Personnel Placement

POSITIONS WANTED

Pathogenic Microbiologist, Ph.D. Research in bacterial adherence, mucosal immunity, immunodiagnoses. Postdoctoral training and administrative experience. Seeks commercial research and development position in mid-Atlantic, Northeast, Box 98, SCIENCE.

Ph.D. Microbiologist, Postdoctoral Training, Molecular biology, biochemistry, immunology, plant sciences and field work experience. Publications. JOBS.


POSITIONS OPEN

ASSISTANT ENTOOMOLOGIST: Develop and conduct research on termites and other structural insect pests. Requires Ph.D. and training in insect pest management. Salaries up to $35,564. Send a letter describing qualifications and interest in position, curriculum vitae, a description of previous publications, and a list of three references to: Dr. Louis A. Magnelli, Chief, Department of Entomology, The Connecticut Agricultural Experiment Station, P.O. Box 1106, New Haven, CT 06504. Application deadline is 31 August 1988. CAES is an Affirmative Action/Equal Opportunity Employer.

DEPARTMENT OF PHYSIOLOGY AND BIOPHYSICS

ANNOUNCEMENT OF OPEN POSITION

The Department of Physiology and Biophysics at the University of Connecticut, Storrs, invites applications for a tenure-track position at the ASSOCIATE PROFESSOR level. Applicants should have training and experience in biology and molecular biology with experience using molecular biology techniques. The successful candidate will establish an independent research program, assist in the teaching programs of the department, participate in departmental and college governance, and have a Ph.D. or M.D. degree and at least 2 years of postdoctoral training. The salary range is $27,000 to $32,000.

Send applications to: Dir. Dept. of Physiology and Biophysics, University of Connecticut, Health Center, 100 Campus Road, Storrs, CT 06268. Applications should be received by 15 August 1988. Review of applications will begin 15 August 1988. Applications are sought from women and members of minority groups.

ASSISTANT PROFESSOR BIOCHEMISTRY AND MOLECULAR BIOLOGY

The Animal Science and Dairy Science Departments at the University of California, Davis, seek an individual with teaching and research experience in biochemistry, bioinformatics, and molecular biology. The successful candidate will establish an independent research program and direct graduate students. A Ph.D. degree in biochemistry, molecular biology, or related discipline is required. Applicants should send curriculum vitae, statement of research interests, and three letters of reference by 20 October 1988 to: Dr. William D. Pritts, Chairman, Search Committee, Department of Animal Science, UC Davis, One Shields Avenue, Davis, CA 95616.

ASSISTANT PROFESSOR

BIOTICAL MICROSCOPY

The Department of Biological Sciences, New York University, seeks a full-time, tenure-track, assistant professor of microbiology, with an emphasis on bacteria in the environment. The position will be open beginning September 1, 1989. Applications should be submitted by 15 October 1988. Review of applications will begin 15 October 1988. Salaries are competitive and include full benefits. Send curriculum vitae, a description of research interests, and three letters of reference to: Dr. Howard D. Kaplan, Chair, Search Committee, Department of Biological Sciences, New York University, 212 W 42nd St, New York, NY 10036.

ASSISTANT PROFESSOR, TENURE-TRACK, to complement the current faculty in industrial hygiene with a particular specialization in occupational Health Sciences and a partial appointment in the School of Pharmacy and Pharmaceutical Sciences, Department of Medical Chemistry and Pharmacognosy, College of Pharmacy, Purdue University, West Lafayette, IN 47907. Applicants should have a Ph.D. degree in chemistry or pharmacology with advanced training in environmental toxicology. Applicants should send full curriculum vitae, and three letters of reference to: Dr. Robert Landoldt, Chair, Search Committee, School of Health Sciences, Purdue University, West Lafayette, IN 47907. Applications should be received by 15 October 1988. This is an Equal Opportunity/Affirmative Action Employer.
ASSISTANT TOXICOLOGIST ($36500). $383.60 to $522.80 per week. The Maine State Department of Human Services, Bureau of Health seeks to fill an immediate vacancy in Augusta, Maine. This is a professional work in the identification of health hazards due to toxins in blood, air, soil, land and assist the state toxicologist. Qualifications include a 6-year combination of education, training and experience to include a B.S. in toxicology, biochemistry, biology, public health science, chemistry, or a related discipline; or public health with experience in chemical risk management—or an equivalent combination of education, training, and experience with PCP systems is highly desirable. For application materials, contact: The Bureau of Human Resources, State Office Building, Augusta, ME 04333. All completed applications must be received in the Bureau of Human Resources by no later than 5:00 p.m., 15 August 1988. Equal Opportunity/Affirmative Action Employer M/F/V/H.

ASSISTANT/ASSOCIATE PROFESSOR. The Departments of Neuroence and Neurology at the University of Washington seek to fill a tenure-track position with an anticipated starting date of 1 March 1989. The focus of this search is for an individual with research interests that may integrate with our Spinal Cord Injury and Rehabilitation Program which presently emphasizes neural tissue transplantation and neuroprotection. The successful candidate will be expected to establish an independent research program and to participate in teaching medical and graduate courses. We encourage applications from women and minority members. Persons interested in applying for this position should send their curriculum vitae, a brief overview of present research and future plans, and the names, addresses, and telephone numbers of four references by 1 October 1988 to: Dr. Paul J. Reier, Department of Neurological Surgery, University of Florida College of Medicine, JHM Health Center, Box J-265, Gainesville, FL 32610-0265. The University of Florida is an Affirmative Action and Equal Opportunity Employer.

BIOMEDICAL/BIOLOGICAL SCIENTIST: Position responsible for the design, engineering, and administrative management of biological research and development programs. The successful candidate will be expected to establish an independent research program and to participate in teaching medical and graduate courses. We encourage applications from women and minority members. Persons interested in applying for this position should send their curriculum vitae, a brief overview of present research and future plans, and the names, addresses, and telephone numbers of four references by 1 October 1988 to: Dr. Paul J. Reier, Department of Neurological Surgery, University of Florida College of Medicine, JHM Health Center, Box J-265, Gainesville, FL 32610-0265. The University of Florida is an Affirmative Action and Equal Opportunity Employer.

BIOMEDICAL/BIOLOGICAL SCIENTIST: Bamboo Engineering and Management Services Company is seeking qualified individuals for the following position. Position is responsible for the design, engineering, and administrative management of biological research and development programs. The successful candidate will be expected to establish an independent research program and to participate in teaching medical and graduate courses. We encourage applications from women and minority members. Persons interested in applying for this position should send their curriculum vitae, a brief overview of present research and future plans, and the names, addresses, and telephone numbers of four references by 1 October 1988 to: Dr. Paul J. Reier, Department of Neurological Surgery, University of Florida College of Medicine, JHM Health Center, Box J-265, Gainesville, FL 32610-0265. The University of Florida is an Affirmative Action and Equal Opportunity Employer.

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ASSOCIATE OR ASSISTANT PROFESSOR OF INTERNAL MEDICINE AND MICROBIOLOGY. The Department of Medicine at Texas Medical Center in Dallas, Texas, seeks candidates for the positions of Associate Professor or Assistant Professor. The successful candidate will be expected to establish a research program in the area of medical genetics or hospital medicine. We encourage applications from women and minority members. Persons interested in applying for this position should send their curriculum vitae, a brief overview of present research and future plans, and the names, addresses, and telephone numbers of four references by 1 October 1988 to: Dr. Paul J. Reier, Department of Neurological Surgery, University of Florida College of Medicine, JHM Health Center, Box J-265, Gainesville, FL 32610-0265. The University of Florida is an Affirmative Action and Equal Opportunity Employer.

Middlebury College—BIOCHEMISTRY. The Department of Chemistry and Biochemistry at Middlebury College invites applications for a 2-year renewable appointment as an assistant professor in biochemistry beginning September 1988. Responsibilities will include teaching undergraduate biochemistry courses and supervision of undergraduate research in biochemistry. A Ph.D. in chemistry or biochemistry is required, and preference will be given to candidates with some prior teaching or research experience. Send resume, a letter describing your research interests, and 3 letters of recommendation to: J. Larivée, Department of Chemistry, Middlebury College, Middlebury, VT 05753. Middlebury College is an Equal Opportunity Employer.

The Children's Mercy Hospital in Kansas City, Missouri, is searching for a CANCER PHARMACOLOGIST. Our hospital is a 167-bed pediatric acute care center and is the tertiary referral center for Missouri. This faculty position would be at an assistant or associate professor level. Responsibilities include monitoring chemotherapy protocols in order to determine optimum treatment and performance of pharmaceutical functions and technical support provided. Qualified applicants will need to prove research accomplishments and be involved in research. Submit curriculum vitae to: Dr. Arnold Freeman, Professor, Chief, Section of Hematology/Oncology, The Children's Mercy Hospital, 2464 Gillham Road, Kansas City, MO 64108.

CELL BIOLOGY FACULTY: The Biology Division at the California Institute of Technology seeks a position open in the area of cell biology or cellular neurobiology. These fields are broadly defined and include biochemical, structural, and functional elements. Applications from all areas of these fields are encouraged. Interested persons should submit curriculum vitae, a statement of research interest, and the names of three references to: Cell Biology Search Committee, c/o Candace Hschenfeld, Division of Biology 216-76, California Institute of Technology, Pasadena, CA 91125.

CHAIRMAN, DEPARTMENT OF PHARMACOLOGY AND TOXICOLOGY, Medical College of Wisconsin. New Chairman sought for this strong department in a rapidly growing, private medical school setting. A ten-track faculty position, and pharmacology and neuropharmacology are complemented by developing interdepartmental efforts in molecular biology, cancer research, and the neuroscience. Individuals with scientific programs and a desire to play a leadership role in an exciting environment should contact: John P. Kappman, M.D., Ph.D., Chairman, Pharmacology Search Committee, Medical College of Wisconsin, 8701 Watertown Plank Road, Milwaukee, WI 53226. The Medical College of Wisconsin is an Affirmative Action/Equal Opportunity Employer M/F/HH/V.

CHIEF, DEPARTMENT OF MEDICINE. University of Oklahoma. Applications are invited for the position of Chief, Department of Medicine. The Department is located in Oklahoma City, with a clinical campus in Tulsa, and is one of seven University of Oklahoma College of Medicine Centers in the Health Sciences Center. Applications with demonstrated administrative skills and experience in academic medicine and interest in developing a large multi-disciplinary clinical department are encouraged. Send curriculum vitae and three letters of recommendation to: Dean's Search Committee, Office of the Provost, University of Oklahoma College of Medicine, 600 N.渐渐路, Oklahoma City, OK 73190. An Equal Opportunity/Affirmative Action Employer.

CONSULTING TOXICOLOGIST: Exxon Biomedical Sciences, Inc. has an opening for a qualified toxicologist in our cardiovascular and/or pulmonary sciences groups. The successful candidate will have a Ph.D. in toxicology with 0-3 years of experience and be knowledgeable in the design of toxicology studies for petroleum and chemical products. The position includes product line interaction, literature evaluation, general biomedical research as well as governmental/regulatory body interactions and risk assessment. The position requires extensive consulting with Exxon Affiliates worldwide. Client interactions are an important aspect of our work, and thus we are seeking individuals who possess excellent communication skills. Please forward résumé to: Human Resources, EXXON BIOMEDICAL SCIENCES, INC. 11100 Bread Street, East Millstone, NJ 08875-2350 Equal Opportunity Employer M/F/H/V.

DEAN, COLLEGE OF MEDICINE. UNIVERSITY OF OKLAHOMA. Applications are invited for the position of Dean, College of Medicine. The College is located in Oklahoma City, with a clinical campus in Tulsa, and is one of seven University of Oklahoma College of Medicine Centers in the Health Sciences Center. Applications with demonstrated administrative skills and strong broad academic background should submit curriculum vitae before December 1, 1988. Send curriculum vitae and three letters of recommendation to: Dean's Search Committee, Office of the Provost, University of Oklahoma College of Medicine, 600 N.渐渐路, Oklahoma City, OK 73190. An Equal Opportunity/Affirmative Action Employer.
For our Research Centre near Lausanne, Switzerland (on the lake of Geneva), we are seeking

**A NUTRITIONIST OR A PHYSIOLOGIST**

to head our group working on

**METABOLIC STUDIES WITH STABLE ISOTOPES.**

The section is concerned with studying the kinetics of whole-body metabolism in man, as well as other animals, with nitrogen 15 and carbon 13. The main research interests are those of protein and amino acid metabolism and of carbohydrate and fat oxidation. The facilities include three isotope-ratio mass spectrometers and an optical emission spectrometer together with associated sample preparation systems.

The successful candidate will have a PhD in Nutrition or Physiology and relevant experience in this field, as well as in directing an active research group.

Kindly send a detailed Curriculum Vitae with three names for reference purposes to Mrs. M. Germanier Audrin, Personnel Services, Nestlé Research Centre, P.O. Box 353, CH-1800 VEVEY, Switzerland.

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**SENIOR ASSISTANT SCIENTIST**

**PHARMACEUTICAL RESEARCH**

Parke-Davis Pharmaceutical Research Division, Warner-Lambert Company, has an immediate opening for a Senior Assistant Scientist in the Pharmacokinetics and Drug Metabolism Department. The successful candidate will assist in conducting pharmacokinetic and metabolic studies of novel drug candidates, isolate drug and potential metabolite(s) from biological matrices by various bioanalytical techniques and quantitate drug and/or metabolite(s) by HPLC, GC, or TLC. The candidate will also quantitate levels of radioactivity and distribution of radiolabel in biological samples.

The successful candidate will possess:

- BS/MS degree in chemical or biological sciences
- 2-3 years analytical experience in chromatography (HPLC, GC, TLC)
- Pharmacokinetic experience, including knowledge of metabolism principles, experience in handling radioactive materials
- Possess some statistical knowledge
- Computer familiarity

We offer excellent compensation and benefits at our modern facilities adjacent to The University of Michigan campus. Interested, qualified applicants should send curriculum vitae to: Ms. S. Hultquist, PARKE-DAVIS, 2800 Plymouth Road, Ann Arbor, MI 48105.

"EQUAL OPPORTUNITY IN ACTION"

**IMMUNOLOGIST Ph.D.**

Merck Sharp & Dohme Research Laboratories is currently offering an excellent career opportunity for an Immunologist to join our expanding cancer research program.

The successful candidate will have expertise in lymphocyte activation, cell surface receptors and ligands, epitope mapping, and lymphokines. Some background in protein chemistry would be desirable.

A Ph.D. in Immunology, Biochemistry or the equivalent and at least two years of postdoctoral experience is required.

Excellent salary and benefits programs accompany this position at our modern research facilities located in suburban Philadelphia.

Please send resume with salary requirements to:

Manager, Personnel Relations, W42-2

**Merck Sharp & Dohme Research Laboratories**

**West Point, PA 19486**

EEO/AA/VH Employer

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Merck & Co., Inc.
**Positions Open**

Princeton University: 

**Department Chairperson and Associate Director**

Combination position of Chairperson, Department of Horticulture and Crop Science at Rutgers University and Associate Director of the New Jersey Agricultural Experiment Station for programs in Intensive Production Agriculture. The appointee will have a Ph.D. in horticulture, crop science, with a distinguished record of research and teaching, and the ability to attract outside grants. The individual is expected to provide leadership and vision for this newly reorganized department and will have the opportunity to maintain an active research program. The successful candidate will be a 30 faculty that will be expanded to 40 by recruiting and will be housed in a new building to be completed by 1992. The new department will be a Premier University department serving the thrusting horticultural industry in New Jersey, with 10,000 students. 

**Faculty Positions**

**Department of Biochemistry**

The Department of Biochemistry and Molecular Biology at the University of Chicago is seeking candidates for positions in its medical and graduate programs. The successful candidate will have a Ph.D. in biochemistry or a related field with a strong record of research achievement and demonstrated potential for the development of an independent program of research and teaching. The successful candidate will be expected to develop a strong record of research achievement and have a demonstrated potential for the development of an independent program of research and teaching.

**University of Florida**

The Department of Chemistry and Molecular Biology at the University of Florida is seeking candidates for tenure-track positions. The successful candidate will have a Ph.D. in chemistry or a related field with a strong record of research achievement and demonstrated potential for the development of an independent program of research and teaching. The successful candidate will be expected to develop a strong record of research achievement and have a demonstrated potential for the development of an independent program of research and teaching.

**Positions Open**

**Consulting Toxicologist**

Exxon Biomedical Sciences, Inc. has an immediate opening for a qualified individual specializing in toxicology and environmental health hazards. The successful candidate will have a Ph.D. degree and a record of administrative and research accomplishments.

**Ectotoxicologist**

Exxon Biomedical Sciences, Inc. is seeking an individual with a strong record of research achievement and demonstrated potential for the development of an independent program of research and teaching.
The Applicantsshould send their Curriculum Vitae and three names for reference purposes to:

Mrs. M. Germanier Audrin
Personnel Services
Nestle Research Centre
P.O. Box 353
CH-1800-VEVEY, Switzerland

American Association for the Advancement of Science
Program on Science, Arms Control, and National Security

VACANCY

The American Association for the Advancement of Science is seeking a Senior Program Associate for its Program on Science, Arms Control, and National Security.

The staff responsibilities of the successful candidate will include activities in the following areas: assisting with the Program’s publication series; planning and execution of major conferences, seminars, and symposia; fund-raising efforts; and assisting with the Program’s long-range planning, to include identifying substantive areas in this field that can be addressed effectively by the AAAS.

Qualifications of the successful candidate will include the following: (1) an understanding of technical and policy related arms control and national security issues, as demonstrated in previous work experience; (2) a M.A. (or equivalent combination of education and experience) in the physical sciences or engineering; (3) excellent written and oral communication skills; (4) experience working with the Congress, federal agencies, industry, universities and/or foundations; (5) administrative experience; and (6) ability to interact effectively with other Program staff and advisory committee members.

Salary to $30,000 contingent upon qualifications.

Please send letter of interest, resume and salary requirements to: Debra Wright, AAAS, 1333 H St., N.W., Washington, D.C. 20005, EOE

RESEARCH ASSOCIATE
CARDIOVASCULAR PHARMACOLOGY

The Squibb Institute for Medical Research is recognized internationally as a leader in the research and development of novel therapeutic agents for the treatment of cardiovascular and infectious diseases. We currently have an exceptional opportunity for an experienced research scientist to join our Pharmacology Department.

You will be responsible for conducting in vivo and in vitro experiments related to myocardial ischemia and cardiovascular pharmacology. In vitro work will involve isolated, perfused heart models of ischemia. You will also perform large and small animal cardiothoracic surgery and conduct data analysis. Some report writing will be required.

Qualified candidates should have a BS (MS preferred) and a minimum of 2 years related research experience.

In addition to an excellent starting salary and comprehensive benefits package, we can offer the opportunity to pursue a stimulating and rewarding career. For confidential consideration, please submit your resume to The Squibb Institute for Medical Research, Human Resources Department 729, P.O. Box 4000, Princeton, NJ 08543-4000. An equal opportunity employer.

Careers in Technology Management and Environmental Policy

Battelle, Pacific Northwest Laboratories, is seeking qualified candidates to join its multidisciplinary team of professionals in environmental policy and compliance planning research. Our research focuses on the regulatory and policy aspects of national level environmental issues, and on the application of those policies and regulations to technology management problems. Desired background for all openings includes training or experience in the application of environmental regulations to the development and application of technology. Current openings exist for the following:

Team Leader

Will lead researchers in environmental policy and compliance planning projects, provide technical guidance and review of programs, and develop a business strategy for growth of policy analysis capabilities. Will interact frequently with clients to develop new opportunities and relay program progress.

Senior Researchers

Will perform research in the area of environmental policy and compliance, and provide regulatory analyses of environmental regulations, compliance issues and strategies, and related policy/planning issues.

If you are interested in pursuing a challenging career in environmental policy and compliance planning research, please send your resume, salary history and references to: Anthony F. Gasperino, Battelle, Pacific Northwest Laboratories, P.O. Box 999, Dept. 044, Richland, WA 99352. U.S. Citizenship required. We are an equal opportunity employer.
FACULTY POSITION
BIOLOGICAL CONTROL
DEPARTMENT OF PLANT PATHOLOGY
UNIVERSITY OF CALIFORNIA, RIVERSIDE

Applications are invited for an 11-month tenure-track position in the area of soil-borne plant pathogen control as associate professor level or higher, to develop an innovative research program in the biological control of soil-borne plant pathogens with emphasis on molecular and developmental biology, and to teach courses in the area. The appointee will be expected to design, conduct, and report on a program of research that will be competitive, funded and help teach medical and graduate students. The medical college and its cancer center are enrolling patients in many new clinical trials in areas of molecular biology, neuroimmunology, lung and organ transplantation, gastroenterology, and ophthalmology. Applicants with interests that may complement these areas are encouraged to apply. In addition, some positions are available in the following areas: Microbiology, Immunobiology and Developmental Biology. The Department of Plant Pathology welcomes applications from qualified minority groups and women. (Search R8397).

FACULTY POSITION IN MOLECULAR BIOLOGY/REPRODUCTION BIOLOGY
UNIVERSITY OF MISSOURI

The University of Missouri is seeking a tenure-track assistant/associate full professor (80% research, 20% teaching) in the University of Missouri Animal Sciences Center Program. The successful candidate will be expected to conduct basic research in a project that applies advanced biotechnology procedures to an area of reproductive biology pertaining to the mammalian female and will join an established group of molecular biologists/reproductive physiologists in the Animal Sciences Research Center. An applicant should have a Ph.D. and at least 2 years of postdoctoral experience in one of the following areas: immunobiology, developmental biology, molecular endocrinology, gene transfer, protein chemistry. Applications will be accepted until 1 September 1988 or until an acceptable applicant is recruited. Applicants should submit curriculum vitae, names of three references and a statement of research interests to: Dr. R. M. Roberts/Dr. B. N. Day, Department of Animal Sciences, University of Missouri, Columbia, MO 65211. The University of Missouri is an Affirmative Action Equal Opportunity Employer.

POSITIONS OPEN
IMMUNOLOGY FACULTY POSITIONS.

The Department of Microbiology invites applications for a tenure-track assistant/associate professor in plant biology. We are seeking a highly motivated individual with at least 2 years of productive postdoctoral experience who will be expected to design, conduct, and report on a program of research that will be competitive, funded and help teach medical and graduate students. The medical college and its cancer center are enrolling patients in many new clinical trials in areas of molecular biology, neuroimmunology, lung and organ transplantation, gastroenterology, and ophthalmology. Applicants with interests that may complement these areas are encouraged to apply. In addition, some positions are available in the following: Microbiology, Immunobiology and Developmental Biology. The Department of Plant Pathology welcomes applications from qualified minority groups and women. (Search R8397).

FACULTY POSITION IN PLANT BIOLOGY

The Department of Molecular and Cell Biology at the University of California, Berkeley is seeking applications for a tenure-track assistant/associate professor in plant biology. We are seeking a highly motivated individual with at least 2 years of productive postdoctoral experience who will be expected to design, conduct, and report on a program of research that will be competitive, funded and help teach medical and graduate students. The medical college and its cancer center are enrolling patients in many new clinical trials in areas of molecular biology, neuroimmunology, lung and organ transplantation, gastroenterology, and ophthalmology. Applicants with interests that may complement these areas are encouraged to apply. In addition, some positions are available in the following: Microbiology, Immunobiology and Developmental Biology. The Department of Plant Pathology welcomes applications from qualified minority groups and women. (Search R8397).

FACULTY POSITION IN PHARMACOLOGY AND TOXICOLOGY.

FACULTY POSITION IN PHARMACOLOGY AND TOXICOLOGY.
The Department of Pharmacology and Toxicology, University of Arizona College of Pharmacy, has two tenured-track openings at the assistant or associate professor level or higher. The applicant is expected to design, conduct, and report on a program of research that will be competitive, funded and help teach medical and graduate students. The medical college and its cancer center are enrolling patients in many new clinical trials in areas of molecular biology, neuroimmunology, lung and organ transplantation, gastroenterology, and ophthalmology. Applicants with interests that may complement these areas are encouraged to apply. In addition, some positions are available in the following: Microbiology, Immunobiology and Developmental Biology. The Department of Plant Pathology welcomes applications from qualified minority groups and women. (Search R8397).

POSITIONS OPEN
IMMUNOLOGY FACULTY POSITIONS.
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FACULTY POSITION
BIOLOGICAL CONTROL
DEPARTMENT OF PLANT PATHOLOGY
UNIVERSITY OF CALIFORNIA, RIVERSIDE

Applications are invited for an 11-month tenure-track position in the area of soil-borne plant pathogen control as associate professor level or higher, to develop an innovative research program in the biological control of soil-borne plant pathogens with emphasis on molecular and developmental biology, and to teach courses in the area. The appointee will be expected to design, conduct, and report on a program of research that will be competitive, funded and help teach medical and graduate students. The medical college and its cancer center are enrolling patients in many new clinical trials in areas of molecular biology, neuroimmunology, lung and organ transplantation, gastroenterology, and ophthalmology. Applicants with interests that may complement these areas are encouraged to apply. In addition, some positions are available in the following: Microbiology, Immunobiology and Developmental Biology. The Department of Plant Pathology welcomes applications from qualified minority groups and women. (Search R8397).

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UNIVERSITY OF MISSOURI

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GENOME ORGANIZATION AND EXPRESSION IN WOODY PLANTS

Two positions, one a SENIOR RESEARCH AS- sociate Professor or equivalent, and the other a POSTDOCTORAL FELLOW, are available immediately in the newly formed Plant Biology Center to work on the genome organization and control mechanisms in wood and non-woody species. Applicants should have a knowledge of recombinant DNA tech- niques. Experience in plant transformation and/or tissue culture procedures would also be desirable. Applicants should be interested in cloning the research and teaching service, and along with curriculum vitae and the names of three references, to: Dr. Chris Cullis, Department of Biology, Western Reserve University, Cleveland, OH 44106.

LECTURER, ENVIRONMENTAL STUDIES

Huxley College of Environmental Studies seeks a person with environmental policy, resource economics, and/or risk assessment expertise. Will teach two of these subjects, introductory course in environmental studies, direct independent study. Scholarly/funding initiatives encouraged. One-year position; possible renewal. Ph.D. required. Send curriculum vitae, names of three referees, and research/teaching interests by 29 July 1988 to: Dr. L. A. Brown, Environmental Studies Department, Huxley College of Environmental Studies, School of Veterinary Medicine, University of Wisconsin, Madison, WI 53706. Deadline 1 August 1988. Affirmative Action/Equal Opportunity Employer.

MOLECULAR BIOLOGIST—To conduct studies on the molecular mechanisms of neoplastic development. Must have at least 2 years of postdoctoral experience in the molecular biology of neoplastic diseases. Experience in cloning and use of expression vectors (both prokaryotic and eukaryotic, including retroviruses) and transcriptional regulatory elements (enhancers, terminators, etc.) is required. Salary commensurate with experience. Send resume to: The Squibb Institute for Medical Research, Human Re- sources Department 500, P.O. Box 4060, Princeton, NJ 08543. An Affirmative Action Employer.
FACULTY POSITIONS
MOLECULAR AND CELL BIOLOGY

Tumor Cell Biology Department seeks applicants for a research position in molecular and cell biology at the Assistant Professor level. We are particularly seeking candidates with previous expertise in molecular and cell biology, biochemistry, or genetics, who want to develop independent programs that complement and extend ongoing departmental activities. Current research within the department includes studies of growth factors, receptors, and oncogenes, primarily in hematopoietic systems, identification and characterization of genes which suppress the transformed phenotype, transcriptional regulation during blood cell development, and characterization of polypeptides that affect the assembly and transport of secretory proteins. The Department currently includes ten Ph.D. and M.D. faculty members engaged in full time research and participating in an active postdoctoral training program. Candidates must have a doctorate degree, postdoctoral training, and a strong commitment to basic research with prospects for individual achievement. Generous start-up funds including technical support are available for junior faculty, and prospects exist for additional monies to complement ongoing grant funded research.

The institution is strongly committed to both basic and clinical research and includes other basic science departments in Virology and Molecular Biology, Biochemistry, Immunology, and has state-of-the-art equipment and shared resources and is presently undergoing major capital development and continued expansion of its research programs.

Applications including a curriculum vitae, brief statement of research interests, and the names of four referees should be submitted to:

Dr. Charles J. Sherr, Chairman
Department of Tumor Cell Biology,
St. Jude Children's Research Hospital,
Memphis, Tennessee 38104.

Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSORS
Tenure Track
(Two Positions)

University of Medicine and Dentistry of New Jersey-UMDNJ, Department of Physiology, has 2 positions available for Assistant Professors to develop an active, independent, and productive research program and to obtain extramural support. Teaching duties will include participation in the medical and dental courses and the departmental graduate program. Preferred areas of research interests are: Membrane and Muscle Physiology and Biophysics, and Endothelial and Epithelial Cell Biology.

Qualifications are Ph.D. or equivalent degree and a minimum of two years of Postdoctoral experience. DEADLINE DATE: OCTOBER 1, 1988. Send a copy of your CV, statement of research accomplishments and future goals, and the names of three references to: Chairman, Department of Physiology, UMD-New Jersey Medical School, (S), 185 South Orange Avenue, Newark, New Jersey 07103-2757.

The UMDNJ is an Affirmative Action/Equal Employment Opportunity Employer M/F/H/V.

INDUSTRIAL POSTDOCTORAL POSITION
Pharmacokinetic Research

Monsanto Agricultural Company is seeking a Post-doctoral Scientist to develop physiological and pharmacodynamic modeling approaches for use in risk assessment at our Environmental Health Laboratory in St. Louis, Missouri. Qualified candidates are required to have a Ph.D. degree with a strong background in the area of pharmacokinetic modeling and the application of pharmacokinetic principles to toxicological problems. Previous research experience in the area of mathematical modeling of biological data is preferred. This position is renewable on an annual basis with an anticipated duration of two years. External publications and participation in the scientific community will be strongly encouraged.

Monsanto provides a generous compensation package relative to your responsibilities and qualifications. Interested candidates should forward resume to: V.L. Bozarth, Mall Zone B3NA, Monsanto Company, 600 N. Lindbergh Blvd., St. Louis, MO 63167. An Equal Opportunity/Affirmative Action Employer M/F/H/V.

Monsanto

Plant Pathologists/Microbial Ecologists/Agronomists

Crop Genetics International, an agricultural biotechnology company in suburban Baltimore/ Washington, is expanding its endophytology (endophyte studies) group to aggressively develop the first InCide™ products, a family of genetically engineered, microbial biopesticides that can be inoculated into seeds and plants. We are working with corn, soybeans, rice, cotton and wheat. Successful candidates will conduct research in phytoecology, microbial ecology, epidemiology, plant water relations, detection methodologies, vector relations and field development. Requirements are:

- A Ph.D. and research experience in Plant Pathology, Microbiology, Agronomy or a related field
- Experience in conducting field research
- An ability and willingness to independently establish and achieve goals.

To apply forward a resume in confidence and the names of three professional references to:

Crop Genetics International
Dept ES1
7170 Standard Drive
Hanover, MD 21076

An equal opportunity employer.

Biochemistry Research
BS/MS Associate

The Upjohn Company, a recognized leader in pharmaceutical research and development, is seeking applicants for a Biochemistry Research position in Biotechnology Product Development in our Control Division. The successful candidate will have experience in protein separation techniques such as HP-IEF, SDS-PAGE, IEF, and reverse phase liquid chromatography. Experience in ELISA, RIA and Western blotting is desirable. Responsibilities will include methods development on new protein therapeutics produced in our Product Discovery area. The candidate will join an inter-disciplinary team participating in product registration issues on a worldwide basis. This position requires either an M.S. in Chemistry or Biochemistry, or a B.S. in these areas and a minimum of 2 years of relevant experience.

We are located in Kalamazoo in southwestern Michigan, midway between Chicago and Detroit. Our area offers varied cultural events, cosmopolitan shopping and entertainment, lakes and woodlands minutes away, abundant year-round sports and recreation. Upjohn offers a highly competitive salary, advancement opportunities, comprehensive benefits and relocation assistance. For confidential consideration, please call from outside of Michigan toll free 1/800/253-8600, ext. 3-6767, (inside Michigan call collect 616/323-6767) to request an employment application be sent to you. Please refer to advertisement number 5554-FA when calling. We are an Equal Opportunity Employer M/F.

Our Commitment to Scientific Excellence Continues...
POSITIONS OPEN

MOLECULAR BIOLOGIST
GYNECOLOGIC ONCOLOGY/MOLECULAR BIOLOGY, NORTHWESTERN UNIVERSITY MEDICAL SCHOOL

Applicants are invited for a tenure-track faculty position at the assistant professor level with primary appointment in the Section of Gynecologic Oncology within the Department of Obstetrics and Gynecology and secondary appointment in the Department of Molecular Biology at the Northwestern University Medical School. Appointment is at the Ph.D. degree and postdoctoral training in molecular biology relating to the study of malignant diseases. We are seeking an individual who will develop an independent, basic molecular biology research program in gynecologic oncology, collaborate with other members of the Departments of OB/GYN and Molecular Biology at Northwestern University Medical School, and in vivo spectroscopic studies using animal models. The position requires a Ph.D. or equivalent, and extensive experience in NMR techniques. The appointee will participate in a multidisciplinary research program involving departments of biology, chemistry, computer science, medicine, surgery, and physics, and will have potential for grant support. Details of the position and salary are available upon request. Interested persons should send curriculum vitae and three letters of reference to: Dr. John R. Lurain, M.D., Head, Section of Gynecologic Oncology, Department of Obstetrics and Gynecology, Northwestern University Medical School, 333 East Superior Street, Chicago, IL 60611.

The University is an Equal Opportunity/Affirmative Action Employer and invites applications from all qualified individuals.

POSITIONS OPEN

NMN SCIENTIST

The Pittsburgh NMR Center for Biomedical Research (under the auspices of Carnegie Mellon University (CMU) and the University of Pittsburgh (Pitt)) has an opening for an NMR Scientist. The center has a Bruker BIOSPEC II 4.7-tesla NMR system with a 40-cm bore superconducting magnet and 11 NMR imagers and in vivo spectroscopic studies using animal models. The position requires a Ph.D. or equivalent, and extensive experience in NMR techniques. The appointee will participate in a multidisciplinary research program involving departments of biology, chemistry, computer science, medicine, surgery, and physics, and will have potential for grant support. Details of the position and salary are available upon request. Interested persons should send curriculum vitae and three letters of reference to: Dr. Mark Rabin, Department of Pediatrics (D-820), University of Pittsburgh Medical Center, 4400 Fifth Avenue, Pittsburgh, PA 15213. CMU and Pitt are Affirmative Action/Equal Opportunity Employers.

NEUROSCIENTIST

Assistant professor (tenure-track), to study the effects of embryonic lesions on the structure and function of heart and ear. At least 3 years of postdoctoral experience in recording and analyzing bioelectric responses is essential. A broad background in gynecologic oncology is useful. Submit curriculum vitae, description of research experience, and names of three references to: Dr. Michael Mulroy, Department of Neurology, University of Pittsburgh NMR Center for Biomedical Research, 4400 Fifth Avenue, Pittsburgh, PA 15213. An Equal Opportunity/Affirmative Action Employer.

PATHOLOGY AND MICROBIOLOGY: The University of Minnesota Medical Center is seeking a CLINICAL CHEMIST, assistant-associate professor, with M.D. degree and board certification in anatomic pathology. The position requires special interest in clinical chemistry and demonstrated academic productivity by publications. Curriculum vitae and three letters of reference should be sent to: Dr. David T. Portillo, M.D., Chairman, Pathology and Microbiology, University of Minnesota Medical Center, 420 and Dewey Avenue, NE 68108. Applications accepted to 1 November 1988. An Equal Opportunity/Affirmative Action Employer.

PHYSICAL OCEANOGRAPHY: The School of Oceanography at the University of Washington invites applications for a TENURE-TRACK FACULTY POSITION in physical oceanography for which the University is seeking faculty appointments at the assistant professor level, or higher. The position involves initiating an independent, externally funded program in physical oceanography with emphasis on the physics of the ocean-atmosphere system. The position will be available in July 1989. Details of this position and an application form are available from: Dr. Richard P. Shipeko, Director, School of Oceanography, University of Washington, Box 354890, Seattle, WA 98195. Closing date for applications is 1 November 1988. The position will be filled in summer 1989 at the assistant or associate professor level. A doctorate is required. The University of Washington is an Equal Opportunity/Affirmative Action Employer.

PLANT ViroLOGIST

Kansas State University, Department of Plant Pathology, invites applications for a tenure-track position at the assistant professor level to begin 1 October 1988. Successful candidate will be expected to investigate the molecular basis of viral infection and disease and to participate in the development of control measures for important viral diseases of cereal crops. A Ph.D. in plant pathology or a closely related discipline with research and employment experience in plant virology is required. Salary commensurate with academic training and experience. Submit letter of application, curriculum vitae, and three letters of reference to: Dr. Frank F. White, Department of Plant Pathology, Throckmorton Hall, Kansas State University, Manhattan, KS 66506 by 1 September 1988. Kansas State University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW. Position available July 1988 to study the molecular genetics of inherited immune deficiency diseases. Project will involve cloning and application of diagnostic and therapeutic strategies. Ph.D. in biochemistry/molecular biology. Prior experience with immunodeficiency virus, DNA, and RNA is strongly preferred. Send curriculum vitae and names of three references to: Dr. Mark Rabin, Department of Pediatrics (D-820), University of Pittsburgh Medical Center, 4400 Fifth Avenue, Pittsburgh, PA 15213. POSTDOCTORAL FELLOW. Position available to study electrophysiological, ionic and transport phenomena in renal epithelial cells. Emphasis will be on the development of techniques to study intracellular microelectrodes, patch clamping, cell fluorescence ion and pH probe, and microperturbation. Positions available 1 September 1988 to 31 August 1990. Send curriculum vitae and names of three references to: Dr. John R. Lurain, M.D., Head, Section of Gynecologic Oncology, Department of Obstetrics and Gynecology, Northwestern University Medical School, 333 East Superior Street, Chicago, IL 60611.

POSITIONS OPEN—Assistant professor (tenure-track), to study the effects of embryonic lesions on the structure and function of heart and ear. At least 3 years of postdoctoral experience in recording and analyzing bioelectric responses is essential. A broad background in gynecologic oncology is useful. Submit curriculum vitae, description of research experience, and names of three references to: Dr. Michael Mulroy, Department of Neurology, University of Pittsburgh NMR Center for Biomedical Research, 4400 Fifth Avenue, Pittsburgh, PA 15213. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW. Position available 1 January 1989 in NIH-supported laboratory to study mechanisms and possible effects on gene expression during development of specific lung cells. Qualifications: Ph.D. with background in molecular biology. Please contact: Dr. Donald L. Shapiro, Department of Pediatrics (Box 651), University of Rochester School of Medicine, 601 Elmwood Avenue, Rochester, NY 14642-calling 546-5884. An Equal Opportunity Employer (M/F).

POSTDOCTORAL FELLOW—MOLECULAR BIOLOGY OF LUNG DEVELOPMENT. Position available 1 January 1989 in NIH-supported laboratory to study mechanisms and possible effects on gene expression during development of specific lung cells. Qualifications: Ph.D. with background in molecular biology. Please contact: Dr. Donald L. Shapiro, Department of Pediatrics (Box 651), University of Rochester School of Medicine, 601 Elmwood Avenue, Rochester, NY 14642-calling 546-5884. An Equal Opportunity Employer (M/F).

POSTDOCTORAL FELLOW available now to conduct studies in one or more of the following areas in a vårable environment represented by (1) Enzymology of DNA repair in human cells (2) Action mechanism of DNA repair enzymes (3) DNA-protein interactions (4) Differential repair of DNA and RNA (5) Roles of folates and flavins in enzymatic catalysis

METHODS and techniques used in our laboratory include enzyme purification, cloning of repair genes, site-specific mutagenesis, preparation of isotope and enzyme kinetic, enzymatic and chemical footprinting, genomic Southern blotting, absorption and fluorescence spectroscopy, flash photolysis, action spectrum measurements. Send applications to: Dr. Aziza Sancar, University of North Carolina at Chapel Hill, Department of Biochemistry, 242 FLOB, CB# 7260, Chapel Hill, NC 27514-7260. Equal Opportunity/Affirmative Action Employer.
Chief, Epidemiology Branch

AIDS PROGRAM
NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES
NATIONAL INSTITUTES OF HEALTH

The AIDS Program of NIAID invites applications for the position of Chief, Epidemiology Branch. Candidates should have a doctorate degree in Epidemiology or be a Board-eligible or Board-certified physician (e.g., Internal Medicine, Preventive Medicine, Pediatrics). Advanced training or experience in public health, epidemiology, and biostatistics is required. A background in the following areas will be helpful: clinical or basic science research; subspecialty training in infectious disease, immunology, pulmonary disease, or oncology; or clinical experience with AIDS. The Branch plans and directs a federal research program into the natural history, epidemiology, and risk factors of HIV and its associated complications. Responsibilities of the position include: providing technical and administrative leadership to the AIDS epidemiologic program; developing, planning, and coordinating extramural epidemiologic research; establishing research priorities; developing and implementing new research initiatives; collaborating in national and international studies, coordinating development of technical research protocols, and serving as the primary scientific liaison to university- and clinic-based study sites and international agencies.

Salary commensurate with experience. Physicians comparability allowance may be available. U.S. citizenship is required. Please send curriculum vitae or SF 171 to:

AIDS Program/NIAID
Attn: Leslie Priel
Executive Bldg, Room 250P
6003 Executive Blvd.
Bethesda, MD 20892

NIH is an Equal Opportunity Employer

EDUCATION COORDINATOR

The American Association for the Advancement of Science, a prestigious science association located in downtown Washington, D.C. has an immediate need for an Education Coordinator.

Qualified candidate will have a doctorate in science, science education, or a related discipline, and experience as a teacher, supervisor, or administrator in the elementary or secondary schools. Must understand the social and political structure of the education system in the United States. Experience in coordinating education projects that involve states, school districts, and universities and familiar with all aspects of curriculum development. Collegiality, inventiveness, energy, commitment to educational reform, and the ability to facilitate the work of others will be major considerations for the position.

For immediate consideration, please submit your resume and salary history in confidence to:

Debra Wright
American Association for the Advancement of Science
Personnel Office
1333 H Street, N.W.
Washington, D.C. 20005

Postdoctoral Scientist

The Department of Immunology at Smith Kline & French Laboratories, located in suburban Philadelphia, Pennsylvania, is seeking one postdoctoral scientist to participate in a research program in immunoregulation and biochemistry of T cell activation in an environment designed to foster creative research and to promote personal and professional growth.

We consider postdoctoral studies to be of major importance in a scientist’s career and encourage publication of findings in leading journals and a full interaction with the scientific community. Our postdoctoral appointments are normally for a period of two years.

Candidates are required to have:
• Ph.D. with 0-2 years of postdoctoral experience.
• Training in protein biochemistry or biochemical pharmacology.
• Experience and/or practical knowledge in signal transduction mechanisms, receptor binding assays and other biochemical and molecular biological techniques in the characterization of enzymes and receptors.
• Good publication record.

The successful candidate will:
• Study receptor-mediated signal transduction pathways in T cell activation.
• Characterize biochemically important targets in T cell regulation.
• Interact with scientists from the Departments of Immunology, Molecular Pharmacology and Molecular Genetics.
• Present work at relevant scientific meetings and publish results in peer-reviewed journals.

We offer excellent compensation and benefits and an attractive relocation policy. For confidential consideration, send your C.V. and names of three references to: Angela Vaccaro, Associate Employment Administrator, V842, Smith Kline & French Laboratories, Research and Development Division, P.O. Box 1530, King of Prussia, PA 19406-0530. We are an Equal Opportunity Employer, M/F/H/V.
POSTDOCTORAL POSITION
available immediately to study regulation of gene expression and molecular characterization of proteins involved in signal transduction pathways. Applicants should have a Ph.D. in molecular biology or biochemistry. Experience in NMR spectroscopy and protein purification is required. Send curriculum vitae and references to: Dr. Barbara F. Connolly, Department of Biology, Washington University School of Medicine, 660 South Euclid, St. Louis, MO 63110. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION
available immediately to study the influence of aging on the alternative splicing of fibronectin. Studies will involve the use of transgenic mouse models. Experience with NMDA receptor physiology is preferred. Send curriculum vitae and three references to: Dr. Robert J. Klebe, Department of Cellular and Structural Biology, University of Texas Health Science Center, San Antonio, TX 78284. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION
available immediately to study the role of mast cells and macrophages in inflammation. Background in biochemistry and cell biology (physiology) and/or pharmacology or immunology required. Send curriculum vitae and letters of reference to: Dr. Barbara F. Connolly, Department of Biology, Washington University School of Medicine, 660 South Euclid, St. Louis, MO 63110. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION
available immediately to study oncogene activation and DNA damage and repair from ultraviolet light during skin carcinogenesis. Collaborative project between the Laboratory of Radiobiology and Environmental Health at the Department of Dermatology at the University of California, San Francisco. Experience in gene cloning, recombinant DNA techniques, and/or molecular biology is required. Salary range is $25,000-$32,000. Send curriculum vitae and references to: Dr. James B. Cleaver, Laboratory of Radiobiology and Environmental Health, University of California, San Francisco, CA 94143-0750. An Equal Opportunity/Affirmative Action Employer.
Postdoctoral Scientist

Regulation of Apolipoprotein Gene Expression

The Upjohn Company has a position available in the Metabolic Diseases and Molecular Biology Research units to study the regulation of primate apolipoprotein gene expression. An M.D. or Ph.D. in biochemistry, physiology or related field, and prior training and experience studying the physiology and metabolism of lipoproteins are required. Some experience with recombinant DNA techniques would be helpful, but is not essential since the successful candidate will receive training in this area. This position is available for 2 years.

Kalamazoo is a medium-sized Southwestern Michigan community with immediate access to a mix of excellent cultural, educational and recreational pursuits, including numerous lakes and a four-season climate. Upjohn offers a competitive salary, and a comprehensive benefits program. For prompt, confidential consideration, please send your CV/resume and a copy of transcripts to: M. William Rex, Corporate Employment, The Upjohn Company, 7000 Portage Road, Kalamazoo, MI 49001. Please refer to advertisement number 22718-11A in your correspondence. We are an Equal Opportunity Employer M/F.

Our Commitment to Scientific Excellence Continues...

Upjohn

BS/MS Scientist

A BS/MS level Scientist position is available within our Medical Products Department's molecular biology laboratory focusing on the molecular genetics of Human Immunodeficiency Virus. The successful candidate will have formal training and work experience in mammalian cell culture and virology, preferably that of retroviruses, as well as experience in recombinant DNA techniques. The applicant will participate in research programs to express HIV genes in mammalian cells and analyze HIV gene function through site directed mutagenesis. The candidate will also be responsible for day-to-day oversight of a virus containment laboratory.

You'll find a highly stimulating scientific environment in a modern research facility near Wilmington, DE. We provide excellent compensation and benefits including relocation. Wilmington's Mid-Atlantic location offers an attractive lifestyle with easy access to affordable housing and a wide range of academic, cultural and recreational activities. Interested candidates should send their resumes and references to: Professional Staffing, Employee Relations Department, Room X-51162, Du Pont Company, Wilmington, DE 19898.
**POSTDOCTORAL POSITION**

POSTDOCTORAL POSITION available on 1 July 1988 for beginning postdoctoral candidate. Position will be in laboratory of epithelial cell polarity and membrane protein sorting—research will involve analysis of targeting in epithelial cells transfected with genes encoding epidermal growth factor receptor peptides—experience in molecular biology is desirable. Position is funded by a departmental NIH training-grant. Applicants must be U.S. citizens. Send curriculum vitae with names of references to:

Department of Cellular and Molecular Physiology
Yale University School of Medicine
P.O. Box 3339
New Haven, CT 06510

**HARVARD MEDICAL SCHOOL DEPARTMENT OF MICROBIOLOGY AND MOLECULAR GENETICS POSTDOCTORAL POSITION IN BACTERIAL GENETICS AND PHYSIOLOGY**

A position is open for studying respiratory regulation of glycerol dissimilation. In Klebsiella pneumoniae the dha regulon specifies four glycerol fermentation enzymes. The work will involve physical mapping, and determina-

**POSTDOCTORAL POSITION IN GENETIC EPIDEMIOLOGY**

available in Neurogenetics Program at Boston University School of Medicine in midlife neurodegenerative diseases; Huntington’s, Alzheimer’s, and Withers, and Autism, Diseases, and with Framingham Heart Study. Training in genetics or genetic epidemiology essential. Send curriculum vitae, statement of research interests, and three letters of recommendation to: Dr. Lindsay A. Farrer, Department of Neurology, Boston University School of Medicine, 720 Harrison Avenue, Suite 1105, Boston, MA 02118. An Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITIONS**

are available for studies in various aspects of cancer research and the regulation of cell proliferation in the Department of Biochemistry, Chemistry, Medicine, Pharmacology, and Pathology. Areas of investigation include: (i) the molecular basis of cancer progression, including tumor suppressor and oncogenic mechanisms; and (ii) the mechanisms of cancer chemotherapeutic agents, molecular cloning of human oncogenes, and the expression of these genes in tumor cell lines.

Three 2-year POSTDOCTORAL POSITIONS are available immediately in a research group investigating the molecular basis of cell proliferation, including the regulation of cell cycle progression, and the identification of novel cellular pathways. Candidates should have a strong background in molecular biology and cell biology, and a proven record of research productivity. Please send curriculum vitae, a brief statement of research interests, and three letters of recommendation to:

**POSTDOCTORAL POSITIONS IN MOLECULAR BIOLOGY AND IMMUNOLOGY**

available in the Department of Molecular Biology and Immunology at the University of California, Irvine. The position is funded by a National Institutes of Health grant and will involve the study of cellular signaling and gene expression in immune cells. The candidate will have a strong background in molecular biology, experience with cell-based assays, and a desire to pursue a career in academic research.

Send curriculum vitae, statement of research interests, and a brief description of your qualifications to:

Department of Pharmacology, Wayne State University School of Medicine, 540 East Canfield, Detroit, MI 48201. Wayne State University is an Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL RESEARCH ASSOCIATE POSITIONS**

available to study the regulation of cytokine production and activity in metastatic tumors at the levels of synthesis, processing and targeting and including regulation by endogenous inhibitors. Techniques which are being used are a spectrum from molecular biology to in vivo metastasis studies. Applicants should have a Ph.D. in biochemistry or a related field with experience in enzymology, biochemistry, molecular biology, or immunology. Candidates should send curriculum vitae, a brief statement of research experience, and the names of three references to:

Department of Pharmacology, Wayne State University School of Medicine, 540 East Canfield, Detroit, MI 48201. Wayne State University is an Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL RESEARCH ASSOCIATE**

available in the postdoctoral program in Immunology at the University of Texas Medical Branch, Galveston. The position is funded by a National Institutes of Health grant and will involve the study of immune responses in the context of cellular and molecular mechanisms. Candidates should have a strong background in molecular biology, experience with cell-based assays, and a desire to pursue a career in academic research.

Send curriculum vitae, statement of research interests, and a brief description of your qualifications to:

**POSTDOCTORAL RESEARCH ASSOCIATE POSITION**

available immediately for a postdoctoral position in the laboratory of Dr. James Templin, Department of Immunology, Texas A&M University, College Station, TX 77843. The position is funded by a National Institutes of Health grant and will involve the study of immune responses in the context of cellular and molecular mechanisms. Candidates should have a strong background in molecular biology, experience with cell-based assays, and a desire to pursue a career in academic research.

Send curriculum vitae, statement of research interests, and a brief description of your qualifications to:

**POSTDOCTORAL RESEARCH ASSOCIATE POSITION**

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Send curriculum vitae, statement of research interests, and a brief description of your qualifications to:

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Send curriculum vitae, statement of research interests, and a brief description of your qualifications to:

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Send curriculum vitae, statement of research interests, and a brief description of your qualifications to:
Participate In Vital Research Operations With A Major Pharmaceutical Firm

OTSUKA PHARMACEUTICAL CO., LTD is an international organization with more than 12,000 employees worldwide and a reputation for excellence and success in health care. We have openings for Research Assistants to help explore the areas of tumor cell biology and growth factors.

The positions we seek to fill are in our Molecular Biology Dept. and require a BS or MS in a related field and a strong academic and/or professional background. Knowledge of bacterial genetics would be a plus.

If you would like to explore the possibilities of a long-term career in an advanced and challenging R & D environment, send your C.V. to: Ms. Anne Haight, OTSUKA PHARMACEUTICAL CO., LTD., 5900 Medical Center Drive, Rockville, MD 20850. An Equal Opportunity Employer M/F.

"OTSUKA, people creating new products for better health worldwide."

Opportunities in INFLAMMATION RESEARCH Pharmacology/Immunology Specialists

As a rapidly expanding $500 million, multinational pharmaceutical manufacturer, Alcon Laboratories is presently building its overall capability to generate new technology. The primary thrust of this effort is the development of innovative new drugs to treat certain eye and skin diseases. As part of this effort, we have an immediate need for innovative Pharmacologists to assist in the development and implementation of pharmacologic and immunologic techniques to assess components of ocular disease. The selected professionals must have a thorough understanding of general pharmacological principles and ability to integrate immunological, biochemical and physiological approaches.

SENIOR SCIENTIST/TEAM LEADER
• Ph.D. in Pharmacology, Immunology, Physiology, or related science
• 10 or more years in industry or post-doctoral experience in inflammation research preferred
• Demonstrated ability to collaborate and manage research or drug discovery team

SENIOR SCIENTIST
• Ph.D. in Pharmacology, Immunology, Physiology, Biochemistry, or related science
• 1 or more years of industry or post-doctoral experience in inflammation research or closely related field
• In vitro and in vivo model development experience
• Good oral/written communication skills

Alcon is a high technology corporation building for the future and we need and appreciate talented individual contributors who can function effectively as team members. Naturally, our position includes a competitive starting salary, plus comprehensive benefits including profit sharing trust, group medical and dental. To initiate your interest in exploring these key positions on a confidential basis, please send your detailed C.V. to: Sherry H. Rightmer, T-3, Alcon Laboratories, Inc., P.O. Box 6600, Ft. Worth, TX 76115. Equal Opportunity Employer, M/F/V/H. Principals Only. Please.

As a worldwide leader in the pharmaceutical industry, G.D. Searle maintains a reputation for innovation and ongoing scientific research. We now offer an opportunity for a research biologist to support our continuing progress.

Involves discovery and development of new anti-arrhythmic agents, and evaluation of electrophysiological effects of drugs in isolated cardiac preparations. MS in physiology, pharmacology or related science required, with coursework in cardiovascular physiology or pharmacology preferred. Experience in intracellular recording techniques is necessary.

We offer an attractive salary and benefits package. For confidential consideration, please send your resume with salary history to: G.D. Searle, Human Resources Dept., HY15, 4901 Searle Parkway, Skokie, IL 60077. Equal Opportunity Employer M/F.

Enzymologist/Drug Discovery

ICI Pharmaceuticals Group, which includes Stuart Pharmaceuticals and ICI Pharma, is one of the fastest-growing producers of quality pharmaceuticals in the U.S. Current research activities are focused on the development of new products for the treatment of cardiovascular diseases, arthritis, cancer, infectious diseases and pulmonary diseases. We have openings at our state-of-the-art laboratories in Wilmington, DE for:

ENZYMOLoGIST/BIOCHEMIST: PhD with 2-3 years' postdoctoral expertise with sound understanding of enzyme kinetics. Will interact with team of biologists and chemists to design and analyze mechanism of action of inhibitors of human neutrophil elastase. Mechanistic studies on other enzymes anticipated. Broad background in biochemistry advantageous.

BIOCHEMICAL PHARMACOLOGIST: BS/MS in Biological Sciences with strong biochemical background to work on the characterization of syntheses and action of lipid hormones (i.e. prostaglandins, leukotrienes and platelet activating factor) in the lung. Experience with separation techniques and RIAs is desirable.

PHARMACOLOGIST: BS/MS in relevant discipline with training/experience in biology/pharmacology to conduct in vivo studies measuring pulmonary mechanics. Additional assignments will include in vivo measurement of gastrointestinal motility.

We offer an excellent salary and benefits program, including tuition aid for approved graduate study, and opportunities for professional growth.

Please send your resume with salary requirement, indicating the position for which you are applying to: Paul S. Flynn, ICI Pharmaceuticals Group, Wilmington, DE 19897.

An Equal Opportunity Employer M/F.
POSTDOCTORATES IN PLANT BIOLOGY

Two positions available immediately: (i) molecular biology of glandular trichome-mediated insect resistance in wild potato (ii) biochemical and molecular basis of metal resistance in plant cell cultures. Background in recombinant DNA, protein biochemistry, chemistry, or enzymology preferred. Salary $19,000 to $21,000 depending on experience. Send resume and names of three references to: Dr. John C. Steffens, Department of Plant Breeding and Biometry, Cornell University, Ithaca, NY 14853. Telephone: 607-255-2043.

INSTITUTE OF GENETICS, UNIVERSITY OF COLOGNE, COLOGNE, GERMANY

PROFESSOR, PHARMACEUTICS (C3 PROFESSOR)

Applicants are invited who have developed an active research program in molecular biology, with particular emphasis on virology, cell biology, human genetics or tumor (developmental) biology. Teaching obligations will be in genetics and molecular biology for biology students at the University of Cologne.

Applications including curriculum vitae and bibliography should be sent before 1 October 1988 to: The Dekan der mathematisch-naturwissenschaftlichen Fakultäten, Universität zu Köln, Albertus-Magnus-Platz, D-5000 Köln 41, Germany.

RESEARCH ASSISTANTS/ASSOCIATES GENSIA PHARMACEUTICALS, INC.

Gensia Pharmaceuticals is a rapidly growing biopharmaceutical firm exploring new therapeutic approaches for cardiovascular, cerebrovascular and neurological diseases. Several B.A.–M.S. level research assistants/associates are needed immediately with experience in one or more of the following areas: animal physiology, neurobiology, enzymology, cell culture, or pharmacology. Gensia offers competitive salaries, an attractive San Diego location and excellent fringe benefits. Send curriculum vitae and the names and telephone numbers of three references to: Dr. Paul J. Marangos, Gensia Pharmaceuticals, Inc., Roselle Street, San Diego, CA 92121.

RESEARCH ASSOCIATE in nutrient cycling with the Long Term Ecological Research Program on the H. J. Andrews Experimental Forest. Ph.D. in ecology or soils with emphasis in nutrient cycling. Experience with isotopes and/or computer modeling desirable. $22,000 to $24,000 per year for 2 years, with possibility of extension depending on funding and performance. Send letter of application, complete résumé, and three letters of reference by 1 September 1988 to: Dr. Logan Norris, College of Forestry, Oregon State University, Peavy Hall 154, Corvallis, OR 97331. An Equal Employment Opportunity/Affirmative Action Employer. Compiles Rehabilitation Act Section 504. OSU has a policy of being responsive to needs of dual-career couples.

RESEARCH ASSOCIATE/Pharmacology-biochemistry positions available immediately for investigation of enzymes encapsulated into carrier erythrocytes for drug antagonism studies. Experience with enzyme purification and quantitation essential. No experience in drug carrier systems necessary. Send curriculum vitae and three references to: Dr. J. L. Way, Department of Pharmacology, Texas A & M University Medical Sciences Building, College Station, TX 77843. Equal Opportunity/Affirmative Action.
A One-Volume Library of Essential AIDS Research

AIDS: Papers from Science, 1982–1985
Edited by Ruth Kulstad

Some of the most frequently cited papers on acquired immune deficiency syndrome (AIDS) that appeared in Science between August 1982 and September 1985 are included in this volume. Arranged chronologically, these 108 research papers and Science news reports show how far AIDS research has come and provide an indication of the directions in which it might go. This fully indexed collection is useful not only for the experimental data and conclusions, but also as an excellent source of references to AIDS work in other major journals worldwide.

An overview of research in AIDS to date is provided in the introduction by Dr. Myron Essex, chairman of the Department of Cancer Biology, Harvard University School of Public Health.

654 pp.; fully indexed and illustrated
Hardcover $32.95 (AAAS member price $26.35)
Softcover $19.95 (AAAS member price $15.95)

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RESEARCH ASSOCIATE
VASCULAR SMOOTH MUSCLE CELL CULTURE/BIOCHEMISTRY

This position is available immediately to study the biochemical mechanisms involved in regulation of vascular smooth muscle contraction. Experience in vascular smooth muscle cell culture is required. Knowledge and experience in Ga"-phosphoinositides-kinase mediated signal transduction is desirable but not essential.

Send curriculum vitae and three references including telephone numbers to: Dr. Hsuooor Akbar (telephone: 614-593-2460), Irvine Hall, Program in Physiology and Pharmacology/Coll of Medicine, Ohio University, Athens, OH 45701.

Ohio University is an Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE IN REPRODUCTIVE ENDOCRINOLOGY with experience in cell isolation, hormone measurement of steroids and gonadotropins in Department of Physiology and Endocrinology. Ph.D. in endocrinology and 3 years experience required with postdoctoral research with emphasis on study of ovarian function. Salary $22,000 per annum.

Qualified applicants apply with résumé to: Dr. John A. Wagner, Dana–Farber Cancer Institute, 250 Brookline Ave., Boston, MA 02115. An Affirmative Action/Equal Opportunity Employer.

RESEARCH STATISTICIAN

DeKalb-Pfizer Genetics is looking for a research statistician. Duties will include coordinating experiments, developing experimental design, general statistical analysis and documenting statistical methods. Individual will be based in DeKalb, Illinois. Applicants should have a Ph.D. or equivalent in agronomic field with statistical emphasis, or a Ph.D. in biometry or statistics. Please send résumé to: Gary Blum, SRI International, 3100 Sycamore Road, DeKalb, IL 60115.

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RESEARCH ASSOCIATE
RADIATION MEDICINE ASSISTANT/ASSOCIATE PHYSICIAN (CLINICAL)

The University of Kentucky and its Department of Radiation Medicine are joining with the St. Claire Medical Center in Morehead, Kentucky to develop a new Radiation Therapy program located in Morehead. We are seeking applicants for Board certified or eligible in therapeutic radiology. This person will have a faculty appointment at the University of Kentucky in Lexington, and practice at St. Claire in Morehead. The Department of Radiation Medicine will ensure that back-up is provided for vacation coverage, etc.

St. Claire Medical Center is a modern, progressive 170 bed acute care regional medical center with an active educational affiliation with the University of Kentucky College of Medicine. Medical staff are progressive caregivers who serve people in an eleven-county area. St. Claire operates three primary care centers, has an extensive in-home services program, and an active public and professional educational program.

Morehead, Kentucky is situated in the scenic Appalachian Foothills and is the home of a regional university with an enrollment of 6,000 students. Morehead offers all the advantages or rural living, while also offering the educational, recreational and cultural opportunities of a university setting just 60 miles east of Lexington on I-64, Morehead is convenient to several metropolitan areas.

For additional information, send a confidential letter and current curriculum vitae with references to:

Yosh Maruyama, M.D.
Professor and Chairman
Department of Radiology
University of Kentucky Medical Center (Room C-15)
Lexington, KY 40536-0084

RESEARCH ASSISTANT

Research assistant in biochemical endocrinology and control of proteoglycan biosynthesis. Design and perform experiments to elucidate the molecular mechanisms regulating the biosynthesis of proteoglycan in chick embryo chondrocytes by cell growth factors. Responsible for collecting, analyzing, and summarizing data and preparing preliminary drafts for scientific presentation. Must be able to work under general supervision via weekly conferences with senior investigators. Requirements: Master's degree in biochemistry with thesis and 2 years research experience. Job requires familiarity and experience with equipment common to biochemical laboratories. The skills to execute quantitative biochemical assays are also required. Salary $18,500 per year; work 40 hours per week. Ad placed by Equal Opportunity Employer. To apply, contact or send résumé to: The Human Resources Employment Security Office, P.O. Box 34047, 1223 West Seventh Street, Little Rock, AR, Job Order no. 417656.

RESEARCH ASSOCIATE: Position available for a recent Ph.D. in either physiology, biology, zoology, or biochemistry. Background in developmental or cell biology is desirable. The position offers opportunities in research, training and clinical responsibilities in the field of in vitro fertilization. Salary: negotiable per year. Send curriculum vitae and list of three references to: Dr. Philip J. Chan, Hillcrest Fertility Center, 1145 South Utica Avenue, Tulsa, OK 74104.

RESEARCH ASSOCIATE

The Laboratory of Molecular Genetics is seeking a research associate to study the hormonal regulation of gene expression. In particular, we are exploring the molecular mechanisms of estradiol, testosterone, and other hormones control glycoprotein hormone gene expression. Such studies include structure-function analyses of cis- and trans- thyroid hormone and sex steroid receptors) elements involved in this regulation utilizing in vitro mutagenesis and gene transfer techniques. A Ph.D. or M.D. degree in molecular biology and/or protein biochemistry is essential. Please send curricu-

lum vitae and the names of three references to: Dr. William W. Chin, Thorn Research Building, Room 917, Brigham and Women's Hospital, 20 Stavtuk Street, Boston, MA 02115.

RESEARCH ASSOCIATE

The Research Associate in Radiation Medicine is responsible for research involving total body irradiation. Basic research involving synthesis and characterization of the radiation products. Requires Ph.D. in chemistry, 1 to 2 years of experience with state-of-the-art research experience in Brevetoxins and related systems. Must have experience in analytical capacity and chromatographic, NMR, spectroscopy; 40 hours a week; $18,000 + year; submit résumé or curriculum vitae to: Philadelphia Job Bank, 444 North 3rd Street, Philadelphia, PA 19123, Job Order #119181.

RESEARCH ASSOCIATE

SOIL BIOGEOCHEMIST

Design and develop an ecologically oriented soil science research program emphasizing geosphere-biosphere-atmosphere interactions for the Biological Sciences Center of the Desert Research Institute. Grant support and start-up funds are available.

Requirements: Ph.D. in soil science, extensive training in the plant sciences, professional experience beyond the Ph.D., a strong publication record, and the proven ability to attract research funding. A research background emphasizing soil-plant-atmosphere interactions and/or remote sensing is highly desirable.

Salary commensurate with qualifications, excellent benefits. Applications must be received by 19 August 1988. Send curriculum vitae, statement of research interest, and three letters of recommendation to: Dr. Carl Fox, Assistant Director, Personnel Office, Desert Research Institute, P.O. Box 60220, Reno, NV 89506. For additional information contact: Dr. Carl Fox at 702-673-7322.

Senior Associate Research Scientist

The Department of Biology at Laval University invites applications for a TENURE-TRACK FACULTY POSITION in SOIL BIOGEOCHEMISTRY. Applications should have research expertise in population genetics or molecular biology of development in any taxonomic category (plant or animal). Qualification include Ph.D. or equivalent in soil biology, including field experience; working knowledge of French, or ability to acquire it within a year from appointment. Rank and salary according to collective agreement (minimum: Canadian: $41,000). Send applications (with curricu- luum vitae and names and addresses of three referees) before 15 August 1988 to: Dr. Jacques Bovet, Département de Biologie, Université Laval, Quebec, Canada, G1K 7P4.
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Position available to establish and manage a new group to detect microorganisms in normally sterile bodily fluids. Will be responsible for developing nucleic acid based assays. This senior level position requires previous experience with developing screens assays. Must have a Ph.D. and previous experience with blood culture and septicemias. Also requires at least 5 years of product development experience and good knowledge of immunoassay development and/or molecular biology.

GENE-TRAK Systems, located in the western suburbs of Boston, offers a lucrative compensation and benefits package that includes equity participation. For immediate consideration send your resume to: Brian Mazar, Human Resources Director, Dept. S7-8, GENE-TRAK Systems, 45 New York Ave., Framingham, MA 01701.

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Research Scientist
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The Upjohn Company, a worldwide leader in pharmaceutical research, has an immediate opening for a Research Scientist in our Drug Delivery Systems Research Group. This program will develop new concepts for facilitating and/or enhancing the transport or delivery of polar compounds, peptides, and protein drug molecules across or through cellular barriers. The preferred candidate will have a Ph.D. and at least 2 years post-doctoral experience with a proven record of independent research potential and significant publications in major scientific journals. The position requires a background in membrane biochemistry and/or biophysics, with emphasis in membrane structure, transport, or receptors. The successful candidate will be expected to establish an independent basic research program that leads to an understanding of membrane transport and recognition phenomena which are relevant to the delivery and cell-specific targeting of bioactive molecules.

Upjohn is located in Kalamazoo, a mid-sized community in southwestern Michigan, midway between Chicago and Detroit. Our area offers varied cultural events, cosmopolitan shopping and entertainment, lakes and woodlands minutes away, abundant year-round sports and recreation. Upjohn offers advancement opportunities, a highly competitive salary, comprehensive benefits and relocation assistance. For confidential consideration, please call from outside of Michigan toll free 1/800/253-5600, ext. 3-6767, (inside Michigan call collect 616/323-6767) to request an employment application be sent. Please refer to advertisement number 21947-HA when calling. An Equal Opportunity Employer M/F.

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RESEARCH SCIENTIST
BIOCHEMISTRY

The Dermatological Research Group of the Bristol-Myers Pharmaceutical Research Development Division has an opportunity for a Research Scientist to join a multi-disciplinary team in the discovery of new drugs for the treatment of skin diseases. The position is in the PreClinical Biochemical Pharmacology Group.

This position requires a Ph.D. in Biochemistry or Biochemical Pharmacology with 1-3 years post-doctoral experience in general biochemical techniques with emphasis on enzymology and receptor binding techniques. The successful candidate will be expected to develop an independent research effort aimed at identifying potential enzyme (or other) targets for the development of new anti-inflammatory drugs for the treatment of psoriasis and other skin diseases. Supervisory experience and leadership skills are important since the position will supervise other scientists.

This position offers an opportunity to work on scientifically exciting and state-of-the-art programs in dermatology. A very attractive and competitive salary and comprehensive benefits package is available. Submit resume and salary requirements in confidence to:

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POSITIONS OPEN

TENURE-TRACK PHARMACOLOGY/TOXICOLOGY POSITIONS: Openings for Assistant, Associate, or full Professor in Pharmacology/Toxicology. Experience in teaching, postdoctoral training, and ability to establish independent fundable research required. Application is open. Send résumé and names of references to: Search Committee, Pharmacology Department, School of Medicine, University of North Carolina, Chapel Hill, NC 27514. UND is an Equal Opportunity Employer.

Department of Physiology in the Medical School wishes to fill a TENURE-TRACK POSITION, the level to depend on experience and research support. Opportunities exist for an appointment at either the Assistant Professor or Associate Professor level. Area of specialization is open. Send résumé and names of references to: Search Committee, Physiology Department, School of Medicine, University of North Carolina, Chapel Hill, NC 27514. UND is an Equal Opportunity Employer.

THEORETICAL ECOLOGIST—Point Reyes Bird Observatory is seeking a theoretical ecologist to work with large data sets in population/community ecology and use research methods to address questions. M.S. degree in statistics or Ph.D. in ecology, vertebrate zoology (or related fields), and solid publications record. Salary: $30,000. Send cover letter, résumé, and three references to: Bird Observatory, 1222 Highway 1, Point Reyes Station, CA 94956.

VIROLOGIST—Hands-on bench position working with HIV and other viruses. Experience in viral cloning and manipulation in transgenic mice. Salary: $30,000 to $40,000 (commensurate with experience). Send a detailed résumé with a current photo to: Virology, 1222 Highway 1, Point Reyes Station, CA 94956.

VISITING RESEARCH ASSISTANT PROFESSOR OR POSTDOCTORAL: Outstanding individual should have background and knowledge of carbohydrate and lipid metabolism. Experience in electron microscopy is desirable. Will be participating in the creative development of a unique implantable needle type glucose sensor based on an equilibrium reaction between a glucose complex-ion exchanger in a polymer matrix and a glucose solution. Pending continued funding this research project may extend for more than 1 year. Send application with résumé and names of three references to: B. W. Libman, Chemical and Nuclear Engineering, University of New Mexico, Albuquerque, NM 87131. Affirmative Action/Equal Opportunity Employer. Application deadline: 26 August 1988.

AWARDS

The Rosenstiel School of Marine and Atmospheric Science of the University of Miami seeks nominations for the ROSENSTIEL AWARD. The Rosenstiel Award is presented annually to recognize outstanding achievement and distinction in oceanographic science. This year's award will be presented for excellence in field work in one's own geographic area. Nominations including a curriculum vitae and the names of three referees should be sent to: Dr. Garrett W. Bean, Chairman, Rosenstiel Award Committee, Division of Marine Geology and Geophysics, 4600 Rickenbacker Causeway, Miami, FL 33149.

TRAINING PROGRAMS

UNIVERSITY OF ARKANSAS FOR MEDICAL SCHOOLS POSTDOCTORAL TRAINING PROGRAM IN DRUG AND ALCOHOL ABUSE

The University of Arkansas for Medical Sciences anticipates filling several postdoctoral positions in the Drug and Alcohol Abuse section in the Research Institute. The program will provide a starting salary of $23,000 per year with a 1,000 annual increase. These positions will be available January 1990. Current research interests are: T. Badger (ethanol and opiate effects on neuroendocrine function and tissue growth and development), D. Davies (ethanol effects on neuroendocrine function and tissue growth and development). Send curriculum vitae and three letters to: Dr. T. Badger, Research Institute, University of Arkansas for Medical Sciences, 4301 West Markham Street, Little Rock, AR 72205.

OPPORTUNITIES FOR ADVANCED STUDY IN MAMMALIAN REPRODUCTIVE BIOLOGY

NIH-supported predoctoral and postdoctoral training opportunities with an interdepartmental, multidisciplinary orientation. Research areas include: glycoprotein synthesis and role in implantation (Cameron), steroid hormones and cancerogenesis (Jones), neuroendocrine control of gonadal function in primates (Kasbo), biochemistry and pathology of celiac disease in different species (Lesnars), protein transitions in spermatogenesis and reproductive toxicology (Melach), control of placental blood flow and fetal cardiac output (Parl), molecular mechanisms controlling spermatogenesis and uterine relaxation (Sanborn), cell interactions during fertilization and early development (Shier), Serrell cell function and regulation of testicular functions (Snelger), receptor-chromatin interactions and testicular polyanion metabolism (Tomi), placental prostaglandins in hypertension, pregnancy, and labor (Welch), chemistry of growth hormone, insulin, and other polypeptide hormones (Wadwa). The program is currently supported by NIH grant 1 F32 HD07055-01. Send inquiries to: Dr. B. S. Babcock, Division of Reproductive and Developmental Biology, Department of Obstetrics and Gynecology, University of California, Los Angeles, CA 90095.

POSTDOCTORAL FELLOWSHIPS IN TOXICOLGY AND RELATED BASIC SCIENCE Disciplines—A 2-year fellowship is available for a basic scientist with research experience in one of the following areas: tumor preparation, cell culture, flow cytometry, biochemistry of the inner ear, olfactory physiology, energy-linked transport in the inner ear, cancer immunology, diabetes, cardiology, dentistry, psychology, psychosocial interventions of patients, experimental therapeutics. Send inquiries to: Robert H. Mathog, M.D., Chairman, Toxicology and Related Basic Sciences, Department of Pathology, University of California, Los Angeles, CA 90095. Send inquiries to: Dr. Stanley T. Yamashiro, Department of Pathology, University of California, Los Angeles, CA 90095. Each fellowship is supported by NIH grant 1 F32 HD07055-01. Send inquiries to: Dr. B. S. Babcock, Division of Reproductive and Developmental Biology, Department of Obstetrics and Gynecology, University of California, Los Angeles, CA 90095.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP


KING'S COLLEGE, CAMBRIDGE, ENGLAND POSTDOCTORAL RESEARCH FELLOWSHIPS IN HUMAN OR MAMMALIAN MOLECULAR GENETICS

Applications are invited for Senior or Junior Research Fellowships in Human or Mammalian Molecular Genetics. Elegance will take place in December 1988 and the Fellowships will run from 1 October 1989 to 30 September 1993. The Fellowships are open to men and women graduates of any university. Eligibility for the Junior Fellowship is limited to candidates who have completed no more than 5 years of research by October 1988. Candidates for the Senior Fellowship will normally have had some years of postdoctoral research experience. Stipends range from about £8,500 to about £15,600, depending on age and experience. Applications will need to be made by mid-September 1988. Write at once for further details, and information on how to apply, to: The Provost, King's College, Cambridge, England CB2 1ST.

POSTDOCTORAL FELLOWSHIPS AND STUDENTSHIPS DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY UNIVERSITY OF bern

Applications are invited from suitably qualified candidates to participate in one of the following projects:

1. Structure and function of protein kinases.
2. Cytochrome c oxidase from P. denitrificans: Location of active centers and molecular aspects of the electron transport and of the proton pump.
3. The anion carriers of the mitochondrial membranes: isolation, reconstitution and structure studies.

Annual salary ranges for a postdoc from $35,000 to $45,000 and for a Ph.D. student from $17,000 to $22,000 U.S. Application should send as soon as possible a full curriculum vitae, and references to: Professor Angelo Azzi, Director, Institut für Biochemie und Molekularbiologie, Universität Bern, Bürkliplatz 28, 3012 Bern, Switzerland. Telephone: 31-64511. Fax: Switzerland (31) 6454377.

ALFRED P. SLOAN FOUNDATION POSTDOCTORAL FELLOWSHIPS IN MOLECULAR STUDIES OF EVOLUTION

Up to ten awards. Total compensation: $25,000 plus $10,000 research funds per year. Tenable for 1 to 2 years at universities or non-profit research institutions in U.S. or Can. Applicant should be prospective or recent Ph.D. in molecular biology, evolutionary biology, or related discipline (molecular biology, anthropology, entomology, etc.). Send all details. Contact: Dr. Michael S. Teitelbaum, Alfred P. Sloan Foundation, 630 Fifth Avenue, New York, NY 10111. Telephone: 212-582-0456.

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<td>&gt;94</td>
<td>0.05–0.1 ng/ml⁵</td>
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¹ Transforming growth factor type beta isolated from human platelets (hTGFβ) or from porcine platelets (pTGFβ1) is sequentially (first 50 a.a.) and biologically identical. Both give an ED₅₀ of 0.1–0.4 ng on NRK (49F) cells when assayed as per Assion et al JBC 258, 7155, 1983, and 0.8–1.0 ng/ml on AKR (2B) after Tucker et al CAN RES 43, p1581, 1983.

² pTGFβ₂ is a structurally distinct second form of TGFβ (sequence homology 70% in the first 50 a.a. to hTGFβ/pTGFβ1). When assayed as above, it gives the same ED₅₀ on NRK and AKR cells. However, some cell lines can distinguish between pTGFβ₂ versus pTGFβ₁/hTGFβ.

³ Human platelet derived growth factor h(PDGF) is assayed on Balb/c-3T3 and NIH-3T3 cells for H₃-thymidine incorporation as per Raines and Ross, Meth. in Enz. 109, p749.

⁴ Porcine PDGF is structurally very different from hPDGF (i.e. differs in M.W., subunit composition, N-terminus), it's activity is determined as in 3 above.

⁵ Both the acidic and basic forms of bovine fibroblast growth factor are isolated from brain and assayed for H₃-thymidine incorporation on NR6-3T3 cells after Gospodarowicz, et al JBC, 253, p3736, 1978.
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