you have several authors at the same institution, list all names and then list the institution once in parentheses.

Skip one line and type abstract. The full width of the typed material must not exceed 5 inches (12.7 cm). Do not draw a box around the abstract. Abstracts wider than this will be returned. The total length of the material, from top of title to bottom of text (including footnotes) must not exceed 5 inches. The entire abstract should be of camera-ready quality; use a letter-quality printer with a typeface no smaller than 10 points (12 characters per inch). The printed abstract will be photographically reduced 1/3 in size for printing. Do not use paragraphs. Special symbols which must be hand lettered should be in black ink. You may use your allocated space to neatly print equations and diagrams.

Name of Presenter	Name of Endorser (Member)
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Mailing Address	Endorser's AAAS Member #
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Presenter's Fax	

REGISTRATION: all submitters whose abstracts are sent prior to July 15 will be sent a registration form after their abstracts are accepted. Abstracts received after July 15, 1994 must be accompanied by a completed registration form. In the event an abstract is not accepted, the registration fee will be refunded.

MAILING INSTRUCTIONS: mail one original plus five photocopies of the abstract flat (**do not bend**) to: AAAS, Meetings Office, Contributed Papers, 1333 H Street, NW, Washington, DC 20005. (Telephone 202-326-6450). Facsimiles are unacceptable as the abstracts will be photographically reproduced.

Free Registration for Students

Upper division undergraduates and full-time graduate students are eligible to serve as Session Aides for the meeting. In exchange for assistance with sessions, students can receive a waiver of registration fees and, for additional sessions, a one-year subscription to *Science* magazine. Information and application forms can be obtained from the Session Aide Coordinator at the above address.

Student Research Awards

To encourage young scientists AAAS will have a poster session for research by undergraduate and graduate students. A panel of distinguished scientists will judge student posters. The best presentation in life, physical, and social sciences will be honored, and will receive a cash prize. In addition, top presenters will receive a one-year (51 issues) subscription to *Science*. Students who wish to be included in this session should type the words "Student Award Entry" above their abstract. A photocopy of a current student identification or enrollment form must be submitted with the abstract. All student entrants must be full-time university or college students. Advanced high school or part-time university/college students are not eligible.

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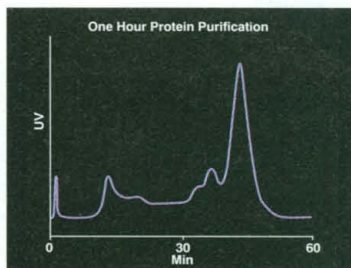
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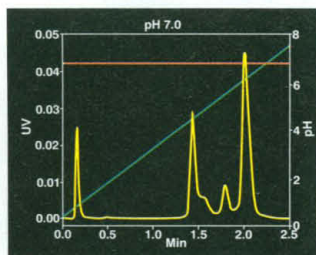
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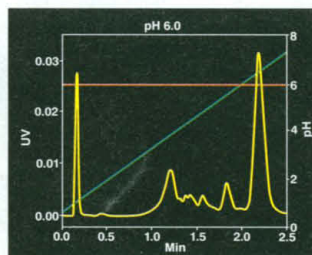


Anion exchange separation of recombinant protein with conventional LC column and instrumentation.

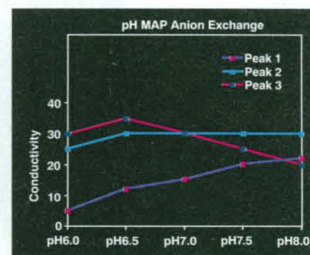
LOOK AT ALL WE'VE BEEN UP TO.



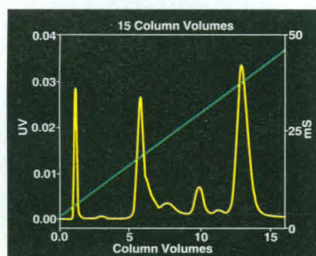
We began by running the separation at several pHs.



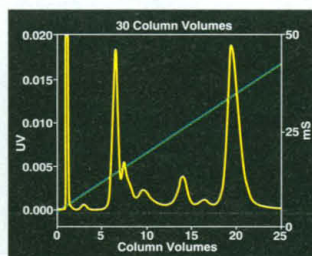
Confirmed the optimum pH at 6.0.



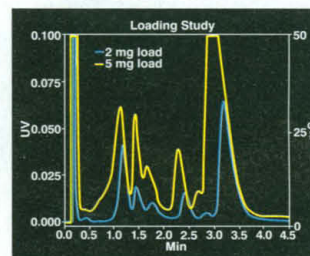
Plotted results from built-in spreadsheet.



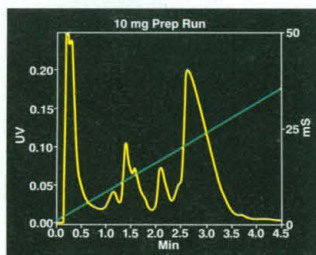
Tested gradient slopes for improved resolution.



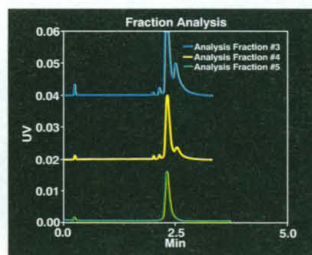
Selected 30 column volume gradient as optimum.



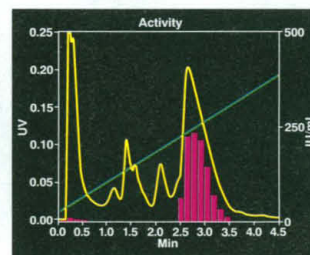
Studied the effect of loading at 2 mg and 5 mg.



Ran a 10 mg prep. Collected fractions.



Analyzed fractions by reversed phase.



Checked biological activity and purity.

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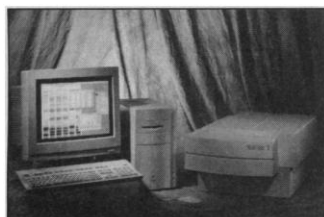
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DNA and RNA Detection

A chemiluminescence-based kit permits fast detection of DNA and RNA immobilized on nylon membranes. The Illuminator nonradioactive detection system detects as little as 0.5 pg of target DNA during a 30-min exposure of the processed filter to x-ray film. Using this same exposure time, 1 pg of a single-copy gene can be detected in less than 1 µg of genomic DNA. This versatile system can also be used for rapid Northern blot analysis of RNA, producing in only 30 min a signal intensity equal to that generated overnight by a radioactive probe. **Stratagene. Circle 141.**

Filmless Autoradiography System

The PhosphorImager SI system, a filmless autoradiography instrument, works with both Macintosh



and IBM-compatible computers. The system offers both the high resolution of autoradiography and the dynamic range of direct counting in less than one-tenth the time of a typical film exposure. The technology can be applied to gels, blots, thin-layer chromatography plates, and tissue sections. Analysis and reporting software for either type of computer is included with the system. **Molecular Dynamics. Circle 142.**

Total RNA Isolation

Total RNA can be isolated from tissues, cells, bacteria, plant, yeast, and biological fluids including serum and plasma from infectious diseases with the Ultraspec-II RNA. The method is based on the principle that the 14 M solu-

tion of guanidine salts and urea act as denaturing agents in conjunction with acidic phenol, and on the use of a specific RNA binding resin that reduces the isolation time to 30 min. The biological sample is homogenized with RNA extraction reagent and extracted with chloroform. The homogenate separates into two phases. The total RNA remains exclusively in the aqueous phase with the specific RNA binding resin. RNA is thus prepared free from impurities such as traces of guanidine salts or phenols. **Biotecx Laboratories. Circle 143.**

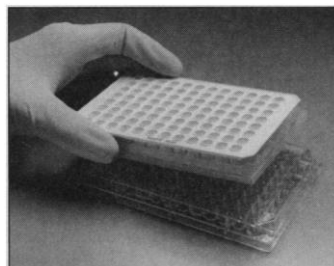
Statistics Software

MINITAB Statistical Software for Windows Release 10 offers advances in graphics, data handling, and general statistics capabilities. Features include new graph editing capabilities that allow users to customize graphs before or after they are generated. The exploratory data analysis capabilities have been expanded with the addition of the ability to highlight points on the graph and see the underlying data. Other new features include three-dimensional graphics; fully implemented dynamic data exchange; enhanced data import capabilities; additional statistical capabilities in the areas of experimental design, time series, and cluster analysis; and a session editor that can be edited to generate reports from within the statistical package. **Minitab. Circle 144.**

Glass Fiber Filter Plates

MultiScreen glass fiber filter plates are 96-well plates for use with filtration assays. These plates, used in conjunction with the MultiScreen bioassay system,

are designed to replace conventional techniques for cell harvesting and receptor binding assays. Compared with traditional methods, the plates can enhance throughput of multiple samples



and reduce radioactive waste by up to 99%. Each step of a typical bioassay—sample immobilization, incubation, washing, and detection—can be carried out within the same MultiScreen plate, eliminating the need for sample transfers from one reaction vessel to another. A plate and the MultiScreen vacuum manifold are all the tools necessary to carry out a multiple sample bioassay. **Millipore. Circle 145.**

Northern and Southern Kits

TotalBLOT Northern (RNA) and Southern (DNA) kits provide high quality reagents for accurate, consistent results. The Southern kit contains agarose and concentrated TBE for 10 1% gels and solutions for depurination, denaturation, and neutralization of the completed gel. Also included for high salt capillary transfer are concentrated saline-sodium citrate buffer and positively charged nylon membrane. The membranes have a high binding capacity for nucleic acids and do not require baking or ultraviolet crosslinking. The Northern kit contains sufficient agarose, concentrated buffer, and formaldehyde for 10 1% denatur-

ing RNA gels. High salt transfer buffer and membranes are included, with reagents guaranteed to be free of RNase contamination. **AMRESCO. Circle 146.**

Mutagenesis Systems

The Altered Sites II Mutagenesis Systems allow high efficiency site-directed mutagenesis. Mutagenesis frequencies of up to 90% are achieved by the positive selection of the mutant by coupling it to the selection for antibiotic resistance. Double-stranded DNA is used instead of the single-stranded used in other systems, making the reaction simpler and performable in one day. If further mutants are required, they are achieved without subcloning by cycling between two antibiotic resistances on the pALTER vectors. **Promega. Circle 147.**

Literature

Monoclonal Antibody Purification Guide describes fast and easy methods to purify any monoclonal antibody from ascites or cell culture even in the presence of high concentrations of bovine immunoglobulin G. It also details the use of a fast antibody measurement kit that is not based on enzyme-linked immunosorbent assay, a kit to qualify mouse ascites or culture supernatant, and an antigen coupling kit for antibody purification. **Sterogene Bioseparations. Circle 148.**

R&D Systems 1994 Catalog is split into five major sections: cytokine proteins and antibodies, adhesion molecule research products, Quantikine cytokine immunoassays, flow cytometry reagents, and probes and genes. **R&D Systems. Circle 149.**

Microlab Diluter Application: Sample Preparation Using Microlab Diluters/Dispensers discusses instruments for sample handling for chromatography and more. **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

Applications are invited for **ASSISTANT RESEARCH PROFESSOR** to participate in research on the mechanisms of polyamines and arachidonate metabolites in experimental cerebral ischemic injury. Candidates must have Ph.D. in chemistry/biochemistry with a minimum of 5 to 6 years of experience in neurosciences/experimental CNS injury. Additional experience in lipid biochemistry will be useful. Send letters of interest, curriculum vitae, names and telephone numbers of three references to: **Dr. Robert J. Dempsey, Department of Surgery, University of Kentucky Medical Center, 800 Rose Street, Lexington, KY 40536**

The University of Kentucky is an Equal Opportunity Employer. Minorities and women are encouraged to apply.

RESEARCH ASSOCIATE PROFESSOR in Department of Anesthesiology at University of Illinois at Chicago. Non-tenure-track position for independent investigator interested in any aspect of basic anesthesiology. Candidates should be committed to excellence in research and training and have demonstrated the ability to develop an innovative and independent research program. Some background in molecular biology preferred, but not required. Interested persons should address correspondence to: **Ronald F. Albrecht, M.D., Head, Department of Anesthesiology, University of Illinois at Chicago Hospital, 1740 West Taylor Street, Suite 3200W, M/C 515, Chicago, IL 60612**. Include curriculum vitae, names of three references and a brief description of research program. *Equal Opportunity/Affirmative Action Employer.*

Faculty position. The Department of Pharmacology, School of Medicine, University of Puerto Rico. A fully accredited institution has an open tenure-track position for an **ASSOCIATED PROFESSOR**. Areas of interest:

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Send applications, curriculum vitae, and three references to: **Dr. Walmor De mello, Department of Pharmacology, School of Medicine, P.O. Box 365067, San Juan, P.R. 00936-5067.**

UNIVERSITY OF GENEVA DEPARTMENT OF MOLECULAR BIOLOGY TWO PROFESSORS OF MOLECULAR BIOLOGY

Full-time appointment at the level of full professor or associate professor, starting date: January 1, 1995.

The successful candidates are expected to teach at graduate and undergraduate levels and to lead a strong research program in molecular genetics. A strong background in genetics is desirable. Research on ribozymes, DNA replication, recombination and translation could also be considered. Teaching in French is required but a period of adjustment can be granted.

Applications should be sent by August 31, 1994, to: **Secrétariat de la Faculté des Sciences, Université de Genève, 30 quai Ernest-Ansermet, CH-1211 Genève 4, Switzerland**, where inquiries can be made.

These positions have been advertised before and the deadline has been extended.

Qualified women are encouraged to apply.

VERTEBRATE ZOOLOGIST Department of Organismic and Evolutionary Biology Harvard University

The Department seeks a broadly based vertebrate zoologist whose work addresses the organismic and evolutionary biology of birds and/or mammals. The appointment will be to a **TENURED PROFESSORSHIP**, and the incumbent will be expected to assume curatorial responsibilities in the Museum of Comparative Zoology. We are especially interested in individuals whose research experience and interests are based on integrative approaches to understanding the diversity of form and function across major taxonomic groups. Applicants should submit, by 1 August 1994, curriculum vitae, a statement of research and teaching interests, and the names and addresses of three references to: **Professor Farish A. Jenkins, Jr., Chairman, Vertebrate Zoology Search Committee, Department of Organismic and Evolutionary Biology, Harvard University, Cambridge, MA 02138.**

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

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR Pathologist, Neuropathologist Preferred

Florida A&M University (FAMU) College of Pharmacy, a comprehensive college offering an M.S./Ph.D. in all pharmaceutical sciences, invites applications for a tenure-track faculty position after the first year in the Environmental Toxicology Graduate Program. Applicants should have Ph.D./D.V.M. degrees and research experience in neuropathology. He/she should have the ability to establish his/her own research program, develop and teach graduate courses in neuropathology, collaborate with other faculty in their neurotoxicology research and advise and guide graduate students in their research projects. FAMU College of Pharmacy provides an excellent salary, generous start-up funds and attractive benefits package including health, dental and retirement plans. Please send curriculum vitae and all supporting materials including three letters of reference to: **Dr. Malak G. Kolta, College of Pharmacy, Florida A&M University, Tallahassee, FL 32307**. Application deadline is July 17, 1994.

FAMU is a Historically Black Institution and is an Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.

FACULTY POSITION—ENTOMOLOGY

ASSISTANT PROFESSOR—ENTOMOLOGY.

This position is a 9-month tenure-track position. Responsibilities include teaching: General Entomology (for majors), Introduction to Insects (for non-majors), Livestock Pest Management, Insects and Society, Aquatic Entomology, and Medical Entomology. The incumbent will also assume advising responsibilities within the department. Qualifications: Ph.D. in entomology with exceptional interests in teaching. Starting date: January 1, 1995. **TO APPLY:** Send letter of application which includes a statement of teaching experience and interests, current résumé, transcripts, and names, addresses and telephone numbers of at least 3 references by September 1, 1994. Send all materials to: **Dr. Clarence H. Colli-son, Head, Department of Entomology and Plant Pathology, Mississippi State University, Box 9775, Mississippi State, MS 39762-9775**. For additional information call 601-325-2085.

The Swiss Federal Institute of Technology Zurich (ETHZ) invites applications for the position of a

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Responsibilities will include teaching of biochemistry to students of the biological and the biochemical curricula, and of basic biochemistry to students of other subjects.

Research activities should focus on the biochemical basis of biological information processing, particularly the regulation of intra- and extracellular processes, the perception of cells and cell-components, and the role of carbohydrates in the structure and function of proteins.

Candidates should be willing to interact actively with colleagues of other ETHZ units that investigate the structures and functions of biomolecules.

Please submit your application together with curriculum vitae and a list of publications to: **President of ETH, Zurich, Prof. Dr. J. Nüesch, ETH Zentrum, CH-8092 Zurich**, no later than July 31, 1994. *In its effort to increase the number of women in top academic positions, the ETHZ specifically invites applications from women.*

ORGANISMAL BIOLOGIST

Princeton University invites applications for a tenure-track position at the level of **ASSISTANT PROFESSOR** in the Department of Ecology and Evolutionary Biology. We are interested in receiving applications from scientists who study animals, and with a strong program of laboratory research complementing field studies. Areas of special interest to the department include the interaction of physiology and biomechanics with ecology, behavior, and evolution. Applicants must have a strong commitment to teaching and research. A statement of research and teaching interests, three reprints, and three letters of recommendation should be sent to: **Dr. Stephen W. Pacala, Department of Ecology and Evolutionary Biology, Princeton University, Princeton, NJ 08544-1003**. We will begin screening applications on September 5, 1994. *Princeton University is an Affirmative Action/Equal Opportunity Employer.*

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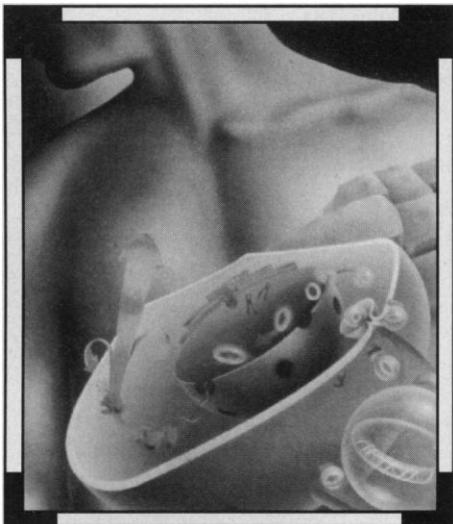
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▲ **Scientists: Site-Specific Delivery of Macromolecules**

We seek five Ph.D.-level scientists who will be responsible for applying peptide and carbohydrate chemistry to develop technologies for enhancing the cell recognition, entry and processing of DNA expression vectors. Post-doctoral training and evidence of productivity in this area are required.

▲ **Scientists: Intracellular Trafficking**

We seek both a Ph.D.-level scientist and a fixed-term post-doctoral fellow with at least two years of experience, to work on vesicular trafficking and/or antigen processing. These scientists will determine the cell entry and trafficking of genes. One of the successful candidates will have experience in immunology and the other in the use of electron and confocal microscopy for studying cell trafficking.

▲ **Scientist: Pharmacokinetics-Pharmacodynamics**

We seek a Ph.D.-level scientist with at least two years of post-Ph.D. experience in the development and application of pharmacokinetic models and the pharmacodynamics of recombinant proteins. Experience in a biotechnology company is desired. This person will be responsible for determining the PK/PD of administered genes and their gene products.

▲ **Scientists: Mammalian DNA Expression Vectors and Immune-Cell-Specific Gene Regulation**

We seek two Ph.D.-level scientists with at least two years of molecular biology experience who will be responsible for identifying and defining promoters and enhancers that function in human lymphocytes and mononuclear cells.

▲ **Scientists: Drug-Controlled Gene Therapy**

We seek two Ph.D.-level scientists having at least two years of molecular biology experience to be responsible for a collaborative program with Baylor College of Medicine to develop a gene switch for gene therapy that utilizes steroid-responsive elements and transactivating proteins to control the *in vivo* expression of administered genes.

▲ **Histologist**

We seek a B.S.-level certified Histologist, Histologist Technician (HT) or a Histotechnologist (HTL), with at least two years of post-training molecular biology experience, to be responsible for preparing conventional fixed and frozen sections, performing histological tests (including *in situ* hybridization and histochemistry) and to further develop the Company's histology program.

▲ **Scientist: DNA Purification**

We seek a Ph.D.-level scientist with experience in biochemistry, molecular biology (specifically nucleic acid, oligonucleotide, protein or plasmid purification) or a related field, to develop novel methods for preparing and purifying plasmid DNA.

We offer highly competitive compensation packages. For confidential consideration, please send your CV to: **GENEMEDICINE, INC., Human Resources, Ref. 694, 8080 North Stadium Drive, Suite 2100, Houston, TX 77054.**

Wadsworth Center

Staff Scientist Positions

Genetics, Neuroscience, Endocrinology

The Wadsworth Center is the multidisciplinary basic research and public health laboratory of the New York State Department of Health. Its staff of over 800 includes 170 doctoral level scientists housed in modern research facilities located in Albany, New York. Core technical facilities in biochemistry, ultrastructural analysis, immunology, molecular genetics (including transgenics) and information resources ensure state-of-the-art equipment and laboratory services. Qualified staff are eligible for faculty appointment in the Department of Biomedical Sciences, State University of New York. Applications are invited for tenure track positions at junior, intermediate and senior levels as follows:

Signal Transduction in Metabolic / Reproductive Disorders

A research scientist is sought by the Laboratory of Reproductive and Metabolic Disorders to develop or implement an existing research program in the molecular genetics of signal transduction, specifically in relationship to defects in metabolism or reproduction. **Dr. James Dias**, Search Committee Chair

Molecular Neurobiology

A research scientist is sought who uses the approaches of molecular biology to investigate fundamental problems of the nervous system such as development, cell death, and signalling mechanisms. The successful candidate will have a broad knowledge of the nervous system and molecular genetics and will be able to develop an independent research program. **Dr. David Martin**, Search Committee Chair

Developmental Genetics

Applications are invited from candidates to establish an independent research program in developmental genetics of humans or model organisms. Investigators concentrating in the genetic mechanism of developmental diseases are particularly encouraged to apply. **Dr. Lorraine Flaherty**, Search Committee Chair

Molecular Genetics of Human Disease Mechanisms

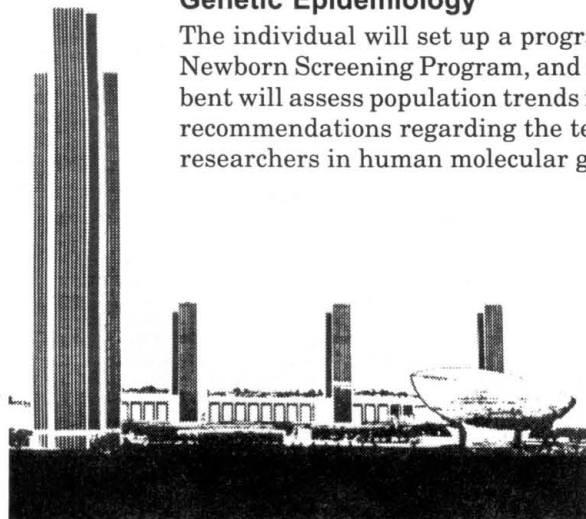
Applications are invited for several research staff scientist positions in human molecular genetics. Investigators concentrating in molecular mechanisms of human disease pathogenesis, chromosome and/or gene structure, or gene expression are encouraged to apply. Candidates are expected to establish an independent research program. **Dr. Anne Messer**, Search Committee Chair

DNA Diagnosis and Cytogenetics

A molecular geneticist is sought with expertise in all aspects of DNA analysis of human specimens and two years relevant experience to establish a new laboratory. The individual will interact with the medical community to provide diagnostic reports and regulatory oversight of clinical genetic laboratories. A productive research program in an associated area is encouraged. Additionally, a clinical cytogeneticist is sought to expand an ongoing testing and regulatory program. **Dr. Ann Willey**, Search Committee Chair

Genetic Epidemiology

The individual will set up a program in genetic epidemiology and will interface with the Newborn Screening Program, and cytogenetics and DNA testing laboratories. The incumbent will assess population trends in New York with respect to the testing activities, make recommendations regarding the testing profile and follow-up program, and interact with researchers in human molecular genetics. **Dr. Kenneth Pass**, Search Committee Chair



Applicants must have a doctoral degree and several years post-doctoral experience. Appointments will be considered at both entry and senior levels. A curriculum vitae with a description of career goals and the names of three references should be sent to the attention of the appropriate Search Committee Chair at the Wadsworth Center, New York State Department of Health, P.O. Box 509, Albany, New York 12201-0509. Applications will be accepted through August 5, 1994. *The Wadsworth Center is an affirmative action / equal opportunity employer. Women and minorities are encouraged to apply.*

POSITIONS OPEN

The George Washington University Medical Center (GWUMC) is seeking a **PROFESSOR AND CHAIR** for the Department of Microbiology and Immunology. The GWUMC seeks a distinguished Ph.D. or M.D./Ph.D. scientist with an outstanding record of scientific productivity and proven ability to attract external funding in molecular virology with an emphasis on AIDS and Cancer. The Chair will direct the expansion and integration of a program in molecular virology, microbiology and immunology. The Chair will serve as director of the interdisciplinary Research Center in Genetics and Molecular Biology and actively recruit additional faculty members. The candidate should be capable of leading the Department to a position of academic excellence and national prominence. The successful candidate will have demonstrated excellence in teaching at the medical, graduate, and postdoctoral levels, as well as leadership qualities and administrative skills necessary to develop an academic interdisciplinary program. Selection process will begin in September 1994 and continue until a successful candidate is identified. *The GWUMC is an Equal Opportunity/Affirmative Action Employer. Applications from women and minorities are encouraged.*

Applicants should submit curriculum vitae, an outline of current and future research interests, and names of three references to: **Dr. Christie A. Holland, Center for Virology, Immunology and Infectious Disease Research, Children's National Medical Center, 111 Michigan Avenue, N.W., Washington, DC 20010.**

MOLECULAR IMMUNOLOGIST

The Department of Animal Sciences of the University of Illinois invites applicants for a tenure-track position as an **ASSISTANT, ASSOCIATE or FULL PROFESSOR** of Molecular Immunology. The successful candidate is expected to establish a strong research program in molecular immunology, in areas such as gene therapy, immunotoxicology, xenotransplantation, hemopoietic differentiation, cytokine biology, or phylogeny of the immune system. Faculty within the Department of Animal Sciences are conducting research at the molecular level in neuroimmunomodulation, immunogenetics, and mucosal immunity, as well as in basic research in reproductive biology, muscle biology, biochemistry and nutrition. Candidates should submit curriculum vitae, a description of their research background and a letter that provides reasons for their interest in the position. They should also ask three qualified individuals to send letters of reference to: **Dennis R. Campion, Head, Department of Animal Sciences, University of Illinois at Urbana-Champaign, 1207 West Gregory Drive, Urbana, IL 61801; Telephone: 217/333-3462; FAX: 217/244-2871.** Application should be received by July 15, 1994, to ensure full consideration. *The University of Illinois is an Affirmative Action/Equal Opportunity Employer.*

DEPARTMENT OF ANATOMY AND CELL BIOLOGY

**JAMES H. QUILLEN COLLEGE
OF MEDICINE**

EAST TENNESSEE STATE UNIVERSITY

*** ANATOMIST/CELL BIOLOGIST.** Applications are invited for a tenure-track position at the **ASSISTANT PROFESSOR** level in the Department of Anatomy and Cell Biology. Candidates must possess the Ph.D. and/or M.D. degree and postdoctoral experience. Preference will be given to applicants with teaching experience in medical gross anatomy, and demonstrated research capability in cell biology and ultrastructure. The successful applicant will be expected to participate in medical student education and in the Graduate Program in Biomedical Sciences, and to maintain an independent, fundable research program in a discipline compatible with those in the department. The department consists of ten faculty members with diverse research interests including cell biology, neurobiology, evolutionary biology, and development toxicology. Review of applications will begin immediately and will continue until the position is filled. It is anticipated that the position will be filled by July 1, 1995. Interested individuals should submit curriculum vitae and the names of at least three references to: **Dr. Fred Hossler, Professor, Chair of the Search Committee, Department of Anatomy and Cell Biology, J.H. Quillen College of Medicine, East Tennessee State University, Johnson City, TN 37614-0582. Telephone: (615) 929-6388, FAX: (615) 461-7040.** *East Tennessee State University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

FACULTY POSITION IN ANATOMY

The Department of Cell Biology and Neuroscience of the University of Texas Southwestern Medical Center at Dallas seeks applications for a tenure-track position at the level of **ASSISTANT PROFESSOR**. Applicants must have a relevant Ph.D. or M.D. degree and at least two years of postdoctoral training plus experience teaching gross anatomy. Candidates are expected to develop an independent research program. Preference will be given to candidates with research interest in one of the following general areas: cell biology, neuroscience, functional morphology, or muscle biology/exercise science. Medical school teaching responsibility will be gross anatomy.

Send curriculum vitae, a brief description of teaching experience, a brief description of proposed research, and the names/addresses of five references to: **Richard G. W. Anderson, Ph.D., Department of Cell Biology and Neuroscience, UT Southwestern, 5323 Harry Hines Boulevard, Dallas, TX 75235-9039.** *An Equal Opportunity/Affirmative Action Employer.*

The Department of Anatomy and Cell Biology invites application for a tenure-track position at the **ASSISTANT PROFESSOR** level. Individuals with demonstrated research accomplishments in the area of neuroscience using modern cellular, molecular and genetic approaches are encouraged to apply. The Ph.D. or M.D. degree with postdoctoral experience is required. The current research strengths of the department in neurosciences are in developmental and molecular biology of the nervous systems. Start-up funds and excellent research facilities are available. The successful applicant will be expected to lead an independent research program, teach in the Medical Neuroanatomy course and participate in graduate education. Curriculum vitae, a brief description of previous and anticipated research along with the names of three referees should be submitted to: **Dr. M.A.Q. Siddiqui, Professor and Chairman, Department of Anatomy and Cell Biology, State University of New York Health Science Center at Brooklyn, 450 Clarkson Avenue, Brooklyn, NY 11203.** *The State University of New York is an Equal Opportunity/Affirmative Action Employer.*

FLORIDA INTERNATIONAL UNIVERSITY GLASER DISTINGUISHED VISITING PROFESSORSHIP IN BIOLOGICAL SCIENCES

Applications are solicited from distinguished scientists interested in visiting the Department of Biological Sciences at Florida International University (FIU), the State University of Florida at Miami. For the 1994/95 Glaser Visiting Professorship we are specifically interested in scientists in the area of Biological Clocks/Circadian Rhythms. The Glaser Professor will offer a short course (ten lectures over a 2- to 3-week period during the Spring 1995 semester), give a departmental seminar, and interact with faculty and students. Remuneration is \$8,000. FIU is a growing, dynamic public university with 24,000 students. The Department of Biological Sciences has 30 faculty and 70 graduate students (M.S. and Ph.D.). Apply with letter of intent, brief course outline, résumé, and reprints of three relevant publications before August 1, 1994, to: **Dr. Laurie L. Richardson, Glaser Committee Chair, Department of Biological Sciences, Florida International University, Miami, FL 33199.** *Women and minorities are especially encouraged to apply. FIU is an Affirmative Action/Equal Opportunity Employer.*

MANAGER CLINICAL SEROLOGIC SERVICES. Anmed/Biosafe Inc., an established and growing company, seeks a Ph.D. to manage the department, conduct clinical research and develop and validate assays. The position requires a degree in Immunology, Virology or related plus supervisory experience and working knowledge of immunoassay methods, e.g., ELISA. Please submit a résumé with salary history to: **Anmed/Biosafe Inc., 7642 Standish Place, Rockville, MD 20855.**

MOLECULAR GENETICIST: FACULTY POSITION in Department of Medicine available for Ph.D. Molecular Geneticist with experience in positional cloning. Academic rank commensurate with professional standing. Contact: **Steven J. Scheinman, M.D., Chief, Nephrology Section, SUNY Health Science Center, 750 East Adams Street, Syracuse, NY 13210.** *Equal Opportunity Employer/Affirmative Action.*

POSITIONS OPEN

FACULTY POSITION IN PHYSIOLOGY

The Department of Physiology at the University of North Dakota School of Medicine invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level. We seek candidates utilizing cellular and molecular technologies to study physiologic events ranging from subcellular to integrative processes. The successful candidate will be expected to contribute one semester per year to the department teaching responsibility in medical neurosciences and/or physiology, and to participate in the graduate program, which offers both the M.S. and Ph.D. degrees. Candidates must have a Ph.D., M.D., or equivalent degree and a minimum of two years of postdoctoral experience. Applications (no later than September 1, 1994) including curriculum vitae, description of research interests with plans for future research, and names of three references should be sent to: **Dr. Ann Bode, Chair, Physiology Search Committee, UND School of Medicine, Box 9001, Grand Forks, ND 58202.** *The University of North Dakota is an Affirmative Action/Equal Opportunity Employer. Minorities and women are particularly encouraged to apply.*

DIRECTOR GENERAL POSITION OF THE NATIONAL AGRICULTURAL RESEARCH FOUNDATION (N.Ag.Re.F.)

The applicants should have the qualifications of Researcher A (i.e., level of University Professor). More specifically, they should be scientists of international acceptance with good research publication record, have capability for coordination of research projects and administrative experience. Their research should be relevant to that of at least one of the Institutes of N.Ag.Re.F. The appointment is for three years with possibility of renewal. Afterwards, she/he can ask for appointment as Researcher A in one of the Institutes of N.Ag.Re.F. With their applications candidates should submit, before July 11, 1994, (Aigialias 19 and Halepa Street, GR-151 25 Paradisos Amarousiou, Athens/Greece)—(a) curriculum vitae with analysis of their publications (7 copies), (b) diplomas, (c) the standard certificates from the military service, municipality registration certificate and copy of the criminal record.

Informations: **Mrs. G. Avgitidou, Telephone: 301-6851-837 and 301/6846-230.**

University of California, Irvine College of Medicine

DELLA MARTIN CHAIR IN PSYCHIATRY

Endowed tenured position in the Department of Psychiatry and Human Behavior. Appointment will be at the Associate or Full Professor level for an M.D. or Ph.D.

The appointee will be expected to develop a funded research program in basic neuroscience as related to neuropsychiatric disease. Clinical responsibilities for an M.D. optional but not required. Possibility of a joint appointment in other departments of University of California, Irvine.

Applications or nominations accompanied by the names and addresses of three referees should be submitted by August 1, 1994, to: **Dr. Edward G. Jones, Chair of Della Martin Search Committee, University of California, Irvine, California College of Medicine, Department of Anatomy and Neurobiology, MSII, Room 364, Irvine, CA 92717.**

The University of California is an Equal Opportunity/Affirmative Action Employer committed to excellence through diversity.

POSTDOCTORAL POSITION AT HARVARD MEDICAL SCHOOL STEM CELL GENE REGULATION AND GENE THERAPY

Postdoctoral or research associate position available immediately for a Ph.D. in molecular biology to investigate the regulation of the stem cell gene CD34 and to investigate the use of hematopoietic specific promoters in gene therapy applications, using vectors such as AAV. Extensive experience in transcription factor research, molecular biology, and stem cell biology required. FAX (or mail) curriculum vitae and three letters of reference to: **Dr. Daniel G. Tenen, Hematology Division, Beth Israel Hospital, 330 Brookline Avenue, Boston, MA 02215; FAX: 617-735-3299.**

CONFERENCE

AACR SPECIAL CONFERENCES IN CANCER RESEARCH

Transcriptional Control of Cell Growth and Differentiation

October 16-20, 1994

Chatham Bars Inn

Chatham (Cape Cod), Massachusetts

Conference Chairpersons:

Eric N. Olson, Bruce M. Spiegelman

Program Committee: Elaine V. Fuchs, Joan V. Ruderman

SCIENTIFIC PROGRAM

Opening Lectures: David Baltimore, Robert Tjian, James E. Darnell, Jr.; **Cell Cycle and Transcription:** David M. Livingston, Stephen J. Elledge, Robert N. Eisenman, Carol L. Prives, George F. Vande Woude, Marc Kirschner, Steven I. Reed; **Signal Transduction Systems Influencing Transcription:** Joan V. Ruderman, Marc Montminy, Jean Y.J. Wang, Spyridon Artavanis-Tsakonas; **Transcription Factors Controlling Cell Growth:** Michael Karin, Richard Treisman, Michael Z. Gilman; **Transcription Factors Controlling Cell Differentiation:** Bruce M. Spiegelman, Elaine V. Fuchs, Michael G. Rosenfeld, Michael Levine, Eric N. Olson, Stuart Orkin, Charles P. Emerson; **Development:** Eddy M. DeRobertis, Richard Behringer, Janet Rossant, Clifford Tabin

Modern Developments in Cancer Therapeutics

Joint Conference with the Institute of Biomedical Sciences, Academia Sinica (Taiwan)

November 7-11, 1994

Activity Center, Academia Sinica, Taipei, Taiwan

Conference Chairpersons:

Yung-Chi Cheng, Cheng-Wen Wu

Conference Co-Chairpersons: Joseph R. Bertino, Edward Bresnick,

Bruce A. Chabner, Jacqueline J. K. Whang-Peng, Felicia Y-H. Wu

SCIENTIFIC PROGRAM

Drug Discovery: Jen-Kun Lin, Bruce A. Chabner, Steve R. Roffler, Jaulang Hwang, Wendell Wierenga, Robert C. Jackson, Allen I. Oliff, Grace W. P. Chao Yeh; **Experimental Therapeutics:** Robert L. Capizzi, Wendell Wierenga, Felicia Y.-H. Wu, Shuen-Kuei Liao, Susan B. Horwitz, Napoleone Ferrara, Rui Han, Edward Chu, Esther H. Chang; **Drug Resistance:** Susan B. Horwitz, Ming-Ching Shen, Chuck C.-K. Chao, Takashi Tsuruo, Joseph R. Bertino, John A. Hickman, Susan P. C. Cole, Yves Pommier; **Tumor Biology:** Ming-Ta Hsu, Edward Bresnick, Pei-Jer Chen, Cheng-Po Hu, Thea D. Tlsty, Wen-Hwa Lee, Chawnschang Chang, Lothar Schweigerer; **Gene Therapy and Vaccines:** Joseph R. Bertino, Ding-Shinn Chen, Lih-Hwa Hwang, Wen-Kuang Yang, Drew M. Pardoll, Alan Gewirtz, Leaf Huang, J. Martin Brown; **Novel Therapy:** Andrew T. Huang, Paul P. Carbone, Yao-Chang Chen, Kuang Y. Chen, Rolf F. Barth, Makoto Ogawa, Mark S. Kaminsky, Alice L. Yu; **Hepatocellular Carcinogenesis: Treatment and Prevention:** I. Bernard Weinstein, Juei Low Sung, Gi-Ming Lai, Ding-Shinn Chen, Zhao-You Tang, Yung-Chi Cheng, Brian I. Carr; **Summary:** Bruce A. Chabner

Future AACR Special Conferences: **Mechanism of Action of Retinoids, Vitamin D, and Steroid Hormones**, January 14-19, 1995, Whistler, British Columbia, Canada. Conference Chairpersons: Michael B. Sporn, Ronald M. Evans, and David J. Mangelsdorf. **Molecular Biology of Cancer: Implications for Prevention and Therapy**, Joint Meeting with the Japanese Cancer Association, February 13-18, 1995, Maui Marriott Resort, Maui, Hawaii. Chairpersons: Masaaki Terada and Lee W. Wattenberg. **86th Annual Meeting**, March 18-22, 1995, Metro Toronto Convention Centre, Toronto, Ontario, Canada. Chairperson: Donald S. Coffey. Abstract deadline: October 14, 1994. **Signal Transduction of Normal and Tumor Cells**, April 1-6, 1995, Banff Centre, Banff, Alberta, Canada. Chairperson: Anthony J. Pawson.

Translational Research in Cancer: New Opportunities for Progress

November 29 - December 4, 1994

The Grove Park Inn, Asheville, North Carolina

Conference Chairperson: Carlo M. Croce

Program Committee: Martin D. Abeloff, Clara D. Bloomfield, Bruce D. Cheson, Robert L. Comis, Mark A. Israel, Marc E. Lippman

SCIENTIFIC PROGRAM

Keynote Address: Webster K. Cavenee; **Hematopoietic Malignancies - Biology:** Max D. Cooper, Edward A. Clark, Bice Perussia, Drew M. Pardoll; **Hematopoietic Malignancies - Molecular Biology:** Carlo M. Croce, Eli Canaan, Stephan W. Morris; **Hematopoietic Malignancies - Treatment:** Albert B. Deisseroth, Neal A. Flomenberg, Lee M. Nadler, Bruce D. Cheson, John C. Reed, Clara D. Bloomfield; **Cytogenetics of Solid Malignancies/Sarcomas/Brain Tumors:** Felix Mitelman, Frederic G. Barr, Mark A. Israel, Mark Noble; **Prostate Cancer and Ovarian Cancer:** John T. Isaacs, Donald S. Coffey, Thomas C. Hamilton, Robert F. Ozols; **Lung Cancer:** John D. Minna, Susan L. Naylor, Paul A. Bunn, Jr.; **Breast Cancer:** Marc E. Lippman, Ira Pastan, Karl Erik Hellström, Charles R. King, Lance A. Liotta, Jackson B. Gibbs, Martin D. Abeloff; **Colorectal Cancer:** Raymond L. White, Richard Fishel, Richard Kolodner, Glenn Steele, Jr.

Basic and Clinical Aspects of Prostate Cancer

December 8-12, 1994

Marriott's Rancho Las Palmas Resort, Rancho Mirage (Palm Springs), California

Conference Chairperson: Donald S. Coffey

Program Committee: Evelyn R. Barrack, Leland W. K. Chung, Gary J. Miller, Howard I. Scher, Donald J. Tindall

SCIENTIFIC PROGRAM

Conference Speakers and Session Chairpersons: Evelyn R. Barrack, Robert E. Bookstein, Maarten C. Bosland, Otis W. Brawley, William J. Catalona, Leland W. K. Chung, Donald S. Coffey, Jonathan Epstein, Michael Freeman, Norman Greenberg, Stephen Harris, Warren D. W. Heston, Donald Ingber, John T. Isaacs, William B. Isaacs, Robert B. Jenkins, Aaron E. Katz, Chung Lee, Hans Lilja, Christopher J. Logothetis, Jill A. Macoska, Timothy McDonnell, Wallace McKeethan, Charles Meyers, Gary J. Miller, William G. Nelson, Arthur B. Pardee, Drew M. Pardoll, Ira Pastan, Donna M. Peehl, Kenneth J. Pienta, Isaac Powell, Gail Prins, David R. Rowley, Avery A. Sandberg, Peter T. Scardino, Jack A. Schalken, Howard I. Scher, William U. Shipley, Jonathan W. Simons, Michael B. Sporn, Thomas Stamey, Kenneth D. Tew, Timothy C. Thompson, Donald J. Tindall, Jan Trapman, Alice S. Whittemore, George Wilding, George L. Wright, Jr.

Information and Application Forms:

American Association for Cancer Research
Public Ledger Building, Suite 816
150 South Independence Mall West
Philadelphia, PA 19106-3483
215-440-9300 215-440-9313 (FAX)





Research Scientists

Research at Novo Nordisk A/S, Biopharmaceuticals Division in Copenhagen is directed towards the discovery of new recombinant proteins used as drugs for the treatment of serious human diseases. In particular research is focused on hemophilia treatment, human growth hormone, vessel wall diseases and inflammatory conditions. The institute has a strong publication record, which the appointee will be expected to maintain. Attendance and presentation at scientific meetings is encouraged, as well as collaborative research with academic groups.

Applications are invited for two research scientist positions in the Coagulation Research, and Fibrinolysis Research departments. We seek a cell biologist/biochemist and a protein chemist/biochemist (PhD or equivalent). The applicants should be willing to join the teams studying the coagulant function of the endothelium and the interaction between proteases and inhibitors. Preference will be given to candidates with experience in coagulation and cell biology or in advanced protein chemistry, purification and characterization.

We offer an excellent compensation and benefit package, and significant opportunities for career development.

Information enquiries can be directed to Dr. Mirella Ezban or Dr. Lars C. Petersen, phone +45 4444 8888 ext. 9485 or 9933.

For immediate consideration please forward your CV marked "Position no. 5122 (Cell Biologist)" or marked "Position no. 1068 (Protein Chemist)" to the attention of Human Resources Health Care Group.

Novo Nordisk is one of the world's leading biotechnology companies. It is a major force in insulin manufacture and diabetes treatment and is the world's largest producer of industrial enzymes. The company also manufactures and markets a variety of other pharmaceuticals and bioindustrial products. Headquartered in Denmark, Novo Nordisk employs more than 11,500 people in 47 countries.

Novo Nordisk



Novo Nordisk A/S
Novo Allé
DK-2880 Bagsværd
Denmark



THE UNIVERSITY OF LIVERPOOL SCHOOL OF TROPICAL MEDICINE SELWYN LLOYD CHAIR OF MEDICAL ENTOMOLOGY

Applications are invited for the Selwyn Lloyd Chair of Medical Entomology, which will become vacant following the retirement of Professor W.W. Macdonald. This is a full-time Chair in the Liverpool School of Tropical Medicine, presenting an exciting opportunity to develop research in an international centre of excellence.

Applications are invited from candidates who have experience in either field-oriented or laboratory-based research in medical entomology. Candidates with experience in the biology of mosquitoes would be particularly welcome.

Salary negotiable.

Informal confidential enquiries may be made to Professor D.H. Molyneux, Director, School of Tropical Medicine or Professor M.W. Service, on 051-708 9393, fax 051- 707 0155.

Quote ref: A/867/S.

Closing date: 31 August, 1994.

Applications, together with the names of three referees, should be received by the Director of Personnel (A), University of Liverpool, PO Box 147, Liverpool L69 3BX, from whom further particulars may be obtained.

WORKING TOWARDS EQUAL OPPORTUNITIES

Wir sind eine von der Bundesrepublik Deutschland und dem Land Nordrhein-Westfalen getragene Großforschungseinrichtung mit etwa 4500 Mitarbeitern. Die fünf Forschungsschwerpunkte Struktur der Materie/Materialforschung, Informationstechnik, Energietechnik, Umweltforschung und Lebenswissenschaften fügen sich in ein breites Spektrum der Grundlagenforschung ein, das von Medizin über Biotechnologie bis zu Festkörperforschung und Mittelenergiephysik reicht.

Wir suchen für unser INSTITUT FÜR WERKSTOFFE DER ENERGIE TECHNIK (IWE), das aus zwei Teilinstituten besteht, zwei

Direktoren/Direktorinnen (C 4)

für die Leitung der beiden Teilinstitute. Die Schwerpunkte sollen auf den Gebieten der Werkstoffsynthese und Herstellungsverfahren sowie Werkstoffeigenschaften und Struktur liegen.

Das Werkstoffforschungsprogramm des Instituts ist in das Energieforschungsprogramm der KFA eingebettet und auf Problemlösungen für die Energietechnik ausgerichtet.

Im Mittelpunkt stehen metallische und keramische Materialien sowie Verbundwerkstoffe, und zwar für Brennstoffzellen und für plasmabelastete Komponenten von Fusionsanlagen. Zusammen mit der Industrie werden werkstofftechnische Untersuchungen zu fortschrittlichen thermischen Kraftwerken durchgeführt. Die derzeit bearbeiteten Forschungsgebiete betreffen einerseits Pulver- und Beschichtungstechnologien unter Einbeziehung neuer Werkstoffe und deren prozeßtechnischer Verarbeitung zu Bauteilen, andererseits Hochtemperatureigenschaften, Werkstoffmechanik, Korrosionsverhalten sowie die Untersuchung der Mikrostruktur und die Werkstoffmodellierung.

Die Ausschreibung richtet sich an Wissenschaftler und Wissenschaftlerinnen mit entsprechender Qualifikation und Erfahrung. Verlangt werden die Fähigkeiten zur kollegialen Leitung eines großen, interdisziplinär arbeitenden Instituts und die Bereitschaft zur Kooperation mit anderen Instituten der KFA, Forschungseinrichtungen und Universitäten sowie der Industrie.

Zusammen mit den Universitäten des Landes Nordrhein-Westfalen ist ein gemeinsames Berufungsverfahren vorgesehen. Habilitation oder gleichwertige wissenschaftliche Leistungen sowie die Bereitschaft zur wissenschaftlichen Lehre an einer der Universitäten des Landes werden vorausgesetzt. Die Vergütung erfolgt nach Besoldungsgruppe C 4.

Die KFA strebt eine Erhöhung des Frauenanteils an und fordert deshalb qualifizierte Frauen nachdrücklich zur Bewerbung auf.

Bewerbungen mit Lebenslauf, Veröffentlichungsliste und kurzer Darstellung des wissenschaftlichen Werdegangs erbittet bis zum 19. August 1994 der

**Vorstand
des Forschungszentrums Jülich GmbH
52425 Jülich, Germany**



**The University of Sydney
AUSTRALIA**

Faculty of Science

LECTURER/SENIOR LECTURER

Department of Biochemistry

Reference No: A20/01

The Department of Biochemistry is seeking to make a tenured/tenurable appointment in the area of protein crystallography who will head an independent research group in the area. The successful applicant will have teaching experience at a tertiary level, have a proven research record and have experience with most of experimental and computational protein crystallography.

The department has space for protein crystallisation experiments at low and ambient temperatures and has the following equipment in place: an R-Axis IIc image plate detector system, rotating anode generators, precession and oscillation cameras and silicon graphic workstations. Access is available to the University Visualisation Centre and to the Fujitsu VP2200 supercomputer at the Australian National University. Excellent general facilities are available for biochemical research, including access to SUMAC, a facility which provides protein and nucleic acid sequencing and synthesis.

The appointee will be expected to commence duty as soon as possible after 1 January 1995. Applicants interested in appointment at Senior Lecturer level only should indicate this on their application. Membership of a superannuation scheme is a condition of employment for new appointees. For further information contact Professor Philip Kuchel (tel. 61-2-692 3709; fax: 61-2-692 4726; e-mail: pwk@biochem.su.au.oz) or Dr Mitchell Guss (tel. 61-2-692 4302; fax: 61-2-692 4726; e-mail: guss_m@summer.chem.su.au.oz).

Salary: Level B: \$A41,574 - \$A49,370 p.a.

Level C: \$A50,928 - \$A58,724 p.a.

(Level of appointment commensurate with experience and qualifications)

Method of application: Three copies of the application, quoting Reference No, including curriculum vitae, list of publications and the names, addresses and FAX numbers of at least three and not more than five referees to The Personnel Officer, (Group A), Carslaw Building (F07), The University of Sydney NSW 2006, Australia by 14 July 1994.

Equal employment opportunity and no smoking in the workplace are University policies. The University reserves the right not to proceed with any appointment for financial or other reasons.

32571



**KAROLINSKA INSTITUTE
CENTER FOR
STRUCTURAL
BIOCHEMISTRY
(CSB)
NOVUM**



Protein Crystallographer/Lecturer

A lectureship in the x-ray diffraction laboratory of the Karolinska Institute, Center for Structural Biochemistry is available. The Center for Structural Biochemistry (CSB) is situated at the South Campus of the Karolinska Institute, encompassing the Novum Research Center and Huddinge University Hospital. CSB has a staff of some 40 persons, with units for Electron Microscopy, Molecular Modeling, NMR-spectroscopy, Protein Engineering and X-ray Crystallography.

The candidate should be an experienced protein crystallographer with several years post doctoral training and a pronounced interest in the determination of the structures of biological macromolecules and their relations to function. A solid background in crystallographic computing, model building, protein biochemistry and crystallization of macromolecules is expected. The candidate should be willing to join current research projects going on in the x-ray diffraction Unit, but is also invited to establish own research projects.

The position is available for 6 years eventually with an initial limitation to 1 year. The above appointment is tenable as soon as possible or such date as may be arranged.

Applications should be sent to Professor Rudolf Ladenstein, Center for Structural Biochemistry, Karolinska Institute, NOVUM, S-141 57 HUDDINGE, SWEDEN, together with CV, a short written report on scientific and pedagogical qualifications and relevant publications. Expiration date: Not later than July 12, 1994.

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LIMNO-GEOPHYSICS AND GEOCHEMISTRY

The UNIVERSITY OF MINNESOTA has established as part of its institution-wide lake studies initiative the LARGE LAKES OBSERVATORY (LLO) on its Duluth Campus located on the shore of Lake Superior. The mission of the LLO is to use an integrated systems approach to study large lakes of the world. Six new tenure-track positions will be filled in the next five years in the physical marine/lake sciences. The LLO invites applications for two positions to be filled in the 1994-1995 academic year at the Assistant or Associate Professor level. A significant record of research, publication, and external funding will be required for appointment at the Associate Professor level.

The first opening is for Limno-geophysics with emphasis on application or marine seismic reflection or other acoustic methods of mapping large lake basins. The second opening is for Limno-geochemistry either with emphasis on the dating of sediments using short-lived radionuclides or in the investigation of the water column and sediments using stable isotopes.

For both positions, demonstrated expertise in the acquisition and analysis of data is required. Candidates are expected to establish field oriented research programs with strong analytical capabilities. Candidates should hold Ph.D.'s in oceanography, the geosciences or a related field.

The appointments will be split between the LLO and the Geology Department at the Duluth Campus, where the tenure-line will reside. A commitment to teaching at the graduate and undergraduate levels is required. The teaching load will be commensurate with the departmental portion of the appointment.

The mission of LLO is global, and candidates will be encouraged to apply their expertise not only to the North American Great Lakes but to large lakes world-wide. Research is currently in progress on several of the large lakes of the East African Rift Valley, Russia, the U.S., and Canada.

Send a statement of research and teaching interests, curriculum vitae, and names, addresses and phone numbers of at least three references by August 1, 1994, to Prof. Thomas C. Johnson, Director, Large Lakes Observatory, Department of Geology, University of Minnesota, Duluth, MN 55812. Prospective candidates with questions about the position may contact Tom Johnson (in France until July 1) by telephone at (33) 91 26 96 49, fax at (33) 91 26 66 38 or by e-mail at 100332.2171@CompuServe.COM.

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.

Postdoctoral Positions in Immunology and Molecular Biology

Postdoctoral positions are available for (a) an immunologist to study cellular immune responses to novel recombinant anti-cancer vaccines, both in experimental systems and in clinical trials, and (b) a molecular biologist to develop novel recombinant immunoglobulin forms and novel recombinant vaccines. Two to three years relevant previous postdoctoral experience desired. Salary range is from \$28,000 to \$40,000 commensurate with experience desired.

To apply, please send curriculum vitae and reference letters to:

Dr. Jeffrey Schlom,
NIH/NCI, Laboratory of
Tumor Immunology and
Biology, Bldg. 10, Rm 8B07,
9000 Rockville Pike,
Bethesda, MD, 20892.

Telephone: 301-496-4343
FAX: 301-496-2756.

NIH/NCI is an Equal
Opportunity Employer

DIRECTOR: MOLECULAR DIAGNOSTICS

The Clinical Laboratories of The Blood Center of Southeastern Wisconsin, providing a range of specialized laboratory services, seeks to recruit a qualified scientist to develop and direct a clinical laboratory specializing in molecular diagnostics. Ph.D. or M.D. with a strong background in molecular biology, genetics, or oncology required. Board certification or eligibility and previous experience in establishing a clinical diagnostic laboratory strongly preferred. Ability to communicate effectively is essential.

Qualified applicants should send a curriculum vitae and the names and addresses of three references to Debra Endean, Ph.D., Vice President Clinical Laboratories, The Blood Center of Southeastern Wisconsin, 1701 West Wisconsin Avenue, Milwaukee, WI 53233.

The Blood Center of Southeastern Wisconsin offers an excellent wage and benefit package.

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 **The Blood Center**
of Southeastern Wisconsin

Procter & Gamble

European Opportunities for PhD Life Scientists and Environmental Scientists

THE OPENINGS

Procter & Gamble has several entry-level openings for life scientists and environmental scientists, preferably with PhD or postdoctoral training in the following disciplines:

Biochemistry
Immunology
Virology
Microbiology

Biology
Agricultural Engineering
Environmental Chemistry
Physiology

Toxicology
Pharmacology
Ecotoxicology
Soil Sciences

THE POSITIONS

The openings for these disciplines are in toxicology, environmental sciences, and regulatory affairs. Job responsibilities include the development and coordination of human and/or environmental safety programs for consumer products, and managing external issues that relate to the safety of consumer products. These positions are at Procter & Gamble's Research and Development facilities in Brussels, Belgium and Schwalbach (near Frankfurt/Main), Germany.

THE CANDIDATES

Successful candidates will have excellent academic records, good communication skills, a high level of initiative and commitment, and must have a good command of English. In addition, fluency in at least one other European language is desirable. Candidates should be eligible to work in the European Economic Community.

THE COMPANY

Procter & Gamble is a research and development-based international corporation with more than \$30 billion/year in worldwide sales in household consumer products and an annual R&D budget of \$1 billion. In Europe, the Middle East, and North Africa, Procter & Gamble is engaged in the research and development, manufacture, and sale of a wide range of household consumer products including detergents, fabric care products, toilet soaps, beauty and health care products, disposable personal hygiene products, household care products, and beverages.

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APPLICATIONS: To apply, please send your
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Applicants in Europe:
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Applicants elsewhere:
Procter & Gamble
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Dept. WDP-2
P.O. Box 398707
Cincinnati, Ohio 45239-8707

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CARDIOVASCULAR PHARMACOLOGY

Postdoctoral Opportunity

SmithKline Beecham Pharmaceuticals, a world leader in pharmaceutical research, has a postdoctoral opening available in its Cardiovascular Pharmacology Department.

The successful candidate will work with a team of scientists who are using histochemical and molecular biology techniques to explore mechanisms of disease process and assess the effectiveness of new drug therapy. The scientist will perform mRNA analysis by northern blot and PCR and *in situ* hybridization of RNA/DNA of peptide mediators in tissues of normal and disease states, as well as utilize immunocytochemical techniques to identify peptides in tissues of normal and disease states.

Qualified candidates will have a Ph.D. in Biochemistry/Molecular Biology or related fields, experience in RNA/DNA isolation and hybridization techniques and knowledge in the use of computer applications. Basic knowledge in immunocytochemistry or related histological disciplines and a biochemical background is desired. Ability to present data in internal and external scientific meetings and a proven record of publication is required.

Our state-of-the-art research facility is located in suburban Philadelphia. We offer a competitive compensation/benefits package, as well as a stimulating work environment in which to grow and excel. For confidential consideration, please send resume with salary history to: SmithKline Beecham Pharmaceuticals, #H0119, P.O. Box 401, Conshohocken, PA 19428. We are an Equal Opportunity Employer, M/F/D/V.



SmithKline Beecham
Pharmaceuticals

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Are You a Sequencing Specialist?

QIAGEN, a rapidly growing biotechnology company located on the northwest edge of Los Angeles, is seeking a Product Manager to join our marketing team. If you are interested in marketing, have a strong molecular biology background with extensive experience in automated sequencing, the ability to communicate effectively with senior researchers, and are looking for a challenging work environment, this is the position you have been waiting for.

Managing our sequencing-related products means that you will develop and implement marketing strategies, write technical literature, train the sales force, contribute ideas for new products, present seminars, and maintain close contact with large sequencing labs. You will travel throughout the United States, and visit Germany. Prior marketing experience is not essential. An MS/PhD degree is preferred.

QIAGEN is committed to aiding employee career and personal development, and sponsors continued education. We offer competitive salaries based on experience, with a comprehensive benefit package.

If you are creative, motivated, and interested in working in a friendly, informal, team environment, mail or fax a resume, salary history, and references to Human Resources (Reference #SPM 617) for immediate consideration.

QIAGEN Inc.

9600 De Soto Ave., Chatsworth CA 91311

Tel: 800-426-8157 Fax: 818-718-2056



GENETIC MODELS OF IMMUNE AND INFLAMMATORY DISEASES

Sponsored by Serono Symposia, USA

October 20-23, 1994

**Radisson Hotel
Savannah, Georgia**

The goal of this symposium is to discuss experimental models in which immune and inflammatory reactions are altered by genetic manipulations. The major sessions will be *Autoimmunity; Infections; Cytokines, Co-stimulators, Tumor Immunity; Cytokine Deletions*.

Faculty:

Abul K. Abbas, <i>Co-Chair</i>	James P. Allison	Michael Aguet
Christophe Benoist	Anne Cooke	Richard Flavell, <i>Co-Chair</i>
Gunter J. Hammerling	Charles A. Janeway, Jr.	Stefan Karlsson
David Lo	Richard Locksley	Tak W. Mak
Jacques F. Miller	Werner Muller	Pam Ohashi
Nancy Ruddle	Nora Sarvetnick	Arlene H. Sharpe
Timothy A. Stewart	Joel D. Taurig	

Submission of abstracts for posters is encouraged. Funds have been made available to support the registration fees for eight students. For further information regarding brochures, registrations and 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.**

TOXICOLOGY RESEARCH

Two positions are available in the Toxicology Research Program at the ManTech Environmental Technology, Inc. facility in Dayton, Ohio. The positions are for a Neurotoxicologist (Position #04) and a Toxicologist/Physiologist (Position #05). Minimum requirements for both positions include Ph.D. or equivalent; proficiency in handling small laboratory animals, including surgery; demonstrated oral/written communication skills; and experience in computer data acquisition and analysis.

■ Position #04: Degree must be in a neurobiological discipline, with experience and expert knowledge in *in vivo* neurotoxicity assessment of chemical materials using quantitative anatomical, biochemical, or physiological endpoints. Preferred candidates will have understanding of behavioral quantitation techniques with experience in performing small animal neurophysiology studies.

■ Position #05: Degree must be in toxicology, physiology, or related discipline, with experience in *in vivo* experimental designs using small laboratory animals and in the measurement of quantitative biochemical endpoints. Preferred candidates will have understanding of systemic toxicology/physiology for the evaluation of biological activity and biochemical mechanisms of toxicity; experience in toxicological effects of nitrate compounds and their metabolites; and proficiency in the use of radiolabeled materials and in dosing laboratory animals.

APPLY FOR EITHER POSITION BY 7/6/94

ManTech Environmental offers competitive salaries and a complete benefits package. *Applicants must be a U.S. citizen or have resident alien status.* Qualified applicants please submit current resume, with cover letter including salary history, to: **Ms. Lois Doncaster, Human Resources/reference position (04 or 05), ManTech Environmental Technology, Inc., A ManTech International Company, P.O. Box 31009, Dayton, OH 45437-0009.** *ManTech Environmental Technology, Inc. is an Equal Opportunity Employer.*

Postdoctoral Opportunities In The Biomedical Sciences

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

Biochemistry and Molecular Biology

Sonia B. Jakowlew, PhD

The regulation of lung cancer by polypeptide growth factors is being investigated using a variety of molecular biologic approaches. Present studies focus on the role of negative growth factors, such as TGF- β , in the development of lung cancer. Future studies will seek to isolate the specific genes being controlled. Applicants should have at least two years of experience in molecular biology. Laboratory of Experimental Biochemistry (OE-48), NCI, Key West Center, 9610 Medical Center Drive, Room C300, Rockville, MD 20850.

Developmental Biology

Lothar Hennighausen, PhD

The role of developmental genes in mammary cell differentiation during puberty, pregnancy and mammary tumorigenesis is being investigated using dominant gain and loss of function experiments in transgenic mice. Current studies are directed towards a temporally controlled deletion of genes specifically in mammary tissue of transgenic mice using a tetracycline inducible CRE/lox system. Applicants should be familiar with embryonic stem cells and basic molecular biology. Laboratory of Biochemistry and Metabolism (OE-48), NIDDK, Building 10, Room 9N113.

Immunology and Cancer Vaccines

Jay A. Berzofsky, MD, PhD

The molecular basis for peptide binding to MHC molecules and recognition of the complex by T-cells is being investigated to facilitate the design of synthetic peptide vaccines for HIV and cancer. Current projects involve induction of cytotoxic T-cell responses to mutant oncogene or tumor suppressor gene products. Applicants must have less than five years postdoctoral experience. Metabolism Branch (OE-48), NCI, Building 10, Room 6B12.

Immunopathogenesis of Tuberculosis

Michael Brennan, PhD

Virulence factors associated with mycobacterial pathogenesis are currently being identified and characterized using immunological, molecular, and microbiological techniques. Applicants with an interest in cellular immunology and vaccine delivery systems are preferred. Laboratory of Mycobacteria (OE-48), FDA/CBER (HFM 431), 1401 Rockville Pike, Rockville, MD 20852-1448.

Molecular and Cell Biology of Muscle

Robert Horowitz, PhD

Large muscle proteins are being studied in order to determine their role in myofibril mechanics and assembly. Positions are available to participate in projects focusing on the molecular biology and cellular organization of the myofibrillar proteins titin and nebulin. A background in molecular or cell biology is

preferred. Applicants should have less than five years of postdoctoral experience. Laboratory of Physical Biology (OE-48), NIAMS, Building 6, Room 113.

Viral Vaccines

Ronald Lundquist, PhD

Viral research activities on the molecular biology and immunology of measles virus, poliovirus, and rotavirus are coordinated with current viral vaccine issues. Applicants must have demonstrated research experience in molecular virology or immunology. Experience in epidemiology and/or vaccine assessment is desirable. Laboratory of Pediatric Diseases (OE-48), FDA/CBER (HFM 460), 1401 Rockville Pike, Rockville, MD 20852-1448.

Signal Transduction

Juan Rivera, PhD

The signaling pathway leading to mast cell effector function is being studied to identify the molecular components involved. Current emphasis is on characterizing these molecules using molecular genetic and biochemical techniques and identifying their role in signal transduction. Applicants must have less than five years of postdoctoral experience. Arthritis and Rheumatism Branch (OE-48), NIAMS, Building 10, Room 9N228.

Additional Postdoctoral Fellowship Opportunities

For an on-line listing of additional postdoctoral openings, you may access the NIH EDNET Bulletin Board POSTDOC conference via Internet (wylbur.cu.nih.gov) or via modem (1,301 4022221 or 1,800 3582221) with modem parameters set at "7,Even,1". When connected to NIH, type in "vt100" for terminal emulation, "F5E" for initials, and "AJL1" for account number.

The Postdoctoral Research Fellowship Opportunities catalog, which describes additional opportunities at the NIH, may be requested from the address below. An electronic version of the catalog may be accessed via the network-based (Internet) Gopher Information System. To access the NIH Gopher server, Gopher client software (available via anonymous ftp "boombox.micro.umn.edu") must be running on your computer and configured to point to "gopher.nih.gov" and port "70". Select *Grants and Research Information* to reveal the *NIH Office of Education* directory. Those interested in receiving information on other postdoctoral opportunities, clinical training opportunities, or accessing Gopher may contact the Office of Education, Building 10, Room 1C129. Phone: 301-496-2427.

To Apply

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



National Institutes Of Health

9000 Rockville Pike, Bethesda, MD 20892

Equal Opportunity Employer

POSITIONS OPEN

PRESIDENT, MICHIGAN CANCER FOUNDATION/DIRECTOR, COMPREHENSIVE CANCER CENTER

The Michigan Cancer Foundation invites applications for the position of President and Director, Meyer L. Prentiss Comprehensive Cancer Center of Metropolitan Detroit (MLPCCCMD), a position created as a result of the merger of the MLPCCCMD into the Michigan Cancer Foundation. This Comprehensive Cancer Center has enjoyed 18 years of recognition and support from the National Cancer Institute. Programs of the Comprehensive Cancer Center are enhanced by affiliations with Wayne State University and the Detroit Medical Center. Over \$26,000,000 in competitive funding presently supports a variety of interdisciplinary research projects within the Center. Sponsoring institutions dedicate nearly 200,000 net square feet to clinical and basic research with 10,000 cancer admissions and over 100,000 cancer outpatient visits annually. The successful applicant will hold the academic rank of Assistant Dean for Cancer Programs in the Wayne State University School of Medicine.

Candidates should hold doctorate degree and possess qualifications as a scientist and administrator with clear leadership experience. He/she must be interested in, and capable of, functioning as a key spokesperson for the Comprehensive Cancer Center to the community and administering community outreach programs.

Interested parties should submit curriculum vitae and three references prior to September 1, 1994, to: Sam C. Brooks, Ph.D., Chairman, Search Committee, Department of Biochemistry, Wayne State University School of Medicine, 540 East Canfield, Detroit, MI 48201.

An Affirmative Action/Equal Opportunity Employer.

DIRECTOR, PROTEIN BIOCHEMISTRY

ICOS Corporation is seeking a Director of Protein Biochemistry. This position requires a Ph.D. in Biochemistry or equivalent as well as a minimum of six to eight years of work experience in the area of protein purification and characterization. Familiarity with scale-up and cGMP's desirable. The successful candidate will have a demonstrated ability to prioritize and must possess strong interpersonal skills. Please send résumé to:

Ref: WIL0394
Human Resources
ICOS Corporation
22021 20th Avenue SE
Bothell, WA 98021

BIOLOGY INSTRUCTORS: Several 1-semester and academic-year positions are anticipated for 1994-95 to teach MYCOLOGY and laboratories in HUMAN ANATOMY, HUMAN PHYSIOLOGY, ANIMAL PHYSIOLOGY, MICROBIOLOGY and GENERAL BIOLOGY. Positions may be renewed for a second year. All positions require a Ph.D. and college teaching experience. Salary is \$28,210 per year. Send curriculum vitae, transcripts, and names and telephone numbers of three references postmarked by July 22, 1994, to: Dr. Martha Potvin, Department of Biology, West Chester University, West Chester, PA 19383. Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL OPPORTUNITY. A National Research Council Associateship for a recent Ph.D. is available at the Walter Reed Army Institute of Research for the study of cellular mechanisms of human neutrophil inflammatory responses. Current research interests focus on the role of hemoglobin, oxygen radicals and nitric oxide in neutrophil-endothelial cell interactions. Prior experience in neutrophil biology is desirable. For further information contact: Dr. Jayasree Nath, Department of Hematology, Walter Reed Army Institute of Research, Washington, DC 20307; Telephone: (202) 576-3557; FAX: (202) 576-0703.

POSTDOCTORAL POSITION, available immediately to conduct basic research on sodium channel expression in the cardiovascular system. Prior experience in molecular biology required; experience in immunocytochemistry, cell culture, and protein chemistry desired. Submit curriculum vitae, a description of research experience, and names, addresses, and telephone numbers of three references to: Sidney A. Cohen, M.D., Ph.D., 522A Johnson Pavilion, 3610 Hamilton Walk, University of Pennsylvania School of Medicine, Philadelphia, PA 19104.

POSITIONS OPEN

POSTDOCTORAL POSITION: A position is available in the field of the protein biochemistry of photosynthesis (pending final approval). This research will examine protein-protein interactions in PS II (see Frankel and Bricker (1992) *Biochemistry* 31, 11059). The position is initially for one year. A Ph.D. in Biochemistry, Plant Biology, or related field is required and the applicant must have experience with PAGE and HPLC techniques. Anticipated starting date is September 1, 1994. Interested candidates should forward curriculum vitae and 3 letters of recommendation to: Dr. Terry M. Bricker, Department of Botany, Louisiana State University, Baton Rouge, LA 70803. Louisiana State University is an Equal Opportunity Employer.

POSTDOCTORAL POSITION IN MAGNETIC RESONANCE MICROSCOPY. A postdoctoral position is open in the Center for *In Vivo* Microscopy at Duke University. Candidates should have a Ph.D. in physics or engineering, a thorough understanding of magnetic resonance imaging physics, and skills in pulse sequence development and image reconstruction. Research will focus on developing novel methods for *in vivo* and *in vitro* magnetic resonance microscopy. A two-year appointment as a Research Associate in the Department of Radiology is offered with a starting salary of \$27,500. Interested parties should send their résumés to: G. Allan Johnson, Ph.D., Department of Radiology, Box 3302, Duke University Medical Center, Durham, NC 27710. Duke University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION IN MAGNETIC RESONANCE MICROSCOPY. A postdoctoral position is open in the Center for *In Vivo* Microscopy at Duke University. Candidates should have a Ph.D. in toxicology, pharmacology, physiology, or a related life science. Knowledge of small-animal models of disease is required with a firm grasp of anatomy and microanatomy in the rodent. The candidate will focus on correlating conventional structural biology with *in vivo* and *in vitro* studies using magnetic resonance microscopy. Knowledge of magnetic resonance is helpful but not essential. Facility with computers is essential. A two-year appointment as a Research Associate in the Department of Radiology is offered with a starting salary of \$27,500. Interested parties should send their résumés to: G. Allan Johnson, Ph.D., Department of Radiology, Box 3302, Duke University Medical Center, Durham, NC 27710. Duke University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION NATIONAL JEWISH CENTER FOR IMMUNOLOGY AND RESPIRATORY MEDICINE (NJCIIRM)

One position is available immediately to study TRANSCRIPTIONAL REGULATION OF B CELL DIFFERENTIATION. Candidates should have a Ph.D., and strong research experience in molecular biology and/or immunology is essential. The position is funded by a NIH training grant and applicants must either be a citizen or permanent resident of the United States. Send curriculum vitae, statement of research interests, and the names of three references to: Dr. James Hagman, Ph.D., Department of Medicine, National Jewish Center for Immunology and Respiratory Medicine, Room K516b, 1400 Jackson Street, Denver, CO 80206. (FAX: 303-398-1396). NJCIIRM is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available to investigate mechanisms underlying a kidney tumor suppressor gene in carcinogenic and fetal development in an animal model of hereditary cancer. Strong background in molecular and/or developmental biology desirable. Send curriculum vitae and names of 3 references to: Dr. Raymond Yeung, c/o Human Resources Department, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. Equal Opportunity Employer.

POSTDOCTORAL POSITION. Insect biochemistry/molecular biology. Characterize a novel P450 enzyme involved in sex pheromone and hydrocarbon biosynthesis and isolate cDNA that codes for this enzyme. Ph.D. with molecular biology background required; expertise in insect biochemistry desirable. Send résumé and three reference letters by August 1, 1994, to: Gary Blomquist, Biochemistry (330), University of Nevada, Reno, NV 89557-0014. Equal Opportunity Employer/Affirmative Action.

POSITIONS OPEN

POSTDOCTORAL POSITION: Available immediately in the Harvard-MIT Division of Health Sciences and Technology to work in the Biology of Drug Delivery. Candidate should have a Ph.D. in polymer science/chemical engineering, experience in polymer-based controlled release systems, pharmacokinetics drug metabolism studies in small animal models and animal physiology. Please send curriculum vitae and names of three references to: Dr. Elazer Edelman, Massachusetts Institute of Technology, Room 20A-127, Cambridge, MA 02139. MIT is an Equal Opportunity Employer.

POSTDOCTORAL POSITION: Role of sunlight in human skin cancer. Projects include genetics of UV-induced apoptosis, tumor suppressor genes in skin, and UV photoproduct repair and mutagenesis. Available summer 1994. Candidates with experience in molecular biology, dermatology, or human genetics should send curriculum vitae, statement of research interests, and names of three references to: Douglas E. Brash, Ph.D., Department of Therapeutic Radiology, Yale School of Medicine, 333 Cedar Street, HRT 309, New Haven, CT 06510. (FAX: 203-785-6309). An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION, ENDOCRINE SECTION, YALE UNIVERSITY. The Section consists of 18 full-time faculty focused in carbohydrate metabolism, parathyroid hormone-related peptide (PTHrP) biology and neuroendocrinology/neuroscience. Research in the Section is benchwork-intensive, relying heavily on techniques in molecular and cellular biology, protein chemistry, and NMR. This is a two-year position for a Ph.D. with appropriate interests and background, with the possibility of additional training dependent upon external funding. The position is available July 1994 or January 1995. U.S. citizenship or permanent residency is required. Send curriculum vitae, statement of research interests and the names of three references to: Robert S. Sherwin, M.D., Endocrine Section, Department of Medicine, Yale University, Box 208020, Fitkin 1, New Haven, CT 06520-8020. FAX: 203-785-6015. Equal Opportunity Employer.

POSTDOCTORAL RESEARCH POSITION

A postdoctoral research position for an M.D. or Ph.D. will be available in the summer or fall of 1994 in the Department of Neurology, Laboratory of Cerebral Ischemia, Wayne State University Medical School, to study the molecular and cellular processes that result in neurodegeneration. Research focuses on the neuroprotective mechanisms of peptide growth factors, the effects of ischemic induced nitric oxide toxicity, and the role of signal transduction in the ischemic cascade. Experimental approaches include cultures with primary hippocampal neurons, gene induction, trophic factor expression, pharmacological manipulation of neuronal survival, and global and focal animal stroke models. Salary will be consistent with NIH guidelines. Please send curriculum vitae, a summary of research interests, and three references to: Kenneth Maiese, M.D., Department of Neurology, 6E-19 University Health Center, Wayne State University School of Medicine, 4201 St. Antoine, Detroit, MI 48201. Wayne State Medical School is an Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF ABERDEEN

The University of Aberdeen is established to provide Higher Education and to carry out related research.

RESEARCH ASSISTANT/FELLOW £13,941-£18,486 per annum

Required for the Department of Biomedical Sciences to work on a project involving a study of the interacting effects of glycosaminoglycans, proteoglycans and electric fields on nerve growth and nerve guidance. Experience in tissue culture, advanced microscopical or histological techniques would be an advantage. The post is available immediately and is tenable for 3 years. Informal enquiries to: Dr. Colin D. McCaig. Telephone: (0224) 273016; FAX: (0224) 273019.

Application forms and further particulars are available from: Personnel Services, University of Aberdeen, Regent Walk, Aberdeen AB9 1FX; Telephone: (0224) 272727, quoting reference number ZBS 794R. A 24-hour answering service is in operation. Closing date: 8 July 1994.

An Equal Opportunities Employer.

Pew

Latin American Fellows Program

A Program of The Pew Charitable Trusts

The Pew Charitable Trusts, one of the United States' largest private foundations, is sponsoring a program providing support for young scientists from Latin America for post-doctoral training in the biomedical sciences in the United States.

The Trusts will select 10 Fellows for awards in 1995. An award of \$40,000, administered by the sponsoring U.S. institution, will be provided for use by the Fellow for living expenses during a two-year training period. Following the two-year training period, upon notification of the Fellow's return to his or her country, an additional \$35,000 award will be provided for the sole purpose of purchasing equipment and supplies to establish a laboratory at their home institution.

Applicants must have held their Ph.D. and/or M.D. degrees for no more than 5 years as of July 1, 1995. Applicants must not have had previous post-doctoral training outside of their home country. Fellows will be selected on the basis of their promise as outstanding investigators, as well as the scientific merit of their research proposal, their record of training, and how well their interests coincide with their host laboratories in the United States. The Program accepts candidates from Mexico, Central and South America.

To obtain further information and application materials, contact the Nominating Committee Chairman listed for your country. The application deadline is October 1, 1994.

ARGENTINA

Dr. Israel Algranati
Instituto de Investigaciones Bioquímicas
Fundación Campomar
Av. Patricias Argentinas 435
1405 Buenos Aires, Argentina
TEL: 1-88-4018 FAX: 1-865-2246

BRASIL

Dr. Carlos Eduardo Rocha-Miranda
Vice President
Academia Brasileira de Ciencias
Rua Anfilóbio de Carvalho, 29, 3° Andar
20001-970 Rio de Janeiro, RJ - Brasil
TEL: 220-4794 FAX: 240-4695

CHILE

Dr. Mario Luxoro
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Division de Estudios de Posgrado
e Investigación
Facultad de Medicina UNAM
Unidad de Posgrado 1er Piso
Ciudad Universitaria
04510 Mexico, D.F.
TEL: 622-07-25 FAX: 550-88-59

ALL OTHER COUNTRIES

Ms. Silvia Montano
Coordinator
The Pew Latin American Fellows Program
1388 Sutter Street, Suite 805
San Francisco, California 94109 U.S.A.
TEL: 415-476-5116 FAX: 415-476-4113

MOLECULAR/CELLULAR PHARMACOLOGY

The Department of Pharmacology, University of Kentucky College of Medicine, at Lexington, is further expanding its programs in Molecular and Cellular Pharmacology. Excellent facilities and new resources are available to support these programs. Several **tenure-track positions** are available immediately at the **Assistant/Associate Professor** levels. Candidates whose research involves modern molecular approaches to structure/function analysis of ion channels and receptors, the regulation of steroid and/or growth factor genes, calcium homeostasis or second messenger systems particularly in relation to brain aging and Alzheimer's Disease, cell toxicity, carcinogenesis, cardiovascular disease, drug abuse, pain or other major health problems and/or who are utilizing gene therapy approaches, are especially encouraged to apply. The successful candidate should have demonstrated clear evidence of the ability to develop a state-of-the-art research program that is competitive for extramural support. Participation in departmental training of medical and graduate students in Pharmacology also is an important aspect of these positions. A Ph.D. or M.D. degree, and postdoctoral experience are required. Interested candidates should send curriculum vitae and the names, addresses and phone numbers of three references to:

Search Committee
Department of Pharmacology
University of Kentucky
College of Medicine
MS-305 Chandler Medical Center
Lexington, KY 40536-0084

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



Government of Canada Gouvernement du Canada

Canada International Fellowships and NATO Science Fellowships 1995-1996

In 1995, the Natural Sciences and Engineering Research Council of Canada (NSERC) will offer 70 Canada International Fellowships to recent Ph.D. graduates from abroad. On behalf of the North Atlantic Treaty Organization (NATO), NSERC will also offer approximately 9 NATO Science Fellowships to postdoctoral fellows from Central and Eastern European countries. These fellowships are tenable in Canadian universities.

Eligibility: Applicants must have obtained a doctoral degree from a recognized foreign university within the last four years (or expect to have such a degree by the time the award is taken up). Candidates must not be Canadian citizens or permanent residents of Canada.

Fields of research: Natural Sciences or Engineering.

Duration of award: One year. Renewals for a second year are possible.

Stipend: \$29,000 (Canadian) per annum plus a travel allowance.

Application procedure: Applications must be submitted directly to the university department in which it is proposed to hold the award, not to NSERC. Candidates must not apply to more than one university.

Date of submission: November 15, 1994, for receipt of applications by the proposed host university.

For further information, contact the:

International Fellowships Office
Natural Sciences and Engineering Research
Council of Canada
Ottawa, Ontario, Canada K1A 1H5
Telephone: (613) 992-9169

Canada

POSITIONS OPEN

POSTDOCTORAL POSITION

A position is available to study the interaction of platelets and monocytes in the inflammatory response with focus on cytokines and complement. Background in molecular biology, immunology, and cell culture desired. Position results in dual appointment at Tufts University School of Medicine/New England Medical Center and Harvard University School of Medicine/Massachusetts General Hospital. Send curriculum vitae, a summary of research interests and experience, and three names of reference to: **Burton D. Clark, Ph.D., Department of Medicine, New England Medical Center, NEMC 68, 750 Washington Street, Boston, MA 02111. FAX: 617-350-3216.**

POSTDOCTORAL POSITIONS

The Laboratory for Biomaterials Science at Rutgers University has openings for postdoctoral associates with expertise in organic synthesis, polymer characterization and processing, surface science, and cellular biology. We offer excellent salaries and benefits, and exciting opportunities to perform interdisciplinary research. Candidates with an outstanding record of academic achievements are encouraged to send a detailed résumé and three confidential letters of reference to: **Professor J. Kohn, Department of Chemistry, Rutgers University, Piscataway, NJ 08855-0939. E-mail: KOHN@RUTCHM.RUTGERS.EDU. Rutgers University is an Equal Opportunity Employer.**

POSTDOCTORAL POSITION in molecular neuroendocrinology to study proteases and protease inhibitors involved in prohormone processing, for production of peptide hormone and neurotransmitters. Experience in molecular biology and/or gene expression of recombinant enzymes/proteins is needed. Send curriculum vitae with 3 references to: **Dr. Vivian Hook, Department of Medicine (911H), University of California, San Diego, 3350 La Jolla Village Drive, San Diego, CA 92161.**

POSTDOCTORAL FELLOWSHIP POSITIONS IN RESEARCH IN CYSTIC FIBROSIS AND PEDIATRIC PULMONOLOGY

Postdoctoral fellowships for M.D., Ph.D., or M.D./Ph.D. graduates in the areas noted below in a large, multidisciplinary, interactive group of investigators. Principal investigators include: **Pamela B. Davis, M.D., Ph.D.** Receptor-mediated gene transfer/gene therapy of CF; role of the R domain in CFTR; airway epithelial cell/neutrophil interactions. **Stephen E. Alpert, M.D.** Altered eicosanoid metabolism by airway epithelial cells induced by ozone; Modulation of cell signal transduction by 15-HETE. **Melvin Berger, M.D., Ph.D.** Biology of the complement receptor in neutrophils: inflammatory response in CF. **Calvin Cotton, Ph.D.** Epithelial electrophysiology; ion transport; pancreatic ductal function; pH regulation. **Dorr Dearborn, Ph.D., M.D.** Function of the nucleotide binding folds in CFTR. **Mitchell Drumm, Ph.D.** Molecular biology of CFTR and activation of CFTR mutants. **Thomas Gerken, Ph.D.** Conformational studies on mucins. **Robert Hogg, Ph.D.** Molecular biology of the arabinose transporter. **Ulrich Hoyer, M.D., Ph.D.** Relation of epithelial macromolecule secretion to ion transport. **Michael Infeld, M.D.** Differentiation of airway epithelial cells. **Carolyn M. Kercsmar, M.D.** Epidemiology of childhood asthma. **Sandra Lemmon, Ph.D.** Clathrin dependent and independent vesicular transport in yeast. **Carole M. Liedtke, Ph.D.** Protein kinase C and volume regulation of airway Na/K/2Cl cotransport. **Lucydia Marino, M.D.** Molecular biology of epithelial transporters and carbonic anhydrase. **E. R. McFadden, Jr., M.D.** Pathophysiology of asthma. **Susan Redline, M.D.** Epidemiology of asthma and sleep apnea. **John Schreiber, M.D.** Molecular biology of antipeptidomimetic antibodies. **Alan Tartakoff, Ph.D.** Protein processing and the processing mutants of CFTR. **Michael Tosi, M.D.** Regulation of the inflammatory response in airways.

Research fellowships are for 2 to 3 years with NIH NRSA funds: only U.S. citizens and permanent residents are eligible. Additional clinical training available for qualified M.D.'s in pediatric pulmonology. *CWRU is an Equal Opportunity Employer and women and minorities are encouraged to apply.* Send curriculum vitae and names of three references to: **P.B. Davis, M.D., Ph.D., Rainbow Babies and Childrens Hospital, 2101 Adelbert Road, Cleveland, OH 44106.**

POSITIONS OPEN

POSTDOCTORAL POSITION available in research on cardiac chloride channels or muscarinic regulation of cardiac ion channels. Experience with patch clamp techniques desirable. Applicants should send a letter stating research interests and experience, copies of publications, curriculum vitae, names and telephone numbers of three references to: **Dr. Steve Sorota, Department of Pharmacology, Columbia University, 630 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.**

THE CENTER FOR INDOOR AIR RESEARCH POSTDOCTORAL FELLOWSHIP PROGRAM

The Center for Indoor Air Research (CIAR) is accepting applications for the CIAR Postdoctoral Fellowship Program. The purpose of this program is to further develop the scientific productivity of outstanding young men and women pursuing careers in indoor air research and to stimulate interest in entering the field of indoor air research among individuals with strong backgrounds in related or allied sciences. For details and application brochure, write or call: **Center for Indoor Air Research, Postdoctoral Fellowship Program, 1099 Winterson Road, Suite 280, Linthicum, MD 21090. Telephone: (410) 684-3777, FAX: (410) 684-3729. Deadline for receipt of application: October 31, 1994.**

POSTDOCTORAL FELLOW OR RESEARCH ASSOCIATE IN MOLECULAR VIROLOGY

A postdoctoral position is available in the broad area of influenza virus replication. A strong background in virology, biochemistry and molecular biology would be an advantage. A highly qualified person could be appointed at the Research Associate level.

Applications, including the names of three references, should be sent to: **Dr. Gillian Air, Department of Microbiology, BBRB Box 8, University of Alabama at Birmingham, Birmingham, AL 35294-2170. (FAX: 205-934-5430).**

UAB is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP available immediately at the National Cancer Institute, Frederick Cancer Research and Development Center to conduct research aimed at defining the molecular mechanisms of metal carcinogenesis and genotoxicity. Experience in molecular biology, carcinogenesis or metals toxicology is desirable. *U.S. citizenship or permanent residency required.* Send curriculum vitae to: **Dr. Michael P. Waalkes, Chief Inorganic Carcinogenesis Section, NCI-FCRDC, Building 538, Room 205E, Frederick, MD 21702-1201.**

Scripps Institution of Oceanography (SIO), University of California, San Diego (UCSD), invites applications for one research position at the **ASSISTANT** level in geosciences with emphasis in one of the following fields: (1) organic geochemistry (field, laboratory, and theoretical studies in organic matter chemistry with a focus on marine sediments); or (2) heat flow and fluid modelling (measurements regarding heat and fluid flow, thermal modelling of oceanic lithosphere and upper mantle processes, hydrogeological modelling of heat and geochemical transport in active tectonic environments).

Candidates must hold a Ph.D. and have demonstrated their ability to carry out high quality research. Appointments will be made at a level appropriate to the experience of the candidate and salary is based on UC salary scale. Assistant Research positions are usually funded by extramural support; however, in this case, salary support is available from the Institution for a period of 12 months paid over 2 to 5 years at the Assistant rank. In this career-track position, SIO will provide base salary support of 25% upon promotion to the Associate Research rank and 50% upon promotion to Full Research as a supplement to extramural support obtained by the candidate, subject to the availability of Institutional funds. The successful candidate will be expected to establish an extramurally funded research program and to involve SIO graduate students.

Applicants should send curriculum vitae, selected reprints, a list of three references, and a brief statement of research interests to: **W.H. Berger, Director, Geological Research Division, Scripps Institution of Oceanography, UCSD, La Jolla, CA 92093-0220.** The closing date for applications is July 25, 1994. *UCSD is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

RESEARCH ASSOCIATE. Opportunity in small company for Ph.D. or M.D. Experience in pharmaceutical research. **Responsibilities:** data analysis, documentation, technical reports, intellectual property. Training/experience in molecular biology, bio-statistics, genetics, cell physiology or medicine preferred. Send letter of interest and résumé to: **Box 52, Science Classified Advertising, 1333 H Street, N.W., Room 814, Washington, DC 20005. An Affirmative Action/Equal Opportunity Employer.**

ANTICIPATED—RESEARCH ASSOCIATE—The Pennington Biomedical Research Center (PBRC), a research facility of Louisiana State University, announces an available non-tenure-track position for our ongoing, externally funded project studying behavioral and neurochemical effects of stress and their potential prevention by nutritional strategies. Position to be filled by September 1, 1994. Competitive salary commensurate with experience. Qualifications: Ph.D. or equivalent degree and several years of experience in behavioral, pharmacology and/or molecular neurobiology.

ANTICIPATED—RESEARCH TECHNICIAN—Needed Immediately—An individual with a B.S., M.S. or equivalent degree and some experience with behavioral and/or neurochemical methods. Competitive salary commensurate with education and experience.

Send curriculum vitae and three letters of reference by July 1, 1994, to: **Evelyn Bennett, Assistant Director, HRM, Pennington Biomedical Research Center, REF: Neuroscience, 6400 Perkins Road, Baton Rouge, LA 70808. LSU/PBRC is an Affirmative Action/Equal Employment Opportunity Employer.**

MARINE GEOCHEMIST RESEARCHER

A research scientist, to be seconded to the International Atomic Energy Agency by the U.S. Government, is being sought to carry out studies at the IAEA Marine Environment Laboratory in Monaco on assessing processes controlling the behaviour and fate of radionuclides dumped in Arctic waters. Using a combined laboratory and field approach the candidate will conduct research on the geochemical characterization of dumpsite sediments, rates of radionuclide sorption and desorption in sediments, bioturbation and mixing rates, and radionuclide transfer rates from sediments to biota. Knowledge of radionuclide interactions with sediments, familiarity with petrographic, mineralogical and sediment separation techniques, and experience in radioanalytical and radiotracer methodologies are required. The post is offered for one year with possibility of extension for a second year. Salary range \$53,000 to \$68,000 tax-free depending upon qualifications and marital status. *The candidate should be a U.S. citizen and have a Ph.D. in marine geochemistry or related field.* Send as soon as possible curriculum vitae, statement of research interests, names and addresses of at least 3 references to: **Director, IAEA-MEL, P.O. Box 800, MC98012 MONACO; FAX: (33) 92057744; Telephone: (33)92052222.**

SENIOR CONSERVATION ANALYST

The Biodiversity Support Program (BSP), a consortium of World Wildlife Fund, the Nature Conservancy, and the World Resources Institute, is seeking a Senior Conservation Analyst to join its staff of 25, housed at World Wildlife Fund in Washington, D.C.

This new position will contribute to BSP's conservation of biodiversity through analysis of existing field programs in Africa, Asia/Pacific and Latin America, and will be responsible for defining, distilling and synthesizing lessons learned from selected conservation approaches, developing activities, and overseeing the effective dissemination of results.

Requirements: At least eight years of experience in biological conservation, natural resources management, international development, or related field; and demonstrated success developing and managing complex analytical projects. Master's in biological sciences, natural resources management, social sciences, or related field required. Ph.D. preferred. Minimum 2 years of work experience in developing countries. Experience with U.S. AID desirable.

Competitive salary and benefits appropriate to U.S. nonprofit sector. *Non U.S. nationals are encouraged to apply.* Send cover letter and résumé to: **World Wildlife Fund, Human Resources—Department 395F by mail: 1250 24th Street, NW, Washington, D.C. 20037. Or by FAX: 202/293-9211. Affirmative Action/Equal Opportunity Employer.**

THE ROCKEFELLER FOUNDATION

POSTDOCTORAL POSITION IN AGRONOMY - UGANDA

The Rockefeller Foundation seeks a postdoctoral agronomist for a program of banana research in Uganda that is partially funded by the Foundation. Bananas provide 40 percent or more of domestic food calories in Uganda, and are the crop best suited to sustainable agriculture by small farmers in the country's highlands. Banana cropping systems in Uganda are diverse and are being threatened by a range of pests and diseases, which in turn interact with declining soil fertility. In 1989 field research was initiated by the Ministry of Agriculture and Makerere University aimed at increasing banana yields. That work has become the banana research program of the National Agricultural Research Organization of Uganda. The banana research team consists of a well-qualified group of national scientists and is assisted by scientists from the International Institute of Tropical Agriculture (Nigeria) and the Natural Resources Institute (UK).

The successful applicant will have an excellent academic record in agronomy and soil science, a background in tropical agriculture systems, and experience in tropical countries conducting on-farm research. The agronomist, in collaboration with the banana research team, will develop an agronomic research program for banana cropping systems and will design and coordinate the on-farm research component of the program. The agronomist will work in a multidisciplinary research team, interact with farmers, and understand the research needs of a tropical cropping system undergoing rapid change. She or he will also work with scientists from IITA's East and Southern Africa Regional Research Center, based in Uganda.

The position will be based at the Kawanda Research Station near Kampala, the capital of Uganda. The Nairobi, Kenya office of the Rockefeller Foundation will provide some logistical support for the post but the appointee will work under the direction of the Uganda National Banana Research Coordinator.

Interested candidates should send a letter by August 31, 1994, indicating why they are qualified for and interested in the position, enclosing a current curriculum vitae to:

Uganda Postdoctoral Search
Agricultural Sciences Division
The Rockefeller Foundation
420 Fifth Avenue
New York, New York 10018-2702

Postdoctoral Fellow

The Skin Biology Research Center (SBRC) of Johnson & Johnson, located at The R. W. Johnson Pharmaceutical Research Institute, Raritan, New Jersey, seeks a highly motivated, enthusiastic, industrious and bright scientist for the position of postdoctoral fellow to pursue research in the molecular biology of skin and its diseases.

The candidate must have completed a Ph.D. in Biochemistry/Genetics/Biology, or a related field, with a strong background in the concepts and techniques of molecular biology. Although recent graduates are welcome to apply, those candidates with a few years of postdoctoral training would be favored. In addition to routine recombinant DNA techniques, the candidate should demonstrate knowledge/experience in handling YACs, cosmids, gene mapping, linkage analysis, PCR, and DNA sequencing.

It is the goal of The Skin Biology Research Center to elucidate the basic mechanisms important to normal and pathological states of skin. Research publications are highly encouraged. Besides providing outstanding library facilities, the company provides excellent compensation and benefits. The laboratories are located in a beautiful part of New Jersey, near Princeton and half way between New York City and Philadelphia. Interested persons should send their c.v., list of publications and three references to: Dept. 23, Johnson & Johnson Recruiting, Employment Management Center, P.O. Box 16597, New Brunswick, NJ 08906-6597.

We are an equal opportunity employer and support diversity in the workplace.

Johnson & Johnson

Ph.D. Opportunities in Molecular Genetics

Wyeth-Ayerst Research, a major division of Fortune 100 American Home Products Corporation, has opportunities available in Molecular Genetics, a newly created Core Technology Division located at its Princeton, New Jersey research center. This Division is dedicated to the application of molecular genetics to the development of transgenic models of human disease.

Successful candidates will have training in molecular genetics as well as in a discipline related to an area of therapeutic interest, along with a proven track record of innovative research. The following positions report to the Director, Molecular Genetics.

Embryonic Stem Cell Program

Participate in a program focused on the derivation of embryonic stem cells (ES cells) from rodents and other species. Experience in embryo manipulation, ES cell isolation, propagation, transfection, nuclear transfer and DNA microinjection is required.

Central Nervous System Disorders

Interface with scientists in the Division of CNS Disorders where current research programs focus on psychiatric diseases, stroke, head injury and Alzheimer's disease. Strong training in basic neuroscience and a track record of research experience in molecular neurobiology are required.

Inflammatory Diseases

Manage multiple transgenic and gene targeting projects in collaboration with scientists in the Division of Inflammatory Diseases. Strong training in cellular and molecular immunology, or chondrocyte biology is required. Experience with animal models which profile the inflammatory disease process is desirable.

Wyeth-Ayerst offers an excellent compensation and benefits package in a highly professional environment. Please respond by sending your resume with salary requirements to: **Wyeth-Ayerst Research, Human Resources, Respond to: SC-MG, CN 8000, Princeton, NJ 08543-8000.** Equal Opportunity Employer, M/F/D/V.

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Bristol-Myers Squibb Pharmaceutical Research Institute is the R&D division of Bristol-Myers Squibb, a worldwide leader in the discovery and development of innovative pharmaceuticals.



Bristol-Myers Squibb

RESEARCH INVESTIGATOR CNS Neurodegenerative Disorders

CNS Drug Discovery has a position available for a Ph.D. with a minimum of 3 years postdoctoral experience to work in Alzheimer's disease research.

Candidates should have knowledge of Protein Biochemistry including electrophoresis, chromatography (FPLC, HPLC) and enzyme assays; and Cell Biology including primary cell culture, immunological methods (ELISA, immunoprecipitation, Western Blots). Experience in molecular biology (sequencing, mutagenesis, gene transfer) is desirable. Additional experience with quantitative enzyme analysis would be an asset.

For confidential consideration, please forward your resume to: **Bristol-Myers Squibb Pharmaceutical Research Institute, Dept. #MH-0101, P.O. Box 5101, 5 Research Parkway, Wallingford, CT 06492-7661.** Equal Opportunity Employer, M/F/D/V.

THE UNIVERSITY OF TEXAS AT AUSTIN Vice President for Research

Nominations and applications of qualified candidates are invited for the position of Vice President for Research.

SUMMARY

The Vice President for Research is the academic officer responsible for the stimulation, coordination, and oversight of research activities of The University. The Vice President is expected to develop and articulate research policy, to provide strong and effective advocacy for research within The University's administration and the state, and to represent The University with federal and state funding agencies, foundations, and corporate research organizations. The Vice President reports to the President, and will work in close collaboration with the President and other Executive Officers, deans and directors, and other members of The University community.

QUALIFICATIONS

Candidates for the position should have an earned doctorate or comparable academic credentials, be qualified for a tenured faculty position, and have a demonstrated record as a successful leader of significant research programs. In addition to a record of administrative experience and achievement in a field of specialization, candidates should be sympathetic to the support of interdisciplinary research and of research within areas that extend beyond those normally associated with sponsored programs. The candidate should be committed to affirmative action.

GENERAL INFORMATION

The University of Texas at Austin has fourteen academic and professional colleges and schools, a Graduate School, a Division of Continuing Education, and eighty-seven organized research units. The student body includes approximately 35,000 undergraduates, 12,000 graduate students, and 1,500 law students. The University offers 281 academic and professional degrees at the Baccalaureate, Master's and Doctoral levels.

APPLICATION PROCEDURE

The process of reviewing applications and nominations will begin July 15, 1994. Applications should be received prior to July 31, 1994. After this date the President may request and consider additional nominations. All applications and nominations, accompanied by appropriate supporting materials, should be addressed to:

**Office of the President
Attention: Thomas F. Staley, Chair
Consultative Committee for the Vice President of Research
The University of Texas at Austin
Post Office Box T
Austin, Texas 78713-8920**

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*The nation's top schools for Biological Sciences, various Chemistry disciplines and Clinical Medicine ranked by the Institute for Scientific Information's *Science Watch*, as well as the top 20 schools from *U.S. News and World Report's* annual America's Best Colleges issue.

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Postdoctoral Fellowship

Become part of a team developing and implementing assays designed to detect novel antimicrobial agents. Study the mechanism of action of these agents and explore the mechanisms of resistance to them — and other antimicrobial agents.

Successful candidates will have a Ph.D. with a strong background in microbiology/biochemistry, along with a good understanding of molecular biology. Experience with protein purification is preferred.

We offer a competitive salary and benefits package. Applicants should send their resume, along with salary requirements, to: Lederle Laboratories, Dept. 928, Medical Research Division, 401 N. Middletown Road, Pearl River, NY 10965. We are an equal opportunity employer.



Discover the spirit of innovation.

The Department of Biology at Laval University invites applications for a **FACULTY POSITION** for a person interested in developing a strong research program in evolutionary and/or behavioral ecology of aquatic animals. An expertise in the application of molecular techniques to problems of evolutionary ecology would be an asset.

The candidate will be expected to develop an active program of research in the field of expertise. Qualifications: Ph.D. or D.Sc., preferably with postdoctoral experience; working knowledge of French or ability to acquire it within a year of appointment. Teaching: participation in the teaching of introductory courses in behavioral ecology and molecular ecology and specialty courses in the area of expertise. Rank and salary: according to the collective agreement. Send applications (with curriculum vitae and names and addresses of three referees) to: Directeur, Département de biologie, Université Laval, Québec, Canada, G1K 7P4. Deadline: October 1, 1994 or until a suitable candidate is found.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent resident of Canada. Laval University applies a policy of employment equity.

University of California, San Francisco

Department of Pharmacology

Two tenure track Assistant Professor Faculty Positions

Exceptional candidates at a higher level will also be considered. In seeking to build a modern molecular pharmacology department we are looking for scientists working in any aspect of: basic cell biology, signal transduction, structural biologists, and chemists interested in macromolecular interactions, protein-ligand interactions, drug design and novel therapeutic strategies.

The first appointment is envisioned to commence in the spring of 1995, and the second later that year. Expected is a Ph.D. and/or M.D. degree or equivalent and demonstrated achievement in their fields. The successful candidates will have outstanding potential for research and teaching, and will be expected to develop dynamic research programs. They will also be expected to participate in graduate and professional school teaching. It is anticipated that the new faculty will join the Program in Biological Sciences, which serves as a framework for graduate training and collegial interaction throughout the basic sciences at the University.

Applications for the first appointment must be received before September 1, 1994. Submit a C.V., a two page summary of research accomplishments, a two page description of future research plans and interests, copies of major publications, and arrange to have three to five letters of recommendation forwarded to: Chairman, Faculty Search Committee, Department of Pharmacology, University of CA, San Francisco, S.F., CA 94143-0450.

Our Department is eager to diversify its faculty and thus we especially encourage women and minorities to apply. U.C.S.F. is an Equal Opportunity and Affirmative Action Employer.

Put yourself on the leading edge of drug discovery and development with one of the world's leading companies. At Pfizer Central Research, where you'll work in a collegial, team-oriented environment, you'll have the backing of a Fortune 100 pharmaceutical giant along with all the potential of an annual R&D budget of over \$1 billion.

Teratologist/ Reproductive Toxicologist

Our Drug Safety Department is seeking a dedicated knowledgeable Research Scientist to join our teratology/ reproductive toxicology unit designing studies, supervising performance, analyzing and interpreting data, and preparing reports for submission to international regulatory agencies.

Your success will demand a PhD or equivalent in Toxicology, Reproductive Biology or a related discipline, and at least 1 year of postdoctoral or similar experience analyzing the effects of drugs or other chemicals on fetal development and reproductive performance. Superior verbal and written communication skills are essential.

In return for your contributions, we offer a competitive salary and benefits (including generous relocation assistance to our desirable southeastern Connecticut shoreline community), plus opportunity for professional rewards and recognition — all in one of the world's most stimulating, state-of-the-art research environments.

For immediate consideration, please forward your resume, in confidence, to: **Ken R. Harewood, PhD, Manager, Employee Resources, Pfizer Central Research, Eastern Point Road, Groton, CT 06340.** We are an equal opportunity employer.



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Discover Treatments for Immunological Diseases

At ImmuLogic, our discoveries have allowed us to develop an advanced understanding of the events controlling the human immune system. Through research in immunology and pharmaceutical product development, we're focused on developing therapeutics for immunologically-mediated diseases. At our state-of-the-art research facility in Palo Alto, California, we have the following opening:

CELLULAR IMMUNOLOGIST

Will participate in our multi-disciplinary research program with the goal of developing immunotherapeutics to treat Multiple Sclerosis. Specific responsibilities will focus on understanding the T cell responses to autoantigens in MS patients. The program has access to clinical samples, supports the use of novel techniques, and encourages interaction with collaborators and consultants from diverse disciplines. Requirements: Ph.D./M.D. with research focus in Immunology. Minimum of two years relevant post-doctoral experience in human T cell immunology, and the desire to apply basic research in immunology to the development of disease-specific therapeutics to treat autoimmune diseases.

ImmuLogic offers a competitive salary and an excellent benefits package, as well as equity participation through an incentive stock program. Please send your curriculum vitae to: **Human Resources, ImmuLogic Pharmaceutical Corporation, 855 California Avenue, Palo Alto, CA 94304.** We are an Equal Opportunity Employer.

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Urology Oncology Biotechnology Company

Seeks to Fill Five Positions: Available Immediately
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Two Positions MS/BS in Immunohistochemistry and In Situ Hybridization

CytoDiagnostics, Inc. (CDI), is emerging as a growth biotechnology company developing products for the detection, treatment, and prevention of bladder, prostate and kidney cancers through the discovery and characterization of novel genes (biomarkers) involved in their pathogenesis. R&D at CDI is seeking:

Position 1: Ph.D. molecular biologist to join our established differential nucleic acid discovery team by conducting independent basic and applied research on cancer gene discovery projects. Techniques such as: state of the art substrate, differential display and comparative PCR methodologies are advantageous.

Position 2: Technical Research Scientists to assist in the above projects, extensive PCR experience and classical molecular biology training are required.

Position 3: Technical Research Scientists to conduct RT-PCR based projects, RT-PCR experience is desired. Positions 1-3 send correspondence to the attention of Dr. S. Mark O'Hara.

Position 4: Laboratory Research Assistant with experience in slide-based immunohistochemistry. Computer literacy would be advantageous.

Position 5: Laboratory Research Assistant with experience in molecular biology, especially in the area of *in situ* hybridization.

For positions 4-5 please send correspondence to the attention of Dr. Garry Marley.

We are looking for highly motivated individuals who seek opportunities to contribute to a positive, productive team environment in an aggressive R&D department within our rapidly expanding company. CDI offers an exciting and diverse research environment and excellent benefits. Please direct all curriculum vitae to the above attentions, CytoDiagnostics Inc., R&D, 2925 United Founders Boulevard, Oklahoma City, OK 73112. No phone calls or walk-ins, please.

SEARCH REOPENED DEAN, COLLEGE OF NATURAL SCIENCES AND MATHEMATICS CALIFORNIA STATE UNIVERSITY, LONG BEACH

California State University, Long Beach, invites applications and nominations for Dean, College of Natural Sciences and Mathematics. The college has five departments; Biological Sciences, Chemistry and Biochemistry, Geological Sciences, Mathematics, and Physics and Astronomy.

Qualifications include eligibility for appointment as a tenured professor in one of the College's academic departments, administrative experience, experience in developing external funds, ability to build consensus, commitment to faculty governance, sensitivity to student needs in a multicultural educational environment. For a more detailed announcement, contact Linda Sumpter at (310) 985-2333 or fax (310) 985-1680.

All applications must include a curriculum vitae, a letter of interest that addresses all qualifications, and a list of at least three professional references including names, addresses, and telephone numbers. All inquiries, nominations and applications will be held in confidence. Nominations are also invited. Review of applications will begin on August 1, 1994. Position will remain open until filled. Proposed effective date of appointment is on or about January, 1995. Submit applications and nominations to:

Professor David Soltz, Chair
Dean Search Committee
Office of the Vice President for Academic Affairs
California State University, Long Beach
Long Beach, California 90840.

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Temple
University
School of Medicine

Molecular Pharmacologists

The Department of Pathology and Laboratory Medicine at Temple University School of Medicine is currently seeking applicants for research positions at the Assistant/Associate Professor level. These positions will be in the division of Experimental Pathology. In particular, qualified candidates are sought in the areas of (1) Hormonal carcinogenesis, (2) Environmental carcinogenesis, (3) Gene targeting/immunotherapy of cancer, and (4) Resistance to cancer chemotherapy. These investigators will hold appointments in the Fels Institute for Cancer Research, will be associated with the Ph.D. program in the department and should have a track record of independent research and research funding. These positions will augment the section of molecular pharmacology in the Temple University Comprehensive Cancer Center. Interested candidates are requested to submit a C.V. and the names of three references to: Henry Simpkins, M.D., Ph.D., Chairman, Department of Pathology and Laboratory Medicine, Temple University School of Medicine, 3401 N. Broad St., Phila., PA 19140. Temple University is an EOE/AA employer and strongly encourages applications from women and minorities.

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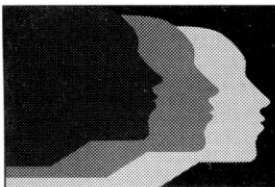
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DIRECTOR, CENTENNIAL CENTER FOR ENVIRONMENTAL TOXICOLOGY UNIVERSITY OF TEXAS MEDICAL BRANCH AT GALVESTON, TEXAS

Applications and nominations are sought for the position of Director, The Centennial Center for Environmental Toxicology. The mission of this new Center is to foster and strengthen collaboration among the diverse and complementary research programs of its more than 40 environmental toxicology faculty. Current toxicology research programs exist in experimental pathology, molecular and biochemical toxicology, pharmacology, genetic toxicology and clinical toxicology. A dynamic leader is needed to develop, coordinate and enhance environmental toxicology initiatives at the University of Texas Medical Branch at Galveston (UTMB).

Candidates should have an active research program, a long-standing interest in the health consequences of exposure to environmental toxins, and must have administrative experience. Resources available include two endowed chairs, generous start-up support, laboratory facilities and an excellent scientific environment.

The Search Committee will give preference to candidates who are qualified and interested in assuming the additional position of Director, Division of Environmental Toxicology, Department of Preventive Medicine and Community Health. The Division is responsible for teaching environmental health and toxicology to medical and graduate students. It maintains a very active, well-funded research program and a model community outreach program.

UTMB is the only state owned and operated multicategorical health referral center in Texas. Currently UTMB has four schools with more than 2,000 students, 670 full time faculty members, seven hospitals, two research institutes, and multiple research centers.

Applications or nominations should include a curriculum vitae and the names and addresses of 3-5 references. The Search Committee will begin reviewing applications on or about August 15, 1994. Address correspondence to:

Harvey Bunce III, Ph.D., Chair
Search Committee for Director, Centennial Center for Environmental Toxicology
1.116 Ewing Hall
The University of Texas Medical Branch
Galveston, Texas 77555-1050
Telephone: 409/772-1128; Fax: 409/772-5272
E-Mail: GMCKINNE@UTMB.EDU

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ASSOCIATE VICE PRESIDENT FOR RESEARCH AND DEAN, SCHOOL OF GRADUATE STUDIES AND RESEARCH

Nominations and applications are requested for the position of Associate Vice President for Research and Dean, School of Graduate Studies and Research (SOGSR) of Meharry Medical College.

The SOGSR is one of four schools of Meharry Medical College, others include: the Schools of Medicine, Dentistry, and Allied Health Professions.

The Associate Vice President for Research and Dean, SOGSR has the overall responsibility to provide leadership in research in all graduate programs, i.e. biochemistry, microbiology, pharmacology, physiology, biomedical sciences, M.D./Ph.D. and Master of Science in Public Health Programs.

The Associate Vice President for Research and Dean, SOGSR is chief academic and administrative officer for the school and reports to the Vice President for Academic Affairs.

Candidates should hold the terminal degree in a biomedical science discipline and be eligible for tenured appointment to the graduate faculty. He or she should have a strong background in research, administrative expertise and success in procurement of extramural funding.

Applications will be accepted until the position is filled. Applicants may submit a letter of interest and a list of three references to:

James W. Davis, J.D.
Chairperson, Search Committee
Box A-10
Meharry Medical College
1005 D.B. Todd Blvd.
Nashville, TN 37208

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The Department of Veterinary Science has made a substantial commitment to expand and energize its research activity in molecular and cellular mechanisms of animal diseases and their biomedical implications with an emphasis on immune functions. Applications are invited for three tenure-track or tenured positions at the levels of assistant, associate, and full professor to be filled immediately. Candidates with interests in **molecular biology, toxicology, microbiology, pharmacology, nutrition, neuroendocrinology, and molecular pathology** as related to the discipline of immunology will be considered. Applicants at the associate and full professor level should have an established externally funded research program. Applicants at the assistant professor level should be recent Ph.D.s, preferably with postdoctoral experience, with the potential for building a solid research program based on externally funded support. The responsibilities of these positions include development of an active, independent research program, participation in departmental undergraduate and graduate education, and support to extension and diagnostic services in the department.

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Minimum qualifications include: (1) and advanced degree in an environmental discipline, e.g., ecology, environmental planning, natural resource economics, forestry and/or pest management; (2) experience working in developing countries on sustainable natural resource management issues; (3) proven track record in working effectively with public sector agencies and with non-governmental organizations (NGOs); (4) strong interpersonal skills; (5) English and Spanish fluency; and (6) U.S. citizenship. Successful candidates should be able to demonstrate proven track record of effective leadership in environmental policy dialogue with high level host country officials, and be a self starter with proven initiative and strong managerial skills.

Send resume or SF-171 by July 31st to Jeffrey J. Brokaw, LAC/DR/E, Room 2242 NS, Agency for International Development, Washington, D.C. 20523-0010. USAID is an Equal Opportunity Employer.

Cardiovascular Pharmacology Faculty Position

The Department of Molecular and Medical Pharmacology of the UCLA School of Medicine has an opening at the Assistant or Associate Professor level for an individual with a primary research focus in vascular or cardiac biology. The department is committed to a rapidly expanding multi-disciplinary program in Molecular and Medical Pharmacology with a highly interactive and productive group of investigators in basic and clinical sciences. We are interested in an individual capable of establishing a scholarly research program. Areas of particular interest include blood-to-cell and cell-to-cell interactions, signal transduction and second messenger systems, drug-receptor interactions and *in vivo* applications as they pertain to vascular/cardiac biology and pathophysiology. The successful candidate will also participate in the education of graduate and medical students. Consideration of applications will begin in early September. Please submit your curriculum vitae, representative reprints, three letters of reference and a one page statement of research and teaching goals to: Dr. Cameron B. Gundersen, Search Committee Chair, Department of Molecular and Medical Pharmacology, UCLA School of Medicine, Los Angeles, CA 90024-1735.

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POSTDOCTORAL FELLOW Allergy

As a member of our Biological Research Department, you will be responsible for developing and implementing assays to evaluate the role of nitric oxide in inflammatory and allergic models of airway disease. To qualify, you will need a PhD in Pharmacology, Biochemistry, Immunology or related discipline and experience in RIA, ELISA and Enzymology. Knowledge of blotting techniques and tissue culture desirable. Excellent communication, writing and organization skills a must. For consideration, please respond to: Dept. TM94-188.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to forward a resume, indicating the Dept. Code for your position of interest and salary requirements to: George Czuba, Human Resources, Schering-Plough Research Institute, 2015 Galloping Hill Road, Kenilworth, NJ 07033-0539. We are an equal opportunity employer.



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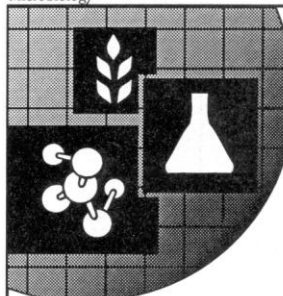


Plant Molecular Biology Postdoctoral Position

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BIOCHEMISTS IGEN, Inc.

The Discovery Research Group at IGEN, Inc. seeks Ph.D. and Master's level biochemists. New and exciting basic research is being carried out with emphasis on diagnostic applications. Scientists experienced in one or more of the following areas are encouraged to apply: enzymology and protein chemistry, inorganic chemistry and electrochemistry especially as applied to luminescent compounds, molecular recognition and imprinting, immobilization and chromatography of biomolecules. Interested candidates should send curriculum vitae with salary history to: Human Resources, IGEN, Inc., Department MM, 1530 East Jefferson Street, Rockville, MD 20852. IGEN, Inc. offers an excellent salary and a comprehensive benefits package.

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Argonne National Laboratory, located near Chicago, Illinois, seeks an experienced environmental scientist to provide information and analyses for incorporation into environmental impact statements and assessments, resource management plans, and related policy and technical reports concerning land use and natural resources planning and classifications. An M.A. degree in geography, land use planning, or another social science discipline with at least two years of related experience, a demonstrated record of technical publications, and considerable communication skills are prerequisites. The ideal candidate will possess considerable knowledge of regional, community and natural resources planning, and intergovernmental relations. We offer an excellent salary commensurate with your background, as well as a comprehensive benefits plan. For prompt consideration, send a detailed résumé to: Susan M. Walker, Employment and Placement, Box EAD-118952-55, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, IL 60439. Telecommunications Device for the Deaf—(708) 252-7722. *Argonne is an Equal Opportunity/Affirmative Action Employer.*

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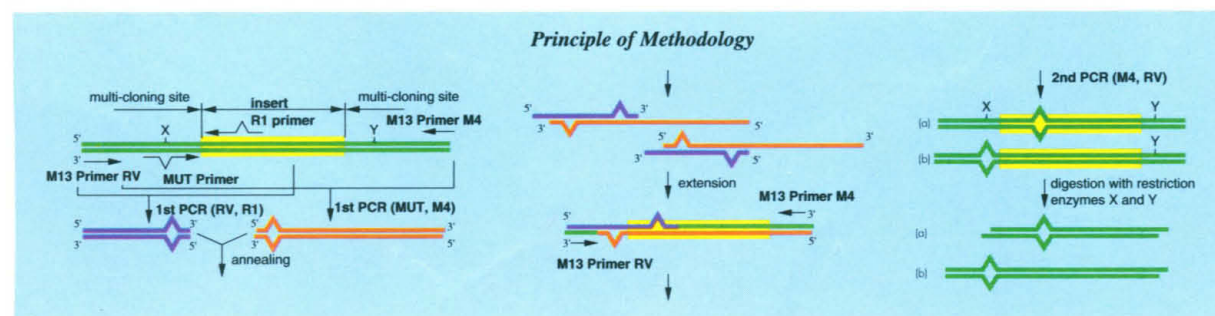
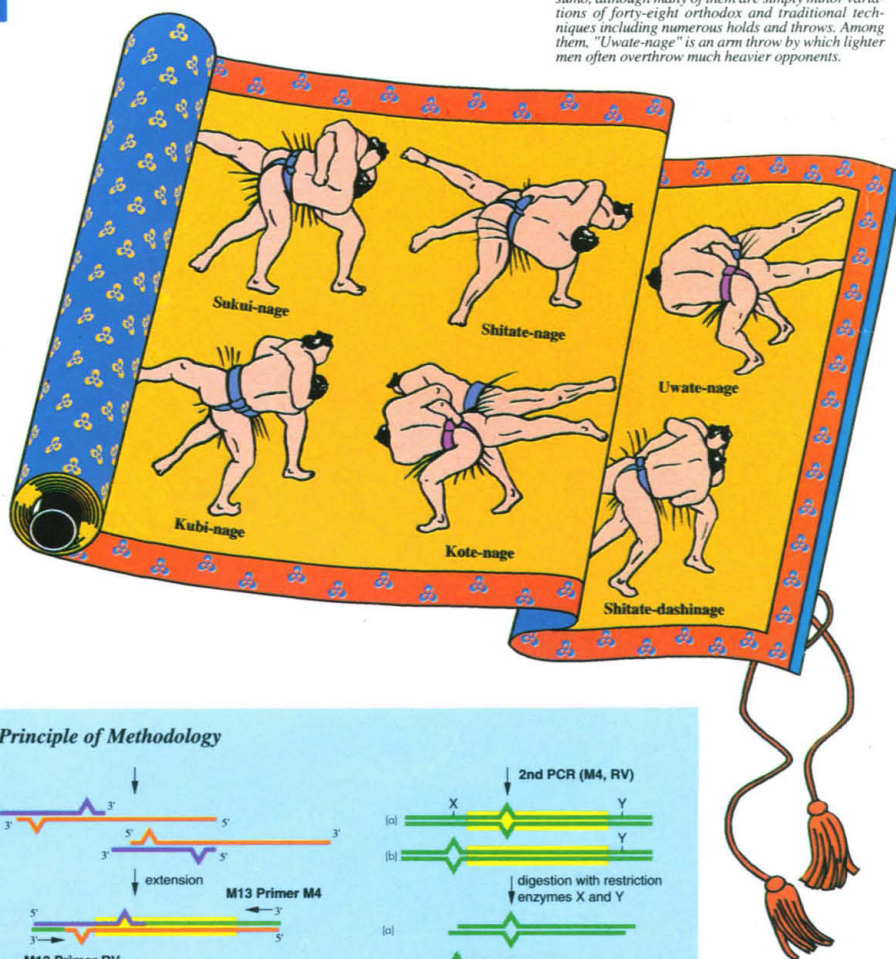
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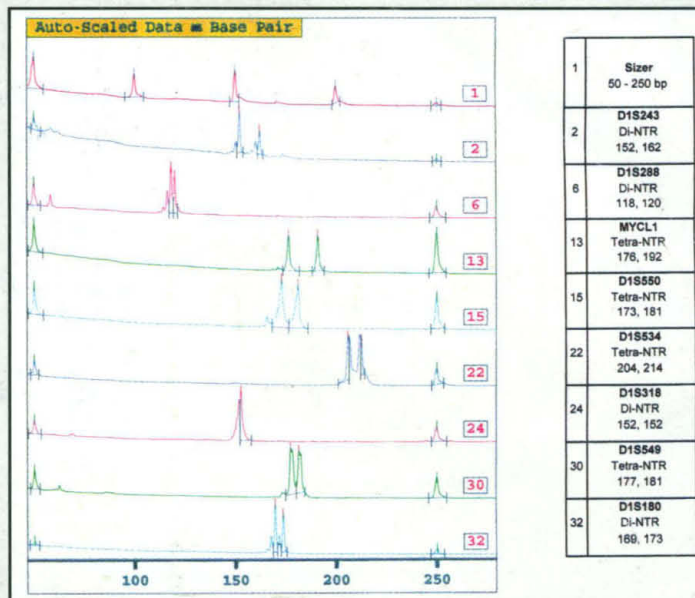
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¹CHLC Report (1993) Vol. 1 No. 1.

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