Products & Materials

Underwater Research Radiometer

The IL1700 Research Radiometer is equipped with an underwater detector head to perform a wide variety of studies in the ultraviolet, visible, and near-infrared spectral range. The portable instrument is auto-ranging to prevent loss of scale due to unexpected environmental changes and provides direct readings in any optical units. Typical applications include plant growth and absorption studies, pollution detection, biological studies at air-ocean interface, and bioluminescence. International Light. Circle 484

Kit for Purification of Recombinant Proteins

The FLAG Kit allows rapid expression, detection, and purification of recombinant proteins. The technology is based on the fusion of a hydrophilic, eight-amino acid FLAG peptide with a cloned protein expressed by the pFLAG-1 vector. The FLAG fusion protein is rapidly affinity-purified in a single step using the patented anti-FLAG monoclonal antibody coupled to agarose. Following purification, the native protein is recovered with greater than 99% efficiency by removal of the FLAG peptide with Enterokinase. The anti-FLAG monoclonal antibody can be used to detect the FLAG fusion protein during the entire process. International Biotechnologies, Inc. Circle 485

Software Creates Digital Confocal Microscope

Micro-Tome software transforms a standard wide-field microscope, video camera, and IBM AT, Apple Macintosh II, or UNIX workstation into a digital confocal micro-



scope. The software allows a researcher to clarify microscope images. Micro-Tome deconvolves, or removes haze and noise, from an image using published deconvolution algorithms. This use of a computer and standard microscope offers advantages over a confocal laser scanning microscope (CSLM) in cost, in allowing the researcher to examine living specimens that the intense laser light required by the CSLM often kills, and by causing less photobleaching. Vay-Tek. Circle 486

Pocket-Sized Balances

Pocket Pro Balances weigh just 10 ounces, and are available in 80-, 150-, and 250-g capacities. These battery-operated digital balances are graduated in 0.1 g with accuracy of



 ± 0.1 g. They are designed for fieldwork or use where space is at a premium, such as under the fume hood. Each balance comes with a calibration weight, carrying case, and 1-year warranty. Lux Scientific Instrument Corp. Circle 487

Scopes to View Inside Vacuum Chambers

A new line of rigid and flexible scopes enables researchers to view magnified video images of processes inside vacuum chambers. The rigid scopes work in a vacuum range down to 10–6 torr and are available off the shelf. The flexible scopes handle ultrahigh vacuums as low as 10–9 torr and are custom-made. The scopes lend themselves to direct viewing or to display on a TV monitor, including the Olympus Video Analyzer, with its software that allows extensive image enhancement, analysis, and storage. Olympus. Circle 488

Cartridges for Nucleic Acid Purification

Nucleobond AX 2000 Cartridges for quick low-pressure liquid chromatographic isolation of large quantities of nucleic acids are now available. The cartridges offer high capacity for large-scale isolations, for example, 1200 μ g of DNA, 2000 μ g of plasmid DNA, or 8000 μ g of RNA. Recoveries range from 85 to 100% with no crosscontamination of double-stranded DNA with RNA when checked by high-performance liquid chromatography or electrophoresis. The Nest Group. Circle 489

Literature

The Virgo IFA Procedure Guide provides information for training in immunofluorescence assays. The 12-page manual provides a general overview of basic immunology, general principles for antibody and antigen detection, and information on fluorescence microscopy. Pharmacia Diagnostics. Circle 490

SpinTrex, The High Performance Rotary Separation System, is a six-page brochure that describes a rotary membrane separation system that sustains high permeate flow at very low operating pressure. Research data and diagrams illustrate how high yields of fragile cells and proteins can be harvested quickly and inexpensively. The membranes are reusable and cover a wide range of biological separations. New Brunswick Scientific. Circle 491

1990–91 Polymer & Monomer Catalog lists more than 600 polymers and 500 monomers as well as related products such as thermal initiators, photo initiators, and inhibitors. Polyethylene oxide derivatives, polymer molecular weight standards, and biodegradable polymers are especially well represented. Polysciences, Inc. Circle 492

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

Personnel Placement

LINE CLASSIFIED ADVERTISEMENTS

DEADLINES: Ads are due by Thursday, 10 a.m., 2 weeks prior to the issue date. *Science* publishes each Friday, except the last Friday of the year. Advertisements must be submitted in writing.

HOW TO SUBMIT A CLASSIFIED AD: Prepare double-spaced typewritten ad copy on a separate sheet. Do not include any abbreviations. *Science* will edit and typeset ads according to *Science* guidelines. Deadline for applications stated in ad must be at least 2 weeks after date of publication. Also include a cover sheet which gives name and phone number of contact person, desired date of publication, and billing information, including any special invoicing requests. Mail or FAX materials to:

SCIENCE Classified Advertising 1333 H Street, N.W., Room 940 Washington, DC 20005 Telephone: 202-326-6555 FAX: 202-682-0816

CLASSIFICATIONS: Science publishes line classified ads under the following headings: Positions Open, Employment Agencies, Situations Wanted, Courses and Training, Meetings, Announcements, and Marketplace. Advertisers should specify classification desired.

HOW TO CALCULATE RATE FOR CLASSIFIED AD: Ads are \$41 per line with a \$410 minimum. One line equals 52 characters and spaces; centered headings equal 32 characters and spaces.

To ESTIMATE ad cost, count total number of 52 character lines and multiply by \$41 to find approximate cost of ad per week. Each line of centered heading counts as one line. Also count one line for white space between headline and first line of text; all partial lines are also counted as full lines (including all centered reply information).

Remember, this is a rough estimate only. Allow for variation between estimated typewritten lines and ads when actually typeset for magazine. Therefore, purchase orders must allow additional funds for flexibility and/or adjustment. *Science* cannot provide proofs of typeset ads.

PREPAYMENT DISCOUNT: A 3% cash discount is granted to all prepaid line ads. Prepayment made in U.S. dollars by checks drawn on U.S. banks is required on all foreign ads.

CREDIT CARDS: Science accepts **MasterCard** and **VISA.** Both personal and corporate cards may be used. Prepayment does not apply to credit cards.

BOXES AND LOGOS: Any line classified ad can be boxed and/or published with logo to increase its visibility on page. Since the box takes up additional space, one line now equals 48 characters and spaces: two additional lines will be added to allow for top and bottom rules. Logos are billed according to the number of lines needed to fit logo in space.

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

DISPLAY PERSONNEL ADVERTISEMENTS

For rates, deadlines, and information about fractional display ads (all ads 1/6 page and larger) and all **Marketplace** listings of available products and services, contact:

Scherago Associates 1515 Broadway New York, NY 10036 Telephone: 212-730-1050 FAX: 212-382-3725

CONDITIONS: Personnel advertising is accepted only with the understanding that the advertisers do not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap, or sexual preference. *Science* reserves the right, at its discretion, to decline to publish advertisements submitted to it and to decline classifications which it considers misleading.

POSITIONS OPEN

ASSISTANT PROFESSOR. The Department of Microbiology and Immunology at Wright State University is inviting applications from candidates with interests in the molecular aspects of immunology, pathogenic mechanisms, or bacterial physiology. Applicants should possess a Ph.D. or M.D. and have recently completed their postdoctoral training. The department is located within the School of Medicine and the College of Science and Mathematics. Teaching responsibilities include medical and Ph.D. level graduate programs. This position is a 12-month tenure-track appointment with available start-up funds and incentives. Send curriculum vitae, three letters of reference, and a statement of research interests to: Neal S. Rote, Ph.D., Professor and Chair, Department of Microbiology and Immunology, 409 Oelman Hall, Wright State University, Dayton, OH 45435. Review of applications will begin 15 June 1991 and continue until a suitable candidate is identified. Women and minorities are encouraged to apply. Wright State University is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR ORGANIC CHEMISTRY WEST VIRGINIA STATE COLLEGE

Recent Ph.D. in organic chemistry for tenure-track position in ACS-certified Chemistry Department of a 4-year land-grant state college. Strong commitment to teaching undergraduate organic chemistry lecture and laboratory courses to first-generation, nontraditional, and minority students and developing undergraduate research programs. Begins 19 August 1991. Salary and rank negotiable. Excellent benefit plans. Send application letter, résumé, certified undergraduate and graduate transcripts, and three letters of recommendation by 1 June 1991 to:

Dr. Barbara J. Oden Vice President for Academic Affairs West Virginia State College P.O. Box 1000 Institute, WV 25112–1000

An Equal Opportunity/Affirmative Action Employer.

TRANSPLANTATION IMMUNOLOGIST LOYOLA UNIVERSITY OF CHICAGO

The Loyola University of Chicago cardiac transplantation program has an immediate opening for an immunologist to establish a high quality basic research program in transplantation immunology. A tenure track will be granted in the Departments of Medicine and Microbiology and Immunology at the ASSISTANT OR ASSOCIATE PROFESSOR levels. Candidates should have a Ph.D. and a record of established research in the areas of allograft rejection, transplantation tolerance, and/or allograft vascular disease. Candidates must be willing to participate in graduate and medical students teaching. While the successful candidate is expected to obtain extramural funding, the salary is not dependent from grant funds. Please submit curriculum vitae, two copies of relevant papers, description of research goals, and three supporting letters to:

Maria Rosa Costanzo-Nordin, M.D. Medical Director Cardiac Transplant Program Loyola University of Chicago Maywood, IL 60153

FLORIDA INTERNATIONAL UNIVERSITY GLASER VISITING PROFESSORSHIP IN BIOLOGICAL SCIENCES

Applications are solicited from distinguished scientists interested in visiting the Department of Biological Sciences at Florida International University (FIU), The State university of Florida at Miami. FIU is a dynamic and growing public university with 23,000 students. The Department of Biology has 23 faculty and 60 graduate students (M.S. and Ph.D.). The Glaser Professor will offer a short course in his/her specialty (ten lectures over a 2- to 3-week period during the 1991–92 academic year), give a departmental lecture, and a university lecture of general interest. Remuneration is \$8000. Apply with letter of intent, résumé, and reprints of up to three relevant publications before 1 June 1991 to: Dr. Laurie Richardson, Glaser Committee Chair, Department of Biological Sciences, Florida International University, Miami, FL 33199. Women and minorities are especially encouraged to apply. FIU is an Affirmative Action/ Equal Opportunity Employer.

POSITIONS OPEN

THE UNIVERSITY OF CALGARY SMOOTH MUSCLE RESEARCH

The University of Calgary Faculty of Medicine invites applications for faculty positions at the ASSISTANT **PROFESSOR** level or higher from scientists with research interests in smooth muscle structure and/or function within any of the following disciplines: biochemistry, molecular biology, physiology, pharmacology, cell biology, and pathology. Well-oualified candidates must compete successfully

Well-qualified candidates must compete successfully for salary and establishment support by application to the Alberta Heritage Foundation for Medical Research, the Medical Research Council of Canada and/or other equivalent agencies, and will have 75% of time protected for research. Applications require an M.D. and/or Ph.D. and research training at the postdoctoral level. Remuneration will be commensurate with qualifications and experience.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of Calgary has an Employment Equity Program and encourages applications from all qualified candidates, including women, aborgiand people, visible minorities, and people with disabilities. Please submit curriculum vitae, a statement of aims

Please submit curriculum vitae, a statement of aims and research interests, and the names and addresses of three references by 30 June 1991 to:

Dr. M. P. Walsh Department of Medical Biochemistry The University of Calgary 3330 Hospital Drive N.W. Calgary, Alberta, Canada T2N 4N1

FOREST ENTOMOLOGIST. The Department of Entomology, Michigan State University (MSU), is seeking an ASSISTANT PROFESSOR (12 month, tenure track) to develop and maintain a strong extension, research, and teaching program in forest entomology, with additional responsibilities in Christmas tree plantations. The applicant should have a Ph.D. and expertise in areas such as insect sampling methods, population dynamics, insect/plant interactions, and ecology. The successful candidate will be expected to engage in cooperative interdepartmental and interagency research programs for gypsy moth management. The primary teaching responsibility will be in the area of forest and shade tree insect management principles with other opportunities in undergraduate and graduate education. Applicants should submit (i) a letter describing qualifications and career goals, (ii) curriculum vitae, (iii) a list of publications (and key reprints, (iv) transcripts, and (v) names, addresses, and telephones of three to five references. Send application to: Dr. Stuart Gage, Search Committee Chairperson, Department of Entomology, Michigan State University, East Lansing, MI 48824–1115. Telephone: 517-355-4665; FAX: 517-353-4354. Target closing date is 1 June 1991. MSU is an Affirmative Action/Equal Opportunity Employer. Please reference position #NS 751E. (Pending approval with the Office of the Provost.)

DIRECTOR, BONE MARROW TRANSPLANTATION PROGRAM

The Departments of Medicine and Pediatrics and University of North Carolina (UNC) Hospitals are pleased to announce the opening of a combined adult and pediatric bone marrow transplantation program. A director of this program is being recruited for a tenuretrack position in the Division of Medical Oncology. Academic rank will be based on experience. Facilities available include an initial unit of four beds with expansion opportunity, a dedicated nursing and professional support staff including housestaff, fellows, coordinator, ancillary research and clinical support staff and the opportunity to help recruit additional transplant faculty. Research interests may include, but are not limited to immunologic restoration, applications of hemopoietic growth factors, genetic therapy or pharmacology of drug resistance. Excellent facilities are available. The successful applicant will be Board-certified in hematology and/or oncology and have demonstrated clinical and research expertise in allogencic and autologous bone marrow transplantation. Applicants should submit their curriculum vitae and references to: Howard Ozer, M.D./ Ph.D., Chief, Division of Medical Oncology, CB# 7305, Old Clinic Building, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599. The University of North Carolina is an Affirmative Action/Equal Opportunity Employer and encourages applications from females and members of minority groups.

PERSONNEL PLACEMENT 733

ASSISTANT PROFESSOR PHYSICAL CHEMISTRY WEST VIRGINIA STATE COLLEGE

Recent Ph.D. in physical chemistry for tenure-track position in ACS-certified Chemistry Department of a 4-year land-grant state college to teach freshman chem-istry lecture courses and physical chemistry lecture and laboratory courses. Strong commitment to teaching firstgeneration, nontraditional, and minority students, upgrading the physical chemistry laboratory, and develop ing undergraduate research programs. Starts 19 August 1991. Salary and rank negotiable. Excellent benefit plans and opportunities for interaction with scientists at nearby industrial laboratories. Send application letter, résumé, certified undergraduate and graduate transcripts, and three letters of recommendation by 1 June 1991 to:

Dr. Barbara J. Oden Vice President for Academic Affairs West Virginia State College P.O. Box 1000 Institute, WV 25112-1000

An Equal Opportunity/Affirmative Action Employer.

DIRECTOR UNDERGRADUATE LABORATORIES MOLECULAR BIOLOGY AND ECOLOGY AND EVOLUTIONARY BIOLOGY

Professional technical staff member responsible for directing all aspects of introductory laboratory courses for molecular biology majors, for ecology and evolutionary biology majors, and for a course for nonmajors. Responsibilities will include reorganization of all labora-tory experiments, writing of protocols, production of laboratory manuals, supervision of staff of preparators, and training of graduate teaching assistants. Applicant must be able to work closely with faculty in redesigning laboratory exercises and in introducing new molecular and biological concepts and techniques to the courses. Director will also be responsible for participating in departmental programs for secondary school teachers, summer research programs, and special training sessions and presentations during the year with external collaborators. An important component of the position will be working with architects and contractors on construction of new laboratory space. A Ph.D. in molecular biology is required, along with an understanding and familiarity with the field of ecology and evolutionary biology. Experience teaching laboratory science at the university level is a must. Salary and rank for this 12-month position commensurate with experience. Applicants should send curriculum vitae and the names of at least three referees to:

Alice Lustig Department of Molecular Biology Princeton Universit Princeton, NJ 08544

Princeton University is an Equal Opportunity/Affirmative Action Employer.

INDEPENDENT SCIENTIST

The Neurobiology Laboratory, part of the Neuro-science Branch of the National Institute on Drug Abuse, Addiction Research Center, wishes to enhance its efforts in clucidating molecular and cellular mechanisms relevant to addition by recruiting an independent investigator with interests and expertise complementing existing programs in molecular pharmacology, molecular neurobiol-ogy, and brain imaging. Individuals with expertise in: (i) protein biochemistry (e.g., defining activity-dependent post-transitional modifications of neuronal proteins or structures of drug receptors, and interest in establishing enhanced protein/peptide biochemical facilities); or (ii) cell biology (e.g., of drug neurotransmitter receptors and related second messengers) are especially encouraged to apply. The successful candidate will lead a unit or labo-ratory, depending on experience, with staff and resources available to take a leadership position in the field. Federal salary and benefits are competitive. M.D. and/or Ph.D. (biology, pharmacology) and U.S. citizenship required. Applicants are encouraged to apply to:

Brian Butters, Neuroscience Search Committee Addiction Research Center P.O. Box 5180 Baltimore, MD 21224

The ARC is an Equal Opportunity/Affirmative Action Employer, M/F/H/V, and is smoke- and drug-free.

POSITIONS OPEN

DIRECTOR OF THE NATIONAL TECHNOLOGY TRANSFER CENTER

A director is sought for the National Technology Transfer Center (NTTC). This Center, mandated by Congress, is on the campus of Wheeling Jesuit College located in Wheeling, West Virginia. The NTTC has as its mission the transfer of federally sponsored research to U.S. business and industry. The NTTC is presently in the initial start-up phase of development.

The position requires a degreed, creative individual with broad understanding of technology transfer policy and its applications. The person should possess supervi-sory skills, strong oral and written communication skills, analytical ability, and an understanding of business development and marketing. The director will be responsible for implementation of

the congressional mandate to transfer technology into the U.S. private sector on a national basis in order to increase U.S. industrial competitiveness. The director will oversee tasks such as the following: the development and application of a sophisticated technology transfer information system; organize a technology access capability to respond to business, industry, and government ranging from the entrepreneur to major U.S. corporations; create a nationwide infrastructure of cooperating organizations including regional, state, and local governments and other technology transfer organizations; de-velop the Center into a self-supporting, growing entity by providing necessary services and products to its clients; and develop and market a nationwide technology transfer training center.

The director should possess, at a minimum, the following qualifications:

• An advanced degree with at least 10 years of experience directing a technology transfer organization or activity.

• An understanding of technology transfer in the United States as it relates to federal agencies, federal laboratories, state governments, U.S. industry, and academia.

• Proven leadership abilities.

A distinguished record in the establishment of new and innovative technology transfer programs.
 Demonstrated record in generating funding neces-

sary to support organizational growth. The position of director for the NTTC reports to the

president of Wheeling Jesuit College. This college is located in the northern panhandle of West Virginia. The city of Wheeling affords a high quality of life in a low cost of living area. Wheeling is 1 hour from the city of Pittsburgh and from the Pittsburgh International Airport, all on interstate highway.

Applicants should send cover letter, curriculum vitae, and references by 24 May 1991 to: President, Wheeling Jesuit College, 316 Washington Avenue, Wheeling, WV 26003.

Applications from members of minority groups and women are encouraged.

CHAIR DEPARTMENT OF BIOCHEMISTRY MARSHALL UNIVERSITY SCHOOL OF MEDICINE

Marshall University School of Medicine is inviting applications or nominations for Chair, Department of Biochemistry, available 1 September 1991. An independent research program, preferably in molecular biology and a strong record of publications and grant funding is desired. The School of Medicine is currently developing a core facility in molecular and cell biology to enhance research opportunities. Candidates must possess a Ph.D. and rank at the associate professor or professor level. The successful candidate will be expected to teach in both the medical and graduate student programs. Applicants should send curriculum vitae, names and addresses of three references, and a statement of research goals and interest to:

Dr. Terry Fenger Chair, Biochemistry Search Committee Marshall University School of Medicine Department of Microbiology 1542 Spring Valley Drive Huntington, WV 25755–9330

The review of applications will begin on 30 April 1991 and continue until the position is filled. Marshall University encourages applications from women and minorities and is an Affirmative Action/Equal Opportunity Employer.

CHAIRPERSON, DEPARTMENT OF BIO-CHEMISTRY. The University of Nebraska College of Medicine is conducting an active search for a Chairper-son of Biochemistry. The successful candidate will be expected to have an outstanding research career in bio-chemistry, molecular biology, and related fields, as well as a commitment to excellence in teaching. Interested ap-plicants should submit curriculum vitae and the names of three references to: Michael F. Sorrell, M.D., Chairman, Biochemistry Chairman Search Committee, c/o Dean's Office, University of Nebraska College of Medicine, 600 South 42nd Street, Omaha, NE 68198–6545. Deadline for application is 1 June 1991. Equal Opportunity/Affirmative Action Employer.

CHAIR, DIVISION OF MEDICINAL CHEMISTRY AND PHARMACEUTICS UNIVERSITY OF KENTUCKY COLLEGE OF PHARMACY

Nominations/applications invited for division chair to provide strong, creative leadership to a division consisting of 15 faculty with research division consisting of 15 faculty with research emphasis in drug design, dosage form develop-ment, and biotechnology. Thirty-six students currently enrolled in the Ph.D. program. Strong multidisciplinary program relationships with various centers of excellence and departments within the university. Strong university commit-ment exists to encourage technology transfer. This is 12 menth concentration of a savier

This is a 12-month appointment for a senior investigator with a strong track record in schol-arship, extramural funding, and program devel-opment. Screening of applications will begin 21 June 1991. Send letter of interest and names of three references to: **Patrick P. DeLuca**, **Univer**sity of Kentucky, College of Pharmacy, Lex-ington, KY 40536–0082. Applications from qualified women and minorities are encouraged.

THE UNIVERSITY OF MICHIGAN

CHAIRPERSON, MECHANICAL ENGINEER-ING AND APPLIED MECHANICS. The Department of Mechanical Engineering and Applied Mechanics at The University of Michigan invites applications and nominations for the position of department chairperson. The candidate should hold a doctoral degree in mechanical engineering, applied mechanics or a related discipline, and have a record of substantial accomplishment in research and education. Please submit supporting mate-rials, including résumé and names of references to: Professor Albert B. Schultz, Search Committee Chair, Department of Mechanical Engineering and Applied Mechanics, The University of Michigan, Ann Arbor, MI 48109–2125. The University of Michigan isan Equal Opportunity/Affirmative Action Employer.

MAJOR NATIONAL PATENT LAW FIRM located in New York City seeks highly qualified Ph.D. scientists in biomedical fields interested in second career opportunities in Intellectual Property law. Demonstrated technical writing skills essential. Competitive salaries and benefits, and opportunities for challenging assignments. Send résumé to:

Box 4 SCIENCE Classified Advertising 1333 H Street, N.W., Room 940 Washington, DC 20005

DEAN, COLLEGE OF AGRICULTURE

The dean will provide leadership and administration in teaching, research, and extension for the three departments in the College of Agriculture and for two jointly administered departments. The Agricultural Experiment Station is also within the College of Agriculture. Candidates must have an earned doctorate in an agricultural discipline, be eligible for the rank of full professor, and evidence administrative competence relevant to a major Ind-grant and research university. Position available 1 September 1991. Submit résumé, letter expressing inter-est, and names, addresses, and telephone numbers of five references. Applications will be considered beginning June 1991. Send applications and nominations to: Dr. Robert C. Lamb, Search and Screening Committee for Dean of the College of Agriculture, Utah State University (USU), Logan, UT 84322–4815. USU is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

Department Head University of Idaho

The faculty of the Department of Bacteriology and Biochemistry at the University of Idaho is reopening its search for an outstanding scientist to serve as Department Head. The department is comprised of 13 research and teaching faculty with research interests in microbiology, biochemistry, and molecular biology. The department offers an undergraduate degree in bacteriology and M.S. and Ph.D. degrees in Bacteriology or Biochemistry. The scientist selected for this position will have an exceptional research record in one of these subject areas, a continuous history of grantsmanship and publication, the academic rank of professor, and teaching experience. The successful applicant will be expected to continue a dynamic research program, supervise the day-to-day adminstration of the department, and provide leadership for the faculty members in this active research-oriented departmentment. Applications should include a detailed discussion of current research interests, curriculum vitae, a summary statement on administrative philosophy and experience, and at least three reference letters. Nominations and applications should be sent to:



Dr. David J. Oliver Department of Bacteriology and Biochemistry Life Science Building University of Idaho Moscow, Idaho 83843 (208) 885-7164

The search will be closed when a sufficient number of qualified applicants have been identified but not before July 1, 1991. The University of Idaho is an equal opportunity/affirmative action employer and educational institution.



DIRECTOR Center for Advanced Research in Biotechnology Maryland Biotechnology Institute

The Center for Advanced Research in Biotechnology (CARB) is seeking qualified applicants for the position of Director. Research at CARB is directed to the determination of protein structure and analysis of protein structure-function relationships. Existing research groups include protein crystallography. NMR spectroscopy, modelling and computational chemistry, molecular biology, and biophysical chemistry. CARB, with 55 faculty and staff members, is one of six Centers of the Maryland Biotechnology Institute and is located in newlyconstructed facilities at the University of Maryland Shady Grove Campus. CARB's program is a unique partnership with the National Institute of Standards and Technology (NIST) which seeks to achieve international leadership in the field of biomolecular structure/function.

The Director reports to the President of MBI and will be responsible for leading expansion of CARB's programs and facilities. Major responsibilities include faculty recruitment, program development, technology transfer development, and facilities planning. Interaction with the MBI, the University System, the State Government, NIST, and other relevant agencies. The successful candidate must be a recognized leader in research related to protein structure/ function and should have a strong background in research administration. She/ he must hold the doctoral degree and must qualify for appointment at the rank of Professor in the Maryland Biotechnology Institute.

Applicants should submit a letter of introduction, current curriculum vitae and the names, addresses and telephone numbers of four references by June 1, 1991 to: Dr. Shain-dow Kung, Chair of the Search Committee, Center for Agricultural Biotechnology, 1206 H. J. Patterson Hall, University of Maryland, College Park, Maryland 20742.

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

SECTION HEAD

Drug Metabolism and Pharmacokinetics

Fisons Pharmaceuticals, an international pharmaceutical research and development organization, is looking for an experienced person to lead a group of scientists dealing with the disposition of candidate compounds in animals and man, at its research facility in Rochester, NY.

The group is involved with early research compounds as well as development candidates, and with mechanistic aspects of prodrugs and other drug delivery problems including those of peptides, especially in relation to the CNS.

The ideal candidate will have a PhD in Drug Metabolism or a related discipline, a sound knowledge of the role of drug metabolism studies in drug development, and several years' experience in team leadership in this general area. Knowledge and experience of use of isotopes, **In vitro** systems, relevant analytical methodology and pharmacokinetic modelling are essential. Strong organizational, interpersonal and communications skills together with an innovative scientific approach and the ability to work collaboratively with scientists in other disciplines are also required.

For confidential consideration, please send resume and salary requirements to: Attn: Employment Office, Ref. Ad # RSC764, Fisons Pharmaceuticals, P.O. Box 1710, Rochester, NY 14603.



Museum Director Raymond M. Alf Museum Claremont, California

The Raymond M. Alf Museum, a paleontological museum located on the campus of The Webb Schools, seeks an enthusiastic and qualified individual as its Director. The teaching museum focuses on the education and enrichment of the students of The Webb Schools and the community at-large.

The director is hired by the museum board in collaboration with the head of The Webb Schools. The director reports to the board on museum matters and to the head on all matters related to The Schools. The museum director is an ex-officio member of the museum's board of trustees.

The director's duties include responsibility for all museum operations, undertakings, staffing, and supervision. The director works with the board and head to develop the goals and objectives which fulfill the missions of the museum and The Schools.

Candidates should have strong qualifications in vertebrate paleontology; significant field work and teaching experience; demonstrated leadership and inspiration of young people; administrative skills; experience in fundraising; and knowledge of and committment to museum development and stewardship. Interest in and experience with the education of collegepreparatory adolescents is preferred.

The Raymond M. Alf Museum does not discriminate on the basis of race, color, national and ethnic origin in the administration of any of their programs or policies.

Interested candidates should send a resumé and statement of purpose and philosophy to:

Dr. Michael Woodburne, Department of Earth Sciences University of California, Riverside, California 92521-0423

DIRECTOR OF THE NASA CLASSROOM OF THE FUTURE

A director is sought for NASA's prototype educational facility, The Classroom of the Future. This high-tech educational facility is developing on the campus of Wheeling Jesuit College at Wheeling, West Virginia. It will include a Challenger Center, 21st century classrooms, a NASA Teacher Resource Center, an Educational and Software Development Center, up-link and downlink components, and interactive video conferencing facilities.

These programs will be housed in a newly constructed 40,000-square-foot building due for completion in the fall of 1992. The position of director is available summer 1991. The purpose of the facility and the programs are to revitalize nationwide the study of math and science, using the interest and dynamic of aerospace and space exploration. The program involves direct contact with students K through 12, a teacher education program for traditional age students, in-service programs for teachers engaged in math and science education, and public awareness to parents and leaders.

The position requires executive leadership abilities, creative interest in math and science education, strong oral and written communication skills, and background in aerospace concepts. The director will oversee the design and development of materials to promote awareness of the Classroom of the Future and its activities; generate funding from public and private sources to insure successful operation of the facility; establish and maintain relationships with educational institutions, regional, state, and local governments; and relate to the educational values of NASA and Jesuit education to ensure the improvement of math and science education in our country's structure. The director should possess, at a minimum, the following qualifications:

 A Ph.D. or advanced degree with an emphasis in math, science, aerospace, or other technical fields.
 A record in the establishment of new and innovative

• A record in the establishment of new and innovative educational programs using advanced education technologies.

ogies. • A background and the ability to administer federal grants and to seek private and federal sources for the expansion of the program. • Communication and interpersonal skills that will

• Communication and interpersonal skills that will present work of this prototype facility consistent with NASA and Jesuit values.

Applicants should send cover letter, curriculum vitae, and references to: The President's Office, Wheeling Jesuit College, 316 Washington Avenue, Wheeling, WV 26003. Deadline: 24 May 1991.

Applications from members of minority groups and women are encouraged.

ACADEMIC PATHOLOGISTS

The Laboratory Service of the Memphis Veterans Administration (VA) Medical Center, an 800+-bed tertiary care facility affiliated with the University of Tennessee, Memphis, is recruiting staff members including surgical pathologists and pathologists specializing in laboratory medicine. Preference will be given to candidates who have excellent diagnostic skills, an active research interest in areas such as extracellular matrix, cell-matrix interactions, carcinogens or tumor invasion, a successful history of extramural funding and a commitment to resident education. These positions will have dual appointment at the VA Medical Center and the University of Tennessee College of Medicine. Academic rank and salary will be commensurate with experience. Prior to 1 July 1991, candidates should send curriculum vitae and three letters of recommendation to: Antonio Martinez-Hernandez, M.D., Chief of Laboratory Service, VA Medical Center, 1030 Jefferson Avenue, Memphis, TN 38104 or Robert E. Scott, M.D., Chairman of Pathology, The University of Tennessee, 800 Madison Avenue, 576 Baptist Main, Memphis, TN 38163. The VA Medical Center and The University of Tennessee Medical Center are Equal Opportunity/Affirmative Action/Title IV/Section 504 Employers.

Maine Maritime Academy (MMA), Department of Ocean Studies, seeks to fill **TWO FACULTY POSI-TIONS**, fall 1991. Assistant professor level—Ph.D. in ocean studies/marine chemistry. Instructor level—M.S. in biology, chemistry, geology, physics. Both positions teach undergraduate marine science courses in biology and chemistry. Send résumé to: **Director of Human Resources, MMA, Ocean Studies Search—Box C-3, Castine, ME 04420**.

POSITIONS OPEN

ENDOWED CHAIR CARDIOVASCULAR SURGERY RESEARCH

The Department of Surgery at the University of South Florida in conjunction with the Suncoast Chapter of the American Heart Association is seeking an outstanding individual for the Endowed Chair Faculty position in Cardiovascular Surgery Research. This individual should be an M.D. or Ph.D. and be committed to spending a minimum of 70 percent of time in cardiovascular research activities. Strong publication experience and demonstrated ability to secure external funding for research are essential. Dedication to teaching with help in motivation and organization of research for residents and junior faculty members is also desired. Candidates should submit curriculum vitae to: Larry

Candidates should submit curriculum vitae to: Larry Carey, M.D., Professor and Chairman, University of South Florida, Department of Surgery, 12901 Bruce B. Downs Boulevard, Tampa, FL 33613.

The University of South Florida is an Affirmative Action/ Equal Opportunity Institution.

DEPARTMENT HEAD FISHERY AND WILDLIFE BIOLOGY (FWB) COLORADO STATE UNIVERSITY

Desired qualifications: Demonstrated leadership in the broad area of biology or management of terrestrial and/or aquatic resources; an earned doctorate; quality teaching, research, and extension or service experience; academic administrative experience or evidence of potential for such. Position is available 1 July 1992. Closing date for application is 1 September 1991. Inquiries for additional information and applications or nominations should be addressed to: Dr. Bruce A. Wunder, FWB Search Committee, College of Forestry and Natural **Resources, Colorado State University, Fort Collins, CO 80523**. Applications should include: (i) a letter detailing interest in the position, qualifications, and administrative philosophy, (ii) curriculum vitae, and (iii) name and telephone numbers of five references. *Ethnic minorities and women are encouraged to apply. Colorado State University is an Affirmative Action/Equal Opportunity Employer. Equal Opportunity Office: 314 Student Services Building.*

ENGINEER. Research and application of kinetic (microscopic) modeling of chemically reacting, nonequilibrium phenomena in high-temperature gas with chemical reactions, ionization, and reabsorption of radiation. Calculate collision strengths for atomic, molecular, and radiative processes; develop diagnostic methods for plasmas in thermal non-equilibrium. Required: A.B.D. in acrospace engineering; background in kinetic modeling of chemically reacting non-equilibrium hypersonic flows; knowledge of the Boltzmann equation in nonequilibrium plasma and the interaction of charge particles with solids. Salary: \$576.92 per week; 40 hours per week. Job/interview site: Los Angeles, California. Send this ad and your résumé to: Job #CC5130, P.O. Box 9560, Sacramento, CA 95823–0560 no later than 20 May 1991.

MOLECULAR BIOLOGY/DNA DIAGNOSTICS

Cedars-Sinai Medical Center, a UCLA-affiliated teaching, research facility, has excellent employment opportunities available working in our internationally renowned Molecular Diagnostics Laboratory in the Division of Medical Genetics as follows:

SUPERVISORY POSITION. To supervise both the clinical and research aspects of the lab, work independently in assigning and carrying out DNA isolation, setting up a new DNA diagnostics service, Southern blotting, library screening, subcloning, probe growth and preparation. Requires master's/Ph.D. with extensive molecular biology experience and supervisory background.

LABORATORY RESEARCH TECHNOLO-GIST. To perform molecular biology procedures similar to those listed above and to work with the laboratory director on specific research projects in the field of DNA isolation and gene mapping. B.S. required, 1 year of work experience in this area. M.S. preferred.

We offer a competitive benefits and compensation package. Send résumé to:

Julie Korenberg, M.D., Ph.D. Director, Molecular Diagnostics Laboratory Cedars-Sinai Medical Center 8723 Alden Drive Speilberg Building, Room 354 Los Angeles, CA 90048 DNA hybridization FACULTY POSITION available. Department of Pediatrics with major assignment in the Meyer Rehabilitation Institute, a multidisciplinary unit of the University of Nebraska Medical Center. M.D. or Ph.D. trained in genetics with experience in DNA hybridization and molecular genetics. An M.D. with long experience in DNA hybridization alone would be considered. Rank and salary commensurate with education and experience. Write: Bruce A. Buehler, M.D., Director of Meyer Rehabilitation Institute, University of Nebraska Medical Center, 600 South 42nd Street, Omaha, NE 68198–5450. An Equal Opportunity/Affirmative Action Employer.

THE HEBREW UNIVERSITY HADASSAH MEDICAL SCHOOL JERUSALEM FACULTY POSITIONS

The Faculty of Medicine invites applications for tenure-track faculty positions and for Allon Fellowship candidates leading to tenure-track positions in basic medical sciences. Preference will be given to candidates that utilize modern molecular approaches in the following areas: medical microbiology, human genetics, parasitology, biochemistry, cell biology, physiological chemistry, physiology and pharmaccutical sciences. Ph.D. and/or M.D. degree and postdoctoral training are required. Excellence in research and teaching will be of prime importance in the decisions of the search committree. Candidates are expected to develop independent research. Curriculum vitae, list of publications, three to five selected reprints, research plans and three letters of recommendation addressed to the **Dean**, **Professor S. Razin**, should reach the office of **The Dean** (**P.O. Box 1172, Jerusalem, Israel 91010**) not later than 30 September 1991.

WESTERN STATE COLLEGE OF COLORADO PLANT ECOLOGIST

A temporary position available August 1991, with tenure track possibility in 1992. Doctorate preferred, but well-qualified master's degree considered. Rank and salary commensurate with education and experience. Responsibilities include plant and general ecology, plant physiology, other botanical courses, and introductory biology. Strong biology program and great location. Send letter of application, curriculum vitae, and names and addresses of three references to: Botanical Search Committee, Department of the Sciences, Western State College, Gunnison, CO 81231. Deadline for receipt of materials is 31 May 1991. An Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply.

HISTOLOGY LECTURERS

Widely approved, successful, international medical school seeks qualified teaching staff. Both senior and junior posts are available. Recently retired lecturers will be considered. Ability to cross-teach in other areas is a plus. Send curriculum vitae (preferably by FAX) to:

Faculty Recruitment Office St. George's University School of Medicine Grenada, West Indies FAX: 809-444-4823

LABORATORY INSTRUCTOR, PHYSIOLOGY

The University of North Dakota School of Medicine, Department of Physiology, is seeking to fill a nontenuretrack, 9-month laboratory instructor position with a starting date of 15 August 1991. A master of science degree in physiology is required and a Ph.D. is preferred. Salary is dependent on academic degree. This is a 75% time position. The person is expected to supervise GTAs in the undergraduate laboratory as well as set up the laboratory and develop new laboratory experiments and teach part-time in an undergraduate level course in physiology (occupational therapy, physical therapy, physical education, and nursing students). The Department of Physiology has opportunities for research for this person and also interactions with the Human Nutrition Laboratory. Review of applications will begin 15 May 1991 and continue until the position is filled. Interested applicants should send the curriculum vitae, a summary of teaching goals, and at least three letters of reference to: Dr. T. K. Akers, c/o Department of Physiology, School of Medicine, University of North Dakota, Grand Forks, ND 58202.

POSITIONS OPEN



The Preclinical Dermatology Research Group has an immediate opening for a

BIOLOGIST

or

PHARMACOLOGIST

interested in planning, conducting and evaluating *in vivo* and *in vitro* studies with investigational dermatologic agents.

The successful candidate will have

- a doctorate in biology or pharmacology
- experience in pharmacology
- a command of spoken and written English
- some familiarity with, and willingness to learn German
- the ability to work in a team.

Experience in experimental dermatology would be useful.

Candidates interested in this position and possessing the necessary qualifications are asked to send their applications with references and a handwritten curriculum vitae to our Personnel Department, F.Bringolf, quoting reference. Science 30/91/ Bri. F.Hoffmann-La Roche Ltd, CH-4002 Basel National Institutes of Health Public Health Service Department of Health and Human Services

CHIEF Laboratory of Molecular Biology

The National Institute of Neurological Disorders and Stroke (NINDS) invites nominations and applications for the position of Chief, Laboratory of Molecular Biology (LMB), Division of Intramural Research (DIR), Basic Neurosciences Program (BNP). This is a Civil Service Position in the Senior Executive Service with a salary range of \$87,000 -\$100,500 per annum. Physicians are also eligible for payment of Physicians Comparability Allowance up to \$20,000 per year. A one-year probationary period must be served by the individual selected if not currently in the Senior Executive Service.

The Chief, Laboratory of Molecular Biology provides technical and administrative direction and leadership to the Institute's research program in molecular neurosciences and serves as the focal point within the Federal Sector, scientific community and the public for these activities.

For more information on the position, contact Dr. Harold Gainer at (301) 496-5468. For information regarding qualifications requirements, contact Ms. Claudia Palumbo at (301) 496-6334. The following forms are *required*: Application for Federal Employment (SF-171) accompanied by a current curriculum vitae and bibliography. These must be submitted to:

> Ms. Claudia Palumbo National Institutes of Health NINDS Personnel Office Building 31, Room 8A23 9000 Rockville Pike Bethesda, Maryland 20892



Applications must be postmarked no later than September 9, 1991

All qualified candidates will receive consideration without regard to race, religion, color, sex, age, national origin, lawful political affiliation, marital status, union membership, or any nondisqualifying physical or mental handicap.

NIH is an Equal Opportunity Employer

National Cancer Institute National Institutes of Health Public Health Service

CANCER PREVENTION FELLOWSHIP PROGRAM

The Division of Cancer Prevention and Control (DCPC) is accepting applications for the Cancer Prevention Fellowship Program (CPFP). The purpose of this program is to attract individuals from a multiplicity of health science disciplines into the field of cancer prevention and control. The program provides for: Master of Public Health training (new feature); Participation in the DCPC Cancer Prevention and Control Academic Course; Working at NCI directly with individual preceptors on cancer prevention and control projects; Field assignments in cancer prevention and control programs at other institutions. Funding permitting, as many as ten Fellows will be accepted for up to three years of training, beginning July 1, 1992 (date may vary for M.P.H. applicants). Benefits include selected relocation and travel expenses, paid federal holidays, and participatory health insurance.

ELIGIBILITY

M.D. or D.D.S. from a U.S., territorial, or Canadian Medical School or equivalent experience. Foreign medical graduates must have current ECFMG/FMGEMS certification and appropriate experience, e.g., one year residency in a training program approved by the Accreditation Council for Graduate Medical Education.

OR

Ph.D., Dr. P.H. or other doctoral degree in a related discipline (epidemiology, biostatistics, and the biomedical, nutritional, public health or behavioral sciences) or equivalent experience. Foreign education must be comparable to that received in accredited U.S., territorial, or Canadian institutions.

PLUS

U.S. citizenship or resident alien eligible for citizenship within four years.

For details and application catalog send a postcard or letter with your name and home address to:

Douglas L. Weed, M.D., M.P.H., Ph.D, Director, Cancer Prevention Fellowship Program, Division of Cancer Prevention and Control, National Cancer Institute, Executive Plaza South, T-41, Bethesda, MD 20892.

Further Inquiries: Mrs. Barbara Redding (301) 496-8640 or 496-8641

> Deadline For Receipt of Applications: SEPTEMBER 1, 1991

NIH is an Equal Opportunity Employer

University of Basel (Switzerland) Professor of Vegetation Science/ Conservation Biology (ausserordentlicher Professor)

This position is offered as part of a new program in applied aspects of plant ecology, vegetation science, and environmental biology. Candidates should have a strong background in one or more of these areas; in addition experience in climate and soil studies, computer applications in vegetation analysis, rangeland or forest ecology or zoology would be welcome. The candidate will be expected to initiate field research and organize lectures, excursions and field courses. Adequate knowledge of the Central European flora is therefore imperative. Cooperation with a second, future faculty appointee (who will have a stronger orientation toward geography) is expected. Applications should include a brief statement about prior an envisaged future research activities, as well as five important publications, and should be submitted to the

> Dekanat der Philosophisch-Naturwissenschaftlichen Fakultät Klingelbergstrasse 23 CH-4056 Basel.

DIRECTOR OF BRONCHOPULMONARY/ ALLERGY RESEARCH



t Hoffmann-La Roche, a world leader in pharmaceutical and diagnostic products, we recognize that our success is dependent upon our ongoing contributions to world health. This commitment has created an opportunity for a highly motivated scientist to become Director of Astma/Allergy Research at our Nutley, New Jersey Headquarters.

In this highly visible position, you will oversee both the scientific and the managerial functions of the Bronchopulmonary/Allergy Department. Specifically, you will direct a multidisciplinary team of approximately 20 scientists conducting exploratory research to identify new antiasthmatic and antiallergy drugs.

Qualifications include a PhD in Biochemistry, Pharmacology, Immunology or Molecular Pharmacology, along with 10+ years of experience gained after your degree. In addition, a background in asthma/allergy research demonstrating successful management of research groups and projects is required; a background in the pharmaceutical industry would be a plus.

We offer an attractive compensation package including bonus, generous benefits and relocation policies, and the opportunity to have significant scientific impact. For confidential consideration, please send your resume, indicating present salary (those without this information will not be acknowledged), to: Mrs. Eleanor M. Malone, Staffing and Employee Services, Dept. EM121AW, Hoffmann-La Roche Inc., Nutley, New Jersey 07110. We are an equal opportunity employer.



Working Today For a Healthier Tomorrow

Senior Biomedical Information Scientist

Due to internal promotion, the Medical Research Division of American Cyanamid Company has a challenging career opportunity for an individual with a Ph.D. in molecular biology or closely related discipline to provide technical information support to our antimicrobial, molecular biol-ogy, virology and biotechnology-oriented research, drug development and marketing programs.

Responsibilities include conducting literature, sequence, and patent searches using leading-edge information re-trieval technology; active participation in our progressive end-user searching program; monitoring current pub-lished literature for important research and commercial advances and effectively communicating these findings to a dynamic population of research scientists, manag-ers, and marketing personnel dedicated to the prevention and treatment of infectious diseases.

Well-developed interpersonal and communications skills are a prerequisite for this position. Individuals with ex-perience using on-line information systems, molecular sequence databases and knowledge of computer technol-ogy will receive preferential consideration.

The position is located on the expanding Lederle Labora-tories campus in Rockland County, New York, 25 miles north of New York City and yet close to extensive out-door recreational and wilderness areas. We offer competitive salaries and ex-cellent benefits. Please send your re-sume and the names of three referen-ces to. Dent L L American Oyanami



ces to: Dept. L.J., American Cyanamid, Medical Research Division, Pearl River, New York 10965. We are an equal opportunity employer m/f/h/v.

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SCIENCE Magazine New Lab Service Department 1515 Broadway SCIENCE New York, NY 10036



Foundation

MERCK-AFCR FOUNDATION MD-PhD POSTDOCTORAL FELLOWSHIPS

FIVE FELLOWSHIPS AVAILABLE

Merck Sharp & Dohme Research Laboratories, through its Academic Development Program, and the American Federation for Clinical Research Foundation announce the 1992 competition for the Merck-AFCR Foundation MD-PhD Postdoctoral Fellowships to support the further training of MD-PhD scientists.

FELLOWSHIP TERMS

- Candidates must have completed an MD-PhD educational program and be accepted into a postdoctoral training program.
- Candidates must provide evidence of 2 years of clinical training or have completed residency training at the time the award begins (July 1, 1992).
- Fellowships are intended for independent research in the biomedical sciences, including the fields of: biological chemistry; cellular, molecular and structural biology; epidemiology; genetics; medical informatics; microbiology; immunology; pharmacology, physiology; pathology.
- Candidates must be citizens of the U.S. or Canada or permanent residents of the United States
- Fellows must devote 80% of his/her time to research. Each Fellow will spend up to three days in the Merck Research Laboratories during his/her tenure as award recipient and present research results Travel support will be provided for the Fellow's mentor. The Fellow must maintain membership in the American Federation for Clinical Research and must submit an abstract to and attend a Regional or National AFCR meeting each year
- First-year support consists of a \$40,000 stipend and a \$3,000 allowance for travel, journal subscriptions and society memberships. In addition, the recipient's university will receive a \$7,000 grant for supplies related to the funded research. Indirect costs will not be allowed.
- Fellowships may be renewable on an annual basis for an additional two years, pending approval of annual progress reports.

FELLOWSHIP APPLICATION TERMS

All applications must be submitted on the official Merck-AFCR Foundation MD-PhD Postdoctoral Fellowship application form. Each application must include:

- A curriculum vitae
- One page abstract of the proposed research
- A proposal of 8 to 10 pages, including background and references
- A statement of the applicant's career goals
- Two letters of recommendation
- Two reprints of published papers representative of the applicant's research
- A letter from the applicant's mentor describing how the proposed research will contribute to the applicant's development as a creative scientist

IMPORTANT DATES

Deadline for receipt of applications - July 15, 1991. Fellowship recipients will be notified by December 15, 1991. Fellowships begin July 1, 1992, unless otherwise agreed

FOR APPLICATIONS AND INQUIRIES: Merck-AFCR Foundation Fellowship Program AFCR Headquarters 6900 Grove Road Thorofare, NJ 08086

Phone: 609-853-9129, Ext. 293 Fax: 609-853-5991

Schering Post Doctoral Fellow

Take action advancing future drug products.

Schering-Plough is a \$3+ billion research-driven leader in the health care industry. We currently have a challenging position available in our Animal Health Formulation Research Group located in Kenilworth, New Jersev.

The selected candidate will research novel drug delivery systems for application to current and future drug products. The successful applicant will apply principles and techniques in physical pharmacy and analytical chemistry as applied to drug formulation research.

We offer a competitive salary and benefits package. This is a one year assignment with an opportunity to renew. Interested candidates should forward their resumes to: PV, Schering-Plough Corporation, 2000 Galloping Hill Road, K6, E-17, Kenilworth, NJ 07033. We are an equal opportunity employer.

What you have in mind, we put into action.



Postdoctoral Research Fellowship

Protein Phosphorylation and Signal Transductionin Tumor Cells

The purpose of this position will be to investigate the role of growth factors, their receptors and tyrosine phosphorylation in cellular proliferation, cell cycle progression and tumorigenesis as well as the consequences of intervening at strategic sites along these pathways. There will also be an opportunity to assess the involvement of second messengers in tumor stress response and programmed cell death.

The candidate will join a highly successful preclinical cancer research group which is part of a multidisciplinary effort to study the control and regulation of cellular proliferation. Candidates should be recent Ph.D. graduates in biochemistry, pharmacology or cell biology. Experience in the areas of signal transduction, tumor biology or oncogene expression would be helpful.

Appointment is for one year, renewable for a second year. Compensation includes a competitive salary with relocation expenses and an attractive benefits package. Our modern research facilities are located adjacent to the University of Michigan in an outstanding living and working environment. Send letter of application with curriculum vitae and names of three references to BOX JDM-0019, Human Resources, PARKE-DAVIS Pharmaceutical Research Division, Warner-Lambert Company, 2800 Plymouth Road, Ann Arbor, MI 48105. 'Smoke-Free Work Environment'

"Equal Opportunity in Action"



POSITIONS OPEN

TENURE-TRACK FACULTY POSITION IN EPIDEMIOLOGY

The Epidemiology Program of the Department of Biomedical and Environmental Health Sciences in the University of California at Berkeley School of Public Health invites applications for a position as ASSOCI-ATE OR FULL PROFESSOR of epidemiology. The successful candidate is expected to develop and maintain an active research program and to participate in the teaching program, including the supervision of doctoral thesis research and the teaching of the introductory course in epidemiologic methods required of all master's level students in epidemiology. The area of specialization within epidemiology of the successful candidate is less important than the candidate's proven ability to sustain an independent research program and his or her ability to teach a course in epidemiologic methods. Candidates should have a doctoral, medical, or equiv-

alent degree and training or extensive research experience in epidemiology. Applicants should send their curriculum vitae and the

names and addresses of three references by 15 July to:

George F. Sensabaugh, Chair Department of Biomedical and Environmental Health Sciences School of Public Health University of California 140 Warren Hall Berkeley, CA 94720

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

A HYBRIDOMA ANTIBODY/CELL CULTURE SPECIALIST at the Ph.D. level to head new Monoc nal Antibody/Cell Culture Facility. The individual will interact with faculty in developing strategies for gener-ating monoclonal antibodies, performing immunizations, cell fusions, and screening of monoclonals. The facility will also provide large-scale tissue culturing and provision of tissue culture media, serum, and reagents. Send curriculum vitae and names of references to: Dr. Susan K. Pierce, Department of Biochemistry, Mo-lecular Biology and Cell Biology, 2153 Sheridan Road, Hogan 2-100, Evanston, IL 60208-3500. Equal Opportunity/Affirmative Action Employer. Employ-ment eligibility verification required upon hire.

POSTDOCTORAL POSITION. Available immediately to study the effect of steroid hormones and growth factors on gene expression in human uterine growth factors on gene expression in human uterine tissues. Experience in molecular biology (e.g. library screening, DNA sequencing) is essential. Research labo-ratories are located at the Tampa General Hospital. Send curriculum vitae and the names of three references by 4 June 1991 to: Dr. William N. Spellacy, Chairman, Department of Obstetrics and Gynecology, Universi-ty of South Florida, Harbour-side Medical Tower, 4 Columbia Drive, Tampa, FL 33606. FAX: 813-254-0940. *An Eaul* Onortunity/Affirmative Action Employer. 0940. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION. Available immediately to study pathophysiological bases of thiamine deficiency/alcohol-induced encephalopathy. Experience with rat brain stereotaxy, histology, and HPLC are essential; in vivo microdialysis, amino acid and ion measurements, pharmacologic treatments, and image analysis techniques highly desirable. Candidates should send curriculum vitae and names of three references to: Dr. P. J. Langlais, Department of Psychology, San Diego State University, San Diego, CA 92182–0350. Equal Employ-ment Opportunity/Affirmative Action/Title IX Employer.

POSTDOCTORAL POSITION DANA-FARBER CANCER INSTITUTE

Available immediately in a laboratory actively engaged in the development of new drugs and therapeutic strat-egies for the treatment of solid tumors. Applicants should be well versed in aspects of Northern, Southern should be well versed in aspects of Northern, Southern and Western blotting techniques and have a familiarity with DNA sequencing and footprinting and mammalian cell culture. This position requires self-motivation and ability to work independently. Joint appointment will be held in an appropriate department of Harvard Medical School. Send curriculum vitae and names, addresses, and telephone numbers of three references to: Dr. Beverly A. Teicher, JF 519, Dana-Farber Cancer Institute, 44 Binneys Street, Boston, MA 021115. *Affirmative Action*/ Binney Street, Boston, MA 02115. Affirmative Action/ Equal Opportunity Employer.

SCIENCE, VOL. 252

A 2- to 3-year **POSTDOCTORAL POSITION** is available to study regulation of ion channel function and excitation-contraction coupling in isolated vascular smooth muscle cells using patch clamp and ratiometric fluorophore techniques. All applicants with strong academic backgrounds will be considered. Please submit curriculum vitae, career objectives, and references to: Dr. Robert H. Cox, Bockus Research Institute, The Graduate Hospital, One Graduate Plaza, Philadelphia, PA 19146. The Graduate Hospital is an Affirmative Action/Equal Opportunity Employer.

RESEARCH CENTER FOR MOLECULAR MICROBIOLOGY SEOUL NATIONAL UNIVERSITY POSTDOCTORAL POSITION

Ten positions available to study the response of microorganisms upon environmental changes. Applicants with backgrounds in such areas as microbial taxonomy, physiology, molecular genetics, ecology, and protein chemistry are wanted. Annual salary is 6,600,000 Won. Please contact and send curriculum vitae, names and addresses of two references to: Dr. Hack Sung Chung, Research Center for Molecular Microbiology, Scoul National University, Seoul 151-742, Korea. Telephone: 82-2-880-6710; FAX: 82-2-888-4911.

POSTDOCTORAL POSITION, PHOTOSYN-THESIS. Available June 1991 for studies of the O₂evolving process of photosynthesis using biochemical spectroscopic, genetic, and molecular biological approaches. The position is for 1 year with the possibility of extension. Salary is highly competitive. Additional sabbatical and graduate student opportunities are available to U.S. citizens under Associated Western Universities competitive programs. Send curriculum vitae, short statement of research interests, and names of three references, with telephone numbers to: Dr. Michael Seibert, Solar Energy Research Institute, 1617 Cole Boulevard, Golden, CO 80401. We are an Equal Opportunity/ Affirmative Action Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL POSITION. With 0 to 2 years of postdoctoral experience. Main emphasis of the work will be on characterizing the structure/function relation ships involved in protein-lipid interactions using various techniques especially fluorescence spectroscopy. The project involves the isolation, purification, and reconstitution of membrane proteins into lipid bilayers. The focus of attention is on the extrinsic membrane proteins (e.g., protein kinase C), although intrinsic membrane proteins, and is available immediately. Send curriculum vitae and names of references to: Dr. C. D. Stubbs, #271 JAH, Thomas Jefferson University, Philadelphia, PA 19107–6799. We are committed to a smoke-free environment. Equal Opportunity Employer.

POSTDOCTORAL POSITION

Opening in September for a postdoctoral fellow to study the molecular biology and immunology of parasite infections. Current research projects include the molecular basis for antigenic variation in African trypanosomes, the regulation of genes for a surface protease in *Leishmania*, a characterization of the immune response to *Onchocerca volvulus* infections and an examination of *Trypanosoma cruzi* invasion of host cells. Background in molecular biology or immunology is desirable. Send curriculum vitae and three reference letters to: Dr. John E. Donelson, Department of Biochemistry, University of Iowa College of Medicine, 300 EMRB, Iowa City, IA 52242. Equal Opportunity Employer.

POSTDOCTORAL IN NEUROPHYSIOLOGY. Position available now to do research in mammalian sensorimotor systems neurophysiology. Projects are focused on neuronal signal processing underlying cerebellar control of eye movements. Techniques used include multiple electrode single cell recording, 3-D eye movement recording, and multidimensional vestibular and visual stimulation. Experience with computers and extracellular recording is desirable. Salary: \$24,000 to \$26,000. Send curriculum vitae, names of three references, and summary of research interests to: Dr. J. I. Simpson, Department of Physiology and Biophysics, New York University Medical Center, 550 First Avenue, New York, NY 10016.

3 MAY 1991



Postdoctoral Fellowship Position

Immunology/Molecular Biology/Biochemistry

Genentech, Inc., a leader in the biotechnology industry, has an outstanding postdoctoral opportunity within our Inflammation and Connective Tissue Research Laboratory.

This research investigates cellular interactions in chronic inflammation and tissue remodeling. We seek a highly motivated individual to join a group exploring T lymphocyte specificity at sites of chronic immune-mediated inflammation. Studies are directed toward delineating T cell antigen receptor usage, control of lymphokine production and T lymphocyte-fibroblast interactions.

Candidates should have a PhD in Molecular Biology, Immunology or Biochemistry and be well versed in molecular biological techniques.

Our progressive company offers an extensive benefits package which includes fully paid dental/medical/vision coverage for you and your dependents, child care facilities, free health club membership and an employee stock purchase plan. For immediate consideration, please send your CV as well as the names and addresses of three references to Edward P. Amento, Genentech, Inc., 460 Point San Bruno Blvd., South San Francisco, CA 94080. We promote and actively support affirmative action and equal employment opportunity. Women and minorities are encouraged to apply.

Genentech, Inc.



NIGMS MINORITY PROGRAMS SYMPOSIUM



November 3-6, 1991

Washington, DC Convention Center and Grand Hyatt Hotel

Join the largest annual meeting of minority biomedical researchers! This event brings together science students and faculty from colleges and universities with substantial minority enrollments. It is an ideal setting in which to recruit graduate students and summer interns, and in which to forge collaborations with others interested in encouraging minorities to pursue research careers.

The meeting is sponsored by the National Institute of General Medical Sciences (NIGMS), a component of the National Institutes of Health. The NIGMS minority programs include the Minority Access to Research Careers (MARC) Program and the Minority Biomedical Research Support (MBRS) Program. These programs support research and research training, with the aim of increasing the number of minority biomedical scientists and strengthening science teaching and research capabilities at minority institutions.

To register to attend or exhibit at the meeting, contact:

Mark Brown TASCON 7101 Wisconsin Avenue, Suite 1125 Bethesda, MD 20814 Phone: (301) 907-3844, Fax: (301) 907-9655

CELL BIOLOGIST/ PARASITOLOGIST Antiparasitic Drug Discovery

The Department of Biochemical Parasitology in the Merck Sharp & Dohme Research Laboratories has an immediate opening for a Senior Research Biologist interested in exploring new chemotherapeutic approaches for the treatment and prevention of protozoan parasitic diseases.

Primary responsibilities include the development of in vivo and in vitro models for parasitic infections for use in the discovery and evaluation of novel antiparasitic agents. This position offers a unique opportunity to interact with a team of scientists in various disciplines focused on developing a better understanding of parasite biochemistry as a means of developing new chemotherapeutic agents.

The position requires supervisory experience and a Ph.D. in Cell Biology with at least 3 years of postdoctoral experience in a relevant field of biology. Superior skills in tissue culture and animal model design are essential. The applicant's practical skills should be complimented by a high level of initiative and superior communication skills.

Merck Sharp & Dohme Research Laboratories is located in Rahway, New Jersey, approximately 25 miles from New York City. Our facilities are state-of-the-art and our renowned research environment is excellent. For consideration, please send your resume with the names of three references to: Human Resources Manager, Merck & Co., Inc., P.O. Box 2000, WBC-155, Department S-18, Rahway, NJ 07065-0900.

An equal opportunity/affirmative action employer, m/f/v/h



CREATICE TO

Technicon Instruments Corporation, a leading manufacturer of automated clinical laboratory instruments, is expanding its Immunomethod R&D Department.

Openings exist at a variety of levels ranging from Technologists to Scientists.

Our interest focuses on the development of new immunochemical reagents and corresponding automated immunoassays. We are seeking candidates with strong educational background in analytical and protein biochemistry, immunochemistry and bio-organic chemistry. Work experience in immunodiagnostic technology is highly desirable.

Our organization offers an environment conducive to professional growth, as well as an excellent compensation and benefits program. Please send c.v. and/or resume in confidence to:

Manager, Human Resources - R&D

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Repligen Corporation is a leader in the application of biotechnology to the healthcare market. We are currently developing an AIDS vaccine, AIDS therapeutic and diagnostic products, cancer therapies, and anti-inflammatives. We take pride in the high caliber of our scientific staff and our collaborations with major research institutions and corporate partners in Europe and the United States. The expansion of our effort has created the following opportunity:

Drincipal Investigator/Group Leader Immunotherapeutics

We are seeking an individual for this senior level position on our Immunology staff to be responsible for coordinating and conducting research in the area of immune response. This will involve using cell culture to mimic disease processes, and identifying mechanisms of cell activation and repression through biochemical and molecular test techniques. The successful candidate will possess a PhD with at least 5 years' experience in biochemical and molecular mechanisms of the immune function. Previous experience in supervising PhD level scientists as well as previous work on leukocyte activation or repression preferred.

Repligen Corporation offers a competitive salary, excellent benefits, relocation, and equity participation. Please submit a cover letter, resume, and references to: Barbara Fleming, Repligen Corporation, One Kendall Square, #122, PO Box 9171, Cambridge, MA 02139. An Equal Opportunity Employer.





INDIANA UNIVERSITY

PROTEINS AS MACHINES

Indiana Molecular Biology Symposium VI

October 27–30, 1991 Indiana Memorial Union

Presented by the

Institute for Molecular and Cellular Biology Indiana University, Bloomington, Indiana

Topics: Cytoplasmic motors; Nuclear motors; Trans-membrane transport; Structural/physical approaches to understanding mechanisms

Speakers Include: Howard Berg (Keynote Speaker)

- Richard McIntosh William Saxton Ronald Vale Lawrence Goldstein Gerald Smith Michael Chamberlin Connie Holm Bruce Alberts Douglass Forbes Gunter Blobel
- Peter Walter Nikolaus Pfanner Thomas Steitz John Murray Kenneth Holmes Toshio Yanagida James Spudich John Hammer Clarence Schutt Thomas Pollard

Sponsored in part by the Indiana Corporation for Science and Technology

For Information and registration, write to: Rhea Percival, Institute for Molecular and Cellular Biology, Jordan Hall 322A, Indiana University, Bloomington, Indiana 47405.



Molecular Biologist

phinx Pharmaceuticals Corporation is a rapidly growing company dedicated to the discovery and development of novel therapeutics for human disease based on interactions with key intracellular enzymes involved in signal transduction pathways.

We are seeking a molecular biologist for our discovery program. The successful candidate will have a Ph.D. in molecular biology, biochemistry, or related scientific field, at least two years of postdoctoral experience, and expertise in the use of recombinant DNA technology including PCR techniques and *in vitro* mutagenesis.

Sphinx Pharmaceuticals offers excellent compensation and benefits as well as an attractive relocation policy. We are located in the Research Triangle area of North Carolina, which offers excellent living conditions and outstanding schools. For confidential consideration, please forward your curriculum vitae, list of publications and names of three references to: Sphinx Pharmaceuticals Corporation, Position 134, P.O. Box 52330, Durham, North Carolina 27717. We are an Equal Opportunity Employer.

Sphinx Pharmaceuticals Corporation



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Molecular Virologist

Gilead Sciences, an emerging biotechnology company in the San Francisco Bay Area, is seeking a molecular virologist to lead a group of scientists working toward the development of novel antiviral compounds.

The candidate should have an M.D. or Ph.D. with a strong background in biochemistry or molecular biology and a broad knowledge of viral biology and pathogenesis. A postdoctoral fellowship plus 3-5 years experience in biotechnology or the pharmaceutical industry is preferred.

Gilead Sciences offers a challenging research environment, competitive salaries and an employee stock option program. Please send a C.V. and three references to: Jennifer Maddock, Gilead Sciences, Inc., 346 Lakeside Drive, Foster City, CA 94404.

GILEAD



At Eli Lilly and Company we rely on a team of high caliber professionals to help us identify, develop and manufacture superior quality health care, diagnostic and animal health products. Our success in these areas is in part due to the high quality process that we have developed to identify innovative products and technologies that meet important clinical needs. To help us in this effort, our Medical Devices and Diagnostics Divison is now seeking an experienced scientist to become part of a team dedicated toward technology assessment and acquisition. Bring us your expertise and help support our worldwide reputation for quality health care.

The individual will have the responsibility, as a member of the division's business planning group to identify diagnostic technology opportunities and make recommendations to senior management. In this process he/she will interact on a continuous basis with other scientists, business development managers, and Lilly subsidiaries developing both <u>in vivo</u> and <u>in vitro</u> diagnostic products.

We are seeking a PhD or equivalent in the biomedical sciences with 3+ years of experience in clinical laboratory based diagnostic assay product development, production technical support, or manufacturing. An understanding of the diagnostic business with respect to current methodologies, products, and the business process is important.

In addition to unprecedented programs for professional growth, we provide attractive salaries and benefits. For consideration, please send a cover letter with resume and salary requirements to: Director, Personnel, Medical Devices and Diagnostics Division, Eli Lilly and Company, Lilly Corporate Center, Indianapolis, IN 46285. Equal Opportunity Employer.



POSTDOCTORAL POSITION. For molecular biologist/immunologist. Research focus on molecular genetics of human antibody repertoire, organization and polymorphism of $V_{\rm H}$ genes, genes encoding autoantibodies. NIH-funded position. Send curriculum vitae and names of three references to: Dr. Eric C. B. Milner, Virginia Mason Research Center, 1000 Seneca Street, Seattle, WA 98101.

POSTDOCTORAL POSITION. To study plantmicrobe interactions in the *Bradyrhizobium japonicum*soybean symbiosis. A Ph.D. in molecular biology, genetics, or biochemistry is required. Experience in the analysis and manipulation of nucleic acids is desirable. Send curriculum vitae and the names of three references to: Dr. Mark R. O'Brian, Department of Biochemistry, State University of New York (SUNY), Buffalo, NY 14214. Research Foundation of SUNY is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS, PLANT MO-LECULAR VIROLOGY/BIOCHEMISTRY. Two positions are now open for the study of plus sense RNA plant viruses. Position A: This project will involve the isolation and characterization of a viral replicase complex from muskmelon plants infected with different strains of cucumber mosaic virus. The successful applicant will be expected to be familiar with standard cloning and molecular techniques with experience in biochemistry and enzymology being desirable. Requirements: A Ph.D. in biochemistry, molecular biology, or related field. Starting date: 1 September 1991. Position B: Projects include the cloning and characterization of polyviruses and their application toward coat protein-mediated cross protection in transgenic plants and basic research concerning tobacco mosaic virus replication and gene expression. Open until a suitable applicant is found. Funding is available for 3 years for each position. To apply, submit curriculum vitae, statement of research interests, and names of three references to: Position (A) Dr. Marilyn Roossinck or (B) Dr. Brandt Cassidy, Samuel Roberts Noble Foundation, Plant Biology Division, P.O. Box 2180, Ardmore, OK 73402. Telephone: 405-223-5810; FAX: 405-221-7362.

POSITIONS OPEN

ENVIRONMENTAL PATHOLOGY/TOXICOL-OGY. NRSA-supported POSTDOCTORAL POSI-TIONS available in 15 research laboratorics. Emphasis on cellular and molecular effects (mutagenesis, neurotoxicity, biotransformation) of toxic chemicals (especially trace metals, aromatic hydrocarbons, ozone respiratory epithelial injury), and behavioral teratology. Inquiries: Dr. N. K. Mottet, Program Director, Department of Pathology, SM-30, University of Washington, Seattle, WA 98195. NRSA requires U.S. citizen/permanent resident. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL COLLEAGUE. University of Hawaii, Pacific Biomedical Research Center. To join on-going study of electrophysiology, morphology, and neurochemistry of cultured peptidergic neurons using patch-clamp, optical, and immuno methods. Whole-cell and single channel patch-clamp experience necessary. Available February 1992 for 2 years. Inquiries to: Ian Cooke, Laboratoire de Neurobiologie, Ecole Normale Superieure, 46 Rue D'Ulm, 75230 Paris Cedex 05, France until 15 July 1991 then Békésy Laboratory of Neurobiology, University of Hawaii, 1993 East-West Road, Honolulu, HI 96822. Equal Opportunity/ Affirmative Action Employer.

BEHAVIORAL NEUROSCIENCE/PHYSIO-LOGICAL PSYCHOLOGY, POSTDOCTORAL ASSOCIATE. Available 1 July 1991. Fully equipped laboratory located in a Veterans Administration Medical Center with active medical research program and medical school affiliation. Excellent academic atmosphere with opportunity for interaction in a variety of neuroscience disciplines. Current projects involve neuroanatomical, electrophysiological, and pharmacological analysis of the visceral aspects of associative learning. Also opportunity for collaboration in clinical research. Prefer individual with experience in electrophysiology and/or tract tracing techniques. Salary competitive, exceptionally good fringe benefits. Contact: D. A. Powell, Neuroscience Research (151-A), Wm. Jennings Bryan Dorn VA Medical Center, Columbia, SC 29201. Telephone: 803-776-4000, ext. 6125. Equal Employment Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION WASHINGTON UNIVERSITY MEDICAL SCHOOL SUGAR RECOGNITION AND HOST DEFENSE

We have an opening at the postdoctoral level for an individual interested in the expression, function and/or structure of sugar-specific receptors, particularly the macrophage mannose receptor, as they relate to host defense mechanisms—phagocytosis, endocytosis, endosomal proteolysis, antigen processing, etc. Send curriculum vitae and names of three references to:

Dr. Phillip D. Stahl Department of Cell Biology and Physiology Washington University Medical School 660 South Euclid Avenue St. Louis, MO 63110

POSTDOCTORAL POSITION IN GENE REG-ULATION. Available immediately to study cell typespecific transcription during hematopoiesis. Our focus is on the myeloid lineage, early stem cells, and the role of CCAAT/enhancer binding protein [*Science* 251, 288 (1991)]. A Ph.D., with molecular biology experience, required. Contact: Dr. Alan D. Friedman, Oncology Department, CMSC-800, Johns Hopkins University, 600 North Wolfe Street, Baltimore, MD 21205, or telephone: 301-955-2457; FAX: 301-955-0028.

POSTDOCTORAL POSITION

Investigate the molecular mechanisms of cell shape change, movement, and their regulation during *Drosophila* development. Emphasis is on molecular, genetic, cell biological, and biochemical analysis of contractile and cytoskeletal proteins with focus on the polypeptide subunits of nonmuscle myosin and on β_{H} spectrin. Send curriculum vitae, statement of research interests, and names of three references to: Dr. Dan Kiehart, Department of Cellular and Developmental Biology, Harvard Biological Laboratories, Cambridge, MA 02138. FAX: 617-495-9300. Harvard is an Equal Opportunity/ Affirmative Action Employer.

UNIVERSITY OF BERNE

The **University of Berne** invites applications for an open

full-time Professorship

in the Division of **Earth System Science** of the **Physics Institute** (Physikalisches Institut). The appointee is expected to be head of the Division and to lead its research program. The position will be available from October 1, 1992.

Applications from established scientists, willing to participate at all levels in the teaching duties of the Physics Institute, should be sent no later than September 30, 1991 to Erziehungsdirektion des Kantons Bern, Amt für Hochschulwesen (1600.51/ 90), Sulgeneckstrasse 70, CH-3005 Berne. In addition to the usual documentation (detailed curriculum vitae, publication record) an outline of the envisaged research program should be submitted.

For enquiries contact Prof. H. Debrunner, managing director, Physikalisches Institut, Sidlerstrasse 5, CH-3012 Berne, Tel. 01141-31654051.





Post-doctoral position available in the laboratory of Dr. M. McKinney, Ph.D., in the Alzheimer's Research Group at Mayo Clinic Jacksonville. On-going studies include molecular pharmacological studies of muscarinic receptor function in aging and in Alzheimer's Disease, studies of the transcriptional regulation of muscarinic receptor subtypes and of genes related to the survival and plasticity of the central cholinergic phenotype. Persons with a strong interest in ap-plying molecular techniques to the development of therapy and/ or to understanding the biology of cholinergic neurodegeneration are encouraged to apply.

Send curriculum vitae and names of three persons who can write letters of reference to:



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POSTDOCTORAL POSITION. Available in molecular immunology for study of signal transduction mechanisms, expression of transcription factors, and biosynthesis of complement components and monokines by cytotoxic macrophages and by subsequently damaged tumor targets. Candidates with Ph.D. in immunology, cell biology, or biochemistry with training and experience in molecular biology/recombinant DNA technology and cell culture are invited to apply. Send curriculum vitae, summary of research experience and interests, and three references to: **Richard W. Leu, Ph.D., The Samuel Roberts Noble Foundation, Inc., Biomedical Division, Immunology Section, P.O. Box 2180, Ardmore, OK 73402.**

POSTDOCTORAL FELLOW, MOLECULAR IMMUNOLOGY. Opening available July 1991 to study T cell receptor interaction with superantigens and repertoire selection. Background in molecular biology, immunology or biochemistry preferred. *Must be U.S. citizen or permanent resident.* Salary commensurate with experience. Send curriculum vitae to: Dr. Nicholas R. J. Gascoigne, Department of Immunology, Research Institute of Scripps Clinic, 10666 North Torrey Pines Road, La Jolla, CA 92037.

POSTDOCTORAL FELLOWSHIP. University of Massachusetts Medical School. Applications are invited for a postdoctoral position as an associate to work in the laboratory of Dr. Roger J. Davis. The successful candidate will join a dynamic group of scientists and participate in an exciting research environment. Our research is focused on the examination of the mechanism of signal transduction by the EGF receptor. Qualified candidates should possess either an M.D. or Ph.D. in the biological sciences. Preference will be given to individuals with experience in molecular biology or protein chemistry. Please forward your curriculum vitae and three letters of recommendation to: Dr. Roger Davis, Program in Molecular Medicine, University of Massachusetts Medical School, 373 Plantation Street, Worcester, MA 01605. An Equal Opportunity Employer.

CLINICAL AND GERIATRIC PHARMACOL-OGY FELLOWSHIPS. Applications from Board-eligible/Board-certified physicians are solicited for positions starting 1 July 1991 and 1 July 1992, in the Brown University Department of Medicine. Areas of active research emphasis using contemporary techniques in biology include geriatric pharmacodynamics and molecular mechanisms of antihypertensive drug action. In addition to M.D. and M.D./Ph.D. applicants, highly qualified Ph.D. applicants will be considered. Competitive salary in an outstanding environment. For further information contact: Darrell R. Abernethy, M.D., Ph.D., Director, Program in Clinical Pharmacology, Brown University, Department of Medicine, Roger Williams Hospital, 825 Chalkstone Avenue, Providence, RI 02908.

POSTDOCTORAL FELLOWSHIP. Available July 1991 to study the molecular and cellular biology of insulin action. Specific projects include structure/function relationship for the insulin receptor, the cellular trafficking of glucose transporter (GLUT 4) enriched vesicles, and the regulation and expression of genes conferring insulin responsiveness on the target cells of muscle and fat. Please send curriculum vitae and the names of three references to: Dr. Paul F. Pilch, Department of Biochemistry, Boston University School of Medicine, 80 East Concord Street, Boston, MA 02118.

POSTDOCTORAL FELLOW/RESEARCH AS-SOCIATE POSITION. Available immediately. Funded project will determine molecular mechanisms underlying signal transduction. Specific studies will characterize novel nucleotide binding proteins coupling peptide receptors to effector enzyme activation in various cells. Ph.D. in biochemistry, pharmacology, or cell biology and experience in protein purification, enzymology, receptor biochemistry, and/or antibody production highly desirable. Salary and benefits are competitive and commensurate with training. Send curriculum vitae, names, and addresses of three references to: Scott A. Waldman, M.D., Ph.D., Division of Clinical Pharmacology, Departments of Medicine and Pharmacology, Thomas Jefferson University, 1100 Walnut Street, MOB 813, Philadelphia, PA 19107–5563. Affirmative Action/Equal Opportunity Employer.

3 MAY 1991

We'd Like Your Word on It.

Scientific Associate

As a leader in the pharmaceutical industry, Searle continues to provide accurate and scientific information to the medical community. To help us maintain these high standards, we are currently seeking a Scientific Associate.

The highly motivated professional we select will utilize their knowledge of cardiovascular drugs to review Searle promotional and medical education pieces to assure their accuracy. Additionally, the Scientific Associate will research and write medical position papers and scientific reports for the Medical Affairs Division.

We require a Ph.D. or Pharm. D. with at least 3 years of experience in cardiovascular research or scientific writing. A cardiovascular background and proficiency in analyzing cardiovascular literature is also required, as is good verbal/written communication skills and attention to detail.

We need your word on it before we'll put ours on it. Send your resume, in confidence, to: Searle, Human Resources, Dept. GE7, 5200 Old Orchard Rd., Skokie, IL 60077. An equal opportunity employer M/F/H.



RESEARCH OPPORTUNITIES IN BIOTECHNOLOGY

The Department of Biotechnology Research at Pioneer Hi-Bred International, Inc. is seeking applicants for our ongoing program of crop improvement. Pioneer offers competitive salaries, excellent facilities, and a highly cooperative research environment. Successful candidates will be expected to interact extensively with ongoing programs in transformation, gene expression, gene isolation or RFLP programs.

Lab Coordinator, Vector Construction - M.S. Degree in molecular biology or equivalent with five years direct experience in gene expression. The successful candidate will be responsible for designing and constructing plasmids for proper expression in plants. This will also include modifying genes for insect and disease resistance. This position will involve both direct laboratory research and supervisory responsibilities.

Applications received by May 17, 1991 will be assured of consideration. However, applications will be considered until positions are filled. Pioneer Hi-Bred International is an Equal Opportunity/Affirmative Action Employer. Send resume including the names of three references and the position for which you are applying to:



PEPTIDE CHEMIST

Position available immediately for qualified peptide chemist to work in the Biological Resources Branch, National Institute of Allergy & Infectious Diseases, National Institutes of Health. Candidate should have expertise in synthesis, in purification and analysis of peptides. Experi-ence in protein chemistry including compositional and sequence analysis would be helpful. Laboratory management experience is desirable. Plenty of resources available. Salary will be commensurate with credentials.

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

John E. Coligan, Ph.D., Chief Biological Resources Branch NIAID, NIH Building 4, Room 413 9000 Rockville Pike Bethesda, MD 20892 (301) 496-3213

NIH is an Equal Opportunity Employer

POSTDOCTORAL FELLOW. Immediate position available for a PROTEIN BIOCHEMIST. Must have demonstrated experience with protein/peptide purification and use of HPLC techniques. Candidates with additional experience in molecular biology techniques will be given preference. Projects include work on a new second messenger enzyme system [see *Cell Regulation* 2, 193-202 and 211-218 (1991)] and on a neuronal circadian oscillator. Salary up to \$25,000 per year, depending on experience. Send curriculum vitae and names of three references to: Dr. Felix Strumwasser, Marine Biological Laboratory, Woods Hole, MA 02543. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE

Immediate opening for postdoctoral associate to explore the role of altered integrin adhesive protein receptor expression in the invasive and metastatic behavior of tumor cells. Background in cellular and molecular biology preferred. Send curriculum vitae and names of three references to: Dr. Samuel A. Santoro, Department of Pathology, Box 8118, Washington University School of Medicine, St. Louis, MO 63110.

POSTDOCTORAL RESEARCH ASSOCIATE REGULATION OF PHOSPHOLIPID METABOLISM AND THE CELL CYCLE

A postdoctoral position is available to participate in an ongoing research program related to the control of cell cycle-specific events by growth factors. Current investigation focuses on the genetic and biochemical regulation of the rate-determining enzymes in membrane phospholipid biosynthesis and turnover during the macrophage cell cycle. Candidates with a Ph.D. degree interested in joining a multidisciplinary group applying techniques of molecular biology and biochemistry to problems related to the regulation of lipid metabolism should submit their curriculum vitae, reprints, and names of three references to: Dr. Suzanne Jackowski, Biochemistry Department, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101. An Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE IN ELECTROPHYS-IOLOGY. Position available July 1991 for a recent Ph.D. to study atrial natriuretic peptide regulation and pathological IgG inhibition of voltage-gated Ca²⁺ channels and their role in the control of aldosterone and catecholamine secretion. Experience with the patch clamp technique is preferred. Send résumé and three references to: Yong I. Kim, Ph.D. (Biomedical Engineering) and Paula Q. Barrett, Ph.D. (Pharmacology), Box 377, University of Virginia Health Sciences Center, Charlottesville, VA 22908.

A RESEARCH SCIENTIST POSITION (assistant professor level) at The Graduate Hospital, an affiliate of the University of Pennsylvania, is available to an individual with skills in modern cellular or molecular techniques. All qualified applicants with strong biological backgrounds will be considered with preference given to those who could interact with ongoing programs in the areas of muscle physiology, neuroscience, or lung injury. Salary, benefits, and start-up funds are competitive. Applicants should submit their curriculum vitae, research objectives and references to: Robert H. Cox, Ph.D., Director of Research, The Graduate Hospital, One Graduate Plaza, Philadelphia, PA 19146. The Graduate Hospital is an Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSISTANT. Needed to conduct independent research to develop high level expression system of foreign proteins in eukaryotic cells. Objectives include isolation, purification, and characterization of the cystic fibrosis gene product. Research will include manipulation and construction of novel expression vectors using recombinant DNA technology, tissue culture of expression cell systems, protein biochemistry and purification, and investigation of possible therapeutic uses of recombinant protein in cystic fibrosis. Will also prepare publications of research findings and write grant applications. Salary: \$23,000 per year; 40 hours per week. Requires M.S. degree in a health science with 1 year of research experience in the area of molecular biology. Send résumés to: Ms. Sandra T. Starnes, Alabama State Employment Service, P.O. Box 12046, Birmingham, AL 35202– 2046. Job Order #AL0626915.

POSITIONS OPEN

SOMATIX THERAPY CORPORATION

Somatix Therapy Corporation is a leading biotechnology company utilizing gene transfer and cellular transplantation technologies to develop cell-based protein delivery systems for human therapeutics. Positions are available immediately for highly motivated and qualified individuals.

RESEARCH SCIENTISTS. Currently seeking three Ph.D.-level scientists in cell biology, virology, and molecular biology with a minimum of 2 years of postdoctoral experience. The successful candidates will have research experience in gene transfer technologies or primary cell culture systems. Preference will be given to individuals with experience in retrovirology, retroviral vectors, homologous recombination or isolation, and characterization of mammalian cells in primary culture. **RESEARCH ASSOCIATES.** Positions are open for

RESEARCH ASSOCIATES. Positions are open for B.S. and/or M.S. level scientists with experience in cell biology, neurobiology, and/or molecular biology.

Somatix provides an excellent career opportunity in a rapidly growing company, as well as a competitive compensation and benefits package. If you are a self-motivated professional interested in being an important and valued member of a multidisciplinary team, then please forward your résumé to: Personnel Department, Somatix Therapy Corporation, 850 Marina Village Parkway, Alameda, CA 94501. Equal Opportunity Employer.

MICROBIOLOGIST/HISTOPATHOLOGIST

The U.S. Fish and Wildlife Service, Longview, Washington, seeks a microbiologist/histopathologist GS-11/ 12 to research the effects of nutrition, disease organisms, and fish cultural practices on the health and histology of anadromous fishes. Salary range: \$31,116 to \$48,481. Call Julie Swanberg at 503-231-6136 for job description, qualifications required, and application forms. Deadline: 30 June 1991. Equal Opportunity Employer.

RESEARCH ASSOCIATE, POSTDOCTORAL. A position is immediately available to investigate longterm neurobiological consequences of repeated administration of the psychomotor stimulants methamphetamine and cocaine. Require a recent Ph.D. in pharmacology or molecular biology. Research experience in molecular biology. Research experience in molecular such as PCR, mRNA, and cDNA purification, expression vector construction, and transfection methodologies as well as histology and microscopy is highly desirable. Send curriculum vitae and three references to: Lewis S. Seiden, Ph.D., Department of Pharmacological and Physiological Sciences, The University of Chicago, 947 East 58th Street, Chicago, IL 60637. An Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSISTANT II. In Department of Psychiatry at private university in northeastern Ohio. The position involves: (i) designing, performing and interpreting homogenate and autoradiographic radioligand binding to monoamine receptors in human and rat brain tissue to support goals of the laboratory in assessing monoamine receptor binding in brain tissue of suicide victims and individuals dying with schizophrenia; (ii) performing radioligand binding in live rats; (iii) developing sheet film and managing darkroom; (iv) abstracting demographic and medical information from confidential medical examiner's records; (v) gathering quantitative autoradiographic receptor binding data with a computer-based image processing system; and (vi) assisting principal investigator with supervising and training undergraduate students and technicians. The Research Assistant II position requires an M.S. in medical studies or medical sciences with no experience required. In lieu of M.S., a B.S. in medical studies or medical sciences with 2 years of experience is required in: (i) performing radioligand binding experiments; (iii) ordering laboratory animals and supplies; (iv) intraperitoneal or tail vein injections of drugs in rats; (v) highpressure liquid chromatography of monoamines; and (vi) cutting histological sections with cryostat microtome. The salary is \$21,365 per year; working hours are 37.5 per week on Monday to Friday (8:30 a.m. to 5:00 p.m.). *Applicants must have proof of legal authority to work permanently in the United States.* Send curriculum vitae with list of publications in duplicate (no calls) to: C. Bussard, JOB # 1255688, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216. *Equal Employment*

POSITIONS OPEN

MOLECULAR IMMUNOLOGIST. Research to determine causes of SCID in mice. Job duties: develop methods to clone Scid gene; evaluate the importance of SCID product in recombinant event. Techniques required: small animal surgery; eukaryotic expression vector construction; genomic library construction; single cell PCR; RNA PCR; transcription initiation site determination by NaTCA; nuclear run-on assay; liver transcription factor isolation; DNA footprinting; DNA Dot matrix and comparison analysis by DNASTAR; lymphocyte culture; use of electroporator. Requires Ph.D. in molecular biology and 3 years of experience on the job or 3 years of related research experience. Requirements also include experience in multigene family research such as P450 gene system or immune system, etc. Forty hours per week; salary: \$28,000 per year. Must have proof of legal authority to work permanently in the United States. Send résumé to: Illinois Department of Employment Security, 401 South State Street 3 South, Chicago, IL 60605, Attention: Len Boksa, Reference #V-IL 2079-B. No calls. An employer-paid ad.

MEETINGS

REGULATING RISK: THE SCIENCE AND POLITICS OF RISK 24 to 25 JUNE 1991, WASHINGTON, DC

A 2-day conference exploring major issues in health, safety, and environmental risk. Invited speakers from business, government, academic, and scientific communities will provide an in-depth look at the many complex, interrelated issues associated with risk in our society. The conference is sponsored by the National Safety Council in cooperation with the ILSI Risk Science Institute. For information/registration contact: Sophie LoBue, National Safety Council, 444 North Michigan Avenue, Chicago, IL 60611, or telephone: 312-527-4800, extension 8132.



Key Management Roles Within A Major New Research Centre International Research in Madrid, Spain

SmithKline Beecham is a major force within the international pharmaceutical industry and enjoys a substantial track record of discovering and developing new medicines. Our vast commitment to research and development is seen as a high priority within the company and is conducted at several research centres around the world.

Currently, we are creating a new research centre at the Technology Park at Tres Cantos in Madrid, Spain. This centre, when fully operational, will make a major contribution to our international research programme. To help achieve this, we need the following high-calibre individuals.

Associate Director, Biotechnology

A significant proportion of the research to be undertaken at the centre will involve a fundamental programme on gene expression in micro-organisms, in particular, Streptomyces. As such, we are looking for a scientist (4 years plus post PhD) with extensive experience in biotechnology to manage a section working on microbial genetics and molecular biology. Reporting to the overall director of the research centre, you will also liaise with the company's Biopharmaceuticals R&D group in both the UK and USA.

Research Managers

A major area of research to be undertaken will be natural product screening to identify selected agents with antimicrobial and/or pharmacological activity. Both antimicrobial assays and mechanism-based screens will be used. We are now looking for three experienced scientists (3 years plus post PhD) to report directly to the overall research centre director and be responsible for managing sections involved in the following activities: microbiology, molecular-targetted screening, and natural product chemistry.

For all the above positions, not only will you need to have excellent scientific ability, but you must also have strong organisational and managerial skills and, moreover, a good command of Spanish and English.

As you would expect from a company of our stature, we offer a first-class salary and benefits package which includes generous relocation assistance to this historic part of Spain.

To apply, please send full career details, indicating which position you are interested in, to Senor Luis Cester, Personnel Director, SmithKline Beecham Pharmaceuticals, Costa Brava 14, 28034 Madrid, Espana.



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