PERSONNEL PLACEMENT

SCIENCE publishes each Friday, except the last Friday of the year. Advertising is accepted only in writing; no abbreviated copy is accepted. Advertising is restricted to positions available only to individuals seeking jobs. No charge for use of box number, per line, $10 minimum, per week. Prepayment required. This rate is available only to individuals seeking jobs.

POSITIONS WANTED

Biochemist, Ph.D. Broad research experience, including extracellular matrix biology, ophthalmology, angiogenesis, teratogenesis, cell culture and enzymology. Excellent experience in journal manuscript editing, grants management, preparation of grant proposals to government and private agencies. Strong interpersonal skills. Seeking administrative and/or research position in either industrial or academic/nonprofit organization setting. Box 155, SCIENCE.

Biochemist, Ph.D. Broad background in metabolic regulation, with main interest in Ca²⁺–dependent regulation of hormones and experimental settings, seeks part-time laboratory or consulting position to develop new methods in immobilization of macromolecules and various ligands, affinity and other separations; preparation of anhydro derivatives of certain siren proteins for structure-function studies and isolation of inhibitors; and preparation and modification of hydroxyapatite for chromatography. Box 157, SCIENCE.

SCIENCE

POSITIONS WANTED

Yale University. The Department of Chemistry invites applications for a position at the ASSISTANT PROFESSOR level, effective academic year 1990-1991. We seek bright teacher-scholars who show promise for developing outstanding research programs in experimental physical-organic chemistry. Applicants should send curriculum vitae, a statement of research interests and plans, and should arrange for the submission of three letters of recommendation. All materials should be received by 15 November 1989. Send applications to: Professor Donald M. Croters, Chair, Faculty Recruitment Committee, P.O. Box 6666, New Haven, CT 06511-8118. Yale University is an Equal Opportunity/Affirmative Action Employer.

THE UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER AT DALLAS

ASSISTANT PROFESSOR

A tenure-track appointment is available for an individual with a strong background in NMR spectroscopy and/or imaging. Experience and demonstrated achievement in biological or biomedical NMR is essential. A minimum of 2 years of relevant postdoctoral experience is recommended. This position requires a 50% commitment of time and effort as Facilities Supervisor and co-investigator for the regional Biotechnology Resources Program (one of the Research Centers of Excellence in the Southwest In Vivo NMR Facility). The Center has an excellent instrumentation, including a 1.8 T/m bore imaging and spectroscopy unit, a 4.7 T/cm bore CSI NMR magnet, 11.75T and well-equipped and staffed electronics and machine shop facilities. A 400 wide bore unit with microscopic imaging is available and will be housed in a new 2-story building currently under construction and dedicated to biomedical NMR research. Persons with the requisite background and research experience in the development of NMR imaging and/or neurophysiology, perfusion measurements by NMR, or tumor biology are particularly encouraged to apply. Appointment to a biological or biomedical engineering graduate program will be provided. This position is strongly focused on biomedical research and has a minor teaching component. Applications and two letters of recommendation should be sent to: Ray L. Nunnally, Ph.D., Associate Professor, Radiology Director, Biomedical Magnetic Resonance Center, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235–9071. Equal Opportunity Employer.

ASSISTANT PROFESSOR–BOTANY

Applications are invited for an entry-level, tenure-track position in structural botany. A strong commitment to excellence in teaching and the development of an active, externally funded research program in vascular plant morphology will be expected. Proficiency in transmission electron microscopy and a research program focused on angiosperm taxa are desirable. Curriculum vita, copies of relevant publications, official graduate and undergraduate transcripts, and at least three letters of recommendation should be received by 15 December 1989 by: Dr. David E. Lemke, Department of Biology, Southwest Texas State University, San Marcos, TX 78666–4616. Telephone: 512-245-2178. Equal Opportunity/ Affirmative Action Employer.

ASSISTANT PROFESSOR, PSYCHIATRY

The Department of Psychology at Yale University expects to make an appointment at the rank of assistant professor in psychological and neuropsychological assessment. Applications are encouraged for the analysis of learning and memory, however, outstanding candidates in all subspecialties of psychology are encouraged to apply. Applicants are expected to provide high quality teaching at the undergraduate level and in a graduate psychology program, and to have exhibited (or shown very clear promise of) excellence in research. This is an Equal Opportunity/Affirmative Action Employer and applications from women and minority group members are especially encouraged. Applicants should send a letter of application, a resume, and the names and addresses of at least three references to the following:

Chair, Psychology Search Committee, Department of Psychology, Yale University, 11A Yale Station, New Haven, CT 06520–7447. Deadline for completed applications: 15 December 1989.
Atherosclerosis Research
Senior Scientist

CIBA-GEIGY Pharmaceuticals Division, world-renowned for innovative research and development of new products to treat cardiovascular and other disorders, is seeking a scientist for a significant role in studying atherosclerosis. The project will be based at our 100-acre headquarters complex in Summit, New Jersey.

The Senior Scientist sought will have experience in lipoprotein biochemistry, and will investigate the interactions between lipoproteins and cells which contribute to the exchange of cholesterol. Experience in lipoprotein and phospholipid synthesis and catabolism would be most appropriate. A PhD in Biochemistry, Cell Biology or related discipline is required—as is at least two years of postdoctoral experience.

We offer an excellent salary, comprehensive benefits, and the opportunity for professional growth. Please send curriculum vitae with salary history and requirements to: Al Aronson, Staffing Center, CIBA-GEIGY Corporation, Pharmaceuticals Division, Dept 305, 556 Morris Avenue, Summit, New Jersey 07901. We Are An Equal Opportunity Employer M/F/H/V.

ASSISTANT/ASSOCIATE PROFESSOR, Institute of Molecular Biology and Biochemistry, Simon Fraser University. Applications are being accepted for a DEVELOPMENTAL GENETICIST. Candidates should be applying genetic and/or modern molecular approaches to model developmental systems. Postdoctoral experience and demonstrated research potential are required. Appointment and teaching duties will be in the Department of Biosciences. The Institute was recently established to stimulate expanded graduate training and research and will be occupying a new building in 1992. Set-up funding is available. Applicants should forward a complete curriculum vitae, reprints of most significant recent publications, and three letters of reference to: Dr. Bruce Brandthorst, Director, Institute of Molecular Biology and Biochemistry (I.M.B.B.), Simon Fraser University, Burnaby, B.C. V5A 1S6, Canada. Applications will be evaluated beginning 1 December 1989. Simon Fraser University affirms Equal Employment Opportunities to qualified applicants. While all are encouraged to apply, Canadian law requires that consideration in the first instance be given to applicants eligible for employment in Canada at the time of application.

ASSISTANT/ASSOCIATE PROFESSOR OF BIOCHEMISTRY AND MOLECULAR BIOLOGY, LOUISIANA STATE UNIVERSITY (LSU) MEDICAL CENTER

The Department of Biochemistry and Molecular Biology, Louisiana State University School of Medicine in Shreveport, invites applications for a tenure-track position at the assistant/associate professor level. As part of our ongoing expansion of our department, we are seeking candidates with strong research training in molecular biology, molecular genetics, protein biochemistry, and/or physical biochemistry. We especially encourage applicants whose research interests are focused on studies using either mammalian or yeast cell systems; however, outstanding candidates in other special areas of molecular biology and biochemistry will definitely be considered. The department currently has well-funded and interactive research programs focused on gene expression and regulation in prokaryotic and eukaryotic systems, yeast genetics, molecular virology, and protein chemistry. Letters of application, including curriculum vitae and a statement of future research interests, and three letters of reference should be sent to: Dr. Richard J. Courtney, Chairman, Department of Biochemistry and Molecular Biology, LSU Medical Center, 1501 Kings Highway, Shreveport, LA 71130. Consideration of applicants will begin 1 November 1989; however, applications will be accepted until 1 December 1989. An Affirmative Action/Equal Opportunity Employer.

Science Serving Mankind

CIBA-GEIGY

Continued success in the development of highly advanced medical diagnostics technology is driving the substantial growth of the Fortune 75 Baxter Healthcare Corporation's Pandex Division. At Pandex you'll enjoy the support of Baxter along with a mid-size environment offering recognition and independent project roles. The following positions are now available at our north suburban Chicago location.

Ph.D. SCIENTIST—Assay Development

We require a Ph.D. with a minimum 2-3 years post doctoral experience in assay development with a strong background in animal/human virology, retrovirology, immunology, or biochemistry.

RESEARCH ASSISTANT—Assay Development

We require a B.S. in Chemistry or a Life Science plus 0-2 years experience in assay development.

Q.C. TECHNICIAN—Reagent Manufacturing

We require a B.S. in Chemistry or Bioscience with 1-2 years quality control background in an industrial laboratory.

In addition to our progressive scientific environment we provide an excellent compensation package including retirement and stock purchase plans, plus relocation assistance. For confidential consideration, please send resume to: Anne McNicholl, Personnel Director, Baxter Healthcare Corporation, Pandex Division, 909 Orchard Street, Mundelein, IL 60060. Equal Opportunity Employer.
ASSISTANT/ASSOCIATE PROFESSOR: The Department of Microbiology and Immunology of the Texas College of Osteopathic Medicine (TCOM) is seeking applicants for tenure-track faculty positions at the assistant or associate professor rank in the area of molecular microbiology, molecular biology, and immunogenetics. Applications will also be accepted for related areas of microbiology and immunology. TCOM is an Equal Opportunity Employer. Send curriculum vitae, summary of research interests, names and addresses of three references to: Dr. Paul F. Cook, Chair, Department of Microbiology and Immunology, Texas College of Osteopathic Medicine, 3500 Camp Bowie Boulevard, Fort Worth, TX 76107-2690.

ASSISTANT/ASSOCIATE PROFESSOR OF MICROBIOLOGY: tenure-track, fish and shellfish disease position. Candidate will conduct research on fish and shellfish diseases; develop an independent research program with industry and public agencies; and contribute to instructional programs and graduate education. Will be appointed to Coastal Oregon Marine Experiment Station, Newport, with academic appointment in Department of Microbiology. Contact: Dr. Robert E. Olson, Search Committee Chairman, Oregon State University, Hatfield Marine Science Center, Newport, OR 97365. Deadline: 30 November 1989. Oregon State University is an Affirmative Action/Equal Opportunity Employer.

MAYO SCHOOL OF MEDICINE ASSISTANT/ASSOCIATE PROFESSORS, MOLECULAR GENETICS, MOLECULAR IMMUNOLOGY

Morehouse School of Medicine (MSM) seeks candidates for a position in the Department of Anatomy at the level of assistant professor and for two positions in molecular genetics and molecular immunology at the level of assistant or associate professor. The molecular genetics and molecular immunology appointments will be made in the department appropriate to the academic qualifications and interests of the applicants. Applicants should have the Ph.D. or M.D. degree. Candidates for assistant professor should have well-established, independently funded research programs and several years of medical/graduate school teaching experience.

Candidates for assistant professor should have strong research training, including postdoctoral experience, records of research productivity and independence, and some teaching experience.

Morehouse School of Medicine is an expanding, new, private medical school with a strong commitment to the academic and scientific growth of minority students. Initial screening of candidates will begin 1 November 1989. Applications should include curriculum vitae, a statement of research interests including funding history, and the names, addresses, and telephone numbers of at least three references. Send applications to: Thomas E. Norris, Ph.D., Senior Associate Dean, Morehouse School of Medicine, 720 Westview Drive, S.W., Atlanta, GA 30310–1495.

ASSISTANT OR ASSOCIATE PROFESSOR (EDUCATIONAL SPECIALIST): Requirements: Ph.D. in education, 3 to 4 years of postdoctoral experience, demonstrated record of publications. Responsibilities: (i) Plan, implement, and evaluate research in educations of health professionals and surgeons; and (ii) Serve as consultant to educational matters to the chairman of the departmental curriculum committee. The position is for (i) three years beginning January 1, 1990; or (ii) Three years beginning July 1, 1989. Applications should include curriculum vitae, statement of research interests and teaching experiences, and telephone numbers of three or more references to: Arthur D. Broom, Ph.D., Chairman, Search Committee, College of Pharmacy, University of Utah, Salt Lake City, UT 84112. The University of Utah is an Equal Opportunity/Affirmative Action Employer; applications from qualified female/minority candidates are encouraged.

DEAN, College of Pharmacy, University of Utah. A distinguished educator/scientist is sought to provide educational, scientific and fiscal leadership for the college. The dean is the chief administrator of the college, reporting directly to the President for Health Sciences. The College of Pharmacy is research-intensive and committed to excellence in professional and graduate education. Applications will be accepted until 1 November 1989 or until a suitable candidate has been identified. Please send curriculum vitae, names and addresses of three or more references, and a statement of professional goals. Applications should be sent to: Reginald E. Pate, Ph.D., Chairman, Search Committee, University of Utah, College of Pharmacy, 30 South 1400 East, Salt Lake City, UT 84112.

EXECUTIVE DIRECTOR, Sea World Research Institute, a private foundation, seeks a person to direct all research and associated programs, and to develop and manage finances. Candidates need to possess a Ph.D. in the biological sciences, demonstrated management ability, and skill in fund-raising. For further information, write to: Frank Aberwry, Sea World Research Institute, 1700 South Shores Road, San Diego, CA 92109.
**SHAPING YOUR FUTURE**

The people who work for Energy, Mines and Resources in Ottawa share the possibility of a career with few boundaries. In fact, by working for one of the 70 departments and agencies that make up the Federal Public Service, they gain experience that enhances their professional development and opens national and international doors. To ensure that all candidates have every chance on an equal basis, we encourage equitable participation by women, aboriginal peoples, members of visible minority groups and persons with disabilities.

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**Research Scientist**

($32,948 - $61,284)

Conduct original research into fundamental problems of crustal and lithospheric evolution and be involved in areas of solid-earth geophysics and impact processes as they relate to the study of evolution. Participate in the development of research programs.

A doctoral degree from a recognized university in the field of earth sciences or a lesser degree with evidence of research experience and productivity equivalent to that of a doctoral degree. Research experience in the field of tectonophysics, potential field studies, remote sensing or mathematical modelling. Experience in writing and presenting research results to the scientific community and high productivity in addressing scientific problems.

Knowledge of English or French is essential.

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Results of research in integrative biology are expected to stimulate new research directions in the Department of Immunology. Faculty positions are available for individuals with Ph.D. or M.D. degrees in disciplines that include molecular and cell biology, biochemistry, immunology, microbiology, and related fields. Applications are invited from individuals who have demonstrated a commitment to excellence in research and teaching. Preference will be given to individuals with significant independent research experience. Applicants should send curriculum vitae, a statement of research interests and future research plans, three letters of reference, and copies of three recent publications to: Charles E. Thayer, Chairman, Department of Immunology, Indiana University School of Medicine, 700 Barnhill Drive, Indianapolis, IN 46202. Applications will be accepted until January 31, 1990.

The Department of Integrative Biology in the College of Biological Sciences, University of California, Berkeley invites applications for a faculty position in Integrative Biology at the level of Associate or Full Professor. The position is open to any individual whose research and teaching interests significantly overlap with the department's emphasis on integrative biology. The successful candidate is expected to develop a vigorous research program in one of the following areas: genetics, physiology, molecular biology, developmental biology, systematics, or evolutionary biology. Exceptional candidates in other areas of biology that may complement existing faculty strengths will also be considered. The position is expected to begin on July 1, 1990. Applications should be submitted to: Chairman, Department of Integrative Biology, Room 3610, 1165 East Hilgard Avenue, University of California, Los Angeles, CA 90024, before December 15, 1989. For further information, contact: Dr. N. Calloway.
Positions Open

INSTITUTE OF CHEMICAL TOXICITY
WAYNE STATE UNIVERSITY

The Institute of Chemical Toxicology, Wayne State University, invites applications for tenure-track FACULTY POSITIONS at the ASSISTANT, ASSOCIATE OR PROFESSOR LEVEL. Faculty research-track positions at all academic ranks are also available. Completely renovated laboratory and well-equipped support facilities are available along with substantial opportunities for collaboration. Emphasis is directed toward molecular/biochemical toxicology, respiratory toxicology, and metals toxicology. Preference within these areas will be accorded to applicants employing modern molecular and cellular approaches in the study of cell differentiation, cellular secretion, oncogene expression, gene regulation, transcriptional and post-transcriptional regulation, and chemically-mediated retrovirus activation. The successful candidates are expected to develop strong independent research programs to collaborate in existing research projects, and to participate in biotechnology development. Highly competitive offerings of laboratory space and start-up funds accompany these positions. Applicants should have a Ph.D. and/or M.D. degree and relevant postdoctoral research experience. Send curriculum vitae by 30 October 1989 to:

Dr. Raymond P. Novak
Director, Institute of Chemical Toxicology
Wayne State University
2727 Second Avenue, Room 402
Detroit, MI 48201

Wayne State University is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS
SECTION OF IMMUNOBIOLOGY
YALE UNIVERSITY

The Section of Immunobiology, a multidisciplinary group working collaboratively on basic problems of T cell development, activation, and function, seeks applicants for several faculty positions at the level of assistant professor in the general area of immunobiology. Qualified applicants in all areas of immunobiology are invited to apply and would be expected to develop an independent research program using molecular, cell biological or biochemical approaches and immunobiological problems. We are particularly interested in people active in the areas of T cell development, regulation of gene expression, signal transduction, and protein traffic in the cells of the immune system. They will also be expected to participate in departmental teaching at primarily the graduate level. Candidates should submit curriculum vitae with a summary of present and future research interests, and request that three letters of recommendation be sent, all of which must be received at the below address no later than 15 November 1989.

Dr. Richard Flavell
Chairman
Section of Immunobiology
Yale University School of Medicine
310 Cedar Street, 424 FMB
P.O. Box 3333
New Haven, CT 06510

An Equal Opportunity/Affirmative Action Employer.

Women and minority candidates are encouraged to apply.

INSECT MOLECULAR BIOLOGIST. Department of Biochemistry—University of Nevada, Reno, invites applications for 12-month tenure-track faculty position (assistant, associate or full professor). Position is part of the university's ongoing commitment to build quality programs in selected areas and is enhanced by an NSF-EPSCoR grant to strengthen programs in insect biochemistry and plant molecular biology. Position is about 20% teaching and 80% research. Ph.D. in biochemistry or related discipline required. The successful candidate will be expected to build a quality, extramurally funded research program. Send curriculum vitae, letter of application, brief statement of research interests, and names, addresses, and telephone numbers of three references to: Dr. David A. Schooley, Biochemistry Department, University of Nevada, Reno, NV 89557. Application deadline is 1 January 1990. Equal Opportunity/Affirmative Action Employer.

29 SEPTEMBER 1989

Schering

Research Professionals

If joining a dynamic protein purification development and scale-up group is what you have in mind, come to Schering-Plough Research.

We're a progressive $3 billion pharmaceuticals leader recognized worldwide for our dedication to discovery. Outstanding opportunities exist at our new state-of-the-art protein purification pilot plant for scientific professionals in the following roles:

Manager, Bioisolation Pilot Plant (DD89-27)
Will plan, direct and administer activities, as well as guide personnel in the development, scale-up and production of rDNA bioactive substances to meet research, pre-clinical, toxidogy, clinical and manufacturing needs.

Requires a PhD in Bio/chemical Engineering with a minimum of 5 years' industrial experience. Knowledge of protein purification procedures with supervisory experience in a plant environment under GMP guidelines plus good managerial judgement and interpersonal skills are also essential.

Sr. Scientist (DD89-36)

Will develop methods to purify and characterize recombinant proteins from bacteria and mammalian cell cultures.

Requires a PhD in protein chemistry, biochemistry, or a related field, plus 2-5 years' experience in purification and characterization of proteins. Familiarity with HPLC, FPLC and conventional chromatographic techniques is also required.

Scientist, Bioisolation Pilot Plant (DD89-37)

Requires a BS in Biochemistry with 7 years' experience or MS in Biochemistry with 5 years' experience in purification process development and scale-up for protein and/or natural products. Position also requires full understanding of GLP and GMP. Experience with preparation of documentation for FDA submissions is highly desirable as well as ability to interact with other research and pilot plant groups.

We offer a competitive salary and benefits package, and a corporate culture which fosters professional growth and satisfaction. For prompt consideration please forward your resume indicating position of interest and job number to: Mr. M. Urdianick, Schering-Plough Corporation, 1011 Morris Ave., Union, NJ 07083. We are an equal opportunity employer.

What you have in mind, we put in action.

Schering-Plough
FACULTY POSITIONS IN EUKARYOTIC MOLECULAR BIOLOGY

The Center of Marine Biotechnology of the Maryland Biotechnology Institute, University of Maryland is seeking outstanding candidates to fill full-time tenure-track positions (assistant professor to full professor) in eukaryotic molecular biology. Experience with marine organisms is desirable but not essential. The successful candidates will be expected to establish independent research programs in, or related to, the following areas: molecular basis of growth, development, and reproduction of fish, shellfish, or algae; endocrinology; molecular basis of marine symbiotic relationships; and sex determination. Marine background is not essential. The search is underway at the Center of Marine Biotechnology. Candidates must have a Ph.D. and a minimum of 2 years of post-doctoral experience. Applicants should submit a letter of application, curriculum vitae, statement of ongoing research, a brief description of research plans, and the names and addresses of three references to: Search Committee, Center of Marine Biotechnology, 600 East Lombard Street, Baltimore, MD 21202. For best consideration, applications should be received before 1 December 1989.

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

FIELD VERTEBRATE ZOOLOGIST

ASSISTANT PROFESSOR

Tenure-track position commencing fall 1990. Teach ichthyology, general or evolutionary biology, and introductory biology. Teaching excellence and under-graduate research program required. Coeducational liberal arts college, Evangelical Lutheran Church in America. Letter of application, résumé, statement of teaching and research goals and three recommendations by 31 January 1990. Pennsylvania College of Technology, Department of Biology, Concordia College, Moorhead, MN 56560. An Equal Opportunity/Affirmative Action Employer.

IMMUNOLOGIST, FACULTY POSITION

A full-time tenure-track position in the Pathology Department at the rank of assistant or associate professor, M.D. or Ph.D. with demonstrated leadership in teaching and research. Establish research program competitive for external funding. Position includes participation in educational programs in department and hospital service responsibility in immunopathology laboratory. Send curriculum vitae and references to: C. Robert Raisden, Chief, Section of Clinical Pathology, Medical College of Georgia, 1100 W. 20th Street, Augusta, GA 30912. Equal Opportunity Employer/Affirmative Action Program.

GENETICIST


MOLECULAR BIOLOGIST

The Department of Biology at the University of Missouri–St. Louis is seeking a molecular biologist to begin a position to start in August 1990, is tenure-track and rank is open. Candidates at the associate and full professor levels are encouraged to apply. Applicants should have a minimum of 2 years of postdoctoral experience. The successful candidate will be expected to develop a strong research program, and should have competence in the newly established Ph.D. program in biology. We seek scientists of exceptional quality irrespective of their specific research interests; however, expertise in areas represented by the faculty is important. Candidates whose interests interface with or complement existing research programs in developmental biology, neuroendocrinology, microbial ecology, or plant biology. Teaching responsibilities include an upper division course in molecular biology and a graduate or undergraduate course in the applicant’s area of expertise. This position will offer competitive salary and laboratory set-up funds; space and equipment are available in a new science building. Send curriculum vitae, statement of research interests and goals, and the names and phone numbers of three references by 20 November 1989 to: Dr. Lon A. Wilkins, Chair, Molecular Biology Search Committee, Department of Biology, University of Missouri–St. Louis, 8001 Natural Bridge Road, St. Louis, MO 63121–4499. The University of Missouri is an Equal Opportunity/Affirmative Action Employer.

MOLECULAR BIOLOGISTS

Two tenure-track positions in molecular/developmental genetics. Preference will be given to candidates with experience in teleost species or those interested in this area. Post-doctoral experience required. Applicants must have a commitment to teaching and a demonstrated ability to develop a funded research program. Applicants must provide curriculum vitae, statement of research and teaching interests, and have three letters of recommendation sent to: Department of Biology, California State University, Long Beach, CA 90840–3702. Deadline for receipt of applications is 15 November 1989 or until a suitable candidate is found. Women and minorities are encouraged to apply. An Equal Opportunity/Affirmative Action Employer.

MOLECULAR DEVELOPMENTAL BIOLOGY

UNIVERSITY OF SOUTHERN CALIFORNIA

The Molecular Biology Section of the Department of Biologic Sciences invites applications for two tenure-track faculty positions, at a junior or senior level. The successful candidates will be expected to establish and maintain a research program. The successful candidate will be expected to participate in the teaching programs of the department at the undergraduate and graduate levels in the further development of the Molecular Biology Section. Applications should send a current curriculum vitae, a statement of research interests, and the names of three references by 30 October 1989 to:

Search Committee Chairman
Molecular Biology Section
SHS 172, MC 1340
University of Southern California
Los Angeles, CA 90089–1340

The University of Southern California is an Equal Opportunity Employer.

MOLECULAR PHARMACOLOGY

Mayo Medical School invites applications for a tenure-track FAC- ULTY POSITION in Department of Pharmacology, available 1 January 1990. Ideal candidate will have primary interests in pharmacology and be actively using the methods of molecular biology. Special attention will be given to candidates with experience related to the development and application of drug target identification and the use of novel techniques to probe the effects of drug receptors and ligand-gated ion channels, but those with other interests will also be considered. Generous financial support is available to attract and retain established investigators. The Mayo Medical School is an Equal Opportunity Employer/Affirmative Action Program.

MAGNETIC RESONANCE PHYSICIST—Research and development of novel experimental methods of NMR imaging and in-vivo NMR spectroscopy. Develop image quality control procedures. Teach physician and technician courses on applications of imaging and spectroscopy in physics or chemistry. Must know NMR imaging and imaging system hardware, assembly language programming, and digital signal processing. Send a statement of research experience (radio frequency coils and novel pulse sequences). Salary: $40,000 per year. Send résumé to: Pittsburgh Job Service North, 1122 Western Avenue, Pittsburgh, PA 15223. Refer to Job Order No. 4143513.

DEPARTMENT OF AGRICULTURE

AGRICULTURAL RESEARCH SERVICE

(ARS)

MICROBIOLOGIST, National Animal Disease Center, Brucebeil Laboratory, Ames, IA. ARS is seeking a microbiologist/cell biologist to develop an in vivo requirement for interaction of a potential antibiotic with growth and differentiation factors, or other signal molecules. Cooperation with units in biochemistry, molecular biology, immunology, and pathology is required to develop the research program. Experience in the area of signal transduction is desirable. Applicants must have experience with common preparations techniques used in biochemistry and cellular biology, including capacity to work with cell cultures. Ph.D. is desirable. Must be U.S. Citizen. Salary is commensurate with experience ($34,580 to $63,172). For information on the research program and/or position, contact: Dr. Norman F. Cheville (515-289-3204). Applications, which should include a curriculum vitae and three letters of reference, should be submitted to: National Animal Disease Center, Brucebeil Laboratory, Ames, IA 50010. Applications are being accepted until the position is filled.

DEPARTMENT OF AGRICULTURE

(ARS)

AGRICULTURAL RESEARCH SERVICE

(ARS)

Molecular Biology of the Department of Biology at the University of Missouri–St. Louis is seeking a molecular biologist to begin a position to start in August 1990, is tenure-track and rank is open. Candidates at the associate and full professor levels are encouraged to apply. Applicants should have a minimum of 2 years of postdoctoral experience. The successful candidate will be expected to develop a strong research program, and should have competence in the newly established Ph.D. program in biology. We seek scientists of exceptional quality irrespective of their specific research interests; however, expertise in areas represented by the faculty is important. Candidates whose interests interface with or complement existing research programs in developmental biology, neuroendocrinology, microbial ecology, or plant biology. Teaching responsibilities include an upper division course in molecular biology and a graduate or undergraduate course in the applicant’s area of expertise. This position will offer competitive salary and laboratory set-up funds; space and equipment are available in a new science building. Send curriculum vitae, statement of research interests and goals, and the names and phone numbers of three references by 20 November 1989 to: Dr. Lon A. Wilkins, Chair, Molecular Biology Search Committee, Department of Biology, University of Missouri–St. Louis, 8001 Natural Bridge Road, St. Louis, MO 63121–4499. The University of Missouri is an Equal Opportunity/Affirmative Action Employer.
RESEARCH MANAGER, CELL BIOLOGY

THE OFFICE OF NAVAL RESEARCH is seeking a highly qualified individual to plan and manage a contract research program in molecular aspects of cell biology. The sponsored research is conducted principally at universities and private laboratories, with research performed by leading scientists in the field. This is a Civil Service position at the GM-13, 14 or 15 level ($41,121 - $74,303), depending on qualifications.

The individual selected will establish goals for and conceive, organize and direct research and development programs in new areas of cell biology addressing the molecular mechanisms of cellular responses to injury and other adverse stimuli, as well as regulatory processes driving regenerative events in cells and tissues. Specifically, the individual selected will integrate research on regulatory cellular processes such as activation events mediated by calcium ions, GTP-binding proteins, membrane lipid and protein phosphorylation, other post-translational modifications of proteins, and growth factors. The molecular events regulating cell function will be examined in the context of pathological changes in trauma, promotion of tissue regeneration, etc. This position provides the challenge and opportunity to have a creative and significant impact on the direction and quality of research conducted at the national level. Additionally, the opportunity exists to establish or maintain an individual research program at an academic institution or government laboratory.

Applicants must have a Ph.D. or equivalent training in biological sciences, with emphasis on cell biology, and at least one year of professional experience or an equivalent combination of education and experience. Demonstrated research experience is preferred.

Interested persons should send a resume, list of publications and a Standard Form 171, Application for Federal Employment (Available at Federal Job Information Centers or from the address below), to:

OFFICE OF THE CHIEF OF NAVAL RESEARCH
Civilian Personnel Division, OCNR Code 01242P
Attn: Announcement #89-34(SC)
800 North Quincy Street
Arlington, VA 22217-5000
U.S. Citizenship Required

Applications will be accepted through 5 January 1990 and must be received by that date. Applicants are requested to complete the appropriate supplemental forms. For further information and supplemental forms, please call (202) 696-4705.

This is an Equal Opportunity Employer

American Cyanamid Leads the Way in Animal Biotechnology

Group Leader

The Animal Industry Discovery and Biotechnology Department of American Cyanamid's Agricultural Research Division has an immediate opening for a Group Leader of their Molecular and Cellular Biology Group. The successful candidate will lead a research team organized to apply the techniques of molecular biology to discover products that (1) enhance animal performance and (2) solve animal health problems important in veterinary medicine, including the study of molecular mechanisms governing immune status.

In pursuing this goal, the Group Leader will be expected to propose new research programs, to develop collaborations with academic research groups and to encourage publishing of research findings in refereed journals. Topics of particular interest include problems in receptor biology, infectious disease, animal physiology and immunology.

Candidates should have a Ph.D. degree in Molecular Biology or comparable training, post-doctoral training and several years postgraduate experience in an academic or industrial setting. To qualify, the individual must have the leadership capabilities needed - technical, communication, interpersonal, and organizational skills - to build innovative research programs. Previous supervisory experience is desirable.

American Cyanamid offers an excellent compensation and benefits package which includes 401(k) savings plan, flex-time work schedules, and a convenient location one hour from New York City and Philadelphia. If interested and qualified, please send your resume and reference contacts to: Employment Office, American Cyanamid Company, Agricultural Research Division, P.O. Box 400, Princeton, New Jersey 08540.

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POSITIONS OPEN

OCEAN SCIENTISTS

The Ocean Sciences Centre, a research unit within the Faculty of Ocean Sciences at the University of Newfoundland, invites applications for two tenure-track faculty positions at the level of assistant professor (research). Research and teaching, primarily at the graduate level, are the primary duties. Applicants must have a PhD with background and achievements in any oceanographic science that complements OSC research in cold oceans, such as biogeochemical cycles, oceanography, coldwater aquaculture environments, physiological ecology, geophysics, Quaternary paleo-ecology and paleo-oceanography, and physical oceanography. OSC operates a 4000-m² laboratory with full running seawater 6 km north of the university's main campus in St. John's, as well as smaller facilities on campuses at Corner Brook, Grand Falls, and St. Lunaire-Griquet. OSC's research involves major research vessels and a large number of independent researchers. Information about positions and application procedures can be accessed through the University of Newfoundland's website. For more information, contact Dr. Fiona J. Macdonald, Director, Ocean Sciences Centre, Box 4000, St. John's, Newfoundland A1B 3X5, Canada. Telephone: 709-737-6681; Fax: 709-737-7711; E-mail: MFO@UCCNOSP.

PARASITOLOGIST

Cornell University. New York State College of Veterinary Medicine. Assistant professor of parasitology, tenure-track. The successful applicant will be expected to develop an independent, competitively funded research program focusing on host-parasite interactions. Applicants should have a Ph.D. and be actively involved in research. Cornell University is an Equal Opportunity/Affirmative Action Employer/Educator.

POSTDOCTORAL POSITION available immediately to study endocrine-immune response interactions. Studies will focus on the regulation of MHC Class II expression by mononuclear phagocytes and on innate microbial resistance mediated by macrophages. The candidate should have a background in cellular immunology, molecular biology, biochemistry, or endocrinology. Send curriculum vitae, a summary of research experience, and the names of three references to: Dr. Bruce S. Zollwilling, Department of Surgery, The Ohio State University, 484 West 12th Avenue, Columbus, OH 43210. The Ohio State University is an Affirmative Action/Equal Opportunity Employer and specifically invites and encourages minority and women applicants.

POSTDOCTORAL POSITION available immediately to actively engaged in development of new drugs and therapeutic strategies for treatment of solid tumors. Applicants will be well versed in all aspects of mammalian tissue culture and have some experience working with animals. Knowledge of flow cytometry is desirable. The postdoctoral position is desirable. This position requires an individual who is able to work relatively independently. Joint appointment will be in the Department of Surgery, College of Veterinary Medicine, and the Graduate School. Send curriculum vitae and names of three references to: Dr. Bev A. Nitchie, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115. An Equal Opportunity/Affirmative Action Employer.

PHARMACOLOGY—MOLECULAR PHARMACOLOGY

Applications are invited for tenure-track positions at the assistant or associate professor level in the areas of molecular pharmacology, neuropharmacology, and sensory physiology. Individuals with a background in molecular biology, pharmacology, or neurophysiology are particularly encouraged to apply. The appointees will have a joint appointment in the Department of Pharmacology and the Department of Physiology and Biophysics. Candidates need to have a Ph.D. or equivalent degree and a strong background in research. Experience with molecular biology and molecular genetics is desirable. Appointees will have the opportunity to work with the large research community in molecular medicine and neuroscience at the University of California. Salary is negotiable. Applicants should submit a curriculum vitae and a statement of research interests by December 15, 1989 to: Dr. Joseph R. Berto, Program Coordinator, Pharmacology Department, University of California, San Francisco, CA 94143. The University of California is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW

MOLECULAR BIOLOGY OF GROWTH FACTOR RECEPTORS

A position is available for research in the area of growth factor receptor biology related to the mechanisms of signal transduction. (For more information, see J. Biol. Chem. 263, 5319; 263, 5373; 263, 7450; 263, 9462; 264, 10828, and 264, 13642.) A strong background in molecular biology or protein chemistry is desirable. Send curriculum vitae and the names of three references to: Dr. William W. Law, Department of Pharmacology, University of California, San Francisco, CA 94143.

POSTDOCTORAL POSITION

CELLULAR IMMUNOLOGY

A postdoctoral position is available immediately to study the basic immunobiology of the ear and eustachian tube. Applicants should possess a Ph.D. and have previous exposure to current techniques in cellular immunology and have demonstrated the ability to work independently. Send curriculum vitae and references to: Mr. Richard Martin, Department of Otolaryngology, The University of Michigan, Ann Arbor, MI 48109.

POSTDOCTORAL RESEARCH FELLOW

Translational Drug Delivery Research: The successful candidate will be expected to develop an independent and competitive research program in the area of human skin transport and transdermal drug delivery systems. This includes in vitro mechanistic investigation of skin permeability and influencing factors, development of transdermal drug formulation and delivery systems, and in vivo pharmacokinetics and pharmacodynamics studies. The position requires Ph.D. in pharmacology, pharmaceutical sciences, or related fields. Applicants must have a strong academic background as demonstrated by completion of the following course work: one course each in biochemistry, pharmacology, physiology, and inorganic chemistry; two courses each in organic chemistry, surface/polymer chemistry, and analytical chemistry; three courses each in physical chemistry and mathematics; and four courses each in advanced physical chemistry and advanced pharmacapeutics. Experience in skin morphology, skin biochemistry, diffusion in skin, other biological membranes and synthetic membranes, skin penetration enhancements, dosage formulations and transdermal delivery systems, drug disposition and metabolism, and computerized mathematical modeling is essential. Scientific publications demonstrating innovative research strategies and skills in transdermal drug delivery system development and history of experience and an undergraduate degree in pharmacy are desirable. Salary: $41,000 first year; $43,000 second year. Send resume to: Ms. Carol H. Jones, Corporate Human Resources, Ciba-Geigy Corporation, 444 Saw Mill River Road, Ardsley, NY 10502.

POSTDOCTORAL POSITION available immediately for an individual with a background in molecular biology to study the molecular basis of autoantibodies expressed by human B-cell malignancies. Work entails amplification and sequencing of human V genes. Send curriculum vitae and names of three references to: Dr. Joseph M. Royston, Department of Immunology and Cancer Research, UCSF Cancer Center, T1-11, La Jolla, CA 92037. To: 619-543-2227. The University of California is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to conduct research in a human autoimmune disease model specific for carbohydrate RBC antigens. The model involves cloning of the gene for EBV-transformed secreting pathogenic red blood cell autoantibodies which are representative of clonal B-cell disorders associated with autoimmune hemolysis. Studies involve cell-mediated immune responses, analysis of V genes of a defined autoimmune response of neoplastic and non-neoplastic B-cell origin to determine the V3 and V4 usage in viral infection. Result from ongoing genetic and functional studies in man will be related to the viral infection. Individuals with experience in neumophysics and/or auditory psychology should send curriculum vitae and a letter describing research interests to: Dr. John C. Middlebrooks, Department of Neurosciences, University of Florida, Gainesville, FL 32610. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS IN MOLECULAR IMMUNOLOGY/University of California, Berkeley, California. Two postdoctoral positions are available to (i) characterize the T cell receptors on tumor infiltrating lymphocytes (TIL) in solid neoplasms and (ii) develop T-cell mitogens as TIL reagents for immunotherapy. Salary commensurate with experience. Training in molecular, cellular and immunology required. Send curriculum vitae, two to three references, and letter of interest to: Dr. Robert S. Goodenow, Department of Molecular and Cell Biology, 451 LSU, Berkeley, CA 94720.

POSTDOCTORAL RESEARCH ASSOCIATE position available immediately for 2 years at Texas A&M University, Center for Advancing Materials Sciences (CAIMS), and the Department of Entomology, College Station, Texas, to conduct basic research on candidate biocidal beneficial insects resistant to chemical pesticides. Study will involve molecular biology of foreign gene expression using recombinant forms of an insect vector with foreign genes inserted into a vector. Send curriculum vitae and names of three references to: Dr. John C. Middlebrooks, Department of Neurosciences, University of Florida, Gainsville, FL 32610. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately for an individual with a background in molecular biology and experience working with the mouse to study the molecular basis of autoantibodies expressed by human B cell malignancies. Work entails amplification and sequencing of human V genes. Send curriculum vitae and names of three references to: Dr. Joseph M. Royston, Department of Immunology and Cancer Research, UCSF Cancer Center, T1-11, La Jolla, CA 92037. To: 619-543-2227. The University of California is an Equal Opportunity/Affirmative Action Employer.
POSTDOCTORAL POSITION available immediately to study EMC virus-induced diabetes. Projects include site-directed mutagenesis and construction of recombinant DNA molecules. Preference to recent Ph.D. experienced in cloning. Starting salary $24,000. Send curriculum vitae and names of three references to: George J. Jordan, M.D., Division of Infectious Diseases, University of California, Davis, School of Medicine, 4301 X Street, Sacramento, CA 95817. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS—Temple University School of Medicine has the following two positions available: RESEARCHER, RECEPTOR REGULATION—Will study the molecular mechanisms involved in receptor regulation. Research will focus on the role of receptor phosphorylation in desensitization utilizing the techniques of cloning, mutagenesis, expression and protein purification, and characterization. Send curriculum vitae and names of three references to: Dr. Jeffrey Benovic, Fels Institute for Cancer Research and Molecular Biology, Temple University School of Medicine, 3401 North Broad Street, Philadelphia, PA 19140. RESEARCHER, SIGNAL TRANSDUCTION—Will investigate the mechanisms of receptor regulation and the role of receptor/G-protein interactions required for signal transduction. Individuals experienced in protein/peptide chemistry and purification, cloning, mutagenesis, or eukaryotic cell expression are encouraged to apply. Send curriculum vitae and three letters of reference to: Dr. Thomas Frielle, Fels Institute for Cancer Research and Molecular Biology, Temple University School of Medicine, 3420 North Broad Street, Philadelphia, PA 19140. Temple University is an Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE available immediately for molecular biology/biochemistry studies of mammalian drug and xenobiotic metabolizing enzymes. Experience with cDNA cloning, DNA sequencing, and expression vectors is desirable. Send curriculum vitae and names and telephone numbers of three references to: John Cashman, Department of Pharmaceutical Chemistry, University of California, San Francisco, CA 94143-0446. UCSF is an Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE POSITION IN CONNECTIVE TISSUE BIOCHEMISTRY LABORATORY

A strong background in protein chemistry required, preferably with experience in connective tissue research, to work on the isolation, characterization, and structural analysis of collagenous and non-collagenous extracellular matrix proteins. Computer literacy (VAX/VMS) and an interest in the three-dimensional structure of proteins an advantage. Modern well-equipped laboratory offering a competitive salary (range $24,000 to $29,000) and résumé with names and telephone numbers of three references to: Robert W. Glanville, Ph.D., Director Research Unit Shriners Hospital for Crippled Children 3101 SW Sam Jackson Park Road Portland, OR 97201

POSTDOCTORAL/RESEARCH ASSOCIATE—position available immediately for ongoing work on cloning/sequencing/regulation of plant peroxidase genes. Experience in modern molecular biology essential. Send curriculum vitae, statement of interests, names, addresses, and telephone numbers of three references to: Dr. Hugh Tyson, Biology Department, McGill University, Stewart Biology Building, 1205 Avenue Dr. Penfield, Montreal, Quebec H3A 1B1, Canada.

POSTDOCTORAL/RESEARCH ASSOCIATE available immediately to study various aspects of control of breathing: airway receptors, neuroregulation of respiratory muscles, development, etc. Strong background in respiratory physiology or neurosciences desirable. Send curriculum vitae and names of references to: Dr. O. P. Mathew, Department of Pediatrics, The University of Texas Medical Branch, Galveston, 77555. UTMB is an Equal Opportunity/M/F/V/H Affirmative Action Employer. UTMB hires only individuals authorized to work in the United States.

POSITIONS OPEN

A Director is sought for the California Institute for Energy Efficiency (CIEE). CIEE is a recently established unit of the University of California (UC), administered by LBL, which coordinates a mid-term research program on energy end-use efficiency as a joint effort among UC, the California energy utilities, the California Public Utilities Commission (CUC), the California Energy Commission (CEC), and other state institutions. The Director interacts regularly at staff and management levels within these institutions, convenes a high-level Research Board to establish overall policy and research direction, convenes a Planning Committee to provide technical input to the Board, and works with officials at LBL and UC on administrative matters. Undertakes technology transfer activities. Represents CIEE at technical meetings and reviews, and before government agencies as appropriate. Directs small staff in support of above duties. May have opportunity to establish or participate in an LBL research program.

Scientific or engineering education at the Ph.D. level or equivalent experience is required. Leadership and management experience is required in one or more of the following institutions: universities, government-supported research laboratories, government agencies, energy utilities. Capable of dealing effectively with management and staff of such institutions in a liaison mode. Experience relevant to energy end-use efficiency, and success in technology transfer activities, strongly preferred.

Potential candidates are encouraged to obtain a package of information concerning CIEE by contacting Marina Gonzalez, Employment Manager, Job C5380, Lawrence Berkeley Laboratory, #1 Cyclotron Road, Mailstop 90/1042, Berkeley, CA 94720. An Equal Opportunity Employer, M/F/H.

The Merck Sharp & Dohme Research Laboratories, recognized as a world leader in pharmaceutical research and development has immediate openings in the Department of Microbial Chemotherapeutics and Molecular Genetics Research.

Biochemists/Molecular Biologists

We seek highly motivated individuals with ability to conduct independent research, supervise the development of a research program in regulation of mammalian mRNA transcription, and to participate in a multi-disciplinary team to discover novel antiviral and anticancer compounds. The successful candidate must have a Ph.D. degree in Molecular Biology and experience in two or more years of postdoctoral experience in a relevant field. Prior experience in isolation and characterization of transcription regulatory molecules desirable.

Postdoctoral Fellow - Atherosclerosis Research

We are seeking an individual with a Ph.D. degree in Molecular Biology or Pathology interested in molecular pathogenesis of the atherosclerotic plaque, and the role of growth factors in the development of the plaque. Previous experience with Polymerase Chain reaction and immunocytochemistry desirable.

Postdoctoral Fellow - Transcription Regulation

We are also seeking an individual with a Ph.D. degree in Molecular Biology or Biochemistry to participate in research on regulation of gene transcription, with particular emphasis on the regulation of LPS responsive genes in macrophages. A strong background in immunology and protein purification is desirable.

Merck Sharp & Dohme Research Laboratories are located in Rahway, NJ, approximately 25 miles from New York City. Our salaries, benefits and growth potential are excellent. Interested candidates should submit their curriculum vitae, three letters of reference, and salary requirements to: Ms. Dolores Barefield, Merck Sharp & Dohme Research Laboratories, P.O. Box 2000, WBD-362, Rahway, NJ 07065. An Equal Opportunity Employer.

Merck & Co., Inc.
POSITIONS OPEN
UNIVERSITY OF CALIFORNIA
LOS ANGELES

POSTDOCTORAL RESEARCH ASSOCIATES
Positions now available to study molecular mechanisms of the genetic and environmental regulation of gene expression in the mammalian retina. Projects involve the light-dependent movement of proteins in visual cells and the non-coordinate expression of visual genes during the light/dark cycle. Experience in molecular biology, biochemistry or immunocytochemistry preferred. Send resume and names of three references to: Dr. James F. McGinnis, University of California, Los Angeles, 760 Westwood Plaza, Los Angeles, CA 90024. Telephone: 213-825-6579.

RESEARCH SCHOLAR
DRUG RECEPTORS AND METABOLISM
RESEARCH BIOCHEMIST/PHARMACOLOGIST: Children's National Medical Center, an academic affiliate of the George Washington University School of Medicine, plans to fund a research scientist with at least 3 years of experience, in the Departments of Laboratory Medicine and Gastroenterology, to conduct and supervise research and be part of a team working on drug metabolism in relationship to hepatic function. Suitable candidates should have a Ph.D. or M.D. degree. Preference will be given to candidates with a strong research background in modern biochemical pharmacology, receptor separation techniques, and affinity chromatography.

The candidate will hold an academic position at the medical school and will be expected to generate research grants.

Please send a complete curriculum vitae and three recent references to: Dr. Steven J. Soldin, Department of Laboratory Medicine, Children's National Medical Center, 111 Michigan Avenue, N.W. Washington, DC 20010.

POSITIONS OPEN
RESEARCH AGRICULTURAL CHEMIST
Applications invited for the position of Research Agricultural Chemist with the California Department of Food and Agriculture, Sacramento, California. Successful applicants will be expected to direct and conduct a vigorous, original, and independent research program. At least 3 years of experience or an M.S. degree, and names of three references to: Dr. James F. McGinnis, University of California, Los Angeles, 760 Westwood Plaza, Los Angeles, CA 90024. Telephone: 213-825-6579.

RESEARCH ASSOCIATE
The Wistar Institute is seeking a molecular biologist to develop a program designed toward understanding the molecular basis of the control of DNA rearrangements and DNA replication in human blood cancer cells. Qualified candidates should have a Ph.D. in biochemistry or molecular biology, 2-3 years experience in using molecular biological techniques and working in the field of DNA recombination and replication.

Submit curriculum vitae to: Dr. Warren B. Cheston, Associate Director, The Wistar Institute, 36th and Spruce Streets, Philadelphia, PA 19104. Equal Opportunity Employer M/F.

RESEARCH ASSOCIATE position available for studies in developmental neuroendocrinology. Ph.D. in physiology, pharmacology, molecular biology or related discipline required. Experience in cell culture and radioimmunoassay preferred; additional techniques welcome. Competitive salary. Please send resume and names of references to: Research Associate Position, c/o Dr. W. Dahms, Rainbow Babies and Childrens Hospital, Room 790, Case Western Reserve University, 2101 Adelbert Road, Cleveland, OH 44106.

RESEARCH POSITION
LABORATORY OF PEDIATRIC CRITICAL CARE
The Department of Pediatrics, Cornell University Medical College, seeks a research scientist (Ph.D.) with postdoctoral experience in fundamental aspects of adenylate receptor pharmacology, including receptor-related events at the cellular and molecular level, for appointment as assistant professor. The candidate will develop a research program in the Division of Pediatric Critical Care Medicine and eventually supervise the research activities of post-residency fellows. Initial full salary and research support are provided. Please submit a cover letter with curriculum vitae, representative publications, and the names of three references to: Daniel A. Notterman, M.D., N-309, Cornell Medical Center, 525 East 68th Street, New York, NY 10021.


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Abbott Laboratories is a Fortune 100 company devoted to the discovery, development, manufacture, sale and distribution of diverse health care products. After seventeen years of record growth, we have over $5 billion in annual sales. Our extensive resources create a superior environment for those who would like to create a significant and professional commitment.

METABOLISM/DELIVERY
Pharmaceutical Products Division

The selected metabolism investigator will work within our drug delivery program and participate in strategic planning in identification of lead drug candidates. An interest in drug discovery is emphasized. The qualified candidate will have skills in hepatic clearance methodologies including isolated tissue and whole animal techniques. Proficiency in HPLC and familiarity with mass spectroscopy are essential. A Ph.D. in Pharmacology, Biochemistry, or Metabolism/Toxicology with 2-5 years postdoctoral experience are required.

Abbott provides competitive compensation and benefits. We are located in an attractive suburban area approximately 30 miles north of Chicago. If you believe that you can benefit from a long-term association with Abbott, and your credentials meet the indicated requirements, please send your resume with salary history to: Patricia Handy, Corporate Placement, Job #7660, Abbott Laboratories, 1 Abbott Park Rd., Abbott Park, IL 60064. (To facilitate handling your resume, please indicate job number on your cover letter or resume.) Abbott is an Affirmative Action Employer.

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CURRENT DISTRIBUTION 160,000
Manager - Animal Development

This position will manage several Product Development Managers assigned to coordinate the R & D and Marketing Department efforts for new and existing animal products. Requirements include strong managerial skills, documented experience in research and several years experience in product development after a Ph.D. or DVM degree.

Animal Product Development Managers

Currently, we have several openings for animal Product Development Managers. These jobs involve the coordination of several projects involving dairy and beef cattle, swine, and poultry products. Duties include designing efficacy and safety studies, coordinating efforts with Discovery, Product Development and Marketing Departments, providing technical advice on assigned projects and monitoring various studies required in an animal drug submission.

Requirements include a DVM or Ph.D. degree in a basic or applied science. Past doctoral experience is a plus with knowledge of US registration procedures highly desirable.

American Cyanamid offers an excellent compensation and benefits package which includes 401(k) savings plan, flex-time work schedules, and a convenient location one hour from New York City and Philadelphia. If interested and qualified, please send your resume and reference contacts to: Employment Office, American Cyanamid Company, Agricultural Research Division, P.O. Box 400, Princeton, New Jersey 08450.

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Environmental Scientists

Lawrence Livermore National Laboratory, located in the San Francisco Bay area, is one of the Nation's premier research and development organizations. Our Nuclear Chemistry Division currently has challenging opportunities available for creative, dynamic scientists who have achieved national recognition for their scientific contributions to multidisciplinary environmental research.

The successful applicants will support a major new environmental initiative at the Department of Energy's Nevada Test Site that will be coordinated with a general expansion of research in environmental, waste, and geoscience areas. They will also provide complementary scientific skills and technical coordination for a multidisciplinary team assembled to address a broad range of environmental questions. Major responsibilities include: the design, conduct and publishing of field oriented research, identification of basic and applied research needs, short and long range technical planning, and communication/coordination with managers and scientists.

Requirements include a minimum of 5 years of professional experience, a demonstrated ability to design/direct multidisciplinary environmental research projects with both basic and applied objectives, excellent management abilities, and good communication/interpersonal skills. Research experience in regions of interior drainage typical of the Southwestern United States desirable, but not necessary. Some field work and travel required.

We offer a competitive salary and excellent benefits. For consideration, please forward your resume to: Art Wong, Professional Staffing, Lawrence Livermore National Laboratory, PO. Box 5510, L-725, Dept. KSCSU904B, Livermore, CA 94550. U.S. citizenship required. An equal opportunity employer.

University of California

Lawrence Livermore National Laboratory
RESEARCH SCIENTISTS
Ph.D. - BS/MS
PULMONARY PHARMACOLOGY

WYETH-AYERST Laboratories has openings in its Immunopharmacology Division for both Ph.D. and BS/MS level pharmacologists to work at its modern research facility located in the Princeton, New Jersey area.

These positions will investigate the involvement of pulmonary inflammation in late phase asthmatic responses and airway hyperreactivity, and will be responsible for establishing appropriate in vivo models for evaluating the pharmacologic activity of drug candidates. Experience in the in vivo assessment of pulmonary function and/or pulmonary inflammation an asset.

The senior level position requires a Ph.D. in pharmacology, physiology or a related life science with 0-3 years post doctoral training. Highly developed oral and written communication skills and a strong publication record in major scientific journals required.

Junior positions require a BS/MS in a related life science and/or a minimum of three years experience working in pulmonary pharmacology/physiology.

We offer an excellent salary and benefits package plus opportunities for career advancement. Interested candidates should submit their curriculum vitae and salary requirements to:

Personnel Manager, Dept. 2776-DG

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PHARMACOLOGIST

Marion Laboratories, Inc., one of the fastest growing pharmaceutical companies in the United States, headquartered in Kansas City, Missouri, has an opening for an experienced Pharmacologist within our Pharmacology department in Kansas City.

Primary responsibilities will be to conduct preclinical pharmacological research and to assist in the preclinical evaluation of various agents which includes specific enzyme inhibitors.

The successful candidate will have a Ph.D. in Pharmacology or Biochemistry and at least 2 years of pharmaceutical industry experience in basic biochemistry and pharmacology. Experience with setting up animal models and drug testing in vivo and in vitro is required. Strong interpersonal and communication skills are essential.

We offer an excellent total compensation and benefits package, including bonus, stock options, profit sharing, comprehensive group health, dental and life insurance. Please send a detailed resume, including salary history, in confidence to: Marion Laboratories, Inc., Recruiting & Placement, Dept. CNA, P.O. Box 9627, Kansas City, MO 64134. Equal Opportunity Employer.

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Flow Cytometry-DNA Clinical Studies Manager

You will be responsible for technical review and program management in clinical trial activities related to the performance of DNA analysis on FACS flow cytometers. The ideal candidate will have a PhD or Master's with extensive experience in flow cytometric DNA analysis. Strong communication skills are essential. Experience in surgical pathology highly preferred.

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Send your resume to: Professional Staffing, Dept. BB-SW, Becton Dickinson Immunocytometry Systems, 2350 Qume Drive, San Jose, CA 95131-1807. An equal opportunity employer.

BECTON DICKINSON

Research Scientists

Due to continued growth in our Cardiovascular Biology Department, Rorer Central Research is currently seeking two Research Scientists interested in research and discovery in the areas of hypertension, atherosclerosis or thrombosis.

The successful candidate for one of the positions must have experience in animal models of thrombosis. Knowledge of platelet adhesion and aggregation or ischemia is desirable. A Ph.D. in cardiovascular pharmacology and two years post-doctoral experience is required.

The other successful candidate must possess a Ph.D. in Biochemical Pharmacology with two years of post-doctoral experience. The incumbent will supply expertise in enzymology and receptor biochemistry for our programs in hypertension and atherosclerosis.

Demonstration of scientific achievement and good communication skills are required. Collaboration with a multi-disciplinary group and presentation of experiments is encouraged.

Rorer Central Research offers a competitive salary, comprehensive benefits package and continued opportunities for professional development. Please submit your resume and salary history in confidence to: Ms. Linda Stewart, Personnel Manager, Rorer Central Research, 640 Allendale Road, King of Prussia, PA 19406. An Equal Opportunity Employer, M/F/H/V.

Rorer Central Research
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Regional Medical Associates

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At Smith Kline & French Laboratories, we revolutionized the treatment of mental illness, peptic ulcer disease and hypertension. Our anti-infective products meet virtually every antibiotic need. We're proud of our past, and we're investing nearly $400 million annually in research and development to ensure that our future is just as exciting. We're pioneers in genetic engineering; have demonstrated a commitment to gastrointestinal and cardiovascular products; and we are the world's leading supplier of polio and measles vaccines.

Be Part of our Future in Sales
Currently we have two openings. One in the Southwest Region and one in the Northeast Region. We are seeking a Manager of Sales and a Sales Representative to combine both scientific expertise and marketing skills. The selected candidate will be headquartered in either Dallas/Houston, Texas or Seattle, Washington. The Southwest Region is located in the Seattle, Washington area.

Responsibilities are to establish and maintain effective relationships within key medical institutions, providing scientific liaison and indepth information essential to appropriate use of SK&F's products. There is also responsibility for training Representatives and medical professionals. Travel required.

Qualifications: Pharm. D. or Ph.D. in Pharmacology, Biochemistry, Microbiology or other Life Sciences. Must possess initiative, strong communication skills, and interest in Marketing.

In addition to an independent work environment where personal and professional growth are a way of life, we offer an outstanding training program and one of the best compensation/benefits package, including car, in the industry. Please send your resume and salary information, indicating which Region, to:

Rorer Central Research
Box 162, SCIENCE
San Francisco, California 94101

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Associate Director for Education

Applications and nominations are sought for the position of Associate Director of Education to be responsible for the quality and vitality of all Institution education programs and to provide leadership in identifying new educational directions. WHOI is a private research and educational Institution that conducts research in ocean related areas of biology, chemistry, engineering, geology, geophysics, physical oceanography and marine policy. Education programs include a joint graduate program with the Massachusetts Institute of Technology, post-doctoral and undergraduate fellowships and traineeships.

In addition to coordinating academic recruiting, enhancing fundraising activities, and allocating existing resources, the Associate Director will be expected to interact at the national and international level on issues of oceanographic/scientific educational policy.

Strong commitment to scholarship and education is essential, demonstrated by a distinguished record in research, teaching, academic leadership and management. Ph.D in a discipline related to ocean sciences required, with credentials appropriate to a senior scientist appointment.

Nominations and/or applications with curriculum vitae to Dr. Joseph Pedlosky, Chairman, Search Committee, Box 54P, Woods Hole, MA 02543

Personnel Manager
Box 54P

Woods Hole Oceanographic Institution

Woods Hole, MA 02543
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Women and minorities are encouraged to apply.

Woods Hole, MA 02543
POSITIONS OPEN

RESEARCH ASSOCIATE/ FELLOWSHIP
CYCLIC AMP-RESPONSIVE TRANSITIONNATIONAL TRANSDUCTOR PROTEINS, CREBs

A position is open for a dedicated investigator with experience in cardiac biology to work on the regulation of a family of DNA-binding proteins responsive to cyclic AMP and/or DAG-dependent signal transduction pathways in animal cardiomyocytes. Experience in signal transduction and an understanding of the cell biological and biochemical functions of cyclic AMP-responsive nuclear proteins are essential. The position requires expertise in cell-based assays, and comprehensive knowledge of molecular and cellular biology. Applicants are encouraged to submit CV, a detailed research plan, and three letters of recommendation. The position is open immediately. Please send your CV and a letter of interest to: Brian Benavente, Ph.D., Laboratory of Molecular Endocrinology, HHMI, Massachusetts General Hospital, Boston, MA 02114. Fax: 617-726-8142.

RESEARCH TECHNICIAN

Master's degree in either electrical engineering or a subdiscipline of the visual sciences to model multi-input nonlinear neurons in primate visual cortex. Requires competency in nonlinear stochastic systems theory, as demonstrated by course work, research, or publications, including knowledge of the Wiener and Volterra theories and stochastic differential equations techniques for modeling and parameter estimation. Familiarity with computers required, plus demonstrated proficiency in at least one major computer language, preferably C, and familiarity with the UNIX operating system. No work experience required. Reports all unusual problems to the principal investigator for clarification and direction. Otherwise works independently. Full time 40 hours per week, 9:00 a.m. to 5:00 p.m., Monday through Friday. Salary is $25,410 per year. Send résumé to: Case #91001, Division of Employment Security Building, Government Center, Boston, MA 02114. Equal Opportunity Employer.

SENIOR ENGINEER—Develop superconducting Josephson Junction Integration Circuit fabrication technology for high-speed low-power electronics. Fabrication of high-temperature superconducting thin films by using physical vapor deposition and analysis of physical properties. Utilize cryogenic equipment, ultra-high vacuum systems, x-ray diffractometer, and electron microscopy.

Ph.D. required in physics and expertise with ultra-high vacuum equipment. Knowledge of thin-film techniques for superconducting thin films. Experience in the design and analysis of compound superconductors is desired. Experience in physical properties of superconducting thin films. Experience in writing technical reports. Salary: $48,000 per year. Résumé to: Pittsburgh Job Service South, 918 Park Avenue, Pittsburgh, PA 15234. Refer to Job Order No. 414505.

SUMMER FACULTY POSITIONS IN SLSTP: A NEXT PROJECT

Four Project Counselor positions are open in the 1990 Space Life Sciences Training Program (SLSTP) to be held at the Kennedy Space Center, Florida. Project counselors will be involved in the implementation of the 7-week long program (starting mid-June 1990) activities for undergraduate college students. An applicant must have a minimum of M.S. degree, preferably Ph.D. degree and some experience teaching and research in life sciences and related fields. If interested, please send a letter of application, complete curriculum vitae, and three letters of recommendation before 31 December 1989 to:

Program Director
SLSTP Florida State University
College of Pharmacy
and Pharmaceutical Sciences
106 Honor House
Tallahassee, FL 32307
Telephone: 904-599-3636

POSITIONS OPEN

SENIOR RESEARCH SCIENTIST to supervise neurobiological laboratory and teach electrophysiological and biochemical techniques to investigators, use pharmacological and biophysical methods to investigate and compare the molecular basis of local anesthetic and antihypertensive drug action in nerve and heart including surroce-gap and voltage-clamp of myelinated nerve and patch clamp of isolated cardiac muscle cells; immuno- cytological studies including purifications and biochemical modifications of dog pancreas venom toxins for use as molecular probes of sodium channels, and production of antisera against canine venom toxins for use in target localization studies in myelinated nerve. Must have Ph.D. in pharmacology, 1 year of experience in voltage clamping of myelinated nerve and patch clamping of cardiac muscle cells. Degree of instruction in immunocytochemistry and radioligand-binding techniques. Salary $25,000 per year. Send résumé to Massachusetts Department of Employment and Training, Special Programs Department, 19 Stanford Street, Boston, MA 02114. Refer to case no. 91335.

TECHNICAL SALES REPRESENTATIVE

Stratagen, a rapidly growing, innovative supplier of molecular biology research products, is currently in search of qualified and experienced technical sales representatives in the Southeast, and additional openings will become available in Texas, Pennsylvania, New Jersey, and the Washington, D.C., areas. These positions represent a unique opportunity for qualified individuals to participate in growing technical sales organization. Candidates should have strong practical experience in molecular biology and a B.S. degree in molecular biology or related field. Prior sales experience is beneficial. Please forward résumé of qualifications to: Kim Brown, Stratagen, 11099 North Torrey Pines Road, La Jolla, CA 92037.

RESEARCH SCIENTIST

The University of Minnesota Department of Urologic Surgery is recruiting an academic urologist at the associate professor level with tenure. Duties will include teaching residents in endourology, uroendoscopy, and pulsed laser techniques while performing these clinical functions in a patient care facility. Appointment at the associate professor level requires professional distinction in research and writing and demonstrated effectiveness in teaching and resident training. The successful candidate should be board certified in urology and have post-residency experience in academic urology. Experience should include a dedicated year of fellowship devoted to endourology, and demonstrated effectiveness in uroendoscopy and pulsed laser surgery. The candidate should have demonstrated extensive teaching experience of medical students and residents. Also, the candidate should have evidence of publications in peer-reviewed journals. Send three letters of reference and curriculum vitae before 20 October 1989 to: E. Fraley, M.D., Professor and Chair, Department of Urologic Surgery, Box 394 UMHC, 420 Delaware Street, S.E., Minneapolis, MN 55455.

The University of Minnesota is an Equal Opportunity Employer and Employer and specifically invites and encourages applications from women and minorities.

TENURE-TRACK POSITION IN PLANT TAXONOMY

The University of Georgia, with a faculty of 1,800, including 900 in the College of Biological Sciences, invites applications for a position in plant systematics and evolutionary biology at the assistant professor level. The appointment is tenure-track. The University of Georgia is an Equal Opportunity/Affirmative Action Employer. Applicants must have a doctorate and a strong commitment to undergraduate education. The minimum requirement is a Ph.D. in any branch of Plant Sciences. Applications must be received by 30 September 1989. The University of Georgia is an EEO/AA Employer.

TENURE-TRACK POSITION IN PLANT TAXONOMY

The Virginia Polytechnic Institute and State University invites applications for an assistant professorship in plant taxonomy, in the Department of Biological Sciences, beginning fall 1990. The position is tenure-track. Applicants should have a doctorate in plant systematics and an excellent knowledge of plants in the temperate zone. The teaching load is 2 courses per year and the responsibility includes teaching, research, and service. Inquiries should be directed to: James A. Wetmore, Assistant Professor, Department of Biological Sciences, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061. The Virginia Polytechnic Institute and State University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

SCIENTIFIC EDITOR

The Neurosciences Institute seeks a person with experience in all phases of publishing. Responsibilities will include working with scientific authors and marketing as well as editing. Aptitude for scientific writing and editing and ability to grasp new subjects quickly are required. Ph.D. or equivalent experience or related field is desirable. Submit résumé to: Dr. W. Einar Gall, Research Director, The Neurosciences Institute, 1230 York Avenue, New York, NY 10021.

TENURE-TRACK FACULTY POSITION UCR/UCLA PROGRAM IN BIOLOGICAL AND HUMAN GROSS ANATOMY

The UCR/UCLA Program in Biomedical Sciences, which offers an accelerated M.D. curriculum jointly between the University of California, Riverside (UCR) and the University of California, Los Angeles (UCLA) School of Medicine, has a tenure-track faculty position open in the Division of Biomedical Sciences at UCR available 1 February 1990. Teaching responsibilities will be in a 10-week lecture and laboratory course in human gross anatomy for 24 first-year medical students. Prior gross anatomy teaching experience is considered essential. The successful candidate is expected to actively participate in graduate student training.

The committee welcomes applications from those working in any modern area of biological research, but applicants with interests in cell, molecular, or developmental biology or neuroscience are encouraged to apply. The prospective level of appointment for candidates, who must possess the Ph.D. and/or M.D. degree, may be at the assistant, associate, or full professor level. Junior applicants must have postdoctoral research experience and the potential to develop a strong, externally funded research program. Senior applicants should have a clearly demonstrable record of research productivity, success in obtaining extramural funding, and demonstrated teaching effectiveness. The University of California is an Affirmative Action/Equal Opportunity Employer. The deadline for application is 15 January 1990. Applicants should send curriculum vitae, representative reprints, a statement of present and future research goals, summary of teaching experience, and arrange to have three letters of recommendation sent to:

Dr. Kenneth Dorshkind
Anatomy Search Committee
Division of Biomedical Sciences
University of California
Riverside, CA 92521-0121

GRANTS

RESEARCH INQUIRIES INVITED

The Smokeless Tobacco Research Council, Inc., invites inquiries regarding grant applications. The council sponsors independent research into questions of smokeless tobacco and health. Research support is through a program of grants-in-aid.

Grants are funded by the council through the Independent Research Advisory Board to the council and will be judged solely on the basis of scientific merit and relevance. Deadlines for receipt of applications are December 31st for July 1st funding and June 30th for January 1st funding. Address inquiries or requests for applications to: The Smokeless Tobacco Research Council, Inc., 420 North Torrey Pines Road, La Jolla, CA 92037. Telephone: 725-6750.

SCIENCE, VOL. 245
CULTURE CURATOR

Cetus Corporation, a leader in the development of biotechnology-based therapeutics for cancer and infectious diseases, is currently seeking a Culture Curator.

You will be responsible for daily operations of the Cetus microbial culture collection which includes deposition of cultures, characterization and documentation. Other duties include interacting with other departments and managers regarding company's patent strains; serving as an information source on host strains for various research projects; supervising staff; and performing a combination of lab and administrative work. Requirements include a minimum MS in Microbiology plus 4-8 years' related experience. Familiarity with microbial physiology, taxonomy and molecular biology, some computer skills, and excellent organizational and communication skills are also required.

Cetus offers an excellent compensation and benefits package. For consideration, please send your resume to: Cetus Corporation, Box JHC, 1400 Fifty-Third Street, Emeryville, CA 94608. We are an Equal Opportunity Employer.

DRUG METABOLISM

Fisons Pharmaceuticals, an international pharmaceutical research and development organization announces two openings in the area of drug metabolism at its U.S. research and development facility in Rochester, NY. Both positions offer challenging opportunities for qualified and highly motivated individuals wishing to join experienced multidisciplinary research teams dedicated to the discovery of innovative drugs.

Head of Drug Metabolism

We are looking for an experienced person to lead a group dealing with the disposition of candidate compounds in animals and man. The ideal candidate will have a Ph.D. in drug metabolism or a related discipline and several years' experience in team leadership in this general area, preferably but not essentially in the pharmaceutical industry, with a sound knowledge of the role of drug metabolism studies in drug development.

Candidate experience should preferably include the use of radiolabelled isotopes in animals and in vitro systems and analytical and separation methodology. Experience in metabolite isolation and identification, and in pharmacokinetics would also be a distinct asset.

Team Leader – Drug Metabolism

A scientist with Post-Doctoral experience in drug metabolism is required to lead a small experimental team in the above group. Candidates should be able to lead and direct a scientific team. Industrial experience would be helpful but is not essential.

Strong organizational, interpersonal and communication skills together with an innovative scientific approach are required of candidates for both positions.

For consideration, send resume and salary requirements to Bill VanBuskirk at Fisons Pharmaceuticals, P.O. Box 1710, Rochester, NY 14603.

RESEARCH ASSOCIATES

MOLECULAR AND CELLULAR BIOLOGY

Amgen has emerged as an innovative leader in the discovery and development of biopharmaceuticals through applied biotechnology. As a result of our continued growth, we have immediate opportunities for BS and MS level scientists in our Exploratory and Mammalian Cell research groups.

Qualified applicants should have a BS or MS degree in Molecular Biology, Biochemistry or other related disciplines and a minimum of two years' relevant research experience. Experience with some, or all, of the following techniques is essential: mammalian cell culture, basic recombinant DNA methodology, southern and northern blotting, cellular proliferation assays and western blotting.

Amgen offers an excellent compensation and benefits package as well as a stimulating and challenging research environment in a company dedicated to scientific excellence. If you have the necessary qualifications and would like to be a part of a company that places a high priority on its human resources, please send a resume or c.v., in confidence, to:

AMGEN, INC.
Recruitment Dept. #428
Amgen Center
Thousand Oaks, CA
91320-1789

Equal Opportunity Employer
AWARD

THE MICHIELSON-MORLEY AWARD

The prestigious Michelson-Morley Award is presented by Case Institute of Technology to recognize the distinctive achievement of a student in the field of molecular science and technology. The award is named in honor of Albert A. Michelson, first professor of physics at Case Institute and 1907 Nobel laureate, and Waldo D. Morley, distinguished professor of chemistry at Western Reserve College. Joint research by Professors Michelson and Morley is highlighted by their contributions to understanding velocity of light. These scientific probes prepared the way for the discoveries of Albert Einstein and decisively advanced modern theoretical physics.

The purpose of the award is to honor the individual chosen for eminent contributions to knowledge and to the well-being of mankind, to perpetuate the tradition of scholarly inquiry exemplified by the independent and collaborative research of Professors Michelson and Morley, and to call to the attention of the general public the continuing contributions of the scientist and engineer to human welfare. Deadline for nominations: 15 November 1989. Nominations should be sent to: Glenn R. Brown, Dean of the Colleges, Case Western Reserve University, P.O. Box 345, 10900 Euclid Avenue, Cleveland, OH 44106.

TRAINING GRANT

POSTDOCTORAL TRAINING IN CELLULAR/MOLECULAR NEUROBIOLOGY is offered by the Department of Physiology and Biophysics of the University of Miami (NIH training grant): E. Barrett, electrophysiology of myelinated axons and motor termini; J. Barrett, neurotoxic regulation of dopaminergic and cholinerdceptors; E. Chambers, biophysics of ganglial interaction; G. Dahl, biogenesis of cell-cell channels, membrane fusion; R. Keane, developmental neurobiology; V. Krasteva, biophysics of ion channels in muscle; W. L. Kerrick, biophysics of muscle contraction; D. Lowndes, molecular basis of neuronal excitability; W. R. Loewenstein, transduction of electrical signals into junctions; K. Maglye, biophysics of ion channels in muscle; K. Muller, neuron signalling and integration, synaptic development, and developmental and W. Nonner, biophysics of neuronal ion channels; B. Ross, regulation of junctional communication; D. Wilson, axonal transport and regeneration. U.S. citizens and permanent residents send curriculum vitae and names of three references to: S. Villamil, Department of Physiology and Biophysics, University of Miami, P.O. Box 016450, Miami, FL 33106. Equal Opportunity/Affirmative Action Employer.

FELLOWSHIPS

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP (Plant molecular genetics): To study leguminous gene and nodulation mutants clustered in garden pea. Experience in cosmid cloning or YAC vectors preferred. Research will involve genome walking and characterization of subclones. Applicable for 2 to 3 years starting immediately. Send application letter, curriculum vitae, and names of references to: Norman F. Berg, Department of Plant Sciences, Cornell University, New York State Agricultural Experiment Station, Geneva, NY 14456. Cornell University is an Opportunity/Affirmative Action Employer. Minorities, women, and the handicapped are encouraged to apply.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIPS IN NEUROPATHOLOGY/NEUROIMMUNOLOGY

Positions exist on an NRSA Training Grant on Experimental Neuropathology for Postdoctoral Fellows to work on immunoneurology of Alzheimer's disease, AIDS, multiple sclerosis, and related models in a leading medical school in the New York City area. Emphasis will be placed on candidates trained in molecular immunology, cytokines, nervous system tissue culture techniques, PCR, adhesion molecules, and immunocytochemistry. Candidates must hold an M.D. or Ph.D. and have some postdoctoral laboratory experience. Send curriculum vitae to: BHA Box 2878, 555 Madison Avenue, Suite 2040, New York, NY 10022. An Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIPS: Opportunities for postdoctoral fellows to work on a wide variety of projects in laboratories in the areas of cancer cell/molecular biology, carcinogenesis, biochemistry, endocrinology, virology, pathophysiology of cancer, environmental cancer, and nutrition. Postdoctoral fellows should forward curriculum vitae, three referees, and a letter of recommendation, and an expression of research interest. Funding is restricted to U.S. citizens or permanent residents. For complete information contact: Donald J. Nagel, Ph.D., Eli Lilly, Department of Research in Cancer, University of Nebraska Medical Center, Omaha, NE 68105. Affirmative Action/Equal Opportunity Employer. Reference positions #9-6146 and #9-6198.

POSTDOCTORAL FELLOWSHIPS IN ENDOCRINOLOGY

Interdisciplinary program supported by NIH Training Grant offers research training to U.S. citizens, permanent residents, and non-citizen nationals in the following areas: Renal Function in Pregnancy (C. Baylis, Ph.D., Physiology); Hepatic Carbohydrate Metabolism (J. B. Blair, Ph.D., Biochemistry); Fetal-Omniary Function (R. L. Butcher, Ph.D., Obstetrics and Gynecology); Growth and Maternal-Infant Nutrition (B. H. Gilchrist, Ph.D., Nutrition); and Endocrine and Metabolic Aspects of Aging (J. Labrie, Ph.D., Animal Science); Reproductive Neuroendocrinology (R. L. Goodman, Ph.D., Physiology); Thyroid Secretion/Blood Flow (G. A. Hedge, Ph.D., Physiology); and Endocrine/Ovariary Relations (K. Imseeke, Ph.D., Animal Science); Salt-Sensitive Hypertension (T. Kotchen, M.D., Medicine); and Gene Expression/Recombinant DNA (J. Strobl, Ph.D., Pharmacology and Toxicology). Positions filled as available depending on candidate qualifications and needs of laboratories involved. Women and minorities are particularly encouraged to apply. Application information and more detailed descriptions of these research programs are available upon request from the program director: Dr. George A. Hedges, Department of Endocrinology, University of California, San Francisco, CA 94143. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIPS AT MOUNT SINAI SCHOOL OF MEDICINE

Two fully funded postdoctoral fellowships are available in the Zoology Department; starting date is negotia-
ble. One is for a behavioral toxicologist or a behavioral neuropharmacologist to work with Dr. Robert T. Schellinger; the other is for a fish ecologist or aquatic toxicologist to work with Dr. Thomas Wiseman. Send resume, three letters of recommendation, and transcripts of all academic work to: Dr. Robert T. Schellinger, Department of Zoology, Miami University, Oxford, OH 45056.

ANNUAL TRAINING IN BIOCENTRIFUGATION FACILITY AT THE UNIVERSITY OF CONNECTICUT

The Division of Medical Genetics, Emory University School of Medicine, is seeking applications for a postdoc-
dorian fellowship to study the molecular biology of Galac-
tosmia. To apply, send curriculum vitae and a synopsis of current and future research interests to: Dr. Louis J. Elias, II, Division of Medical Genetics, Emory University School of Medicine, 2040 Ridgeway Drive Atlanta, GA 30322.

Deadline for receipt of application is 31 October 1989.

Emory University School of Medicine is an Equal Opportunity/Affirmative Action Employer.

ANNUAL TRAINING IN BIOCENTRIFUGATION FACILITY AT THE UNIVERSITY OF CONNECTICUT

This newly formed national facility, funded in part by the National Science Foundation, provides opportunities for the characterization of macromolecules in solution. Studies of single molecules, and insitu and in vitro can be performed with facility analytical ultracentrifuges and related specialized instrumentation. A variety of collaborative arrangements are available for research projects, including short-term and long-term projects and personnel training.

Inquiries should be made to:

Dr. Ernest J. Rassweiler, Head National Analytical Ultracentrifugation Facility Biotechnology Center The University of Connecticut Storrs, CT 06269-3123

Bitnet CENTRIF@UCONNM

FELLOWSHIPS

University of California, Los Angeles—FELLOWSHIP IN CARDIOVASCULAR PATHOLOGY. The Department of Pathology of UCLA School of Medicine is offering a Fellowship in Cardiovascular pathobiology for 1 to 3 years. Available are faculty positions in the areas of cancer cell/molecular biology, carcinogenesis, biochemistry, endocrinology, virology, pathophysiology of cancer, environmental cancer, and nutrition. Postdoctoral fellowships should forward curriculum vitae, three referees, and a letter of recommendation, and an expression of research interest. Funding is restricted to U.S. citizens or permanent residents. For complete information contact: Donald J. Nagel, Ph.D., Eli Lilly, Department of Research in Cancer, University of Nebraska Medical Center, Omaha, NE 68105. Affirmative Action/Equal Opportunity Employer. Reference positions #9-6146 and #9-6198.

POSTDOCTORAL FELLOWSHIP IN CANCER CELL BIOLoGY is offered by the Department of Pathology, UCLA School of Medicine, to study the molecular biology of cancer cells. Appropriate training in molecular biology is required, and the candidate should have a Ph.D. or M.D. degree. Applications are invited from candidates interested in studies of cell biology, cell signaling, and cell cycle regulation with an emphasis on molecular mechanisms and therapeutic implications of these processes. The successful candidate will be expected to become a faculty member of the UCLA Division of Cell Biology starting in January 1990. Salary: $30,000 per year, plus benefits. Stipends and salary are negotiable. Send letter of application, curriculum vitae, and the names of three references to: Dr. Charles O. Rock, Jr., Jude Children’s Research Hospital, 332 North Lauderdale, Memphis, TN 38101. An Equal Opportunity/Affirmative Action Employer.

SMITHSONIAN INSTITUTION FELLOWSHIP PROGRAM


VIROLOGY POSTDOCTORAL FELLOWSHIP UNIVERSITY OF KANSAS—LINCOLN

Position available, January 1990, to work on the molecular biology of Bovine Viral Diarrhea virus (BVDV, Flavivirus). The research aim is to characterize the molecular basis for the differential mode of interaction of cytopathic and non-cytopathic BVDV variants with the host cell. Requires Ph.D. in microbiology, molecular biology, or biochemistry. Experience in molecular biology and protein biochemistry is desirable. Applicants must have three and three letters of reference before 1 November 1989 to: Dr. Ruben Donis, Department of Veterinary Science, University of Nebraska—Lincoln, Lincoln, NE 68583-0905. Affirmative Action/Equal Opportunity Employer.
Berlex Laboratories is part of a global family of companies engaged in the research, development, manufacturing and marketing of chemical-pharmaceutical products in 120 plants and subsidiaries in 140 countries, employing over 25,000 people. Combined sales are in excess of $2.7 billion.

At Berlex Laboratories, you will be supported, recognized and encouraged to pursue your scientific interests and ideas.

**SENIOR SCIENTIST**

As a protein biochemist/enzymologist, you will plan, execute and interpret laboratory research in protein isolation, purification and characterization. To qualify, you must be a Ph.D. with at least 6 years of experience. Specific requirements include a knowledge of enzyme kinetics, protein sequencing, amino acid composition analysis, chemical modification studies, SDS-PAGE, FPLC, HPLC and immunoassays. You must also have a strong record of publications and excellent oral communication skills. Experience in molecular biology is preferred.

**SENIOR RESEARCH PHARMACOLOGIST**

You’ll be heading up a small team investigating whole animal models for assessing coronary flow, regional function, and blood flow distribution. To qualify, you must have a Ph.D. and 1 or more years of postdoctoral experience in the specialty above. Experience with models of angina and prevention of myocardial ischemia is desirable. You must have a high level of creativity and communications skills, and be able to work in a supervisory role.

**BIOLOGIST/PHYSIOLOGY, BIOCHEMISTRY**

As part of a cardiovascular research team involved in drug discovery and development, you will conduct experiments on segments of isolated blood vessels designed to determine effects of various agents on contractile activity. You’ll also design and interpret experiments. To qualify, you must have a B.S. or M.S. and a background in in-vitro physiology or biochemistry. Good surgical skills and the ability to handle laboratory animals are essential as are excellent written and oral presentation skills. A basic knowledge of computer data analysis and contractile biochemistry is highly desirable.

**BIOLOGIST/BIOCHEMISTRY, IMMUNOLOGY**

You’ll work on drug discovery and development in a cardiovascular research team. To qualify, you must have a B.S. or M.S. and a background in biochemistry or immunology. Your specific experience should include work in protein biochemistry with an emphasis on membrane receptor studies and familiarity with preparation of membrane receptors and handling radio-labelled legends. Additional knowledge of HDLC, FPLC, SOS-PAGE, RIA and ELISA techniques as well as computer analysis of data and experience in molecular biology is helpful. You’ll also need excellent written and oral communications skills in order to present your findings.

In addition to a stimulating research environment complete with excellent resources BERLEX offers a generous salary and benefits package including tuition reimbursement and comprehensive medical and dental coverage. For consideration, send your resume to JOAN BIANCHINI, Human Resources Representative, BERLEX LABORATORIES, INC., 110 East Hanover Avenue, Cedar Knolls, New Jersey 07927. Equal Opportunity Employer M/W/H/V.
HUMAN FRONTIER SCIENCE PROGRAM (HFSP)
The new international program starts now.

The Human Frontier Science Program (HFSP) is an international program, which was proposed by the Japanese Government at the Venice Economic Summit Meeting in 1987, and which has been discussed at the Toronto Economic Summit Meeting and at the meetings of eminent scientists and experts from the Economic Summit member countries and the Commission of the European Communities. The HFSP aims at promoting, through international cooperation, basic research focused on the elucidation of the sophisticated and complex mechanisms of living organisms. To the fullest possible extent the research results will be used for the benefit of all mankind. The HFSP is also intended to encourage international interdisciplinary research by researchers early in their careers who are expected to play an important role in originating and pursuing creative research.

Invitation for Applications
Research Grants/Fellowships/Workshops

Research Areas of the HFSP:
(A) Basic research for the elucidation of brain functions
   1. Perception and Cognition
   2. Movement and Behaviour
   3. Memory and Learning
   4. Language and Thinking
(B) Basic research for the elucidation of biological functions through molecular level approaches
   1. Expression of Genetic Information
   2. Morphogenesis
   3. Molecular Recognition and Responses
   4. Energy Conversion

Research grants: Grants for basic research carried out by international joint research teams represented by principal researchers from one of the eligible countries.

Fellowships: Fellowships for researchers from the eligible countries who wish to do research in foreign countries, or for researchers outside the eligible countries who wish to do research in one of the eligible countries.

Workshops: Subsidies for international workshops organized by researchers from the eligible countries.

* The eligible countries for fiscal year 1989 are Canada, France, F.R.G., Italy, Japan, U.K., and U.S.A. Researchers in non-summit EC member countries may apply through the Commission of the EC on equal terms with the researchers in the eligible countries.

(Details in the guidebook)

Prospective number of awards and duration of each activity for fiscal year 1989:
- Research Grants ~ 20 3 years
- Long-term Fellowships ~ 100 3 months - 2 years
- Short-term Fellowships ~ 50 2 weeks - 3 months
- Workshops ~ 10 ----- 

Application Deadline: November 15, 1989
In fiscal year 1989, awardees will be determined by March 31, 1990, after the review procedures are completed by the organization to implement the HFSP.

Further information:
Until the organization is established in Strasbourg (France) this fall, the Task Force on the HFSP of the Japanese Government will undertake preparatory activities on behalf of the organization.

Guidebooks and Application Forms may be obtained upon request from the address given below. (Please indicate which program activity (Research Grant/Fellowship/Workshop) you are interested in.)

The Task Force on the HFSP
c/o Science and Technology Agency, The Japanese Government
2-2-1, Kasumigaseki, Chiyoda-ku, Tokyo, 100, Japan.
FAX: (Japan 81)-3-581-3079, 3-581-5698, TEL: (Japan 81)-3-501-3490