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The Fifth Conference on Modern Approaches to Vaccines
MODERN APPROACHES TO NEW VACCINES INCLUDING PREVENTION OF AIDS
September 9-13, 1987
Organized by:
Fred Brown, Wellcome Biotechnology Ltd.
Robert Chanock, National Institutes of Health
Harold Ginsberg, Columbia University
Richard Lerner, Scripps Clinic & Research Foundation

The meeting will provide:
1. comprehensive updates on strategies for development of vaccines against viral, bacterial, and parasitic diseases;
2. discussions on AIDS, presenting latest research on the AIDS retrovirus and prospects for developing a vaccine;
3. discussions on the latest research on structural/chemical aspects of antigen-antibody union and antigen presentation and processing.

The abstract deadline is JULY 1.
Requests for registration and/or abstract materials should be forwarded to:
Meetings Coordinator
Cold Spring Harbor Laboratory
P.O. Box 100
Cold Spring Harbor, NY 11724
(516) 367-8346

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POSITIONS OPEN

FBI LABORATORY/ANALYTICAL CHEMISTS

The Forensic Science Research Unit of the FBI Laboratory invites applications from analytical chemists to conduct research to develop new and improved analytical methods in the analysis of trace physical evidence. The first candidate must have experience in liquid, gas, and ion chromatography. The second chemist is expected to publish research results in recognized scientific journals, participate in scientific meetings and activities, and support the analytical laboratory. Responsibilities include graduate and undergraduate instruction in the area of trace evidence. Salary range is $23,000 to $27,000, depending on experience.

Assistant Professor—Microbiology.

WEDNESDAY, JUNE 14, 1989

PROFESSIONAL

POSITIONS WANTED

Ph.D. Biophysics, computational and theoretical. Twenty publications; 4 years of postdoctoral experience in protein structure, polymer configuration and conformational changes for use by text number. Experimental experience in molecular biology and in vivo protein assays; some experience in statistics. Box 73, SCIENCE. 5/22, 29

Protein Biochemist/Cell Physiologist. Ph.D. Ten years of experience isolating and characterizing protein for structure and function; seeks academic or industrial position. Reviewing background, dynamic and static solution spectroscopy, cytochemistry, and retinal physiology. Box 69, SCIENCE. 5/22, 29, 6/5


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**Research Scientist**

Immunex Corporation, a Seattle based biotechnology company pursuing research and development of protein pharmaceuticals and immunoregulatory therapeutic products, currently has an opening for a Research Scientist with post-doctoral experience in cellular immunology.

The successful candidate is expected to have conducted independent research and to have demonstrated an ability to work well in collaborative settings. Recent experience in areas of autoimmunity and/or hematopoiesis is preferred.

Applicants are encouraged to have a thorough knowledge of molecular immunology and have demonstrated their research abilities through publications in peer-reviewed journals.

Immunex is a leader in the development of lymphokines as therapeutic agents. We offer excellent opportunity for career development as well as competitive salaries and an excellent benefits package. For consideration, please submit CV, 3 references and a list of publications to:

Human Resources Officer
IMMUNE X CORPORATION
51 University Street
Seattle, WA 98101

Immunex is an equal opportunity employer.

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**POSITION OPENINGS AT IBI**

Technical Training Specialist — This position represents an ideal opportunity for the molecular biologist who enjoys teaching. Responsibilities include product and technique training programs for IBI personnel as well as customers of IBI. The ideal candidate will have a Ph.D. and extensive laboratory experience, particularly with sequencing techniques. Organizational and interpersonal skills are important to this position.

If you are ready to leave the research laboratory and want to see new faces and new places, your application is invited at IBI.

Biotechnology (Inside Sales) Position — Apply your science degree to the exciting field of biotechnology sales. This position is an excellent opportunity for individuals with strong interpersonal skills and at least one year of molecular biology laboratory experience.

Interested candidates should send resume to:

The Cutting Edge of Molecular Biology

IBI, P.O. Box 9558, New Haven, CT 06535.
POSITIONS OPEN

ASSISTANT PROFESSOR, PLANT IMPROVEMENT—MOLLEcular GENETICIST
We are seeking individuals to develop a basic research program in the field of molecular genetics, with particular emphasis on the molecular basis of plant disease resistance. Women and minorities are encouraged to apply. Details may be obtained from the Chairperson.

ASSOCIATE OR ASSOCIATE PROFESSOR Position available within the Department of Biochemistry, Boston University School of Medicine. Applicants will be expected to establish an independent research program and prepare applications for external funding. Women and minorities are encouraged to apply.

PHYSIOLOGICAL ADAPTATION TO WEIGHTLESSNESS

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR OF BIOCHEMISTRY
The position is available in the field of cell biology and is open to individuals with a strong background in research, teaching, and technology development. Women and minorities are encouraged to apply.

BIOCHEMIST

NEHEMIAH AND NAOMI COHEN CHAIR OF PULMONARY RESEARCH AT GEORGETOWN UNIVERSITY

POSITIONS OPEN

CELL BIOLOGIST/MICROBIOLOGIST

The position is available in the field of molecular biology and is open to individuals with a strong background in research, teaching, and technology development. Women and minorities are encouraged to apply.

CHAIRPERSON, DEPARTMENT OF HUMAN ANATOMY

The position is available in the field of human anatomy and is open to individuals with a strong background in research, teaching, and technology development. Women and minorities are encouraged to apply.

BIOTECHNOLOGICAL ENGINEERING

POSITIONS OPEN

The position is available in the field of biotechnology and is open to individuals with a strong background in research, teaching, and technology development. Women and minorities are encouraged to apply.

Cytogenetics TECHNOLOGY OPENINGS

The position is available in the field of cytogenetics and is open to individuals with a strong background in research, teaching, and technology development. Women and minorities are encouraged to apply.
FACULTY POSITIONS AT RUTGERS UNIVERSITY

CAFT
The Center for Advanced Food Technology and the Food Science Department invite applications and nominations for three tenure-track professorships at the New Brunswick, Cook College campus.

The areas of research specialization are:
1. Interactions of water and biomacromolecules,
2. Control and inactivation of enzyme systems,
3. Unique approaches to in-line sensing of physical factors in food.

The successful candidates will conduct research and manage the research efforts of a cross-disciplinary team of research leaders from various discipline departments throughout the university. Each research team is supported with $350,000 to $500,000 (DCO) of funds provided by the New Jersey Commission of Science and Technology and the Industrial Members of the Center. Appropriate expertise in biophysics, biochemical, physical chemistry, physics, chemical engineering, electrical engineering, and food science is essential. We seek individuals with proven records of research management and scholarly achievement. Teaching at the graduate level and representation of CAFT in the scientific and industrial environments will be important aspects of the positions.

Salary and rank will be commensurate with professional qualifications.

Applications must include a description of research interest, an up-to-date publications list, curriculum vitae, and the names (address and telephone) of five persons prepared to provide professional references. Applications will be accepted until each position is filled.

Direct applications and nominations to: Dr. Myron Selberg, Director, Center for Advanced Food Technology, Cook College, PO Box 231, Rutgers, The State University of New Jersey, New Brunswick, New Jersey 08903. Rutgers University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW
PLANT BIOCHEMISTRY

The Plant Biochemistry Department of Zoecon Research Institute, a division of Sandoz Crop Protection Corporation, is seeking a postdoctoral scientist to participate in an interdisciplinary research team studying plant enzymeology.

The position is available for up to two years. Applicants should have experience in kinetic and biochemical characterization of either membrane bound or soluble enzymes. Previous experience with higher plants is not essential but a strong background in chemistry is preferred.

Zoecon Research Institute has been a leader in innovative agricultural research for more than 15 years. The Institute has a known reputation for plant biotechnology, insect physiology/biochemistry and chemistry.

Our research laboratories are located in Palo Alto, California, and the campus is close to Stanford University. We conduct our research in an open, academic-like environment which encourages publication and interaction with other scientists throughout the world.

To apply for this position, please send curriculum vitae and three references to:
Sandoz Crop Protection Corporation
Zoecon Research Institute
Human Resources Department
975 California Avenue
Palo Alto, CA 94304
EDE/AA

DIRECTOR CENTER FOR ADVANCED RESEARCH IN BIOTECHNOLOGY

The University of Maryland and the National Bureau of Standards (NBS) have jointly established the Center for Advanced Research in Biotechnology (CARB). The CARB facility, now under construction, is located near Washington, DC, in Montgomery County, Maryland, in close proximity to industrial and governmental biotechnology research laboratories.

The Center will conduct forefront research in biotechnology with special focus upon structural and functional characterization of proteins using the most advanced measurement instruments. Research areas include structure analysis, computer modeling, biosensors, biothermodynamics, and protein separations. Applications research will be conducted through collaborative programs and sponsored research with industry and federal agencies. CARB thus represents an exciting and unique venture combining resources and perspectives of a major university, Federal, county and state governments and industry.

The Director of CARB will be responsible for implementation of the Center concept and for the day-to-day operations of the center. He/she will work closely with the president of the university and the Director of NBS. He/she will work closely with a Board of Overseers which includes appointees from the University of Maryland, NBS, the Montgomery County, Maryland government, and private industry. The Director will develop plans and identify staff to conduct research projects in biotechnology. Visiting scientists will be appointed from industry, universities, Federal agencies and other biotechnology research centers to complement the efforts of University of Maryland faculty and NBS scientists at CARB.

The Director must be a well-established scientist with an active research program and a demonstrated ability to create an environment conducive to research consistent with the capabilities and requirements of academic, government, and commercial organizations. He/she will be expected to qualify for a tenure professorship in an appropriate department at the University of Maryland.

The Director will combine strong scientific credentials and an entrepreneurial spirit necessary to bring CARB into a national leadership position in biotechnology. He/she must display skills appropriate to develop harmonious working relationships among universities, Federal agencies, county and state governments, and private industry.

For best consideration, all interested candidates should forward their resumes before June 30, 1987 to:

UNIVERSITY OF MARYLAND, Jane McClade, Assistant to the Director, Maryland Biotechnology Institute, 1326 Chemistry, College Park, MD 20742, Telephone (301) 454-1628.

The University of Maryland and the National Bureau of Standards are Equal Opportunity/Affirmative Action Employers and actively solicit the names of appropriate men and women and minority candidates.

SOLAR RESEARCH OPPORTUNITY

A position at the Staff Scientist 2 level is available in the Energy Conversion and Storage Program of Lawrence Berkeley Laboratory. The employee will perform analytical and experimental research on the use of concentrated solar energy for driving high-temperature thermal and thermochemical reactions; will develop and improve analytic models for the chemical, thermodynamic, and optical phenomena involved in using small particles in gas or liquid streams as the absorbing and heat transfer media; plan and conduct experimental investigations to characterize the properties of candidate reactions; direct junior project staff and graduate students; and present and publish research results. Candidates must have a strong theoretical and experimental background in thermodynamics, solar energy conversion techniques, chemical processes, and be familiar with optics. Must be able to plan and carry out original research agenda, including guidance of graduate students. Good organizational and writing skills necessary. Prefer Ph.D. in physics, chemistry, mechanical or chemical engineering.

This is a one-year appointment with a good possibility of renewal, and opportunity for permanent appointment at LBL.

Please specify Job #B/3403. Send two copies of resume to:
Lawrence Berkeley Laboratory, Employment Office, 90-1042, One Cyclotron Road, Berkeley, CA 94720.

Equal Opportunity Employer. M/F/H.
**DIRECTOR, TOXICOLOGY AND MICROBIOLOGY**

The U.S. Environmental Protection Agency (EPA) is seeking candidates for the position of Director, Toxicoology and Microbiology Division (TMD). The position is located in the Health Effects Research Laboratory, Canton, Ohio. This is a permanent full-time federal civil service position. The salary range is $53,830 to $69,976 per year and includes an excellent package of benefits. The position is eligible for an additional $10,000 annual supplemental.

The incumbent is responsible for directing/supervising TMD which studies, identifies, characterizes, and quantifies health risks that may result from exposure to biological or chemical agents found primarily in water. Appropriate epidemiological, toxicological, microbial, and in vitro test systems are utilized to identify overt or potential effects of pollutants. The Division has a current staff of about 85 persons, 20 of whom are principal investigators trained at the doctoral level.

Desired qualifications for the position include: a Ph.D. (toxicology, biology, biochemistry, microbiology, or chemistry) or an M.D. degree; research experience including environmental and/or health effects; supervisory and management experience. U.S. citizenship is required.

Further information including detailed qualification requirements and an application packet may be obtained by contacting: Vicki N. Yungmann, Director, Woods Hole Research Center, Box 296, Woods Hole, MA 02543, An Equal Opportunity Employer.

**ECOLOGY/ECOSYSTEMS RESEARCH**

The Woods Hole Research Center is seeking an Associate or Senior Scientist to join in research on biotic aspects of the global carbon dioxide problem. Ph.D. required. Experience in research concerning environmental carbon cycling and in modeling desirable. Send letter, résumé, list of references, and list of publications by 5 June 1987 to: Dr. G. M. Woodwell, Director, Woods Hole Research Center, Woods Hole, MA 02543, An Equal Opportunity Employer.

**FACULTY POSITION**

**DEVELOPMENTAL BIOLOGIST:** The Department of Biology, State University of New York (SUNY) College at Fredonia, invites applications for a temporary teaching position for fall 1987. This is a 10-month temporary appointment with possible renewal on a tenure-track basis. Major teaching responsibilities will be developmental biology with labs, an upper-level specialty course, and introductory biology. Send curriculum vitae and three letters of recommen-
dation by 15 June 1987 to: Dr. S. Yungmann, Department of Biology, SUNY College at Fredonia, Fredonia, NY 14063. Telephone: 716-673-3282.

**FACULTY POSITION—FOOD PROCESSING—ENGINEERING—Tenure-track position in food engineering and packaging research in food packaging technology, interest in packaging with biodegradable packaging materials or packaging with food and food products. Send curriculum vitae and three letters of recommen-
dation by 15 June 1987 to: Chair, Search Committee, University of California Forest Products Laboratory, 1301 South 46 Street, Richmond, CA 94804. Telephone: 415-231-9452.

**DIRECTORS**

**PROGRAMS FOR UNIVERSITIES**

**SCIENCE AND TECHNOLOGY.** Non-profit organization in the physical sciences and technology seeks a Director and Regional Directors to represent its programs and services to colleges, universities, and other nonprofit research institutions. As head of institutional relations, the Director will create and implement programs to market technology transfer services, and to assist colleges and universities in strengthening basic research programs. The Director will be assisted by Regional Directors.

Qualifications: The candidate for the position of Director should have a background in university research and administration. Desirable would be experience in negotiating research contracts and grants, and in administering institutional patent policies. Candidates for the post of Regional Director should have a strong background in university administration. The candidate must possess strong oral and written communication skills, and an ability to work effectively with science and engineering professionals. Box 72, SCIENCE.
POSTDOCTORAL FELLOWSHIPS
Research Training in Lipid Metabolism Related to Atherosclerosis

Traineeships supported by an NHLBI grant are currently available at the Hormel Institute, a unit of the Graduate School, University of Minnesota. Basic, multidisciplinary research related to atherosclerosis with emphasis on membrane structure and function includes: polyunsaturated fatty acids in nutrition, metabolism and disease; control of mitochondrial function; ionophore catalyzed cation transport; analysis and biosynthesis of prostaglandins and related compounds; inhibition of platelet aggregation; metabolism of furan fatty acids; phospholipid desacylation/reacylation and LDL uptake by endothelial cells; NMR of lysophospholipid and cholesterol interactions; carbohydrate and lipid metabolism in isolated cell systems related to development/prevention of obesity; regulation of lipases and phospholipases; the role of membrane phospholipids in signal transduction and cell injury; protein-regulated lipid transfer processes; and biogenesis of membrane proteins and membrane organelles. Faculty members include Drs. W. J. Baumann, H. L. Brockman, R. E. Brown, M. P. Cleary, J. T. Holman, D. R. Pfeiffer, H. Schlenk, H. H. O. Schmid and C. W. Zwischen. Beginning salaries are substantially above NIH scale with complete fringe benefit package. Appointments are annually renewable. Applicants must be U.S. citizens, non-citizen nationals, or permanent U.S. residents with a Ph.D., M.D. or equivalent degree. Applications should include curriculum vitae, list of publications, and the names of three references. Send curriculum vitae to: Dr. Margot P. Cleary, The Hormel Institute, University of Minnesota, 801 16th Avenue N.E., Austin, MN 55912. Telephone: 507/432-6664. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages women and minority applicants.

CAREERS IN BIOTECHNOLOGY
Join the leading producer of research products for the molecular biology and cell biology industries.

GIBCO/BRL, a division of Life Technologies, Inc. is a successful biotechnology company with a strong reputation in the industry. The leadership enjoyed by our products is evidence of our commitment to excellence.

We currently have positions available in several departments for Ph.D., M.S. and B.S. degreed individuals in molecular biology, biology and chemistry.

Our salary and benefits are highly competitive. Our location combines the scenic country of Maryland with the cultural vitality of Washington, D.C.

In addition, marketing and administrative positions are available.

We invite you to submit your curriculum vitae or resume for consideration to:

Mr. Richard L. Hotaling, Jr.
Personnel Manager
Life Technologies, Inc.
8717 Grovemont Circle
Gaithersburg, MD 20877

An equal opportunity employer. M/F/H/V

22 MAY 1987
NEUROANATOMIST: Applications are invited for a tenure-track position in the Department of Biophysics and Molecular Science at the Wadsworth Center for Laboratories and Research, New York State Department of Health, with a simultaneous faculty appointment at the State University of New York at Albany. Applicants should be able to participate in ongoing research efforts involving neuronal circuits and local and extrasomatic gene expression, and develop new research projects in these areas. Applicants should have an active research program and be published with respect to current project or projects. Current neuroscience is an interactive group of neurobiologists, neurochemists, and cell biologists. This position is available immediately. The Wadsworth Center offers excellent facilities for and electron microscopy, including a 1.2-MeV HVEM. Applications must be received by 7 July 1987. Submit curriculum vitae and the names of three references to: David L. Martin, Wadsworth Center for Laboratories and Research, New York State Department of Health, Albany, NY 12201.

PATHOLOGIST—MOLECULAR. The Department of Pathology at the University of California, Los Angeles (UCLA), School of Medicine has a position available at the assistant professor level to start on or before 1 January 1988. Qualifications include an M.D. degree, Board eligibility or certification in anatomic and clinical pathology, and the ability to demonstrate research ability. Specialized training in molecular genetics and/or cellular biology is required, and the applicant should be an Associate Professor in the University of California Molecular Biology Program. It is also expected to participate in the University of California Medical Genetic Counseling Program. The curriculum vitae, summary of research interests, and names and addresses of four references should be sent to: F. A. Gancilla, M.D., Chairman, Department of Pathology, UCLA School of Medicine, Los Angeles, CA 90024. UCLA is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are encouraged to apply.

PHYSIOLOGIST. Full-time position at assistant professor level beginning 2 September 1987. Ph.D. with teaching experience in human physiology and general physiology is desired. Other teaching responsibilities will include a semester course in human anatomy and physiology, laboratory sessions in general biology, and others depending upon interest of the individual. Applicants should send curriculum vitae with introductory letter and three letters of recommendation by 15 July 1987 to: Dr. Joseph A. Zucman, Department of Anatomy, Coe College, Cedar Rapids, IA 52402. Affirmative Action/Equal Opportunity Institution.

PLANT MOLECULAR BIOLOGIST. The College of Agriculture at the University of Nevada, Reno invites applicants for a full-time (12 month) tenure-track position, at the assistant professor level, in the areas of plant science and biochemistry at the level of assistant or associate professor. The primary responsibility of the successful candidate will be to develop a vigorous, independently funded research program in some area of plant molecular biology. A Ph.D. and post-doctoral experience in plant molecular biology is required. Applicants should submit their curriculum vitae, a statement of research interests and goals, selected reprints, and arrange to have three letters of reference sent to: Plant Molecular Biologist Search, Plant Science Department, University of Nevada, Reno, 295-6240, July 1987. The University of Nevada is an Equal Opportunity/Affirmative Action Employer.

POSITION AVAILABLE IMMEDIATELY. Position requires mathematical analysis and modeling in the biological sciences. Candidate will provide mathematics, statistics, and computer science support within a multidisciplinary environment. Candidates must respond by 5 June 1987 to Dr. K. A. Krogh, Biophysics and Molecular Science, University of Washington, Seattle, WA 98195. The University of Washington is an Affirmative Action/Equal Opportunity Employer.

PLANT MOLECULAR BIOLOGISTS. Two anticipated tenure-track positions available as early as fall 1987 in the Department of Plant Molecular Biology Research Center with appointment(s) in the Departments of Biological Sciences and/or Chemistry. Position(s) will be designated at entry level to demonstrate research ability. Applicants should have an active research program and be published with respect to current project or projects. The position(s) is/are available immediately. Submit curriculum vitae and the names of three references to: K. A. Krogh, Biophysics and Molecular Science, University of Washington, Seattle, WA 98195. The University of Washington is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL ASSOCIATE position available in NIH supported tumor biology laboratory concentrating on development of gene expression. Applicants should have strong background in protein and/or nuclear acid biochemistry. Evidence of research productivity is essential. Current areas of interest include cellular mutagenesis and expression of tumor cells with endothelium and the role of selected oncogenes in metastasis. Competitive salary commensurate with experience and productivity. Screening of applications will begin 1 July 1987 and will continue until a suitable applicant is found. Send curriculum vitae, three letters of reference should be sent to: Dr. Jean R. Starkey, Microbiology Department, Lewis Hall, Montana State University, Bozeman, MT 59717. Montana State University is an Equal Opportunity Affirmative Action Employer.

POSTDOCTORAL ASSOCIATE POSITION. Available now for research on the behavioral pharmacology of opioid drugs and peptides in small primates and rodents. Applicants should have recent doctorate in pharmacology or other basic medical science, or in experimental psychology. Skills in stereotaxic surgery and in use of microcomputers is desirable. Send curriculum vitae and names of three references by 31 July 1987 to: Stephen G. Holtzman, Ph.D., Department of Pharmacology, Emory University School of Medicine, Atlanta, GA 30322. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL ASSOCIATE trained in biological sciences to clone the mucin peptide gene. cDNA probe will be established to monitor mucin synthesis in animal models of development, age-related or disease state. The position will be part of a multidisciplinary program consisting of basic and clinical scientists. Send curriculum vitae, three letters of reference to: Dr. Richard J. Mahley, Ph.D., Department of Pediatrics, Pediatric Gastroenterology and Nutrition, New England Medical Center, Box 213, 75 Washington Street, Boston, MA 02111.

POSTDOCTORAL ASSOCIATE/FELLOW. A position is available to investigate the molecular cell biology of intestinal lactase. The primary focus is upon microscopy, intracellular processing, and gene cloning. Send curriculum vitae, statement of research interests, and three names of three references to: Dr. Richard J. Mahley, Ph.D., Department of Pediatrics, Pediatric Gastroenterology and Nutrition, New England Medical Center, Box 213, 75 Washington Street, Boston, MA 02111.


POSTDOCTORAL FELLOW IN PROTEIN MAPPING AND BIOMOLECULAR STRUCTURE, Position available as early as 1 July 1987. Seeking neurochemist/protein biochemist to expand protein mapping research in characterizing the rabbit retinal photoreceptor. Position is expected to engage in parallel studies of specific proteins and mechanisms relevant to retinopathy of prematurity. Send curriculum vitae and three references to: Dr. George M. Anderson, Yale University School of Medicine, Child Study Center, P.O. Box 3333, New Haven, CT 06510. The University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately in cellular and transplantation immunology. Areas of research include marrow stem cell purification, monoclonal antibody development, and tolerance induction in murine and nonhuman primate models. Send curriculum vitae and three references to: Morton J. Cowan, M.D., Pediatric Bone Marrow Transplant Program, University of California San Francisco, San Francisco, CA 94143-0108. The University of California is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study the structure and regulation of gene expression of glycoproteins in differentiation and oncoprotein expression in tumor cell lines. Applicants must be able to use techniques which are tissue- or cell-line-specific by cDNA analysis and transfection. Experience in isolation and sequencing of cDNA or transfection of cDNA is desirable. The expected salary range is $18,000 to $26,000, depending on experience. Please send curriculum vitae and names of three references to: Dr. Stuart Callewood, or Dr. Clayton Hunt, Joint Center for Radiation Therapy, Harvard Medical School, 50 Binney Street, Boston, MA 02115. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available 1 July 1987 in the Division of Arteriosclerosis and Human Nutrition to study the regulation of the expression of apolipoprotein genes. Applicants must have a Ph.D. or M.D. Experience in techniques of molecular genetics and cell biology is desirable. Send curriculum vitae and names and addresses of three references to: Howard A. Eder, M.D., Department of Medicine, Albert Einstein College of Medicine, Bronx, NY 10461.

POSTDOCTORAL POSITION available in neurobiology to study regeneration of peripheral and central nerves. Experience in use of animal models, cell biology, and immunohistochemistry desirable. Send curriculum vitae and three letters of reference to: R. W. Mahley, M.D., Ph.D., Gladstone Foundation Laboratories for Cardiovascular Disease, University of California, P.O. Box 40608, San Francisco, CA 94140.

POSTDOCTORAL POSITION available July 1987. Seeking physiologist/proteinozologist to participate in an ultrastructural study of the euglenoid flagellates. Must have experience with transmission and scanning electron microscopy. Applicants should send curriculum vitae and three letters of reference to: E. N. Triemer, Department of Biological Sciences, Rutgers University, P.O. Box 1059, Piscataway, NJ 08855-1059.

POSTDOCTORAL POSITION available immediately to study the molecular biology and immunology of cytokine expression and signal transduction. Experience in molecular genetics and protein and lipopolysaccharide purification. Send resume, publications, and three letters of reference to: Albert Rubin, M.D., Ph.D., University of Pennsylvania, School of Medicine, Infectious Diseases Section, 356 Johnson Pavilion/6073, 36th Street and Hamilton Walk, Philadelphia, PA 19104.
The State of California's Department of Health Services is recruiting TOXICOLOGISTS for immediate openings. Vacancies exist in Sacramento and Berkeley. The areas of involvement are environmental and occupational toxicology, with specific emphasis on quantitative risk assessment, carcinogenicity, and reproductive toxicity. The annual salary is $46,152-$55,824.

Employment with CDHS depends on successful completion of an oral civil service examination, which may be taken over the telephone. Applications are accepted on a continual basis.

Requirements: Possession of a doctoral degree in toxicology or a closely related field and three years postdoctoral experience, including consultation on an interpretation of toxicological findings relative to probable human health hazards.

Position Description: Generally, the toxicologist serves as a statewide expert on the toxicological properties of products and chemicals as they relate to human health problems; interprets experimental study results in terms of toxicological properties and hazards, including risk assessments for carcinogenicity and reproductive toxicity; evaluates, advises and consults on the adequacy of toxicological data submitted by other organizations; advises on precautionary labelling for hazardous chemicals and products; advises in cases of accidental exposure or poisoning; testifies as a witness in hearings and court procedures; and prepares reports and scientific papers for publication.

Application: Send curriculum vitae to:
California Department of Health Services
Office of Environmental Health Hazard Assessment
714 P Street, Room 476
Sacramento, CA 95814

The California Department of Health Services is an equal opportunity employer.

Creative BioMolecules, Inc. seeks highly motivated and well qualified candidates to join our Process Development Group in developing methods leading to the production of therapeutic proteins produced by recombinant DNA technology. Positions available are:

Protein Purification Scientist
Candidate will develop and scale-up processes for pilot production of material for clinical testing. Position requires a Ph.D. in Protein Biochemistry plus industrial experience in product recovery methods. Knowledge of GMP would be a plus.

Biochemical Engineer
BS/MS to develop scale-up of production processes including fermentation, product recovery, and immobilized enzyme reactions. Biochemical/Chemical Engineering degree or equivalent experience is required.

Creative BioMolecules offers competitive salaries and health benefits along with the opportunity to make a significant contribution to the success of the Company. Please send resume to Personnel Department.

Biotechnology company with laboratories in Geneva, engaged in the development of pharmaceutical products through genetic engineering has vacancies for:

A CELLULAR IMMUNOLOGIST
with several years of postdoctoral experience in the field of lymphokines.

A MOLECULAR BIOLOGIST
having, at least, an MSc degree and experience in cDNA synthesis and library construction.

If this offer appeals to you, please send your resume, list of publications and the names of three references to:
Rita Gloor, Personnel Manager, B I O G E N
S. A. 46, Route des Acacias, 1227 CAROUGE — GENEVA, Switzerland

All replies will be evaluated in strict confidence.
Research Scientist
Protein Chemist, PhD

Wyeth Laboratories, a pacemaker in the pharmaceutical industry, with a firm commitment to research and development, has an immediate opportunity available in its Microbiology Division, to join dynamic research group developing blood protein products and vaccines.

We seek a PhD level protein chemist with at least two years post-doctoral experience in protein characterization and purification at research and pilot scale. The candidate must have strong background in diverse approaches including affinity chromatography, HPLC; experience with immobilized enzymes helpful.

We offer a highly competitive salary, extensive benefits, and a state-of-the-art environment at our Radnor Corporate headquarters in suburban Philadelphia. Qualified candidates are invited to submit c.v. with salary expectations, in confidence, to Recruitment Manager, Wyeth Laboratories, Inc., P.O. Box 8299, Philadelphia, PA 19101. An equal opportunity employer. M/F/V/H

Wyeth Laboratories

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TROPICAL CATTLE RESEARCH CENTRE
ROCKHAMPTON QLD

THE DIVISION: The Division of Tropical Animal Science undertakes research activities on the improvement of animal production, particularly cattle production, in Tropical Australia. It has programs of breeding and management, disease and parasite control and nutrition.

THE PROGRAM: Beef production in northern Australia is based on Zebu crossed cattle harvesting their nutrients from pastures of variable but generally low nutritional value. The Division has established research groups at Rockhampton and Townsville with the aim of increasing cattle growth and reproduction through the improved use of available feed. From quantitative studies of nutrient release in the digestive tract and of nutrient metabolism in the tissues, it is believed that major improvements in cattle nutrition require the development of rumen microbes with superior ability to ferment dietary fibre. Studies to achieve this end have commenced with rumen modifiers and artificial rumen.

THE JOB: A microbiologist is being sought to take a more specialized part in the above research. The appointee will be located at the Division’s modern Rockhampton Laboratory and will undertake independent and collaborative research within the broad nutrition program. The work will include characterization of microbial populations and their manipulation to improve the digestibility of low quality roughtage diets and the composition of the end products of digestion. The appointee will be encouraged to develop projects to take advantage of the multidisciplinary nature of the Division.

THE PERSON: Applicants should hold a PhD degree or equivalent qualification with demonstrable research ability and a sound knowledge in the field of ruminant microbiology. Consideration could be given to the appointment of an outstanding applicant at a higher level.

CONDITIONS: Appointment will be indefinite and Australian Government superannuation benefits are available.

MORE INFORMATION: Prospective applicants are invited to telephone Dr John Vercoc on (079) 36 1286 for further information. Dr Vercoc can also provide a copy of the detailed job description and selection criteria.

APPLICATIONS: Applications should be submitted by June 25, 1987 and should quote reference number AS584. They should be framed against the selection criteria and provide details of relevant personal particulars, including qualifications and experience. Applicants should nominate at least two professional referees, and address their applications to:

The Chief
CSIRO Division of Tropical Animal Science
Lang Pockt Laboratory
Private Bag No. 3
INDIANNAPOLIS QLD 4068
AUSTRALIA

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CELL AND DEVELOPMENTAL BIOLOGISTS

The Department of Cell Biology and Neuroanatomy at the University of Minnesota seeks highly qualified applicants for positions in Cell and Developmental Biology. Appointments may range from Assistant Professor (tenure-track) to Professor (tenured), depending upon qualifications (guidelines for appointment at each level will be sent on request). Areas of research interest of those appointed must complement ongoing programs in the department in the areas of Cell and Developmental Biology, since it is our intent to provide critical masses of scientists to interact with and extend existing strengths in the department and the University. Particular consideration will be given to those with interests in early vertebrate development (including cell-cell interactions and cell-extracellular matrix interactions), molecular structural biology (including macromolecular organization of cell organelles, the cytoskeleton, cell membranes, chromosomes), intracellular trafficking (including endocytosis, Golgi function, lysosomes), immunobiology as related to basic aspects of tissue and organ transplantation, or structural aspects of nuclear-cytoplasmic interactions. Applicants must have a relevant graduate degree (PhD, MD (or both) or equivalent foreign degree) with at least two years of productive postdoctoral experience. Technical expertise of successful applicants must be appropriate to their fields, but must show evidence of the broad use of many techniques for solving biological problems, which could include structural (light and electron microscopy and/or diffraction and image reconstruction), molecular biological (recombinant DNA technology, NMR) and biochemical approaches. Teaching will be related to cell and developmental biology courses taught to medical and dental students by the department. In addition, training of graduate students and teaching in appropriate graduate programs will be required.

Applications or nominations (to be received no later than August 1, 1987) should be sent to: Cell/Development Search Committee, Department of Cell Biology and Neuroanatomy, 4-135 Jackson Hall, 321 Church Street, S.E., Minneapolis, MN 55455.

The University of Minnesota is an equal opportunity educator and employer and specifically invites and encourages applications from women and minorities.

Assistant Scientist

Ocean Engineering Department seeks tenure-track Assistant Scientist to join a well-established group working on ocean acoustic tomography. Successful candidate will conduct original research in areas of coastal and deep ocean tomography, numerical modeling of ocean dynamics, and inverse theory and contribute to the development of these and related research programs. Position requires appropriate doctoral degree with background in physical oceanography, numerical modeling, inverse theory, and ocean acoustics. In addition to research opportunities, the Institution has a joint program with the Massachusetts Institute of Technology which affords teaching and student interaction. Applicants should send a detailed resume to:

Personnel Manager
Box 54P

Woods Hole Oceanographic Institution
Woods Hole, MA 02543

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Genentech, Inc. is a research and development company which utilizes recombinant DNA technology to produce pharmaceutical products for the treatment of a variety of human diseases.

**Protein Purification & Characterization**

Working in tandem with other biochemists, you'll help develop and scale up methods for the purification/characterization of recombinant proteins and peptides to be used in human pharmaceuticals and animal health care products. Several positions are available. Some will focus on recovery processes and others will focus on rapid protein purification and characterization in conjunction with research. Knowledge of HPLC, FPLC, affinity and other protein purification/analysis techniques is essential.

Successful candidate will have a PhD in Biochemistry/Biochemical Engineering and at least 2 years relevant postdoctoral experience in academia or industry. (JG-2033)

**Peptide Chemistry**

An individual with a strong background in organic and/or protein chemistry is sought, with a special emphasis on peptide chemistry.

The successful candidate should have several years of postgraduate experience with synthesis, purification, characterization and chemical modification of biologically active peptides. (1129)

**Medicinal & Analytical Chemistry**

Position will supervise the testing and release of new products for clinical trials. The candidate we seek will have creative abilities in protein/peptide characterization, and the expertise to establish and implement final product specs. This position also involves writing scientific reports in support of IND submissions, so excellent communications skills are essential.

Successful candidate will have a PhD in Biochemistry or related field and at least 2 years related experience in academia or industry. Pharmaceutical experience highly desirable. (JG-1351)

**Postdoctoral Fellow Protein Biochemist**

An individual with a strong background in protein biochemistry and enzymatic characterization is sought to investigate the biochemical and structural characterization of the growth factor receptors.

The successful candidate should have extensive hands-on experience with protein/receptor purification, receptor binding techniques and determination of enzymatic parameters. (5001SW)

**Biological Chemistry**

An individual with a strong background in cell biology and protein biochemistry is sought to investigate the basic mechanisms of action of growth factors at the molecular and cellular level and to study the biochemistry of signal transduction.

The successful candidate should have several years of postgraduate experience and extensive hands-on experience with cell culture, receptor binding techniques and experience with protein/receptor purification. (5000SW)

Genentech, Inc. offers an excellent salary and benefits package coupled with the opportunity to make a significant contribution to our organization. Please send resume, indicating position title and number, to Human Resources Department, Genentech, Inc., 460 Point San Bruno Boulevard, South San Francisco, CA 94080. An equal opportunity employer.

See you at the ASBC meeting, June 7, 8 and 9, 1987.
POSTDOCTORAL POSITIONS OPEN

POSTDOCTORAL POSITION. Available summer/fall 1987 to participate in studies on ligand receptors and signal transduction in cultured Leydig cells. Must hold Ph.D. or equivalent degree. Send curriculum vitae and the names and addresses of three persons who can be contacted for reference to: Dr. Mario Assouli, The Population Council, 1230 York Avenue, New York, NY 10021.

POSTDOCTORAL POSITIONS available immediately for studies on the structures and biosynthesis of proteoglycans and their interactions with plasma proteins. Experience in poly saccharides and/or proteins; blood coagulation; or cell culture is preferred. Send curriculum vitae and references to: Dr. Isidore Danishefsky, Biochemistry Department, New York Medical College, Valhalla, NY 10595.

POSTDOCTORAL POSITIONS available immediately to join a research project involving in vivo and cell culture experiments on pattern formation and growth control in developing mouse limb buds. Ph.D. required, with experience in one or more of the following: cell culture, growth factor biology, extra-cellular matrix, protein chemistry, molecular biology. Submit curriculum vitae and statement of research interests, and ask three individuals to write letters of recommendation to:

Dr. Susan Bryant
Developmental Biology Center
University of California, Irvine
Irvine, CA 92717

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

POSTDOCTORAL POSITIONS are available immediately to study the molecular mechanism of Na,K-ATPase in red cell, kidney, and cloned enzyme preparations. Approaches include membrane biochemistry, kinetics of intermediates and transport, subunit interactions, involvement of anions and electrical parameters in purified preparations, ghosts, vesicles, and reconstituted systems. Background in biochemistry and cellular physiology desirable. Send curriculum vitae and three letters of reference by 15 June 1987 to: Joseph F. Hoffman, Department of Physiology, Yale Medical School, 333 Cedar Street, New Haven, CT 06510. Yale University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS are available immediately to work on areas of cellular stimulus-response coupling mechanisms involving GTP-binding proteins, Ca++, phospholipases and arachidonic acid, IP3, and protein kinases. A strong background in one or more of the following areas is essential: biochemistry (proteins and/or lipids), enzymology or biophysics (membrane transport, fluorescent probes). Address, curriculum vitae, and three letters of reference to: Dr. M. B. Feinblatt, Department of Pharmacology, University of Connecticut Health Center, Farmington, CT 06032. Affirmative Action/Equal Opportunity Employer M/W/H.

POSTDOCTORAL POSITIONS are available immediately to join a research project involving in vivo and cell culture experiments on pattern formation and growth control in developing mouse limb buds. Ph.D. required, with experience in one or more of the following: cell culture, growth factor biology, extracellular matrix, protein chemistry, molecular biology. Submit curriculum vitae and statement of research interests, and ask three individuals to write letters of recommendation to:

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POSTDOCTORAL RESEARCH ASSOCIATE POSITION

POSTDOCTORAL RESEARCH ASSOCIATE POSITION PROTEIN CHEMISTRY/HUMAN GENETICS

UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER

A postdoctoral/research associate position is available immediately to conduct research on the protein structure and molecular genetics of the human alkaline phosphatases, a family of cell surface glycoproteins of clinical and genetic interest. Experience in molecular biology is desirable. Applicants should send curriculum vitae, description of research interests, and the names of at least three references to: Dr. Clive A. Slaughter, Howard Hughes Medical Institute, University of Texas Health Science Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9050.
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(Peptide Chemistry)

The LILLY RESEARCH LABORATORIES, a Division of Eli Lilly and Company, is seeking highly qualified peptide chemistry candidates for a Senior Scientist position in the Biochemical Research Division.

Applicants must have a doctoral degree in either biochemistry, organic chemistry or medicinal chemistry and post-doctoral experience in the synthesis of amino acids and/or peptides.

In search for new therapeutically active compounds, the Senior Scientist will study peptides and their interactions in biological systems. A working knowledge of molecular modeling, structure-activity relationships, and purification of synthetic peptides is highly desirable.

Qualified candidates should send their curriculum vitae to:

John W. Crooks
Manager, College Relations (SPC)
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Lilly Corporate Center
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POSTDOCTORAL RESEARCH ASSOCIATE positions for well-trained, highly motivated biochemists to study molecular, regulatory, and pathophysiologica! aspects of protein kinase C systems in heart, cancer, and brain. Expertise in protein and lipid biochemistry and endocrinology essential; experience in cell culture helpful. Send resume to: Dr. J. F. Ku, Departments of Pharmacology and Experimental Therapy, Emory University School of Medicine, Atlanta, GA 30322. An Equal Opportunity/Affirmative Action Employer.


POSTDOCTORAL RESEARCH POSITION available for studies on neurochemical basis of intracranial self-stimulation. Position involves the production and characterization of herpesvirus genes and gene products involved in initiation, maintenance, and reactivation of latent virus infection. Expertise in molecular biology, biochemistry, or nucleic acid biology with experience in molecular biology, protein biochemistry, and/or virology/tissue culture is desired. Position available September 1987. Send curriculum vitae and names of three references by 19 June 1987 to: Dr. Daniel Rock, Veterinary Science Department, University of Nebraska—Lincoln, Lincoln, NE 68580-0905. Affirmative Action/Equal Opportunity Employer.

UNIVERSITY OF NEBRASKA-LINCOLN VETERINARY SCIENCE DEPARTMENT POSTDOCTORAL RESEARCH FELLOW Position available to conduct research in area of herpesvirus gene expression and regulation of herpesvirus gene and protein products involved in initiation, maintenance, and reactivation of latent virus infection. Focus will be on molecular biology, biochemistry, or nucleic acid biology with experience in molecular biology, protein biochemistry, and/or virology/tissue culture is desired. Position available September 1987. Send curriculum vitae and names of three references to: J. B. Justice, Jr., Department of Chemistry, Emory University, Atlanta, GA 30322. Telephone: 404-727-6588. Emory University is an Equal Opportunity/Affirmative Action Employer.

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL RESEARCH SERVICE Postdoctoral position is available in the Horticultural Sciences Laboratory. Position is for research in membrane-bound enzymes involved in biosynthesis of cell wall polysaccharides. Knowledge or experience in physical biochemistry and biochemistry associated with plant membranes required. For information contact: Dr. Alley E. Watada, telephone: 301-344-3128. Salary is $27,173. U.S. citizenship required. Address for application is: USDA, Agricultural Research Service, Personnel Operations Branch, Beltsville Area, Beltsville, MD 20705. Applications must be marked TE034. An Equal Opportunity Employer.

POSTDOCTORAL OR RESEARCH POSITION AVAILABLE IN CELLULAR IMMUNOLOGY FOR PH.D. OR M.D. Studies deal with immunopharmacology of immunosuppressive agents including mechanisms of action at the cellular and molecular level, and use in tolerance induction as part of a major program in transplantation. Salary range from $24,000 to $34,000, depending on prior experience.

Send curriculum vitae together with names of three references to: Marvin R. Garovoy, M.D., Director, Immunogenetics and Transplantation Laboratory, HSE-520, University of California, San Francisco, Third and Parnassus Avenues, San Francisco, CA 94143.

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

POSTDOCTORAL OR RESEARCH POSITION AVAILABLE IN MOLECULAR-CELLULAR IMMUNOLOGY FOR PH.D. OR M.D. Studies deal with human lymphokine regulation, cell and gene function, and transgenic mice in the context of induction of transplant tolerance. Salary range from $24,000 to $34,000, depending on prior experience. Send curriculum vitae and names of three references to: Marvin R. Garovoy, M.D., Director, Immunogenetics and Transplantation Laboratory, HSE-520, University of California, San Francisco, Third and Parnassus Avenues, San Francisco, CA 94143.

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

RESEARCH ASSISTANT position available for recent Ph.D. with background in chemistry or a related science. Research will involve experimental cancer chemotherapy, molecular biology, and immunology. Research in vivo and in vitro. The applicant must be experienced in vitro drug metabolism, receptor binding methodology, high performance liquid chromatography, two-dimensional gel electrophoresis, DNA and RNA hybridization and must be familiar with in vivo studies of antineoplastic agents in rodents. Salary approximately $24,000. Send curriculum vitae and names of three references to: Dr. J. A. Houghton, Department of Biochemical and Clinical Pharmacology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101. An Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE/ASSOCIATE DIRECTOR The University of Missouri invites applications for a 12-month state-supported position as Associate Director of the Center for Biomedical Research. Applicants must have Ph.D. degree or equivalent experience in immunology, immunobiology, and immunohistochemistry. Send curriculum vitae and three letters of recommendation to: Dr. Marvin H. Dallal, Director, Center for Biomedical Research, 201 Science Building, University of Missouri, Columbia, MO 65211. An Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE/POSTDOCTORAL FELLOW: A position is available to study structure/function relationships of contractile proteins in muscle tissue. Knowledge of the physical chemistry of electron microscopy, fluorescent spectroscopy, protein purification by HPLC, site-directed mutagenesis, experience in physical biochemistry or protein chemistry required. Send resume and three references to: Dr. S. L. Lowrey, Roswell Park Basic Medical Sciences Research Center, Brandeis University, Waltham, MA 02254. An Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE—Job order 656156. Research in the field of arthropod biology and arthropod analysis. Work in the Electron Microscope laboratory. Must be familiar with arthropod biology and arthropod analysis by scanning electron microscope (SEM), transmission electron microscope (TEM), and selected area electron diffraction (SAED). B.S. in biology. Forty hours per week; 8:30 a.m. to 4:30 p.m.; $18,000 per year. Contact: Louisiana Department of Employment Security, 617 St. Charles Avenue, New Orleans, LA 70130.

RESEARCH ASSOCIATE for university in north-eastern Ohio. Position involves research in molecular (polymer) science. In particular, (i) theoretical and experimental analysis to determine helix-coil stability of polynucleotides, particularly poly(dG-dC) and poly(dA-dT)/poly(dG-dC) in sodium and dodecyl sulfate solutions. (ii) To study the dynamics, using computer simulation techniques, of protein- ligand and drug-receptor interactions. Salary is approximately $24,000. Send curriculum vitae with references to: L. Ellison, JR. # 1025047, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

POSTDOCTORAL RESEARCH ASSOCIATE position open for research with background in chemistry or a related science. Research will involve experimental cancer chemotherapy, molecular biology, and immunology. Research in vivo and in vitro. The applicant must be experienced in vitro drug metabolism, receptor binding methodology, high performance liquid chromatography, two-dimensional gel electrophoresis, DNA and RNA hybridization and must be familiar with in vivo studies of antineoplastic agents in rodents. Salary approximately $24,000. Send curriculum vitae and names of three references to: Dr. J. A. Houghton, Department of Biochemical and Clinical Pharmacology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101. An Equal Opportunity/Affirmative Action Employer.

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NUTRITIONIST

SCIENTIFIC PROGRAM OFFICER

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This individual is the primary government liaison official to the research leadership at the USDA Human Nutrition Research Center on Aging, carried out under contract by Tufts University. Located in Boston, MA, in a new facility, the program is a multidisciplinary attempt to uncover: (1) the adequacy of nutrient consumption of adults as they age; (2) nutrient needs of aging adults; (3) relationship of nutrient intake to age-related changes in physiologic functions.

The Scientific Program Official represents the Agricultural Research Service in program planning, resource allocation and program delivery evaluation.

The job requires a broad and in-depth knowledge of science encompassed by nutrition particularly biochemistry, physiology and related disciplines.

Must be a U.S. citizen. Salary is commensurate with experience. For information on application procedures, contact Alice McNamara, 301/344-2944. Applications in response to this advertisement should be marked 7E019. Applications should be sent to: Alice McNamara, ARS, USDA, PD, Rm. 123, Bldg. 003, BARC-West, Beltsville, MD 20705. Applications must be received by June 15, 1987.

Grade: GM 14 or 15
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Research fellow position available immediately for accomplishment-oriented, inquisitive scientist. Five years of research experience with recombinant DNA techniques required, and some experience with transfection of mammalian cells is desirable. Demonstrated success in laboratory and the potential to interact closely with other laboratory members in research projects concerning patheways of intracellular protein synthesis and aging. Send curriculum vitae and names of three references to: Dr. J. Fred Diez, Department of Physiology, Tufts University, 136 Harrison Avenue, Boston, MA 02111.

RESEARCH SCIENTIST—Apply AIRSHED photochemical oxidant numerical model to simulate the ozone concentrations to evaluate ozone control strategies in urban areas; develop dispersion modeling techniques for heavier-than-air (dense) gases in the atmosphere. Requires B.S. in atmospheric science and 2 years of professional experience with specific interest in air pollution modeling, or M.S. in atmospheric science and 1 year of professional research experience in numerical air pollution modeling. Areas of research experience must include peer-reviewed publications; the use of AIRSHED and DEGADIS numerical models, and graphics and statistics software on UNIX PC, IBM, and IBM 3083 systems. 37.5 hours per week/$26,354 to $32,801 per year. Send resume and two letters of recommendation by 30 June 1987 to: Bureau of Personnel, NY State Department of Environmental Conservation, 50 Wolf Road, Room 100, Albany, NY 12233. Attention: M. Hines.

RESEARCH SCIENTIST: Surgical laboratory in university-based surgical department seeks basic science researcher with Ph.D. in biochemistry, immunology, or physiology. Must be qualified for academic appointment with specific interest in wound healing, collagen, and/or elastic metabolism. Attractive salary and comprehensive benefits. To case send curriculum vitae or contact: Jean Cogwell, Employment Representative, Telephone: 718-470-8842. Long Island Jewish Medical Center, New Hyde Park, NY 11042. An Equal Opportunity Employer.

SCIENCE ASSOCIATE

The Environmental Defense Fund, a national non-profit environmental organization, invites applications for the position of staff scientist. Responsibilities include research on environmental problems and their application to public policy. Areas of interest include acid rain and global atmospheric change, and their effects. Applicants with advanced degrees in physical sciences such as atmospheric sciences or aquatic chemistry are encouraged to apply. Applications should be sent to: Jane Cereso, Environmental Defense Fund, 257 Park Avenue South, New York, NY 10010.

SCIENTIST: Conduct research leading toward development of immunological techniques for treatment of reprotox- inative disorders. Includes characterization and isolation of receptor proteins of reproductive hormones by affinity chromatography for primary structure analysis to lead to cloning DNA: isolation, purification, and characterization of reproductive hormones from tissues and cell culture media; developing and standardizing biosassays and immunonan assays for such hormones; direct research in reproductive neuroendocrinology, M.S. or Ph.D. or equivalent in chemistry or biochemistry; 5 years of experience or 5 years of experience in reproductive neuroendocrinology research. Experience research must include peptide and protein biochemistry as well as reproductive endocrinology. Demonstrated ability to conduct scientific research as required of the position. Salary: $37,000-$45,000. For consideration, send resume with a letter to: Robert W. Norry, Department of Pathology, College of Veterinary Medicine and Biomedical Sciences, Colorado State University, Fort Collins, CO 80523. Application will be accepted through 15 July 1987 or until a suitable candidate is identified. Colorado State University is an Affirmative Action/Equal Opportunity Employer.

VIROLOGIST (M.D. or Ph.D.), with interest in mechanisms of disease or development of viral detection techniques, to establish a research program. Must be capable of obtaining independent research funds and eligible for medical school faculty appointment. Send curriculum vitae and outline of proposed research program to: Sheri L. Slichter, M.D., Scientific Director, Puget Sound Blood Center, Terry at Madison, Seattle, WA 98104.

FELLOWSHIPS

MAGNESIUM TRANSPORT

POSTDOCTORAL FELLOWSHIP: A postdoc- toral fellowship is available to study the mechanism of Mg transport across cell membranes. Significant ad- vances into the mechanism of Mg transport across mem- branes are expected in view of the unique tissue Mg usage and a new approach of measuring intracellular Mg activity. The basic methods of investigations are electro- physiology, autoradiography, intracellular Mg-containing and non-selective microelectrodes and patch-clamp techniques. After defining and characteriz- ing the Mg transporting system in one of the defined cell membrane, the aim is to develop a cell line of the Mg transporting epithelium with the long-term objective of isolating and cloning the transporting gene. This project is a joint venture between the Departments of Physiology and Chemistry at Cornell. Candidates interested should send curriculum vitae to Dr. D. W. Beyleveld, phone: 607-253-3482, or send curriculum vitae to: Department of Physiology, VRT826, Cornell University, Ithaca, NY 14853.

HARRINGTON ARTHRITIS RESEARCH CENTER, POSTDOCTORAL FELLOWSHIP IN BONE BIOLOGY. Two-year position available July 1987 for research on bone response to biomaterials, and/or bone biopsy techniques. Applicants must have Ph.D. degree or equivalent, and ability to participate in an active multidisciplinary research program. For information, contact: Thomas Gruen, Director of Education, Harrington Arthritis Research Center, 1800 East Van Buren, Phoenix, AZ 85006.

HARRINGTON ARTHRITIS RESEARCH CENTER, POSTDOCTORAL FELLOWSHIP IN IMMUNOLOGY. Two-year position available July 1987 for research on cell immunology, immunohistochemistry, and immunosassays associated with arthritis and biomaterials. Applicants must have Ph.D. degree or equivalent, and ability to participate in an active multidisciplinary program devoted to arthritis. For information, contact: Thomas Gruen, Director of Education, Harrington Arthritis Research Center, 1800 East Van Buren, Phoenix, AZ 85006.

POSTDOCTORAL FELLOWSHIP available im- mediately in the laboratory of Dr. D. W. Beyleveld, Yale University School of Medicine, to study molecular mechanisms of transplacentation of cytomegalovirus and related herpes viruses. Applicants should have Ph.D. in immunology. Experience with monoclonal antibody production and characterization, protein purification, molecular bi- ology methods, and broad knowledge of cellular immun- ology are essential. Opportunity to interact with a large community of scientists at the Yale University School of Medicine. Applicants should provide curriculum vitae, academic transcripts, and names, addresses, and phone numbers of three references. For information contact: Dr. Brigitte P. Griffin, Virology Laboratory 151B, VA Medical Center, West Haven, CT 06516. Telephone: 203-932-6711, extension 744.

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**Senior Scientists**

**Immunology**

Will lead a research team engaged in independent and collaborative research. Ph.D. with at least three years' experience in molecular immunology, cellular immunology, or immunochemistry is required.

**Senior Scientists**

**Molecular Biology**

Will lead a research team engaged in independent and collaborative research. Ph.D. with at least three years' experience in recombinant DNA technology, preferably in mammalian systems, is required.

**Senior Scientists**

**Protein Chemistry**

Will lead a research team engaged in independent and collaborative research. Ph.D. with at least three years' experience in protein and/or peptide structure/function analysis is required.

**Research Associates**

Will be part of a research team under the guidance of a Senior Scientist. Master's degree or minimum of five years' experience in immunochemistry, molecular biology, or biochemistry required. An individual with knowledge of peptide synthesis and purification is also being sought.

**Research Assistants**

Will perform laboratory procedures and participate in research as member of a project team. Bachelor's degree in biological sciences and some laboratory experience is required.

ImmuLogic is committed to providing a challenging, creative interactive environment. You will work in collaboration with leading scientists in immunology, molecular biology, and biochemistry, and you will contribute to building a new and dynamic company which will be a leader in its field. ImmuLogic is conveniently located in Cambridge, MA within walking distance of MIT. We offer competitive salary and benefits as well as an incentive stock option program.

Please send curriculum vitae and list of publications and/or resume to:

**ImmuLogic Pharmaceutical Corporation**
P.O. Box 1376
Kendall Square
Cambridge, MA 02142
Attn: Human Resources Dept.

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**BIOTECHNOLOGY**

The Amoco Research Center is expanding its dynamic staff and currently has several exciting career opportunities available in the following areas:

**CHEMIST**

We seek a Bioorganic Chemist with PhD to work with molecular biologists and engineers to develop process for synthesis of novel analogs of isoprenoid compounds. Position requires experience with natural products chemistry and analytical/purification techniques, as well as a strong background in molecular biology.

**MICROBIAL PHYSIOLOGIST/ENZYMATOLOGIST**

We seek a PhD to join our Molecular Biology program dedicated to the development of genetically engineered microorganisms, including yeast, capable of producing selected secondary metabolites. This position requires a background in microbiology, experience with enzyme assays/purification and knowledge of natural products chemistry/analysis. Industrial experience is preferred, but not necessary.

**FERMENTATION SPECIALIST**

Qualified candidate will possess a PhD or MS with a strong microbiological background to optimize production and scale-up of non-protein products from genetically engineered yeast. Some experience with yeast and genetically engineered organisms desirable. This position will require extensive interaction with molecular biologists and process engineers. Some industrial experience is required.

These positions offer the distinct advantage of working with a topflight team of professionals and both personal and professional advancement. Selected candidates will receive salaries commensurate with experience, a comprehensive benefits package and a convenient suburban Chicago location. Please forward resume, INDICATING POSITION OF INTEREST, in strictest confidence, to:

**Professional Recruiting Coordinator**

**AMOCO RESEARCH CENTER**

P.O. Box 400/DEPT. CAS
Naperville, IL 60566

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