


Studies in Pre-Colombian Art and Archaeology, 31.


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Ion Channels in the Cardiovascular System
Function and Dysfunction
12-15 September 1992 ♦ Westfields Conference Center, Chantilly, VA
Sponsored by National Heart, Lung and Blood Institute, National Institutes of Health and American Association for the Advancement of Science

Arthur M. Brown and William A. Catterall, co-chairs

This intensive conference will synthesize the recent explosion of information on sodium and potassium ion channels in the cardiovascular system. New developments in calcium and chloride channels will also be addressed.

Leading scientists will focus on such issues as subunit function, modulation and control, mutagenesis and amino acid replacement studies, de- and repolarizing sodium and potassium channels, and channel involvement in disease processes (e.g., arrhythmias, sudden death).

Participants will discuss the ways in which this information could be used in the development of new pharmaceuticals to treat ion channel mediated diseases.

Sessions include: Clinical and Basic Science Tutorials on Ion Channels and Cardiac Disease ♦ Ion Channels and Cardiovascular Function ♦ Channel Modulation and Autonomic Control ♦ Structure-Function of Ion Channels ♦ Molecular Pharmacology ♦ Drug Discovery

Who should attend: ♦ Basic scientists involved in deciphering molecular aspects of cardiovascular channel structure and function ♦ Academic clinicians concerned with disease processes resulting from channel dysfunction ♦ Pharmaceutical scientists involved in the design and testing of new channel active drugs

For a complete program and information on registration and poster presentations, contact: AAAS Meetings Office, 1333 H Street, NW, Washington, DC 20005; Phone: 202-326-6461; Fax: 202-289-4021
1992 AAAS Philip Hauge Abelson Prize

The AAAS Philip Hauge Abelson Prize of $2,500, established by the AAAS Board of Directors in 1985, is awarded annually either to:

- a public servant, in recognition of sustained exceptional contributions to advancing science, or
- a scientist whose career has been distinguished both for scientific achievement and for other notable services to the scientific community.

AAAS members are invited to submit nominations now for the 1992 prize, to be awarded at the 1993 Annual Meeting in Boston, MA. Each nomination must be seconded by at least two other AAAS members.

Nominations should be typed and should include the following information: nominee's typed name, institutional affiliation and title, address, and brief biographical resume (please do not send lengthy publications lists); statement of justification for nomination; and names, identification, and signatures of the three or more AAAS member sponsors.

Nominations should be submitted to Amy Crumpton, AAAS Directorate for Science and Policy Programs, 1333 H Street, N.W., Washington, DC 20005, for receipt by 1 August 1992.

1993 AAAS Scientific Freedom and Responsibility Award

To Encourage Scientists and Engineers to Reflect Upon the Social Implications of their Professional Actions

The AAAS Scientific Freedom and Responsibility Award, established by the AAAS Board of Directors in 1980, is awarded annually to scientists and engineers who have:

- acted to protect the public's health, safety, or welfare; or
- focused public attention on important potential impacts of science and technology on society by their responsible participation in public policy debates; or
- established important new precedents in carrying out the social responsibilities or in defending the professional freedoms of scientists and engineers.

You are invited to submit nominations now for the 1993 award, to be presented at the 1993 AAAS Annual Meeting in Boston, MA. A recipient of the award is selected by a panel of six judges. The deadline for receipt of entries is 15 July 1992.

Requests for nomination forms and more information should be sent to: Amy Crumpton, Directorate for Science and Policy Programs, AAAS, 1333 H Street, NW, Washington, DC 20005.
Scientific Word Processing Software
Scientific Word is a word processing program that produces typeset quality formulas, equations, and documents. The program recognizes mathematical symbols and automatically italicizes, sizes, spaces, and positions symbols for the user. There is no need to learn unfamiliar codes to enter mathematics. The user simply clicks the mouse on symbols in the on-screen panels and they appear in the document. The symbols can also be entered with keyboard shortcuts. The program requires a computer with Microsoft Windows 3.0 or higher and a minimum of two megabytes memory. TCI Software Research. Circle 90.

Magnetic Radiation Meter
This hand-held, battery-powered magnetic radiation meter can be used to survey the lab for sources of electromagnetic interference (EMI) before setting up sensitive equipment. It has a magnetic field measurement range of 0 to 10 milligauss. A switch allows the user to detect either low-frequency (60 Hz) or high-frequency (16 to 40 Hz) EMI. Low-frequency EMI is typical of the ambient field produced by power lines and fluorescent lights, while high-frequency EMI typically radiates from video display tubes. World Precision Instruments. Circle 91.

Microvolume Biodialyser
The Sialomed Biodialyser offers a fast approach to dialysis of biological samples from 10 to 1500 µl. Made of inert Teflon, it is available for volumes of 10, 50, 100, 200, 500, 1000, and 1500 µl, with precut ultrafiltration membrane sizes including 0.1, 0.5, 1, 2, 5, 10, 25, 50, 100, and 300 K. There is no overflow or cross-contamination of samples, and sample loss is minimal. It can be used for sample preparations for high-performance liquid chromatography, electrophoresis, equilibrium dialysis, immunoblotting, buffer exchange, enzyme assay, removal of excess radiolabel, removal of salts before derivatization of sugars, protein binding assay, removal of primer in polymerase chain reactions, and other applications. Sialomed. Circle 92.

Antibodies to Human Integrins
An extensive line of monoclonal antibodies to human integrins is available for extracellular matrix research. The antibodies are suitable for use in assays such as enzyme-linked immunosorbent assays, immunofluorescence, immunoblotting, immunoprecipitation, and cell attachment studies. Telios Pharmaceuticals. Circle 93.

Ultrafiltration Disk Membranes
UltraSep ultrafiltration disk membranes, manufactured of polysulfone, combine high flow rates, controlled pore structures, efficient retention, and excellent sample recovery. The membranes are designed to purify and concentrate proteins, enzymes, nucleic acids, and antibodies. They are low protein binding and non-cytotoxic and do not denature biological samples. They are available in nominal molecular weight cutoffs of 10,000, 30,000, and 100,000 in diameter sizes of 25, 44.5, 63.5, 76, 90, and 150 mm. Micron Separations Inc. Circle 94.

Cryostopped-Flowed Spectrofluorimeter
The SF-40 Series Stopped-Flow Spectrofluorimeters make use of the latest in rapid reaction technology to facilitate the study of the kinetics of fast reactions between -100° and +60°C. The cryostatic capability (which slows the rate of reaction), the system dead time of around 2 ms, the sorbance and fluorescence measurement capability, and the ability to mix sequentially more than one reagent combine to produce systems that allow the study of a wide range of reactions. Variable ratio mixing, simultaneous monitoring of two detection channels, anaerobic operation, and conductivity detection are all possible. Hi-Tech Scientific. Circle 95.

Endonuclease Eliminates Interfering Nucleic Acids
Benzonase is a genetically engineered endonuclease that degrades all forms of DNA and RNA for rapid isolation and purification of proteins, peptides, carbohydrates, and lipids. Because of its nonspecific, active nature, small amounts (1 to 10 mg) of Benzonase are sufficient to degrade the interfering nucleic acids into oligonucleotides in the 3- to 5-bp range, greatly simplifying protein purification processes. Benzonase assures a lower viscosity of the sample matrix; consequently, nucleic acid fragments can be easily removed by dialysis. EM Science. Circle 96.

Cryogenic Vials
Cryorea cryogenic vials are designed for storing cell cultures, biological fluids such as serum or sperm, and aqueous cell solutions at vapor-phase liquid nitrogen temperatures (−195°C). Free-standing and round-bottomed 0.4-ml capacity sizes have been added to the existing line of free-standing 1.0-, 1.5-, and 3.5-ml capacity vials. The four freestanding vials feature an octagonal base that locks into the CryoSure Processing Rack for one-handed capping and uncapping. The polypropylene copolymer material is nearly transparent and provides superior tensile strength and resistance to gamma radiation sterilization. Evergreen Scientific. Circle 97.

Literature
Supercritical Fluid Technology is a 12-page brochure featuring pure grade fluids and gas mixtures with major attention focused on two supercritical fluid chromatography-grade carbon dioxide products—research purity and ultrahigh purity carbon dioxide. Scott Specialty Gases Inc. Circle 98.
Products for Cell Science is a product guide for researchers using mammalian cells. It includes 95 application references relevant to centrifugation, immunology, and cell culture, along with extensive notes on the physical characteristics of the products, tips on their usage, and a list of product literature. Pharmacia LKB Biotechnology. Circle 99.
Synthetic Peptides Made to Your Specifications is a brochure covering custom services. IAF BioChem International. Circle 100.
ANIMAL PHYSIOLOGY—HUMAN ANATOMY AND PHYSIOLOGY: ASSISTANT PROFESSOR. Tenure track, Plymouth State College (PSC). To teach animal physiology (one semester per year) and share teaching of large human anatomy and physiology course (two-semester sequence per year). Candidates must serve as graduate assistant research advisor in area of animal physiology. Minimum qualifications: Ph.D. in discipline; experience in teaching and research; granted least $28,000 to $30,000 or negotiable (hiring contingent upon eligibility to work in United States). Send curriculum vitae and three letters of recommendation to: Chair, Animal Physiology, Department of Natural Science, Plymouth State College, Plymouth, NH 03264. Deadline: 5 June 1992 to begin 21 August. PSC is an Affirmative Action/Equal Employment Opportunity Employer and actively seeks women and minority candidates.

ASSISTANT PROFESSOR OF BIOLOGY

The Biology Department of Raymond Walters College, the University of Cincinnati, is seeking applications from individuals to fill a tenure-track position at the level of ASSISTANT PROFESSOR OF BIOLOGY beginning 1 September 1992. Primary teaching duties will include courses in general biology, genetics, and microbiology. The successful candidate must have a Ph.D. degree in a biological science and must demonstrate significant teaching experience. Preference will be given to candidates with primary responsibility for lecture and laboratory preparation at the college level. Please send a detailed résumé, including a summary of teaching experience, course evaluations, evidence of teaching proficiency (student evaluations), college transcripts and three letters of professional reference to: Dr. Donald M. Metzler, Chairman, Department of Biology, Raymond Walters College, University of Cincinnati, 9555 Plainfield Road, Cincinnati, OH 45236. All application materials must be received by 1 July 1992. The University of Cincinnati is an Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.

UNIVERSITY OF LOUISVILLE
SCHOOL OF MEDICINE
DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY

A tenure-track ASSISTANT PROFESSOR position is available in MOLECULAR VIROLOGY is available for fall 1992. The University of Louisville is part of the state university system, and the department is undergoing expansion at all levels. Candidates should hold a Ph.D., D.V.M., M.D. or equivalent degree, have at least 2 years of postdoctoral experience, and have demonstrated expertise and productivity in molecular studies involving humann or animal pathogens. The successful candidate will receive good start-up support and a 12-month salary and be expected to establish an independent research program in molecular virology. He/she will also be expected to interact with other researchers at the university and demonstrate proficiency in teaching virology to medical, dental and graduate students. Applicants should send by 5 July 1992 a curriculum vitae, a statement of research interests, and names of three references to: Dr. Gordon D. Ross, Chairman, Department of Microbiology and Immunology, University of Louisville, Louisville, KY 40292. Equal Employment Opportunity (M/F) Employer.

FIELD VETERINARIAN ZOOLOGIST: ASSISTANT PROFESSOR. Tenure track, Plymouth State College (PSC). To teach lower-level vertebrate zoology, which is laboratory and field-oriented, and general biology I and II including labs; assist upper-division biology majors on student research projects; contribute to environmental biology program. Candidates must serve on department and college committees as appropriate. Minimum qualifications: Ph.D.; college-level teaching experience; research experience in field of biology; experience with the Northern Forest. Starting salary: $28,000 to $30,000 or negotiable (hiring contingent upon eligibility to work in the United States). Send letter of application, résumé, and three letters of recommendation to: Raymond Walters College, Natural Science, Raymond Hall, Plymouth, NH 03264. Deadline is 5 June 1992 to begin 31 August 1992. PSC is an Affirmative Action/Equal Employment Opportunity Employer and actively seeks women and minority candidates.

University of Louisville
SCHOOL OF MEDICINE
DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY

A tenure-track ASSISTANT PROFESSOR position is available. Candidates should hold a Ph.D., D.V.M., or M.D. degree and have at least 6 years of postdoctoral experience. The successful candidate will be expected to develop a research program in immunology and/or developmental/biological immunology. Experience in cytokines, macrophages, membrane receptor biology, flow cytometry, immunology of anesthia, antigen presentation, and NK cells is particularly desirable. By 1 July 1992 applicants should send their curriculum vitae, a statement of research interests, and the names of three references to: Dr. Gordon D. Ross, Chairman, Department of Microbiology and Immunology, University of Louisville, Louisville, KY 40292. The University of Louisville is an Equal Opportunity Educator and Employer that specifically encourages applications from women and minorities.

UNIVERSITY OF LOUISVILLE
SCHOOL OF MEDICINE
DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY

A tenure-track ASSISTANT PROFESSOR position is available. Candidates should hold a Ph.D., D.V.M., or M.D. degree and have at least 6 years of postdoctoral experience. The successful candidate will be expected to develop a research program in immunology and/or developmental/biological immunology. Experience in cytokines, macrophages, membrane receptor biology, flow cytometry, immunology of anesthia, antigen presentation, and NK cells is particularly desirable. By 1 July 1992 applicants should send their curriculum vitae, a statement of research interests, and the names of three references to: Dr. Gordon D. Ross, Chairman, Department of Microbiology and Immunology, University of Louisville, Louisville, KY 40292. The University of Louisville is an Equal Opportunity Educator and Employer that specifically encourages applications from women and minorities.

PHYSIOLOGY, ASSISTANT PROFESSOR (research track) position available for investigations on the molecular and biochemical regulation of enzymes including mitogen and nitric oxide synthases. An integrative research program involving single cell analysis in cellular imaging and/ or developmental/comparative immunology. Experience in cytokines, macrophages, membrane receptor biology, flow cytometry, immunology of anesthia, antigen presentation, and NK cells is particularly desirable. By 1 July 1992 applicants should send their curriculum vitae, a statement of research interests, and the names of three references to: James T. Stevens, Ph.D., Chairman, Department of Physiology, University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235—9040, telephone: 214-688-6849, FAX: 214-688-2974. An Affirmative Action/Equal Opportunity Employer.

The University of North Dakota School of Medicine seeks applications for a position of ASSISTANT OR ASSOCIATE PROFESSOR to join the DEPARTMENT OF PHYSIOLOGY under the direction of its new chairman. The successful candidate will be expected to contribute to the teaching of medical and allied health sciences physiology and to establish an independently funded research program. Demonstration of experience in these endeavors is critical. Applications should include curriculum vitae with statements of teaching experience and research interests, reprints of three selected publications, and the names and addresses of three individuals willing to be listed as references. Women, minorities and veterans are encouraged to apply. Applications should be sent to: Dr. Willis K. Schonhoff, Dean, University of North Dakota School of Medicine, Grand Forks, ND 58202. We are an Equal Opportunity/Affirmative Action Employer.
IMMUNOCYTODYNAMICIST. Ph.D. or M.D. at ASSISTANT or ASSOCIATE PROFESSOR level to work in the 500-bed Temple University Hospital, which has one of the finest mammalian annotation programs. Experience in HLA typing required. Expertise in research and funding areas is essential. Teaching of residents expected. Apply to: H. Simpkins, M.D., Ph.D., Professor and Chairperson. Division of Pathology, TEMPLE UNIVERSITY SCHOOL OF MEDICINE, 3401 North Broad Street, Philadelphia, PA 19140. University of Equal Opportunity/Affirmative Action Employer and strongly encourages applications from women and minorities.

MOLECULAR BIOLOGIST/NEUROBIOLOGIST

MEHARRY MEDICAL COLLEGE

Applications are invited for a tenure-track position as ASSISTANT OR ASSOCIATE PROFESSOR in the Division of Biomedical Sciences. Candidates are sought with training and research experience in areas including: genetics, developmental biology, receptor biology and/or signal transduction mechanisms. Expertise in neurobiology is desirable but not required. Successful applicants will be expected to participate in graduate and professional teaching programs and to develop and maintain an extramurally funded research program. Emphasis is placed on research programs in cell and molecular biology, sickle cell anemia, neurosciences, AIDS and tropical diseases provide opportunities for interdisciplinary research. Demonstration of aptitude or experience in teaching and research, and qualifications for leadership in field. Request full position description from: Clarice Marn, Department of Medicine, School of Veterinary Medicine, Meharry Medical College, 19140, telephone: 615-327-6253. Applications accepted through 15 August 1992 or until a candidate is identified. The University of California is an Affirmative Action/Equal Opportunity Employer.

ANATOMICAL PATHOLOGIST

MEHARRY MEDICAL COLLEGE

Applications are invited for a tenure-track position as ASSISTANT OR ASSOCIATE PROFESSOR in the Division of Biomedical Sciences. Candidates are sought with training and research experience in areas including: genetics, developmental biology, receptor biology and/or signal transduction mechanisms. Expertise in neurobiology is desirable but not required. Successful applicants will be expected to participate in graduate and professional teaching programs and to develop and maintain an extramurally funded research program. Emphasis is placed on research programs in cell and molecular biology, sickle cell anemia, neurosciences, AIDS and tropical diseases provide opportunities for interdisciplinary research. Demonstration of aptitude or experience in teaching and research, and qualifications for leadership in field. Request full position description from: Clarice Marn, Department of Medicine, School of Veterinary Medicine, Meharry Medical College, 19140, telephone: 615-327-6253. Applications accepted through 15 August 1992 or until a candidate is identified. The University of California is an Affirmative Action/Equal Opportunity Employer.

PHARMACOLOGY—UNIVERSITY OF PENNSYLVANIA

The Department of Pharmacology is recruiting for a premature appointment to the rank of ASSISTANT or ASSOCIATE PROFESSOR. Investigators interested in the broad areas of analytical/molecular pharmacology and cellular/molecular pharmacology, especially examples of pharmacological areas of interest include: (1) the structure and function of biological membranes using analytical techniques (e.g., NMR, EPR, ionic labels and genetic approaches); (2) enzyme-inhibitor/receptor-ligand binding assessments; (3) drug or second-messenger metabolism; (4) growth factor signaling; (5) gene transcription (e.g., gene transfer, embryonic stem cells and transgenics); and (6) ion channel/brain slice electrophysiology. Applicants should have a postdoctoral research experience and the ability to develop a strong extramurally funded research program. Renovated laboratory space and start-up funds are available. Applicants from women and minorities are especially encouraged. Please submit curriculum vitae, a list of publications, reprints or preprints of selected papers, and a statement of research interests. Resume and three letters of recommendation should be sent to: Search Committee, Department of Pharmacology, University of Pennsylvania School of Medicine, Philadelphia, PA 19104-4084. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.

Aging and Developmental Biology

MEHARRY MEDICAL COLLEGE

Applications are invited for an open-rank position as ASSISTANT OR ASSOCIATE PROFESSOR in the Division of Biomedical Sciences. Candidates are sought with training and research experience in areas including: genetics, developmental biology, receptor biology and/or signal transduction mechanisms. Expertise in neurobiology is desirable but not required. Successful applicants will be expected to participate in graduate and professional teaching programs and to develop and maintain an extramurally funded research program. Emphasis is placed on research programs in cell and molecular biology, sickle cell anemia, neurosciences, AIDS and tropical diseases provide opportunities for interdisciplinary research. Demonstration of aptitude or experience in teaching and research, and qualifications for leadership in field. Request full position description from: Clarice Marn, Department of Medicine, School of Veterinary Medicine, Meharry Medical College, 19140, telephone: 615-327-6253. Applications accepted through 15 August 1992 or until a candidate is identified. The University of California is an Affirmative Action/Equal Opportunity Employer.

DEPARTMENT OF PHARMACOLOGY, THE OHIO STATE UNIVERSITY COLLEGE OF MEDICINE

Applications are invited for an ASSOCIATE/FULL PROFESSOR, tenure-track faculty position. Experience in one of the following areas is preferred: molecular toxicology, neuropharmacology or cardiovascular pharmacology. A Ph.D. or M.D. is required. Demonstrated record of extramural funded research programs and teaching experience suitable for a position in the college of medicine is required. The successful candidate is expected to continue to expand his/her research program and to be involved with the teaching and training of medical and graduate students. Applicants, M.D. and/or Ph.D., should send curriculum vitae, statement of research and teaching interests and experience, and the names of three references by 30 January 1993 to: Chair, Search Committee, Department of Pharmacology, The Ohio State University College of Medicine, 5198 Graves Hall, 1265 West 12th Avenue, Columbus, OH 43210-1239. The Ohio State University is an Affirmative Action/Equal Opportunity Employer. Qualified women, minorities, Vietnam-era veterans, disabled veterans and the disabled are encouraged to apply.
INSECT BIOLOGY

Merck Research Laboratories is seeking applicants for three positions in our Basic Animal Science Research Department. The successful candidates will form an insect control research group; areas of interest will be: mechanism based drug research, identification of inhibitors of insect hormones and transcriptional control mechanisms, involved in neuronal development and embryonic pattern formation.

Associate Director/ Senior Research Fellow
To direct a group of five researchers focusing on insect control and insecticide development. The focus is to generate inhibitors of insect hormones and transcriptional control mechanisms. The Insect Group will be part of a team of 25 researchers in the department of Genetics and Molecular Biology whose research focuses on mechanism based drug research in neurobiology, transcriptional control and endocrinology. The successful candidate will have a Ph.D. or equivalent degree, with at least five years of experience in Insect-Physiology, Molecular Biology and/or Insect Genetics. Active research experience with Drosophila melanogaster and/or Manduca sexta is essential. At least two years of experience supervising a research group and a strong record of scientific accomplishment are required. (Ref.# S-38)

Senior Research Biologist
To perform research in Drosophila molecular genetics and neuronal development. The qualified individual will be part of a research team focusing on mechanism based drug development for insect control. The successful candidate will have a Ph.D. or equivalent degree in Drosophila Molecular Biology and Biochemistry. (Ref.# S-39)

Staff Biologist
To perform research in the Insect Biology group on insect control. Research experience with Drosophila is essential and familiarity with insect physiology desirable. M.S. or equivalent in Biology, Molecular Biology and 2 years of experience, or B.S. or equivalent with 3 years of experience. (Ref.# S-40)

Salary, benefits and growth potential for these positions are excellent. The work location is in Rahway, New Jersey, approximately 25 miles from New York City.

Please address resume and outline of research interests, with three references to Dr. L.H.T. Van der Ploeg, Director, Department of Genetics and Molecular Biology. Mail applications to: Human Resources Manager, P.O. Box 2000, WBC-155, Rahway, NJ 07065. EEO/AA/VH Employer.

Cancer Drug Discovery

Solve the equation for success.

Pfizer, a U.S. based multinational pharmaceutical company, is seeking a qualified scientist for its Cancer Drug Discovery group at our Central Research facility in Groton, Connecticut. We are looking for an individual with strong credentials in the areas of molecular biology and cancer pharmacology.

You will participate in the development of strategies to exploit cancer cell selective molecular targets and create approaches towards cancer drug discovery as novel targets are identified. Your qualifications should include a PhD degree and at least two years of postdoctoral training. Individuals who have applied their expertise in the cloning and characterization of novel genes to the field of tumor cell biology (oncogenes, tumor suppressor genes, differentiation, etc.) are particularly encouraged to apply.

Pfizer offers a stimulating research environment and a competitive compensation and benefits package, along with relocation assistance to this southeastern Connecticut shoreline community. Please send a resume and the names of three references to: Mr. Kym Goddu, Personnel Associate, Employee Resources Department, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340. An equal opportunity employer.
Postdoctoral Positions
Molecular Toxicology Group

The Biomedical Sciences Division at the Lawrence Livermore National Laboratory has an exciting program to investigate the effects of chemicals on DNA, mutation, and cytogenetic endpoints. This is part of a larger program to investigate the cancer and mutation risk posed by chemicals present in the diet and the environment. We are seeking several postdoctoral fellows with recent Ph.D.s to work as part of an interdisciplinary team of biologists, biochemists, toxicologists, and physicists in the following areas. Appointments will be initially for two years with the possibility for a 1 year extension, depending on funding and project status.

Metabolism (2)

POSITION A - Successful candidates will be responsible for conducting studies on whole body metabolism, pharmacokinetics, and bioalkylation/biodealkylation pathways of chemical carcinogens. These positions require a Ph.D. in Biochemistry, Toxicology, Pharmacology or related field with experience preferred in metabolite synthesis, radio-isotope tracer studies, pharmacokinetics, and/or animal handling. Some experience with molecular biology or immunoassays is desirable.

Biophysics (1)

POSITION B - We are seeking an individual with a Ph.D. in biophysics to study the interactions of carcinogens with DNA. Experience in nucleic acid chemistry and quantum chemistry is highly desired.

DNA and Protein Chemistry (2)

POSITION C - These individuals will conduct studies on the interactions of chemicals with macromolecules, and study the relationships between molecular damage and biological effect. The positions require a Ph.D. in Biochemistry, Toxicology, Pharmacology or related field with experience in DNA adduct analysis, electrophoresis, protein chemistry, mammalian cell culture, animal handling and/or molecular biology.

Cyto genetics (2)

POSITION D - Applicants for these positions should have a Ph.D. degree or the equivalent in genetics, molecular biology, or a related discipline. The first position requires experience in molecular biology, including DNA cloning and isolation, phage and cosmide library construction, and PCR and nick translation with non-isotopic markers. Candidates with at least some experience in cytogenetics will be preferred. A second position requires experience in cytogenetics, including tissue culture, metaphase chromosome preparation and analysis, and fluorescence in situ hybridization. Candidates with at least some experience in molecular biology will be preferred. Applicants must be able to interact constructively with a large research team and with other research groups. Computer literacy and ability to work with small laboratory animals are also desired.

For further information contact: Drs. James Felton (510) 422-5655 or Ken Turteltaub (510) 423-8152 (Positions A, B, C) or Dr. James Tucker (510) 423-8154 (Position D).

Interested applicants should send their CV indicating position preference to: Phil Harding, Professional Employment, Dept. A92216BS, Lawrence Livermore National Laboratory, P.O. Box 5510, L-725, Livermore, CA 94551. LLNL is an equal opportunity employer. Minority applicants are encouraged to apply.

University of California

Lawrence Livermore National Laboratory

ACS Eminent Scholar FACULTY POSITION CANCER CELL/ MOLECULAR BIOLOGY University of Florida College of Medicine

Applications and nominations are invited for the American Cancer Society Edward R. Koger Eminent Scholar Chair in Basic Cancer Research. The successful candidate for this faculty position will hold a Ph.D. or M.D. degree and she/he will have demonstrated excellence in research on the cellular and/or molecular biology of cancer. She/he would include cell division cycle control, cytokine action, molecular genetics, chromosomal/chromatin structure, oncogene molecular biology, or other basic research areas holding great promise for fundamental breakthroughs in understanding and controlling cancer. Commitments for laboratory and office space, start-up funding, as well as other resources will assure the Koger Scholar's sustained trajectory to international eminence. She/he can also play a significant role in efforts to build a major cancer research center at the University of Florida. Appointment in an appropriate department within the College of Medicine will be based upon the candidate's accomplishments and field of interest. The closing date for nomination or application (including Curriculum Vitae, statement of research goals, current funding, and three letters of reference) is July 31, 1982. Address all correspondence to:

Daniel L. Purich, Ph.D., Chairman
Koger Scholar Search Advisory Committee
Department of Biochemistry & Molecular Biology
College of Medicine, Health Science Center
Gainesville, FL 32610-0245.

(An Equal Opportunity/ Affirmative Action Employer)
Cyanamid uses novel approaches to discover and develop new therapeutics in parasitology.

At the Agricultural Research Division of American Cyanamid Company, you'll be part of a winning team that has produced 17 new products in 4 years. We have a long-range commitment to discovering ways to increase worldwide crop and livestock production through chemical, biochemical and biological research. This commitment is evidenced by our expanding research budget which has tripled over the last decade.

The following opportunities exist in our Animal Discovery Department and Clinical Development Laboratory, where you will find a dedicated effort to treat and prevent disease, promote growth and improve feed efficiency in livestock and poultry.

Parasitologist/Protozoologist
The research scientist we seek will administer a program geared toward discovering new anticoccidials/antiprotozoals. We require a PhD with post-doctoral training in protozoology, molecular parasitology, parasite biochemistry or a related discipline. A background in immunology, avian physiology and novel approaches to identifying new therapeutics is desirable.

Dept. RHS

Research Parasitologist
The successful candidate will conduct studies on the efficacy of anthelmintics in farm animals. Studies require experience with experimental infections in farm animals and interpretation of results. A PhD in parasitology and at least 2 years' experience in conducting experiments with large animals are required. Dept. KS

American Cyanamid Company offers an excellent compensation and benefits package which includes 401(k) savings plan, flex-time work schedules and a convenient location one hour from New York City or Philadelphia. We invite you to forward your resume, indicating appropriate position code to: Employment Office, American Cyanamid Company, Agricultural Research Division, P.O. Box 400, Princeton, NJ 08543-0400. An Equal Opportunity Employer M/F/H/V.

Pulmonary Research

Genentech, Inc., a leader in the biotechnology industry, is currently seeking two scientists to join our active pulmonary research program. You'll be involved in new research in the area of obstructive lung disease and in ongoing programs such as the study of aerosolized DNase for the treatment of airway obstruction associated with cystic fibrosis, chronic bronchitis and pneumonia.

Pulmonary Scientist
Join our team of scientific investigators in finding new molecular approaches to the treatment of lung disease.

We're seeking an individual with a PhD or MD and expertise in pulmonary pathology and/or anatomy, animal models of lung disease, and their relation to human diseases, such as emphysema, chronic bronchitis, cystic fibrosis or asthma. A strong interest in molecular mechanisms of lung injury and repair is highly desirable.

Pulmonary/Aerosol Pharmacologist or Physiologist
As a member of a multidisciplinary group, you'll be involved in the development of new aerosol treatments of lung disease. A strong interest in the aerosol delivery of proteins, peptides and/or genes is highly desirable.

We require a PhD and expertise in the performance of inhalation studies in experimental animals.

Our progressive company offers an excellent salary and benefits package which includes child care facilities, free health club membership and fully paid medical/dental/vision coverage. Please send your resume to Genentech, Inc., Human Resources, Dept. WS, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We actively support and promote affirmative action and equal opportunity employment. Women and minorities are encouraged to apply.

Genentech, Inc.
SCIENTIST (ASSOCIATE)

Assoc. Scientist will engage in a variety of molecular, biochemical, and cellular biology research as part of the American Cyanamid's Fermentation Development Department. This is an excellent opportunity for individuals interested in the study and application of fermentation processes for the production of pharmaceutical intermediates and molecules of potential therapeutic value. The successful candidate will work with a team of scientists and technicians to carry out research projects in molecular biology and fermentation science.

In addition to technical responsibilities, the scientist will also be involved in the development of innovative research projects, and will participate in the preparation of scientific publications and presentations at conferences. This position requires a strong background in molecular biology and fermentation science, as well as excellent communication and interpersonal skills.

The position is located at the American Cyanamid facility in Greenwich, Connecticut. American Cyanamid is a leading producer of a wide range of chemicals and pharmaceuticals, and offers a dynamic and challenging work environment.

POSITIONS OPEN

INTESTINAL CELL BIOLOGIST

The Nemours Research Program of the Alfred I. duPont Institute intends to establish a Gastroenterology Research Laboratory. The program will include a research scientist for the position of DIRECTOR OF LABORATORY. We are seeking an individual whose interests lie in some aspect of intestinal cell biology, with a strong interest in cellular differentiation, development, and function. In this position, the appointee will pursue his/her independently supported research program. The successful candidate will have a Ph.D. in cell biology, with a strong background in molecular biology and cell culture techniques. The position will involve the development and implementation of research projects in the field of intestinal cell biology, with a focus on the regulation of intestinal cell differentiation and function.

The position is located at the Alfred I. duPont Institute, which is a comprehensive children's hospital and research institute dedicated to the care of children and families. The institute is known for its commitment to excellence in patient care, research, and education.

PROGRAM DIRECTOR

NATIONAL RESEARCH INITIATIVE

THE DEPARTMENT OF AGRICULTURE (USDA)

The National Research Initiative Competitive Grants Program (NRI-CGP), U.S. Department of Agriculture, seeks highly qualified candidates to serve as Program Director for grant review and administration in the area of animal disease research. Candidates must have a Ph.D. or other degree with major study in microbiology, veterinary medicine, or related field. The successful candidate will have a strong background in animal disease research and a demonstrated ability to manage a large and diverse research portfolio.

The position is located at the USDA headquarters in Washington, D.C. The successful candidate will work closely with other USDA agencies and organizations to administer the competitive grants program, which supports research aimed at reducing the incidence and impact of animal diseases.

THE SCHOOL FOR FIELD STUDIES

IN CONJUNCTION WITH NORTHEASTERN UNIVERSITY

RESIDENT FACULTY POSITIONS

RESOURCE MANAGEMENT AND COASTAL ZONE MANAGEMENT

Resident Faculty for full-time teaching positions in the School for Field Studies, a study abroad program of Northeastern University, is available in the fields of resource management and coastal zone management. These positions offer the opportunity to teach a variety of courses in the fields of natural resources, environmental science, and resource management. The successful candidate will have a strong background in the relevant field(s) and a commitment to teaching excellence.

The School for Field Studies is a study abroad program of Northeastern University that provides unique, interdisciplinary learning experiences in the fields of environmental science, natural resources, and sustainability. The successful candidate will work closely with other faculty members and students to develop and deliver high-quality courses.

The position is located in a variety of locations around the world, with the specific location depending on the field of study. The successful candidate will have a strong commitment to teaching and learning excellence and a desire to contribute to the mission of the School for Field Studies.

RESEARCH FACULTY POSITION, SCHOOL OF MEDICINE, UNIVERSITY OF WASHINGTON

Urology, University of Washington

The University of Washington Department of Urology seeks to recruit a Ph.D. fellowship-trained researcher. This position will involve the development and implementation of research projects in the field of urology, with a focus on the study of renal physiology and disease. The successful candidate will have a strong background in urology and renal physiology, and a demonstrated ability to manage a research portfolio.

The position is located at the University of Washington Department of Urology, which is a comprehensive research institute dedicated to the care of patients with urologic conditions. The successful candidate will work closely with other faculty members and researchers to develop and conduct high-quality research projects.
POsITIONS OPEN

POPULATION BIOLOGIST, BIOSTATISTICIAN, MAMMALOGIST. The Department of Biological Sciences at Idaho State University has a non-tenure-track position which will be available for 1 to 3 years. Responsibilities include teaching the human reproduction and demography section of a large, undergraduate nonmajor course each semester, a graduate course in biostatistics on the human population, and participation in research in molecular biology and mammalogy on alternate years. Previous experience with museum collections is desirable but not required. Opportunity to work with M.S., Ph.D., and Doctor of Arts students. Applicants will be expected to hold a doctoral degree. This position will remain open until filled, but applicants should send a letter of application, curriculum vitae, and three letters of reference by 22 June 1992 to: Chairperson, Search Committee, Box 8007, Department of Biological Sciences, Idaho State University, Pocatello, ID 83209. Idaho State University is an Equal Opportunity/ Affirmative Action Employer.

VIROLOGIST AT NORTHWESTERN UNIVERSITY MEDICAL SCHOOL. A tenure-track university FAculty position is available in the Department of Pathology, for the opportunity for a career combining a major commitment to academic laboratory medicine and scientific research. The successful candidate will be either an M.D. or Ph.D. who has an active research program and experience in the virology laboratory (including retrovirology). Faculty rank and salary will be commensurate with the candidate's level of qualification and academic development. The position has administrative leadership of a BL-3-level virus research laboratory and help in the construction of a major commitment to virology, including but not limited to AIDS. Northwestern University is an NIH Comprehensive AIDS Center and has an active multidisciplinary group of investigators in the discipline of virology. Interested candidates should submit curriculum vitae by 30 June 1992 to: Dr. Dante G. Scarpelli, Chairman, Department of Pathology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611.

Northwestern University is an Affirmative Action/Equal Opportunity Employer. Hiring is contingent upon the eligibility to work in the United States.

HUMAN GENETICS AT THE UNIVERSITY OF UTAH

The University of Utah, Department of Human Genetics, wishes to recruit and hire at the RESEARCH INSTRUCTOR level. The department would like to recruit a candidate that has a Ph.D. with four or more years of research in molecular genetics of the human. Research experience with a variety of techniques, development of STS-based DNA markers, mapping of YACs and generation of physical and genetic maps of the human genome. The candidate should further have extensive experience in mapping and cloning of genotypes causing hereditary disease. Application deadline will be 1 July 1992. Applications submitted after the deadline may be considered if no qualified candidates have applied by the deadline. Send curriculum vitae and references to: Dr. Raymond Gesteland, Human Genetics Recruitment Committee, University of Utah, Building 533, Room 2100, Salt Lake City, UT 84112. The University of Utah is an Equal Opportunity Employer.

FACULTY POSITION (NON-NUNREN ACCRUING) DEPARTMENT OF BIOCHEMISTRY. Instructor position is available 1 July 1992 in the Department of Biochemistry, University of Texas (UT) Southwestern Medical Center at Dallas. Nontenure accruing. Must have a Ph.D. degree in biochemistry and a master's degree in a biology-related field. Experience in cloning, PCR amplification and expression of cDNA (in E. coli); additional experience in enzyme assays for cytochrome P450 and RNA binding of mitochondrial and microsomal proteins. Send resume and names of three references to: Ronald W. Eatebrook, Department of Biochemistry, University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9038. UT Southwestern Medical Center is an Equal Opportunity/Affirmative Action Employer.

BIOCHEMIST/MOLECULAR BIOLOGIST

The Cardiovascular Diseases Research Unit of Upjohn Laboratories, a division of The Upjohn Company, has an opening for a biochemist with a strong background in molecular biology. Upjohn Laboratories has made a long-term commitment toward understanding cardiovascular disease at the molecular level. Using molecular, cell biological, and/or biophysical approaches, the successful candidate will develop a research project focused on the role of ion channel (K+ channels in particular) in cardiovascular diseases such as hypertension, arrhythmia, and myocardial ischemia.

This individual will be involved in research efforts aimed at successfully cloning K+ channels that are of therapeutic interest. You will be a member of an interdisciplinary team of scientists in the areas of pharmacology, electrophysiology, cell biology, biochemistry, and chemistry, all interested in exploiting therapeutic opportunities in this scientifically challenging field.

A Ph.D. along with a strong theoretical and experimental background in molecular biology plus 2-3 years post-graduate experience is required. Prior experience in the application of molecular biology techniques to the study of ion channels would be considered a significant plus. An understanding of the oocyte expression system, as well as the electrophysiological techniques used for the assessment of ion channel function would also be highly desirable.

Upjohn offers a very competitive compensation and benefits package in addition to a stimulating, multi-disciplinary research environment at our modern laboratories, located in Kalamazoo, Michigan. Our region provides abundant cultural and recreational pursuits and offers reasonable housing and living costs. For confidential consideration, please forward a curriculum vitae to: The Upjohn Company, Corporate Recruiting/Specialty Code 117, 7000 Portage Street, Kalamazoo, MI 49001-0900. Please refer to specialty code #117 in your cover letter. An Equal Opportunity Employer M/F.

Our Commitment to Scientific Excellence Continues Logo

MOLECULAR BIOLOGIST/ BIOCHEMIST

The Department of Immunology Research is seeking both Ph.D. and Bachelor-level Scientists to join a multidisciplinary group studying receptor biology with particular emphasis on the structure/function relationships for both ligand binding and signal transduction. The goal of the group is to utilize cutting edge science to develop novel therapeutic agents for the treatment of inflammatory and autoimmune disorders.

Senior Research Scientist - The positions require a Ph.D. or M.D. or equivalent with at least 2 years of postdoctoral experience and a proven record of original research. Relevant experience in protein biochemistry and/or molecular biology as they pertain to structure/function relationships is highly desirable, as is a background in signal transduction.

Staff/Research Scientist - Applicants should have an M.S./B.S. or equivalent with substantial laboratory experience. Preference will be given to candidates with a strong background in molecular biology with emphasis on cloning, mutagenesis, and expression, or in biochemistry with emphasis on protein purification and characterization.

These are excellent opportunities for motivated and creative individuals to continue their scientific growth and development. Publication and internal and external collaborations are actively encouraged.

Merck Research Laboratories is located in Rahway, New Jersey approximately 25 miles from New York City. Our salaries, benefits and growth potential are excellent. For consideration, please send your resume with the names of 3 references to Susan F. Marsella, Ad#120, Merck & Co., Inc., R80-A3, P.O. Box 2000, Rahway, NJ 07065. An EEO/AA/VH Employer.

MERCK Research Laboratories


POSITIONS OPEN

UNIVERSITÉ DE MONTRÉAL

TERRESTRIAL VERTEBRATE ECOLOGY

The Département de sciences biologiques of the Faculté des arts et des sciences, invites applications for a tenure-track position in terrestrial vertebrate ecology, preferably mammalian ecology. Functions: the successful candidate will be expected to be able to teach courses in French at the undergraduate and graduate levels, to supervise graduate students, and to carry out an active research program. Preference will be given to candidates who would be able to use the facilities of the Station de biologie des Laurentides. Requirements: candidates should have a Ph.D. in a relevant field and postdoctoral or equivalent experience. Salary: based on current contract agreements. Appointment date: the position begins 1 June 1993. Interested applicants should submit curriculum vitae, two copies of five representative reprints or preprints, and three letters of reference before 31 August 1992 to: Raymond McNeil, Directeur, Département de sciences biologiques, Université de Montréal, C.P. 6128, succursale A, Montréal (Québec), H3C 3J7. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents (0078).

POSTDOCTORAL POSITION—BIOMOLECULAR SIMULATION. Participate in the development and application of sensitivity analysis methods to study biomolecular structure-function relationships. Experience in modeling and simulation of chemical and biomolecular systems. UNIX and FORTRAN programming and computational work are advantageous, but candidates with different backgrounds will be considered. Please send résumé and three letters of recommendation to: Dr. Chung R. Li, Department of Physiology and Biophysics, Box 1218, The Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6674. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION—BIOLOGICAL SIMULATION. Participate in the development and application of sensitivity analysis methods to study biomolecular structure-function relationships. Experience in modeling and simulation of chemical and biomolecular systems. UNIX and FORTRAN programming and computational work are advantageous, but candidates with different backgrounds will be considered. Please send résumé and three letters of recommendation to: Dr. Chung R. Li, Department of Physiology and Biophysics, Box 1218, The Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6674. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION AVAILABLE IMMEDIATELY to study mucosal immunity and host resistance to E. coli urinary tract infection. Studies on antibody produc-
tion in the urogenital tract and vaccine development will be pursued. Candidates should have a recent Ph.D. and a strong background in microbiology, immunology, and bacterial antigen purification. Send curriculum vitae, names and addresses of three references, and a description of research interests to: Dr. Walter J. Hopkins, Department of Surgery, 600 Highland Avenue, Madison, WI 53792.

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Molecular Biologist
Regulation of Gene Expression

The PARKE-DAVIS Pharmaceutical Research Division of Warner-Lambert Company has fostered an innovative and exciting environment for discovery research. A critical component of this effort is the constant push to look forward for new therapeutic advances. In this regard, we are committed to exploring the role of gene expression in the pathophysiology of human disease. We seek a research scientist interested in the hormonal regulation of gene expression to join our new Signal Transduction Department.

This scientist will initiate and direct a research effort to study the basic mechanisms involved in the expression of proteins that are disregulated in diseases such as diabetes, inflammation and cancer. The scientist will join a highly interactive and creative group focused on intracellular signaling for peptide hormones and growth factors. The successful candidate should be an energetic and productive molecular biologist, with a Ph.D. degree and at least 3 years of postdoctoral experience as well as a proven record of accomplishment.

Our modern facilities are located adjacent to the University of Michigan campus. Excellent compensation and benefits are only a part of the package. Our dynamic and challenging research environment offers ample opportunities for personal and professional creativity and growth. If you are qualified and wish to be considered, please send a curriculum vitae and list of references in confidence to Human Resources Department, Box JDM-91024, PARKE-DAVIS Research Division, Warner-Lambert Company, 2800 Plymouth Road, Ann Arbor, MI 48105. "Smoke-Free Work Environment"

"Equal Opportunity in Action"

PARKE-DAVIS
A DIVISION OF WARNER LAMBERT

We’re More Committed Than Ever To New Drug Discovery.

Abbott Laboratories’ leadership in the development of new pharmaceutical products has resulted in 20 consecutive years of growth. Now, fueled by last year’s 18% increase in R&D spending, you could join us and support our vital research efforts.

BIOCHEMIST/PHARMACOLOGIST
Immunosciences Research

Working within the Immunosciences area of our New Drug Discovery Group, the candidate we select will contribute to research involving inflammatory mediators. A PhD is required, as is experience in HPLC, lipid biochemistry, immunosassays and leukocyte cell biology. You must also be capable of supervising assistants and working closely with associates on a large, successful multi-disciplinary team.

Abbott provides an excellent salary and benefits package including profit sharing and a stock retirement plan. We are located in an attractive suburban setting, approximately 30 miles north of Chicago. For confidential consideration, please forward a resume and salary history to: Patricia Handy, Corporate Placement, Job # 53546, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064. Abbott is an Affirmative Action Employer/Smoke-Free Environment.

ABBOTT LABORATORIES

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The sixth
SANDOZ PRIZE FOR
GERONTOLOGICAL RESEARCH

worth 50,000 Swiss Francs, will be awarded by the International Association of Gerontology at the XVth International Congress of Gerontology, Budapest, 4-9 July 1993.

Applications and nominations should be submitted not later than
15 October 1992
to John L. C. Dall, MD, Official Coordinator for the SANDOZ PRIZE, The Victoria Infirmary, Glasgow G42 9TY, United Kingdom (phone 44 41-649 4545, fax 44 41-649 2206).

Information can be obtained from this office and from any SANDOZ PHARMA company.
At Syva, R & D is serious business. As part of health care leader Syntex, we are a medical diagnostics company maintaining a strong commitment to scientific achievement and opportunity. Consider the following openings in our new Evergreen/San Jose facility.

**Senior Scientist**

In this critical and highly visible position, responsibilities will include development of new automated assays for serological diagnosis of infectious diseases. This individual will also lead a small group of scientists in these efforts.

The ideal candidate will have a PhD in Biochemistry, Immunology or Microbiology, plus post doctoral experience and 1-3 years experience in immunoassay development (preferably in infectious diseases). A Master's degree candidate must have 5-7 years experience in immunoassay development. Supervisory experience preferred.

**Senior Immunochemist**

We are seeking an innovative and independent immunologist/biochemist to develop immunoassays for monitoring emerging therapeutic technologies. This position will combine all aspects of diagnostic assay development including identification of suitable antibodies, protein modification, optimization of the assay to maximize clinical utility, formulation, clinical evaluation and transfer to production.

Background required for this position includes a PhD plus 2 years, or equivalent experience in Immunology and/or Biochemistry. Strong analytical skills also required and knowledge in diagnostics development, organic chemistry and clinical chemistry is preferred.

We offer an excellent salary and benefits package, along with a wonderful work environment. Please send your resume with salary history, to: Syva, Dept. SWH3, 3403 Yerba Buena Road, P.O. Box 49013, San Jose, CA 95161-9013. Or, you may FAX your resume to: (408) 239-2516. Principals only, please. Syva is an equal opportunity employer committed to the values of a diversified workforce.

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**Analytical Chemists**

Battelle, Pacific Northwest Laboratories (PNL), is an international leader in the practical application of technology. Battelle PNL is dedicated to finding ways to preserve our environment and keep America technologically competitive.

Our Analytical Chemistry Laboratory is a service oriented laboratory organization. We are committed to providing our clients with high quality, timely analytical results. We have immediate openings for two experienced Analytical Chemists.

The ideal candidates will have experience in service laboratory environment, technical bench chemist experience with some program management experience, and experience with EPA requirements.

These positions require a Bachelor's degree in Chemistry; a Master's degree in Chemistry preferred. Candidates must have three or more years of experience in inorganic analytical techniques with instrumentation such as ICP, IC, AA (flame, GFAA, CVAA), and UV/Vis. Candidates must also have experience in CERCLA/CLP, RCRA SW846, and/or NPDES. Must have excellent computer skills including experience with spreadsheets, word processors, and data bases. IBM or compatible experience is preferred. Must have good verbal and written communication skills with specific experience in formal report writing.

Battelle PNL is located in Richland in Southeastern Washington state. You'll enjoy the advantages of small town living and a wide variety of outdoor recreational opportunities. Interested candidates should send a resume to: Battelle Recruiting Center, P.O. Box 1406, Dept. 6177BAH, Richland, WA 99352. Principals Only. EO.

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**Research Scientist II**

**Virology/Biochemistry**

Exploring and testing your analytical and intuitive abilities is what a scientific career is all about. And Burroughs Wellcome Co. can give you those opportunities. We are at the forefront of important new pharmaceutical developments, with a long record of successes. That means you can have the resources and support to do your best work, and make a meaningful difference. Discover your capabilities at Burroughs Wellcome Co.

The Division of Molecular Genetics and Microbiology has need of a scientist to perform enzymology, biochemistry and tissue culture studies in collaboration with other scientists to elucidate the mechanism of action of candidate antiviral agents.

Candidates need a Ph.D. degree in biochemistry or microbiology and experience with enzyme mechanism studies, tissue culture techniques, and biochemical analytical techniques. Candidates selected for interview will take an on-site writing assessment. Other factors to be considered include HPLC and DNA recombinant techniques and experience extrapolating from the literature.

Burroughs Wellcome Co. offers competitive salaries and comprehensive benefits. We also offer the advantage of working in North Carolina's celebrated Research Triangle Park, one of the country's leading areas for scientific research, with the cultural and recreational opportunities of the Raleigh/Durham/Research Triangle area nearby. To apply, please send your resume, indicating position number in your cover letter, by June 22, 1992, to: Burroughs Wellcome Co., Recruiting & Staffing, P.O. Box 63833-50, 3030 Cornwallis Road, Research Triangle Park, NC 27709.

For information on other opportunities with Burroughs Wellcome Co., call our Job Information Line at (919) 248-6347.
**National Institutes of Health**

**RESEARCH SCIENTIST/POSTDOCTORAL FELLOW (Molecular Biologist)**

The Laboratory of Cellular Development and Oncology, National Institute of Dental Research, seeks an outstanding candidate with graduate education and/or experience in Biochemistry and Molecular Biology for a senior postdoctoral fellowship position. Applicants should have at least 2 years postdoctoral training and research experience in signal transduction as well as mechanisms of action through non-receptor and receptor-tyrosine kinases. Additionally, the applicant should be familiar with nuclear medicine principles and radiation protection, radioreceptor binding assays, enzymology, protein purification, tissue culture techniques including biological assays for mitogens and transforming genes, expression of cloned genes in mammalian cells and the use of recombinant retroviral vectors. A substantial record of publications of original work in these areas is required. Starting salary will be commensurate with qualifications and experience. Interested candidates should submit a curriculum vitae, several reprints, summary of research interests and names of three references no later than June 30, 1992.

Material should be sent to: **Faye M. Harbrant, Personnel Management Specialist, National Institute of Dental Research, National Institutes of Health, Bldg. 31, Room 2C23, 9000 Rockville Pike, Bethesda, MD 20892.**

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**The United States Department of Energy**

1992

**DISTINGUISHED POSTDOCTORAL RESEARCH PROGRAM**

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- Oak Ridge, Tennessee 37831-0117
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**A TIME FOR ACHIEVEMENT**

There is that place in time in the progress of a company, when it stands at the threshold of an era of splendid opportunity. For Glaxo Inc., one of the largest pharmaceutical firms in the U.S., that time is now. We have worked hard to make that happen — with high spirit and a strong belief in the abilities and commitment of our employees.

We invite you to experience the challenges and accomplishments a future with us holds for you. Join us today in the following opening at our Research Triangle Park, NC Corporate Headquarters.

**SYSTEMS ANALYST/ SR. SYSTEMS ANALYST**

The individual will perform project work related to CPDMS Kinetics calculations development and support, chromatography data integration with CPDMS and graphical data interface.

Background must include a BS degree in Computer Science, Chemistry, or Biology with a minimum of 4-6 years direct computing experience, or a MS degree or PhD and 2-4 years experience. Candidates should have experience in a Laboratory Automation environment specifically with VMS based Chromatography data systems, preferably VG's Multichrom. Previous experience with VAX/VMS and relational database including Forms programming required, ORACLE preferred. A demonstrable working knowledge of either "C" or FORTRAN is a must; bench chemistry and analytical methodology experience is a plus.

Join Glaxo and enjoy an excellent salary, flexible benefits, an on-site recreation and fitness center, a spirit of enthusiasm and teamwork and outstanding opportunities for career satisfaction. Equally appealing is our world famous scientific, industrial and academic community in Research Triangle Park, NC. Send your resume and salary history to: Human Resources Department, Job #3646804-SC, Glaxo Inc., P.O. Box 13398, Research Triangle Park, NC 27709. (No Phone Calls or Agency Referrals, Please.) An Equal Opportunity Employer M/F/H/V.

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**Glaxo Inc.**
POSTDOCTORAL POSITION to study the prion protein and its association with transmissible spongiform encephalopathies in animals. Experience in protein biochemistry required as well as interest in neurobiology. Please send curriculum vitae and names of three references to: Dr. F. Marsh, Department of Animal Health and Biomedical Sciences, University of Wisconsin—Madison, 1655 Lind Drive, Madison, WI 53706. The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL ASSOCIATE—MOLECULAR CARDIOLOGY. Available immediately, to study molecular mechanisms of expression in cardiac tissue and cardiac cells. Please send curriculum vitae and names of three references to: Mabroukeh Eghbali, Pharm.D., Linda B. Hill, Department of Anesthesiology, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06510. Yale University is an Affirmative Action Employer and provides equal opportunities to all applicants.

POSTDOCTORAL FELLOW: CARDIOVASCULAR PHYSIOLOGY, TULANE UNIVERSITY. Position available for Ph.D. or M.D. with experience in cardiovascular autonomic physiology to assist in the development of a research project pertaining to autonomic regulation of the electrophysiologic properties of the neonatal heart. Experience with cardiovascular research using animal models and the neonatal heart systems are essential. Experience in autonomic nervous system physiology highly desirable. Send curriculum vitae and names of three references to: S. Pickoff, M.D., Director, Pediatric Cardiology Section, Tulane University Medical Center, 1430 Tulane Avenue, New Orleans, LA 70112.

POSTDOCTORAL FELLOW, NIH STIPEND, depending on Ph.D. degree. Should have training in Northern, Southern blots and in situ hybridization. PCR desirable. To be applied to interdisciplinary project concerning endothelial pathophysiology of cerebral microcirculation and endothelial/smooth muscle interaction. Both intact vessels and cultured cells will be used. Work will begin between 1 July 1992 and 1 July 1993. Funding will last at least 2 years. Forward curriculum vitae and three references to: William Rosenblum, M.D., Department of Pediatrics, Virginia Commonwealth University, Box 17, MCV Station, Richmond, VA 23298-0017. FAX: 804-225-3299. Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.

ATTENTION SCIENCE ADVERTISERS $40 SPECIAL
Place your classified ad in any May–August 1992 issue of SCIENCE and get double exposure. We’ll display the same position announcement at the Employment Exchange during the AAAS Pacific Division Meeting or Science Innovation ’92 for only $40 more. That’s less than the cost of one additional line.

When you place your classified ad in SCIENCE, simply let us know that you want to take advantage of the $40 Special and we’ll do the rest. Please specify the meeting of your choice or both.

The Employment Exchange will take place at the AAAS Pacific Division Meeting, 21–24 June 1992, and the Science Innovation ‘92, 21–24 July 1992, at the Moscone Convention Center in San Francisco, California. Thousands of scientists in various disciplines have been invited to participate. Act fast and you can reach this unique pool of candidates.

For more information on how you can interview candidates on-site please refer to the 8 May 1992 issue of Science, pages 763 and 765.

POSTDOCTORAL ASSOCIATE
Harvard-MIT Division of Health Sciences and Technology seeks an individual to work on the development of systems for the non-invasive regeneration of skeletal tissue. This work involves developing methods and techniques for cell culture of skeletal tissue and for developing methods using polymer materials for use as tissue supports.

REQUIREMENTS: Ph.D. in biology, chemistry, clinical engineering or related field. Must be versed in areas of tissue/organ culture or synthetic biomaterials technology.

Interested candidates should send two copies of both cover letter and CV to: Dr. Cato Laurencin, c/o MIT Personnel Office (E29-259), 77 Massachusetts Avenue, Cambridge, MA 02139-4307. MIT is an equal opportunity/Affirmative Action Employer. Women are encouraged to apply.

POSTDOCTORAL FELLOW OR RESEARCH SCIENTIST
Applications are invited for a Ph.D. or equivalent to join a laboratory designed to the understanding of cell and molecular biology of epithelial cells. Of particular interest are the mechanisms involved in the transport of normal cells and in cells derived from models of hyperplasia. The successful applicant will be expected to develop a research project or related discipline with a background in liposomas, membrane biophysics or lipid physical chemistry. Send curriculum vitae and three references to: Dr. A. Santoro, Department of Pathology, University of Pennsylvania, Philadelphia, PA 19104. Women and minorities are encouraged to apply.

POSTDOCTORAL RESEARCH ASSOCIATE
The Minority Center for Toxicological Research is accepting applications for a position of postdoctoral research associate.

Qualifications: Ph.D. in toxicology, biochemical pharmacology or other concerning experience in neurobehavioral toxicology/pharmacology. The project is designed to investigate the role of central dopaminergic receptors in neurobehavioral toxicity of Ph. Salby: $30,000 per year. (Availability contingent upon funding of a grant.)

Send detailed resume with letter of interest to: Dr. A. Santoro, Department of Pathology, University of Pennsylvania, Philadelphia, PA 19104.

POSTDOCTORAL RESEARCH ASSOCIATE
Positions available in the laboratory of Dr. David Jadhav, Department of Pharmacology, Washington University School of Medicine, 660 South Euclid Avenue, St. Louis, MO 63110. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION, BELUGA WHALE POPULATION GENETICS, available immediately to conduct research into the stock structure of beluga whale populations. Candidates should have experience in sequencing mitochondrial DNA, investigating variability of nuclear DNA, and analyzing molecular populations by electrophoretic or enzymatic techniques. Send application, including curriculum vitae, publica-

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DIRECTOR OF MEDICAL RESEARCH

Marshfield Clinic, a 400-physician multispecialty not-for-profit group practice, is seeking a M.D. or Ph.D. Director for its expanding Medical Research Foundation. Experience in medical research plus management and excellent communication skills are required. The Director is responsible for the planning, development, implementation and evaluation of basic and applied clinical research programs. He or she reports directly to the President of the Marshfield Clinic.

Founded in 1959, the Research Foundation has grown significantly and currently includes five complete Basic Science Research Laboratories, the Department of Epidemiology and Biostatistics, the National Farm Medicine Center, the Rural Health Research Center, ongoing clinical research projects and other areas of study. This outstanding opportunity is located in one of the Midwest’s best small cities.

Send curriculum vitae with cover letter to:
William O. Myers, M.D.
Chairman
Search Committee
1000 North Oak Avenue
Marshfield, WI 54449

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We challenge motivated scientists in the following areas to explore these excellent career opportunities:

Post Doctoral Fellow:

- Position Number 101
- Ph.D. with 0-3 years of industrial experience in biochemistry. This position will require demonstrated expertise in molecular biology and in one or more of the following areas: protein purification, cell culture, protein expression, or bacterial fermentation.

Biochemist:

- Position Number 102
- MS with 1-5 years of strong laboratory background in protein purification. Working knowledge of recombinant DNA techniques and enzyme assay development is highly desirable.

Microbiologist:

- Position Number 103
- MS with 1-5 years of experience in microbial fermentation. Expertise in bacterial physiology or cell culture is required. Experience in optimization and process development focusing on protein expression is a plus.

Pel-Freez,
a leading and diversified biotechnology company, is headquartered in NorthWest Arkansas. The Rogers facilities are 4 miles from beautiful Beaver Lake with over 500 miles of scenic shoreline. We offer a unique blend of biotechnology excellence and a high quality of life. For consideration, send C.V. or resume and salary history to: Human Resources Department, Pel-Freez Corporate Office, P.O. Box 68, Rogers, AR 72797-0068. Please include position number, EOE

Center for Synchrotron Radiation Research and Instrumentation is seeking a

STRUCTURAL BIOPHYSICIST

A position in structural biophysics in the Department of Physics at Illinois Institute of Technology will be open in Fall 1992. It is anticipated that the initial appointment will be at the Research Assistant/Associate Professor level with conversion to a tenure-track faculty position after two years. We are seeking an experienced Ph.D. macromolecular crystallographer with interest in the development and use of synchrotron facilities for diffraction studies.

IIT, through its Center for Synchrotron Radiation Research and Instrumentation, will be responsible for the development of several synchrotron beam lines at the Advanced Photon Source currently being constructed at Argonne National Laboratory near Chicago. The successful candidate will work closely with the Center staff on the development of two beam lines for the Industrial Macromolecular Crystallography Association (IMCA), a consortium of twelve major chemical and pharmaceutical companies. Upon commissioning of the beam lines, it is anticipated that this faculty member will become the Director of IMCA operations at the Advanced Photon Source.

Illinois Institute of Technology, founded in 1890, is a private technological university located in south-central Chicago. The Department of Physics has strong research programs in biophysics, condensed matter physics, elementary particle physics and materials science, and offers bachelor's, masters, and doctoral degrees.

To apply, please send a curriculum vitae and publication list to:
Professor P. W. Johnson, Chairman
Department of Physics
Illinois Institute of Technology
Chicago, IL 60616 USA

Illinois Institute of Technology is an equal employment/affirmative action employer M/F/H.V.
Research Opportunities

Molecular Devices has an active interdisciplinary research program at the interface between biology and silicon technology. We study the effects of receptor activation on cell physiology, particularly as revealed by silicon-based biosensor systems. Molecular Devices develops and manufactures biosensor-based instrumentation, software, and reagents. We have the following research opportunities available.

**Molecular/Cell Biologist**


A PhD and approximately 3 years of pre- or post-doctoral experience applying recombinant DNA methodology to eukaryotic cells are required. Respond to Dept. MCB.

**Product Applications Scientist**

Responsibilities will include designing and executing experiments on the Cytosensor™ Microphysiometer system to demonstrate the utility of this technology within the pharmaceutical industry.

Experiments will include studies with excitatory amino acids, growth factors, ion channels, brain slices, peptide hormones and signal transduction probes. Other responsibilities will be analyzing specific specimens and cell samples from prospective Cytosensor customers; presenting the Cytosensor technology and products; attending scientific meetings and trade shows; and providing support for customer training, equipment installation and customer follow-up. Up to 30% travel required.

A PhD in Pharmacology and/or Physiology and the following experience required: 1+ years' post-doctoral in Neurosciences, Neuropharmacology and/or Neuroimmunology; 1+ years' pharmaceutical industry experience in Neuropharmacology. Teaching experience desirable. Evidence of independent research and scientific publications mandatory. Respond to Dept. PAS.

Molecular Devices offers a competitive compensation and benefits package. Please send your resume, indicating appropriate Dept. Code, to Molecular Devices Corporation, Attn: Professional Staffing, 4700 Bohannon Drive, Menlo Park, CA 94025. Principals only, please. EOE.

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SCIENCE
Chiron Corporation is a leading East Bay-based biotechnology company developing products to diagnose, prevent and treat serious human disease. We currently have several exciting positions available.

**PROTEIN FORMULATION SCIENTIST**
You will design and perform experiments, ultimately to develop liquid and lyophilized proteins which are stable, pharmaceutically acceptable and clinically compatible. Additionally, you will optimize formulation processes such as lyophilization cycles and filtration for maximum throughput.

Requires a PhD in Biochemistry or equivalent and 1-2 years’ postdoctoral work. Knowledge of and hands-on experience with protein analytical techniques (SDS-PAGE, IEF, HPLC, florescence, DSC, CD) is essential. Familiarity with formulation of proteins and lyophilization is desirable. Box# 92-137MH.

**MICROBIAL PHYSIOLOGIST**
Responsibilities include optimizing culture conditions for expression of recombinant therapeutic proteins in bacteria and yeast. You will collaborate in the design of microbial host/vector systems and develop small-scale screening methods for medium and culture condition optimization. You will also characterize cell banks and fermentation processes for regulatory submissions.

Requires a PhD in Microbiology and 5+ years’ pharmaceutical biotechnology industry experience. Interest in secretory protein processing and familiarity with FDA “POINTS TO CONSIDER FOR BIOLOGICALS PRODUCED BY rDNA TECHNOLOGY.” Management and team leadership a plus. Box# 92-138BM.

**CLINICAL PHARMACOLOGY SCIENTIST**
You will assume responsibility for the daily operations of the clinical pharmacology laboratory. This group is responsible for collecting and analyzing antigenicity, pharmacological, and immunological data from human trials. Additionally, you will integrate these data with the clinical patient database while communicating the results of these studies to our outside investigators.

Position calls for an experienced MD or PhD who has demonstrated experience in developing and analyzing clinical pharmacology and/or immunology data. Excellent communication and writing skills are necessary. Experience with database management is a plus. Box# 92-120BZ.

**PURIFICATION PROCESS/DEVELOPMENT SCIENTIST**
You will be responsible for the design and development of purification processes for a variety of recombinant proteins. You will also provide detailed biochemical characterization of process parameters as well as intermediate and final product materials.

Requires a PhD with a solid biochemical background and strong skills in the areas of protein purification and protein folding. Knowledge of cGMP is a plus. Box 92-136BF.

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BIOTECHNOLOGY POSTDOCTORAL ASSOCIATE. 1- to 2-year position on NSF-sponsored interdepartmental project on genetic engineering to enhance product recovery in recombinant organisms. Must have background in protein biochemistry or genetic engineering or chemical engineer with related experience. Send copy of curriculum vitae and three references to: Dr. C. E. Glatz, Chemical Engineering, 231 Sweeney Hall, Iowa State University, Ames, IA 50011. As Equal Opportunity and Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE BROOKHAVEN NATIONAL LABORATORY

The Department of Applied Science has a position available for a Ph.D. trained in plant molecular biology with experience in DNA/RNA isolation and sequencing, protein purification, and Northern, Southern, and Western blotting techniques to conduct research on gene expression mechanisms. Experience with eukaryotic and structural biology is desirable. The successful candidate will join an ongoing research program to elucidate the molecular mechanisms responsible for the photoregulation of gene expression in eukaryotic algae.

Candidates are asked to forward curriculum vitae, list of publications, and the names and addresses of three references to: Dr. Paul G. Philp, Department of Applied Science, Brookhaven National Laboratory, Associated Universities, Inc., Upton, Long Island, NY 11973. Equal Opportunity Employer M/F/D/V.

POSTDOCTORAL RESEARCH ASSOCIATE BROOKHAVEN NATIONAL LABORATORY

The Department of Applied Science has a position available for a Ph.D., preferably in chemistry, with experience in x-ray absorption spectroscopy. A background in geochemistry and/or environmental chemistry is desirable. The successful candidate will participate in an interdisciplinary research process using synchrotron radiation-based x-ray absorption spectroscopy as an analytical tool for determining chemical species in study samples. Duties will include: (1) measuring x-ray absorption spectra at the National Synchrotron Light Source; (2) analyzing the spectral data using computer-based algorithms; and (3) developing, modifying, or adapting the necessary computer algorithms for data analysis.

Applicants are asked to forward resume, copies of relevant publications and names, addresses and telephone numbers of three references to: Mr. Bernard Manowitz, Department of Applied Science, Building 801, Brookhaven National Laboratory, Associated Universities, Inc., Upton, Long Island, NY 11973. Equal Opportunity Employer M/F/D/V.

RESEARCH ASSOCIATE

Position available in the General Clinical Research Center, Biomedical Mass Spectrometry Facility. Responsibilities include development of new techniques and application of stable isotopic methodology to human biological research; teach fellows, students and other technicians techniques of biomedical mass spectrometry; supervise the daily operation and quality control of the facility. Successful candidates will have an advanced degree (M.S. or Ph.D.) in chemistry or environmental science. Experience in research and a publication record in peer-reviewed journals is required. Send letter of application, professional resume, and addresses of three references to: Dr. Sree Nair, Metabolic Unit, Department of Medicine, Geisinger Medical Center, The University of Vermont (UVM), Burlington, VT 05405. Position open until filled. UVM is an Affirmative Action/Equal Opportunity Employer. Applications from women and people from ethnic, racial, and cultural backgrounds are encouraged to apply.

RESEARCH ASSOCIATE

TRANSGENIC MOUSE FACILITY

Research associate to oversee transgenic mouse facility at University of Southern California Medical School. Experience in production of transgenic mice and recombinant DNA techniques desirable. Highly competitive salary commensurate with experience. Send resume to: Dr. Jose Lopez, Norris Cancer Hospital, Room 743, 1441 Eastlake Avenue, Los Angeles, CA 90033.

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Drug Metabolism and Pharmacokinetics

SmithKline Beecham, a worldwide leader in pharmaceutical research, is seeking a scientist to join our Clinical Pharmacokinetics group.

The Scientist will design, direct and analyze clinical and preclinical pharmacokinetic and pharmacodynamic studies. This position offers substantial opportunity for collaboration with other scientists involved in the discovery and development of novel therapeutic agents. As part of multi-disciplinary project teams, the scientist will be expected to provide the drug metabolism and pharmacokinetic perspective to fellow research scientists. Since the scientist will assume a high degree of project related responsibility, the position will draw heavily upon individual scientific initiative, independence and innovation. Excellent interpersonal and communication skills are essential. Publication and presentation of research findings are strongly encouraged.

Candidates should possess a Ph.D. in Pharmacy, Pharmacokinetics, Pharmacology, Pharmacokinetics or a related field, or Pharm.D. with at least 2-3 years post-doctoral experience in pharmacokinetics. An in-depth understanding of pharmacokinetic and pharmacodynamic principles and demonstrated ability to apply those principles are required. Background in bioanalytical methodology is desirable.

Our state-of-the-art research facility is located in suburban Philadelphia, near Valley Forge, PA. We offer a competitive compensation/benefits/relocation package and a stimulating team environment. For confidential consideration, send your resume to: HR McConnell, M043, Employment Administrator, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.

SB

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PHYSIOLOGIST, GS-413-13/14, Cardiac Rhythm Disturbances. Seeking a physiologist with knowledge of cardiac electrophysiology to administer program. Candidates must have a Ph.D., M.D., D.V.M. or equivalent degree and be committed to administrative, research, and laboratory career. Excellent verbal and written communication skills required. Please submit Application for Federal Employment, FE-144, current curriculum vitae, and references to: National Heart, Lung, and Blood Institute, Attention: Ms. Logan, Personnel Office, Building 31, Room 5A28, 9000 Rockville Pike, Bethesda, MD 20892; telephone: 301-496-6477. Applicants must be a U.S. citizen. National Institutes of Health is an Equal Opportunity Employer.

TISSUE TYPING COORDINATOR
Position available in Immunogenetics/Bone Marrow Transplantation Laboratory at All Children’s Hospital (ACH). St. Petersburg, Florida. Responsibilities include HL-A typing, mixed lymphocyte cultures, development and standardization of new tests and participation in the processing of bone marrow for transplantation. M.S. or Ph.D. with experience in immunogenetics preferable. ACH is a JCAHO-accredited teaching and research facility and offers a competitive compensation package which includes paid medical/dental insurance and a stimulating professional environment for career development. For more information, call: 813-892-4139. Equal Opportunity Employer M/F/U/V.

POSITION OPEN
PHYSIOLOGIST, GS-413-13/14, Cardiac Rhythm Disturbances. Seeking a physiologist with knowledge of cardiac electrophysiology to administer program. Candidates must have a Ph.D., M.D., D.V.M. or equivalent degree and be committed to administrative, research, and laboratory career. Excellent verbal and written communication skills required. Please submit Application for Federal Employment, FE-144, current curriculum vitae, and references to: National Heart, Lung, and Blood Institute, Attention: Ms. Logan, Personnel Office, Building 31, Room 5A28, 9000 Rockville Pike, Bethesda, MD 20892; telephone: 301-496-6477. Applicants must be a U.S. citizen. National Institutes of Health is an Equal Opportunity Employer.

RESEARCH ANIMAL SCIENTIST, permanent position, will be located in facilities of Purdue University’s Animal Sciences Department. Responsible for initiating and developing a research program directed toward understanding the relationships among physiological parameters, animal behavior, and well-being. Research would include identification of internal states of animal cognition/perception and the development of indicators of well-being for food-producing animals. Degree in animal science or related discipline, which included at least 20 semester hours in animal science and, preferably, experience in animal science are required. Ph.D. and knowledge of animal physiology are desirable. Salary range: $38,861 to $54,607 per annum based on qualifications and experience. For position information contact: Dr. J. R. Wilcox, 317-494-8074. For the vacancy announcement and application procedures contact: Beverly Webert, 301-444-1921. Applications must be marked SNS40 and postmarked by 29 June 1992. Incomplete applications will not be considered. ARES is an Equal Opportunity Employer.

ECOLOGICAL RESEARCH MANAGER
University of Georgia’s Savannah River Ecology Laboratory (SREL) has an opening immediate for a full-time science administrator. The research manager will be responsible for the daily management, project coordination, and report and proposal preparation for the Wildlife Ecology and Toxicology Division. The individual will have frequent interaction with SREL and University of Georgia research faculty and administrators and state and federal personnel. Candidates must be U.S. citizens and have a Ph.D. degree and training in ecology or environmental science. Knowledge of federal environmental regulations and experience in research project management are desirable. Supervisory and communication skills will be weighed heavily in evaluating candidates. Salary is negotiable, depending on the professional record of the applicants. Applicants should send their résumés, reprints, and the names, addresses and telephone numbers of four individuals who may be contacted as references to: Dr. Ronald K. Cheser Wildlife Ecology and Toxicology Division Savannah River Ecology Laboratory Aiken, SC 29802
Applications will be accepted until 7 June 1992. The University of Georgia is an Equal Opportunity/Affirmative Action Institution.

RESEARCH VERTEBRATE ECOLOGIST
To be part of research team at USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Lincoln, Wyoming. Required: Ph.D. in terrestrial ecology or related field; ecological modeling and advanced statistical ability; ability to conduct landscape-level research. Knowledge of rangeland/big game ecology desirable. Formal announcement will be sent to all respondents. Send résumé by 15 June 1992 to: Dr. Len Ruggiero, Program in Sciences, 222 South 22nd Street, Laramie, WY 82070.

RESEARCH AND DEVELOPMENT MANAGER
Position available at Immunogenetics/Bone Marrow Transplantation Laboratory at All Children’s Hospital (ACH). St. Petersburg, Florida. Responsibilities include HL-A typing, mixed lymphocyte cultures, development and standardization of new tests and participation in the processing of bone marrow for transplantation. M.S. or Ph.D. with experience in immunogenetics preferable. ACH is a JCAHO-accredited teaching and research facility and offers a competitive compensation package which includes paid medical/dental insurance and a stimulating professional environment for career development. For more information, call: 813-892-4139. Equal Opportunity Employer M/F/U/V.

ENVIRONMENTAL SPECIALIST IV
Palatka, Florida. Salary: $33,000 to $49,500. This is a senior research position for an environmental toxicologist who will be responsible for the development and management of a toxic substances survey for a large estuarine ecosystem and for development of remediation plans. Should have experience in sampling and analyzing sediments and tissues for the presence of toxic substances, knowledge of environmental health effects of various pollutants, and knowledge of remediation techniques. A bachelor’s degree from an accredited college in toxicology, biology, environmental science, or related field and 5 years of experience in environmental toxicology. Send résumé with source of ad to: The John’s River Water Management District, Office of Human Resources, P.O. Box 1429, Palatka, FL 32178-1429. Apply by: 5 June 1992. Equal Employment Opportunity/Affirmative Action Employer/Veteran Preference

DRUG-FREE WORKPLACE
SITUATIONS WANTED
Ph.D. IN MEDICAL MYCOLOGY, 10 years of research and process development experience in fermentation technology and bioengineering of yeast metabolites (ethanol, S. cerevisiae), training in yeast genetic engineering and biosensors. Interested in a research position in academic or industrial concerns. Fields of interest: Pathogenesis of HIV and drug development/yeast genetics/industrial process development of microbial metabolites. Contact: 223 Schrade Road, #1A, Briarcliff Manor, NY 10510. Telephone: 914-941-8192.

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RESEARCH AWARDS
The International Life Sciences Institute (ILSI) Research Foundation announces that one or two awards for a total of $50,000 may be available under the program TOXICOLOGY OR ENVIRONMENTAL HEALTH (to include human nutrition), of up to $100,000 over 3 years, will be made in 1993. The purpose of the award program is to encourage scientists in new investigations in basic biomedical sciences to apply modern knowledge and techniques to basic problems related to comparative toxicology or environmental influences on growth, development, and aging. The closing date for applications is 25 August 1992. For further information, write: Award Administrator, ILSI Research Foundation, 1126 16th Street, NW, Suite 100, Washington, DC 20036.

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Puzzle #2

There's more cash in your 1992 Pierce Catalog another $10,000! Solve this crossword puzzle correctly and it could be yours.

Note: All hyphens have been eliminated.

Across:
1. Best known as polar neuronal tracer
2. Fifty new ones to choose from
3. Accepted as standard for protein quantitation
4. Thevenin used to conjugate soybean trypsin inhibitor and trypsin to yield a fluorescent species
5. 950D antigen (or a lily)
6. Powerful bleaching agent for immunoblots
7. Used to label tubulin and aldolase at pH 6.8-7.5
8. Contained in light collecting apparatus of algae
9. Enzyme purified by N-CDZ Phenylalanine
10. React with amines to form extremely stable sulfonamides
11. Will inhibit "E-EGF" binding to EGF receptor
12. Classified into erythrocyte (68kD) and muscle types (107kD)
13. Used to form conjugates that contain hindered disulfide bonds and exhibit enhanced stability in vivo

Down:
1. Faster than "shaker" method
2. Functions as reverse affinity matrix
3. Lacks proline rich sequence found in hinge region of IgG and IgA
4. Wash blocker
5. Carboxy-reactive crosslinker that is iodinatable and photoactive
6. Kit used to identify purity of cell line
7. Previously, no product available for one-step purification of this
8. Described by Young as novel substrate for HRP
9. Plays important role in cell adhesion and extensions
10. Easy way to radiolabel your cell surface proteins
11. Synthesis of collagen can be quantitated by measuring release of this peptide
12. Allows production of free sulfydryls on macromolecules for conjugation
13. Can be used for histology with acetone-fixed snap frozen tonsil
14. Substrate for alkaline phosphatase in immunoblotting applications

New Products

(Revised: The NEW PRODUCTS section of your 1992 Pierce Immunotechnology Catalog and Handbook holds all the answers.)

How you can win $10,000 (U.S. dollars)

Solve the puzzle. All of the answers can be found on pages 1-56 in the New Products Section of your 1992 Pierce Immunotechnology Catalog and Handbook. Only one entry per person. Photocopies of this puzzle will be accepted.

Complete the information at right. All information must be included.

Place completed puzzle in an envelope and mail to: Pierce Puzzle, P.O. Box 117, Rockford, IL 61105. All envelopes must be postmarked no later than August 1, 1992.

If more than one entrant correctly solves the puzzle, the winner will be selected in a random drawing on August 15, 1992. Winner will be notified no later than September 1, 1992.

All entrants must be researchers at least 21 years of age and employed by an industrial, academic, clinical or governmental research facility. Employees of Pierce Chemical, Pierce Europe, Perstorp, Pierce Agents/Distributors or family members of aforementioned are ineligible.

All federal, state and local laws and regulations apply void where prohibited by law.

Winner has the option to donate the money to a charity of choice. Taxes are the sole responsibility of the winner.

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Until recently, if you wanted a full-size thermoplate sequencer, you had two choices: Buy an STS-45 from IBI. Or choose one of the dozen or so STS-45 clones made by other suppliers. But now that's all changed with the Base Runner™ family of nucleic acid sequencers, the first sequencers to actually surpass the STS for versatility, efficiency and ease of use.

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