

Personnel Placement

SCIENCE publishes each Friday, except the last Friday of the year, and is mailed on issue date. Personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap, or sexual preference. **SCIENCE** reserves the right, in its discretion, to decline to publish advertisements submitted to it.

LINE CLASSIFIED ADVERTISEMENTS

DEADLINE: Thursday, 10 a.m., 2 weeks prior to issue date. Advertising is accepted only in writing.

POLICIES: All classified ads will be edited and typeset according to **SCIENCE** style guidelines. NO ABBREVIATIONS. Any deadline for applications stated in ad must be at least 2 weeks after date of issue in which ad appears.

CLASSIFICATION: **SCIENCE** publishes line classified ads under the following headings: **Positions Open, Employment Agencies, Fellowships, Situations Wanted, Courses and Training, Meetings, Announcements, and Marketplace.** Advertisers should specify classification desired; however, **SCIENCE** reserves the right to decline classification requests which it believes may be misleading to readers.

RATE: \$41 per line, \$410 minimum, per week. One line equals 52 characters and spaces; centered headings equal 32 characters and spaces per line. No charge for use of blind box number. No agency commission for ads less than 40 lines. No cash discount. Prepayment required for all foreign ads. Purchase orders required for all other advertising.

To estimate ad cost, structure ad copy on a 52-character line; include any desired heading on 32-character lines. Each line of heading, one line of white space between heading and body of ad, and all partial lines (including centered reply information, if desired) are counted as full lines. Multiply total number of lines \times \$41 = approximate cost of ad, per week. (This is an approximate cost ONLY. Allow for variation between estimated lines and actual typeset lines and resulting final cost. Purchase orders must allow for some degree of flexibility and/or adjustment. **SCIENCE** cannot provide proofs of typeset ads.)

BOXES AND LOGOS: Any 1-column line classified ad can be boxed and/or published with logo. No extra production charge for use of box or logo. For boxed ads, one line equals 48 characters and spaces; two additional lines will be added to cost of ad to allow for top and bottom box rules. Logos are billed according to number of lines needed to accommodate logo.

SITUATIONS WANTED ADS: As a service to AAAS members in good standing, **SCIENCE** offers free placement of Situations Wanted ads for individuals seeking full-time or part-time employment. A blind box may be used. Ads must be submitted in writing with text of 20 words or less, not including address or box number, and are limited to two insertions per member in each calendar year. Please enclose **SCIENCE** mailing label including AAAS membership number when submitting ad.

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

Address ad copy or requests for information to:

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

MARKETPLACE AND DISPLAY PERSONNEL ADVERTISEMENTS

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

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

RESPONSES TO EMPLOYMENT ADS

Applicants should read Positions Open ads carefully in order to submit all required material when responding, and should especially check for any stated deadline for receipt of applications.

SCIENCE encourages applicants for positions to investigate employment laws, nondiscrimination policies, visa requirements, and cultural differences in the country advertising for employees.

To reply to a blind box ad, address correspondence to:

Box (give number)
SCIENCE Classified Advertising
1333 H Street, NW, Room 940
Washington, DC 20005

POSITIONS OPEN

ASSISTANT PROFESSOR DEPARTMENT OF ANATOMY DALHOUSIE UNIVERSITY HALIFAX, NOVA SCOTIA

The Department of Anatomy at Dalhousie University is seeking applications for a limited term appointment. The funding for this appointment will end 1 April 1995. The starting date is negotiable. It is expected that, in 1991, a tenure-track appointment will be available for which the incumbent of this position could apply. Candidates must have a Ph.D. and have undertaken postdoctoral training. The ability to teach any two of histology, gross anatomy, and neuroanatomy is required, and the candidate will be expected to undertake an active research program. Applications should include curriculum vitae, representative reprints, a summary of present research activities, an outline of future research directions, and the names of three referees. Please apply to: **Dr. D. G. Gwyn, Professor and Head, Department of Anatomy, Faculty of Medicine, Dalhousie University, Halifax, Nova Scotia, Canada B3H 4H7.** This competition will be open until a suitable candidate is selected. *In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents. Dalhousie University has a policy of Affirmative Action in hiring qualified women academic staff.*

ASSISTANT PROFESSOR BIOCHEMISTRY/MOLECULAR BIOLOGY

The Biochemistry and Molecular Biology Department of the Medical University of South Carolina seeks an exceptional individual for a tenure-track position. The area of research interest is open, but applications from those with current research interests in structural biology are encouraged. The successful applicant will be expected to establish an independent research program and participate in the teaching activities of the department. A Ph.D. and at least 2 years of postdoctoral experience are required. A letter of application, full curriculum vitae with research interests, and the names of at least three references should be sent by 1 May 1990 to: **Dr. John W. Ledbetter, Department of Biochemistry and Molecular Biology, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425. Telephone: 803-792-4321.**

Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY

Applications are invited for a tenure-track position at the assistant professor level. Applicants should have two or more years of postdoctoral experience and should have the potential for establishing an independent research program in molecular biology to complement existing programs in gene regulation, proto-oncogene action, developmental biology, neurobiology, and the human genome. The department has biotechnology and tissue culture support units. Competitive start-up and equipment funds will be provided. The present department consists of 11 faculty with \$1.3 million in direct annual research grant support. Interested individuals should send curriculum vitae with bibliography, short (three-page) summary of planned research, and the names and addresses of three references to the following:

Robert Roskoski, Jr., Head
Department of Biochemistry and Molecular Biology
Louisiana State University Medical Center (LSUMC)
1100 Florida Avenue
New Orleans, LA 70119-2799

LSUMC is an Equal Opportunity/Affirmative Action Employer.

VACANCIES IN GENETICS AND EMBRYOLOGY/DEVELOPMENTAL BIOLOGY

Two positions at the rank of **ASSISTANT PROFESSOR**; August 1990. One position: teach genetics and evolutionary biology; other position: embryology/developmental biology. Both include introductory course responsibilities. Ph.D. required. Commitment to undergraduate teaching and research in a liberal arts context required. Submit application letter, résumé, statement of teaching and research goals, all transcripts, and three letters of recommendation to: **Dr. Gerald L. Van Amburg, Department of Biology, Concordia College, Moorhead, MN 56562.** File reviews begin 9 April 1990 and continue until positions are filled. *An Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR OF BIOLOGY

Anticipated 1-year sabbatical replacement position to teach introductory biology for majors and nonmajors. Enthusiasm for undergraduate teaching and a Ph.D. are required. Send curriculum vitae, statement of teaching philosophy and research interests, and names of three references to: **M. Flynn, Biology Department, Siena College, Loudonville (Albany), NY 12211.** *Applications from members of underrepresented groups are particularly encouraged. Siena is an Equal Opportunity Employer.*

ASSISTANT PROFESSOR REPRODUCTIVE BIOLOGY

Reproductive Endocrinology Center and Program in Molecular Medicine invites applicants for assistant professor position in the Department of Obstetrics, Gynecology, and Reproductive Sciences, University of California, San Francisco. Candidates should hold a Ph.D. or M.D. degree with two or more years of postdoctoral research experience. Candidates will be expected to establish and maintain an active research program in biochemical, cellular, or molecular reproductive biology. Opportunities are available for participation in several graduate programs via membership in the Program in Biological Sciences.

Applications, including curriculum vitae and names of three references, should be submitted by 11 June 1990 to: **Richard Weiner, Ph.D., Department of Obstetrics, Gynecology, and Reproductive Sciences, University of California, San Francisco, CA 94143-0556.** *University of California is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

ASSISTANT PROFESSOR TENURE TRACK

The Nuclear Medicine Section of the Department of Radiology is seeking a tenure-track assistant professor to serve as **ASSISTANT DIRECTOR OF RESEARCH** in the department and to be a major participant in projects concerning the molecular biology of radiation resistance. Research presently involves cloning, characterizing, and transferring of genetic elements responsible for radiation resistance in microorganisms and mammalian cells in culture. A recent Ph.D. with expertise and publications in microbiology/molecular biology would be desirable. An appointment in the appropriate basic science department will be provided. Salary will be commensurate with experience. Send curriculum vitae and three references by 15 April 1990 to:

Glenn V. Dalrymple, M.D.
Director, Section of Nuclear Medicine
Director of Research, Department of Radiology
University of Nebraska Medical Center
600 South 42nd Street
Omaha, NE 68198-1045

The University of Nebraska Medical Center is an Equal Opportunity/Affirmative Action Employer, M/F/H/V.

ASSISTANT OR ASSOCIATE PROFESSOR, BIOCHEMICAL TOXICOLOGY. Louisiana State University (LSU) is seeking a highly motivated person to develop a strong research program in biochemical toxicology. Emphasis on application of biotechnology to environmental concerns. Position requires Ph.D. in chemistry, biochemistry, pharmacology, toxicology, or closely related field. This is a first year (12-month), tenure-track appointment. Send résumé and three letters of recommendation to: **Dr. Charles R. Short, School of Veterinary Medicine, LSU, Baton Rouge, LA 70803,** by 15 May 1990. *LSU is an Equal Opportunity Employer.*

ASSISTANT PROFESSOR AND ASSOCIATE PROFESSOR positions in physiology. Tenure-track, 12-month positions at Indiana University School of Medicine, Terre Haute Center for Medical Education. Applicants must possess an earned doctoral degree in discipline and have the potential to develop and sustain a fundable independent research program. Academic duties include a significant portion of time in teaching first-year medical students. Interested individuals are invited to submit curriculum vitae and three letters of reference to: **Search and Screen Committee, Terre Haute Center for Medical Education, Indiana University School of Medicine, 135 Holmsted Hall, Terre Haute, IN 47809.** *Indiana University is an Affirmative Action/Equal Opportunity Employer.*

Discover What It's Like To Discover.

Discover a bright future at Sterling Research Group, the worldwide pharmaceutical research and development organization of Sterling Drug Inc.



PHARMACEUTICAL SCIENCES DEPARTMENT

The department of Pharmaceutical Sciences is conducting research directed toward developing novel strategies for the stabilization of protein/peptide drug candidates in delivery systems. We are seeking scientists to conduct physico-chemical characterization work or novel protein/peptide drug candidates to support formulation development. Responsibilities include conducting studies to characterize properties including solubility; chemical stability; thermal behavior, aggregation and adsorption; establishing analytical methods and conducting studies to elucidate degradative mechanisms for drug substance.

Research Scientist

Requires a B.S. or M.S. in Chemistry or Biochemistry with 2-5 years' experience in protein/peptide characterization. Experience with analytical techniques including chromatography and electrophoresis required. Knowledge of protein/peptide degradation products desirable. Please respond to GV-212.

Senior Research Scientist

Requires a Ph.D. in Pharmaceutical Chemistry or Biochemistry or the equivalent with 1-5 years' experience in physico-chemical characterization of protein/peptides. Experience with analytical techniques including chromatography, electrophoresis, CD and microcalorimetry is essential. Scientific publications demonstrating innovative research skills also required. Please respond to GV-114.

In exchange for your talents, we offer a competitive salary and benefits package. For confidential consideration, please send your resume with salary history and appropriate dept. code to: **Sterling Research Group, A Division of Sterling Drug Inc., 9 Great Valley Parkway, Malvern, PA 19355.** An equal opportunity employer M/F/H/V.



STERLING RESEARCH GROUP

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POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR. The Department of Otorhinolaryngology is seeking applications for a tenure-track research scientist. The successful candidate will have 2 years of postdoctoral experience, a research interest in the neurobiology of the auditory or vestibular system using biochemical or pharmacological methodology, and the ability to build an independently funded neuroscience research program. Applicants should send curriculum vitae, statement of current and planned research interest, and three reference letters to: **Dr. Glenn C. Thompson, Department of Otorhinolaryngology, University of Oklahoma Health Sciences Center (OUHSC), P.O. Box 26901, Oklahoma City, OK 73190-3048.** OUHSC is an Affirmative Action/Equal Opportunity Employer.

The Division of Gerontology in the Department of Medicine, University of Alabama at Birmingham (UAB), has a tenured **ASSOCIATE PROFESSOR** position open for an experienced peptide chemist with a terminal degree who works in the field of lipoproteins. This scientist will study the structure and function of apolipoproteins, work on the immunoregulatory properties of apolipoproteins, and study the antiviral properties of lipoproteins. The successful candidate must have knowledge of physical, chemical, and biological methods to be used in the above stated studies, be independent, and have a demonstrated ability to obtain federal grant support, and be well accomplished as evidenced by publications in well-refereed scientific journals. Send curriculum vitae, three reference letters, and statement of research interests by 1 May 1990 to: **Jere P. Segrest, M.D., Ph.D., Professor of Medicine, Room 630 BDB, UAB Station, Birmingham, AL 35294.**

Gonzaga University seeks a tenure-track **BIOCHEMIST (Ph.D., ASSISTANT PROFESSOR)** for joint appointment in Biology and Chemistry Departments. Develop a two-semester biochemistry lecture/laboratory course, plus teach general chemistry, molecular biology, or immunology, and direct undergraduate research. Submit curriculum vitae, an outline of research plans, and transcripts, and have three reference letters sent to: **D. Kelsh, Chemistry Department, Gonzaga University, Spokane, WA 99258.** An Equal Opportunity Employer.

BIOCHEMISTRY AND MOLECULAR BIOLOGY. Permanent-track **FACULTY POSITION.** Excellent facilities, support, and research environment available for an established or highly promising research investigator. Level of appointment commensurate with qualifications. Preference given to candidate in the area of molecular structure/function relationships with an interest in teaching graduate and medical school biochemistry. Send curriculum vitae, bibliography, and three letters of reference by 31 May 1990 to: **Dr. David O. Toft, Department of Biochemistry and Molecular Biology, Mayo Medical School, Rochester, MN 55905.** An Affirmative Action/Equal Opportunity Employer.

BIOLOGIST, Ph.D. Required by 16 September 1990; temporary 9-month sabbatical replacement position starts 16 September 1990; to teach fall: human anatomy and physiology; winter: genetics; spring: developmental biology. The University of Minnesota, Morris (UMM), is a distinguished small (2000) liberal arts college in west central Minnesota. Send résumé, transcripts, and three letters of recommendation by 15 April 1990 to: **Dr. James K. Olson, Division of Science and Math, University of Minnesota, Morris, MN 56267.** UMM is an Equal Opportunity Educator/Employer and specifically invites and encourages applications from women and minorities.

BIOLOGY/DEVELOPMENTAL BIOLOGY. A **VISITING PROFESSORSHIP at ASSISTANT OR ASSOCIATE** rank is available at Delaware State College for the 1990-91 academic year. Minimum qualifications include a Ph.D. in biological sciences with strong concentration in developmental biology and demonstrated ability to work effectively with students. The successful candidate will be expected to teach undergraduate and possibly graduate courses in area of expertise. Involvement in undergraduate program will include teaching introductory and/or advanced level courses. Send curriculum vitae, official transcripts, and three letters of reference by 15 April 1990 to: **Dr. Dorene Petrosky, Chairperson, Department of Biological Sciences, Delaware State College, Dover, DE 19901.** Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

BIOLOGY. Position 1: **CHAIR** of Biology Department, fall of 1990. Ph.D. in biology required. Nine-month position with summer teaching available. Duties include teaching, recruiting faculty, facilitating research, developing curricular policies, and providing leadership to a faculty of 11. Position 2: **ASSISTANT PROFESSOR**, tenure track, fall of 1990. Contingent on funding. Ph.D. preferred. Duties include teaching aquatic biology, ichthyology, limnology, comparative anatomy, mammalogy, general zoology, and introductory biology. Send letter of application, curriculum vitae, transcripts, and three letters of recommendation to: **Dr. P. R. Dorris, Box 7544, Henderson State University, Arkadelphia, AR 71923,** by 15 April 1990. Henderson is an Affirmative Action/Equal Opportunity Employer.

BIOMATERIAL SCIENTIST

As a leader in the field of cell transplantation research, we currently have an opening for a Ph.D. scientist with experience in biomedical engineering, cell biology, physiology and/or artificial organs to work in the field of encapsulated cell transplantation. Please submit curriculum vitae to: **Department #952, Administration Department, Hana Biologics, Inc., 850 Marina Village Parkway, Alameda, CA 94501.** Equal Opportunity Employer.

BIOTECHNOLOGIST

The Pulp and Paper Research Institute of Canada carries out a cooperative program of basic and applied research and development for the Canadian pulp and paper industry. We are currently seeking a biotechnologist for our main laboratory in Pointe-Claire, Québec, Canada, for independent research on the biological degradation of lignocelluloses in order to develop biotechnological applications for bleaching and waste treatment. A Ph.D. or engineering degree in a relevant field is required. Research or industry-related experience would be an asset. Please send your résumé to: **Employment Services, Pulp and Paper Research Institute of Canada, 570 St. Jean Boulevard, Pointe-Claire, Québec, Canada H9R 3J9.**

CELLULAR IMMUNOLOGISTS STAFF SCIENTISTS

Applications are invited for tenure-track staff scientist positions in cellular immunology at the Wadsworth Center for Laboratories and Research, New York State Department of Health, Albany, available summer-fall of 1990. The center is particularly interested in candidates working in the areas of lymphocyte activation, interaction, and/or regulation. Successful candidates will be expected to possess a broad knowledge of immunology and to develop a strong independent basic research program. Participation in immunology graduate programs at the State University of New York, Albany, and at other area institutions is strongly encouraged. Candidates must possess a Ph.D. or equivalent degree and have at least 3 years of postdoctoral experience. Send curriculum vitae, a statement of current and future research interests, and the names, addresses, and telephone numbers of three references by 1 June 1990 to: **Dr. Donal Murphy, Chairman, Immunology Search Committee, Wadsworth Center for Laboratories and Research, P.O. Box 509, Albany, NY 12201-0509.** The Wadsworth Center is a multidisciplinary basic research and public health center devoted to the study of human disease, and is an Equal Opportunity/Affirmative Action Employer.

CHAIR DEPARTMENT OF PLANT PATHOLOGY

Nominations and applications are invited for the position of chair and professor of plant pathology at Iowa State University. The position will be divided between administration and an active program in research, teaching, and/or extension. The chair is responsible for faculty and staff development and program and budget administration. Candidates must have a Ph.D. in plant pathology or a related discipline; have a nationally recognized record in research, teaching, and/or extension; and qualify for tenure with the rank of **PROFESSOR.** Applications should include curriculum vitae, a statement of administrative philosophy and professional interests, and the names of five references. Send inquiries, applications, or nominations by 1 June 1990 (or until position is filled) to: **Kenneth J. Frey, Chair of Plant Pathology Search Committee, 105 Bessey Hall, Iowa State University, Ames, IA 50011.** Telephone: 515-294-1160.

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

POSITIONS OPEN

CHAIRPERSON, DEPARTMENT OF BIO-CHEMISTRY. Tulane University School of Medicine invites applications and nominations for the position of chairperson of the Department of Biochemistry. Candidates should be well-established and funded investigators with a fundamental commitment to teaching medical and graduate students. Focus will be on cellular and molecular biology both within and between departments. Applicants should send curriculum vitae, names and addresses of three references, and a statement about professional goals, interests, and experience to: **Dr. Cyril Y. Bowers, Department of Medicine, Tulane Medical School, 1430 Tulane Avenue, New Orleans, LA 70112.** Applications will be accepted until 30 April 1990. *Tulane Medical School is an Equal Opportunity/Affirmative Action Employer.*

CHAIRPERSON, Department of Psychology, Washington University in St. Louis. An outstanding scholar with an active research program and a broad understanding of contemporary psychology is sought to chair the Department of Psychology. This is a tenured position at the rank of full professor; salary is negotiable. *We especially encourage applications from women and members of minority groups.* The Psychology Department is part of a strong liberal arts curriculum in the Faculty of Arts and Sciences and has close ties to an outstanding medical school with well-developed programs in neurobiology and clinical neuroscience. Psychology is the most popular major for Washington University's superior undergraduate students. The department has a variety of graduate programs leading to the Ph.D. degree. Washington University is a well-endowed private research and teaching university. The university is making a major commitment to building a first-ranked Psychology Department. This search is for a leader of that effort. In addition to excellence in scholarship, broad knowledge of psychology, and academic vision, an aptitude for administration is required. Direct inquiries (including curriculum vitae) to: **Professor Marcus E. Raichle, Chair, Psychology Department Chairperson Search Committee, Campus Box 1125, Washington University, St. Louis, MO 63130.** *Washington University is an Equal Opportunity/Affirmative Action Employer. Employment eligibility verification required upon hire.*

DIRECTOR OF RESEARCH DEPARTMENT OF OTOLARYNGOLOGY AND COMMUNICATIVE SCIENCES BAYLOR COLLEGE OF MEDICINE

Applications are invited for the position of Director of Research. We seek an established neuroscientist with leadership qualities who has a particular interest in the inner ear and/or its central connections. Preference will be given to individuals conversant with the application of molecular approaches at the cellular level.

The applicant will be expected to provide overall direction to the departmental research program, to maintain his/her own on-going research program, to recruit other scientists, to coordinate the residency research program, and to promote and facilitate interdisciplinary and interdepartmental interactions among research personnel.

Send curriculum vitae and recent reprints to: **Dr. James Jerger, Chair Search Committee, Department of Otolaryngology and Communicative Sciences, Baylor College of Medicine, NSC, NA 200, 6501 Fannin Street, Houston, TX 77030.** Telephone: 713-798-3421; FAX: 713-798-6002.

Baylor College of Medicine is an Equal Opportunity/Affirmative Action Employer.

The University of Pittsburgh has established a Department of Human Genetics and an Institute of Medical Genetics in the university-affiliated hospitals.

Inquiries are welcomed, especially for **DIRECTOR OF REPRODUCTIVE GENETICS** at Magee Women's Hospital, **GENETICIST** (dysmorphology or cytogenetics) at Magee, **METABOLIC GENETICIST** at Pittsburgh Children's Hospital, **MATHEMATICAL GENETICIST** in the department, **MOLECULAR GENETICISTS** in the department, and the expanded comprehensive **FELLOWSHIP** in all five disciplines.

Contact: **John J. Mulvihill, M.D., Chairman and Director Designate, or Robert E. Ferrell, Ph.D., A316 Crabtree Hall, Department of Human Genetics, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA 15261.** Telephone: 412-624-3018.

POSITIONS OPEN

DEAN FACULTY OF NATURAL SCIENCES AND MATHEMATICS STOCKTON STATE COLLEGE

Stockton State College is a young, residential, undergraduate, liberal arts and sciences college, with a student body of 5000. The college is located on a 1600-acre wooded campus in the Pinelands of New Jersey, 15 miles from the ocean beaches, 1 hour from Philadelphia, and 2 1/2 hours from New York City. The Faculty of Natural Sciences and Mathematics consists of 47 faculty strongly committed to undergraduate teaching and active research, and includes majors in environmental studies and marine science as well as the more traditional programs in biology, chemistry, geology, mathematics, and physics. The science laboratories are currently being completely renovated, and a new Arts and Sciences Building to house the Environmental Studies Program is scheduled for construction in the near future.

The dean manages the division, exercises curricular leadership, develops and administers the budget, oversees and monitors faculty development, manages faculty recruitment and evaluation, and participates in overall academic planning. The dean reports to the Vice President for Academic Affairs.

Qualifications:

- A Ph.D. in one of the sciences or mathematics.
- An academic record that would merit at least the rank of associate professor.
- A strong commitment to excellence in teaching.
- An understanding of the role of research in undergraduate science education.
- An appreciation of the resources necessary to support the laboratory and field sciences.

Applications should include a cover letter outlining the applicant's qualifications for and interest in the position as well as current curriculum vitae. Applicants should request that three letters of recommendation be sent to the address below.

Applications and letters of reference should be sent to:

**Professor Lynn F. Stiles, Jr.
Chair, Dean Search Committee
Faculty of Natural Sciences and Mathematics
Stockton State College
Pomona, NJ 08240**

Salary is competitive and based on qualifications and experience. Screening will begin 6 April 1990. *Stockton State College is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply. (R003290.)*

MOLECULAR BIOLOGY BRANCH BRANCH CHIEF POSITION

The Center for Devices and Radiological Health, Food and Drug Administration (FDA), is seeking a qualified individual to serve as chief of the Molecular Biology Branch to direct intra- and extramural scientific programs in molecular biology and biotechnology. Responsibilities include leading an energetic and growing number of staff in scientific and regulatory matters related to center programs in molecular biology, molecular immunology, and biotechnology. The position is located in Rockville, Maryland.

A Ph.D., M.D., or equivalent degree is required with demonstrated research experience in relevant scientific areas. Candidate must have managerial and supervisory skills and a broad understanding of the impact of biotechnology at the clinical level. Appointment may be at the GM-14 through GM-15 levels, depending upon experience and qualifications of the candidate. Appointment may also be made through the U.S. PHS Commissioned Corps for qualified candidates.

Please send curriculum vitae, completed Form 171, transcripts, and reprints of a few representative publications to: **Dr. Mary E. Jacobs, Director, Division of Life Sciences, OST, FDA/Center for Devices and Radiological Health (HFZ-113), 12709 Twinbrook Parkway, Rockville, MD 20857.** Telephone: 301-443-7115.

NUCLEAR MEDICINE FACULTY POSITION at Georgetown University Hospital, Department of Radiology. Interest/training in pediatric nuclear medicine desirable. Certification in diagnostic radiology preferred. Contact: **John W. Keyes, Jr., M.D., Director, Division of Nuclear Medicine, Georgetown University Hospital, Washington, DC 20007.** *Equal Opportunity/Affirmative Action Employer.*

Research Associates

The Squibb Institute for Medical Research is continuing to expand our extensive research efforts in the areas of cardiovascular diseases, oncology, cholesterol and lipid metabolism. This expansion has created several exceptional opportunities for creative research professionals.

Cell Biology

Contribute to one of the following research programs:

- Investigate the regulation of lipid and lipoprotein metabolism by utilizing techniques in mammalian tissue culture, enzyme assays, and molecular biology.
- Perform protein isolation and enzyme assays in addition to utilizing molecular and cellular biology techniques for lipid and lipoprotein metabolism.
- Evaluate enzymes in the cholesterol synthetic pathway utilizing skills in protein/enzyme isolation, enzyme assays and kinetics.

Molecular Biology

- Establish an in-situ hybridization core unit to interact with ongoing basic research on the molecular characterization of oncogenes, utilizing in-situ hybridization techniques, preparation of tissue sections and probes.

Pharmacology

- Conduct biochemical and functional evaluation of cell activation and suppression in animal models utilizing anticoagulant and thrombolytic agents, platelet and/or leukocyte preparations, and cellular/molecular biology techniques.

Candidates for these positions should possess a BS/MS in a relevant scientific discipline along with 1 - 2 years experience.

Please forward your resume to:
The Squibb Institute for Medical Research, Human Resources Department 110, P.O. Box 4000, Princeton, NJ 08543-4000. An equal opportunity employer.

The Squibb Institute for Medical Research



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POSITIONS OPEN

DIRECTOR, NEW YORK STATE MUSEUM, ALBANY. The New York State Museum invites applicants and nominations for the position of director. The director serves as Assistant Commissioner for the Museum and Science Service in the New York State Education Department. The director must have advanced degree in museum-related discipline and possess strong leadership qualities, scholarly achievement in a discipline relevant to the museum's research areas, administrative capabilities in a complex organizational setting, long-range planning experience, and a proven record of fund-raising. The state museum has major research programs in anthropology, biology, geology, and history; extensive collections; and innovative exhibit and museum education programs. The state museum has a staff of 200, an operating budget of \$7.5 million, and is the major cultural institution in a metropolitan region of 850,000 people. Salary range: \$75,362 to \$95,591. Qualified candidates should send résumé and cover letter including the names of three references by 18 April 1990 to: **Mr. Charles J. Byrne, Director of Personnel, Box SC-34-SCI, New York State Education Department, 89 Washington Avenue, Albany, NY 12234.** An Affirmative Action/Equal Opportunity Employer.

HUMAN IN VITRO FERTILIZATION

IVF Australia, a highly successful in vitro fertilization program with over 600 babies born from all of our IVF programs in the United States (between March 1986 and March 1990), has challenging and rewarding laboratory opportunities in Westchester County, New York, and Long Island, New York. There are likely to be further openings in Pittsburgh, Detroit, and New Jersey in the near future. Positions available:

- **LABORATORY DIRECTOR.** Ph.D. in biological sciences; experience in reproductive physiology, embryology or andrology; and laboratory management is desirable.
- **EMBRYOLOGY TECHNOLOGISTS.** B.S., M.S., or M.T. in embryology or andrology experience desired to work in our embryology laboratory. Extensive on-the-job training is supplied.

Candidates must be comfortable working as a team member and have a desire to deliver service in a very patient-oriented program.

We offer salaries based on qualifications and experience. Send résumé with salary history to:

David J. Beames

Vice President, New Program Implementation
500 West Putnam Avenue
Greenwich, CT 06830

Telephone inquiries are welcome. Please call **David Beames** at 203-622-7230, Monday through Friday, or FAX your résumé to 203-622-7256.

An Equal Opportunity Employer.

FACULTY POSITIONS. Georgia Institute of Technology, School of Earth and Atmospheric Sciences, seeks applicants in atmospheric chemistry, atmospheric dynamics, geochemistry, geophysics, and meteorology for two tenure-track faculty positions. Three additional positions in these areas will be filled in the next 2 years. These positions require a Ph.D. and exceptional promise in research and teaching at the graduate and undergraduate levels. Application materials, including curriculum vitae, publications list, brief statement of research plans and teaching interests, and the names of three references should be sent to: **Search Committee Chair, School of Earth and Atmospheric Sciences, Georgia Institute of Technology, Atlanta, GA 30332.** Georgia Institute of Technology (a unit of the University System of Georgia) is an Equal Opportunity/Affirmative Action Employer.

FACULTY, HUMAN NUTRITION. The University of Illinois is seeking applicants for a tenure-track faculty position with open rank. Doctorate required in nutrition or related field. The successful candidate must demonstrate ability to develop nationally recognized research program and obtain external funding for studies on basic issues of human nutrition. Preferred area of research is maternal and infant nutrition. Available fall of 1990 or January 1991. Send application to: **Dr. Sharon Nickols, School of Human Resources and Family Studies, 260 Bevier Hall, University of Illinois, 905 South Goodwin, Urbana, IL 61801.** Closing date 30 June 1990 or until filled. For further information, contact: **Dr. Donald Layman, telephone: 217-333-1616.** Equal Opportunity Employer/Affirmative Action.

POSITIONS OPEN

DIRECTOR, RHEUMATOLOGY RESEARCH. Roger Williams General Hospital seeks a Ph.D. or M.D. to direct its rheumatology research program. Candidates must qualify for appointment at Brown University as assistant or associate professor (research) of medicine and must have skills and interest in teaching fellows in the laboratory. Three years of postdoctoral research experience in molecular biology, preferably in connective tissue biology or autoimmunity, are required. The incumbent will be expected to develop a high-caliber, independent research program, collaborate with other faculty, and compete successfully for external funding. Appointment as **ASSOCIATE PROFESSOR, RESEARCH SCHOLAR**, requires a national reputation as an independent investigator. Approximately 90% to 100% time research. Please send curriculum vitae and a one-page summary of research interests to: **E. Lally, M.D., Director, Division of Rheumatology, Brown University, Box G-RW, Providence, RI 02912.** Applications are expected by 28 May 1990. Screening will begin on that date and continue until the search is successful or closed. Roger Williams General Hospital is an Equal Opportunity/Affirmative Action Employer and actively solicits applications from minority and protected groups.

ENGINEER/PHYSICIST BIOMEDICAL SCIENTIST

The National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control, is seeking a **CHIEF** for the Physical Agents Effects Branch, Division of Biomedical and Behavioral Science, in Cincinnati, Ohio. The successful candidate will manage NIOSH's principal research program addressing the health and safety consequences of occupational exposure to such physical agents as noise, radiation, vibration, and thermal factors. Candidate should have research expertise and publications in one or more of these areas as well as experience in research program development and management. The position is in the career civil service, GS-14 or GS-15. Salary range is \$50,342 to \$76,982, depending on qualifications. Interested candidates should send an application or curriculum vitae to: **Mr. William Latham, NIOSH Personnel Office, 4676b Columbia Parkway, Cincinnati, OH 45226.**

An Equal Opportunity Employer.

ENVIRONMENTAL BIOLOGIST. Washington College invites applications for a tenure-track position in the Department of Biology at the rank of **ASSISTANT PROFESSOR** effective August 1990. Ph.D., with teaching experience required. The candidate should be a broadly based marine/estuarine biologist with strengths in vertebrates and invertebrates. Alternating teaching responsibilities will include introductory and upper level courses, environmental biology, and vertebrate morphogenesis. The successful candidate will have the opportunity to introduce an upper level course in his/her area of interest and to assist in the development of an environmental studies program. Salary is competitive. Submit résumé, graduate transcript, and two letters of recommendation by 15 April 1990 to: **Dr. Donald A. Munson, Chair, Department of Biology, Washington College, Chestertown, MD 21620.** Equal Opportunity Employer.

SENIOR LEVEL FACULTY POSITION: CELLULAR/MOLECULAR NEUROBIOLOGY. The Department of Biological Sciences and the Program in Neural, Informational, and Behavioral Sciences (NIBS) invite applications for a tenured faculty position (**ASSOCIATE/FULL PROFESSOR**). Preference will be given to individuals using modern cell biological or molecular methods to study the function, development, or plasticity of the nervous system. Candidates will be expected to have substantial research programs and to participate in graduate and undergraduate teaching. Excellent research space will be provided in the newly completed Hedco Neurosciences Building. The successful candidate will be a member of the Section of Neurobiology, a vigorous group of 23 faculty, and the university-wide NIBS program, a large multidisciplinary group of molecular, cellular, systems, behavioral, cognitive, and computational neuroscientists. Please submit by 30 April 1990 curriculum vitae, statement of research interests, and the names of three referees to: **Neurobiology Search Committee, Section of Neurobiology, Department of Biological Sciences, University of Southern California (USC), Los Angeles, CA 90089-2520.** USC is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITIONS. The Hematopathology Program and Section of Laboratory Hematology, Division of Laboratory Medicine, The University of Texas M. D. Anderson Cancer Center, has junior and senior tenure-track faculty positions open. Candidates should have training and/or research experience in hematologic neoplasia. The successful applicants will be expected to develop independent and collaborative research. Preference will be given to individuals who have a specialized background, particularly molecular biology. Academic rank is commensurate with qualifications and experience. Send curriculum vitae, names of three references, and a statement of research interests to: **Sanford A. Stass, M.D., Director, Hematopathology Program, Box 72, Division of Laboratory Medicine, The University of Texas M. D. Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, TX 77030.** The University of Texas M. D. Anderson Cancer Center is an Equal Opportunity/Affirmative Action Employer.

TENURE-TRACK FACULTY POSITION BIOCHEMISTRY/ENZYMOLOGY

The Center for Advanced Research in Biotechnology (CARB) invites applications for a faculty position in the area of protein biochemistry/molecular enzymology. This is a tenure-track position at the **ASSISTANT, ASSOCIATE, OR PROFESSOR** level. CARB is a newly established basic research institute devoted to fundamental problems in protein function, structure, and engineering. CARB is a joint venture between the University of Maryland, the National Institute of Standards and Technology, and Montgomery County, Maryland. The successful candidate will be an employee of the University of Maryland.

CARB's new 40,000-square-foot research facility is located in the Shady Grove Life Science Center in Rockville, Maryland. CARB has established state-of-the-art laboratories in macromolecular crystallography, molecular biology, theoretical modeling of protein structure and function, and a high field NMR facility. We are seeking an individual whose research interests are focused on the biochemistry of proteins, enzymes, or nucleic acid function as it relates to a fundamental biological problem. The successful candidate will be expected to develop a strong research program and collaborate with other CARB scientists. Interested candidates should send curriculum vitae, a statement of research interests and accomplishments, reprints of recent publications, and request that three letters of recommendation be sent to:

CARB Biochemistry Search Committee
Center for Advanced Research in Biotechnology
9600 Gudelsky Drive
Rockville, MD 20850

The University of Maryland is an Equal Opportunity/Affirmative Action Employer. The closing date is 15 May 1990.

NEUROPHYSIOLOGY FACULTY POSITION DEPARTMENT OF BIOLOGICAL SCIENCES WELLESLEY COLLEGE

The Department of Biological Sciences at Wellesley College, a liberal arts institution located 10 miles west of Boston with a student body of 2200 women, invites applications for a full-time position to be filled by September 1990.

This appointment will be made at the **ASSISTANT PROFESSOR** level to teach an introductory course in psychobiology, with an emphasis on the biological aspects, and an advanced course in neurobiology research methods. In addition, this person will team teach a course in human biology and one in animal physiology. Candidates for this position should indicate their abilities in all these areas. This position is a 1- to 2-year, nontenure-track appointment.

For this position, we are seeking applicants who demonstrate a commitment to the teaching of undergraduates. Because of space limitations, research onsite will be difficult, and will not be expected.

Credentials will be reviewed when complete. Applicants should send curriculum vitae, graduate transcript, a statement of teaching expertise, one letter of recommendation, and the names of two additional referees to: **Dr. Dennis M. Smith, Chairman, Department of Biological Sciences, Wellesley College, Wellesley, MA 02181,** no later than 30 April 1990.

Wellesley College is an Equal Opportunity/Affirmative Action Employer.



**International Crops Research Institute
for the Semi-Arid Tropics
Patancheru
Andhra Pradesh 502 324, India**

Team Leader

West African Regional Sorghum Program (Mali)

The International Crops Research Institute for the Semi-Arid Tropics needs a Team Leader who will provide scientific and administrative leadership to the West African Regional Sorghum Improvement Program located in Mali. He/she will report to the ICRISAT Executive Director for West Africa at ISC. The aim of the program is to provide scientists in national programs in West Africa with stable, high-yielding cultivars of sorghum adapted to the northern Guinean and Sudanian climatic zones and with resistance to *Striga*, diseases, and insect pests. Sorghum-based cropping systems research with emphasis on improvement of existing systems through more efficient management of available moisture and other resources is part of the team's activities.

The Team Leader will work closely with the national agricultural research systems, SAFGRAD, other relevant regional organizations and other ICRISAT programs in ensuring the free exchange of promising breeding material among scientists throughout the region. He/she will supervise the coordination of activities within the SAFGRAD sorghum network. The duty station will be Bamako, the capital of Mali. An ICRISAT research station is being developed at Samanko, 16 km from the city.

Essential qualifications: A Ph.D. in a relevant agricultural discipline with at least 10 years' research experience; experience in research management; fluency in French and good to excellent command of English. Desirable: Research and management experience in developing-country agriculture; experience in the management of research grants and contracts; experience in extension and training activities.

The position is at principal staff level, and is of indefinite duration, from January 1991. Salary and related benefits are commensurate with comparable international positions. Bamako (pop. 800,000) commands good road and air routes with neighboring countries. Living conditions and amenities are satisfactory; educational curricula are available in French through high school and in English through primary or grade school.

Send resume and names of three referees within 6 weeks to: Director General, ICRISAT, Patancheru, Andhra Pradesh 502 324, India.

LIBRARY DIRECTOR

ARIZONA HEALTH SCIENCES CENTER LIBRARY THE UNIVERSITY OF ARIZONA

The University of Arizona Health Sciences Center invites nominations and applications for the position of Director of the Arizona Health Sciences Center Library. The Director is responsible for the overall administration and development of the Arizona Health Sciences Library, including collections and resources development, planning, fiscal management, user services, process services, library automation, faculty and staff supervision, and library outreach programs.

The Library services the academic Health Sciences Center which includes the Colleges of Medicine, Nursing, and Pharmacy, the School of Allied Health Professions, and the University Medical Center Hospital. It is the only academic medical library in Arizona.

The Library is presently located in a 33,000 square feet facility which houses a collection of approximately 165,000 bound volumes, 3,400 current serial subscriptions, and 3,500 media programs. The Library employs 16 librarians and 20 support staff, plus student assistants. A new Library building is in the final stages of planning and construction is expected to begin in the summer of 1990, for completion in 1991.

Qualifications: An M.L.S. from an ALA accredited program. At least seven years' experience in a biomedical library with at least five years of progressively greater administrative responsibility, preferably in an academic health sciences center.

Women and minorities are encouraged to apply. Applications and nominations should be directed to:

**Andreas M. Goldner, Ph.D.
Associate Dean for Student Affairs
The University of Arizona College of Medicine
Searches and Reviews, Room 2206
Tucson, Arizona 85724**

Applications should include a curriculum vitae with complete address and telephone number, along with the names, addresses, and telephone numbers of at least three references.

The review of applications will begin in April, 1990 and will continue until the position is filled.

The University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer



Neuroscience and Cell Biology

Robert Wood Johnson Medical School

New tenure track positions at junior and senior ranks are available in Neuroscience and Cell Biology at The University of Medicine and Dentistry of New Jersey's Robert Wood Johnson Medical School. Scientists will be located in the new Center for Advanced Biotechnology and Medicine, a joint venture with Robert Wood Johnson Medical School and Rutgers University, on the scientific Busch Campus in the New Brunswick/Piscataway area. Investigators with interests in molecular neurobiology, cellular neurobiology, systems biology and the relationship of biology to behavior and mentation are encouraged to apply. Positions will be available from the summer of 1990.

Please submit a curriculum vitae, summary of scientific interests and goals, and 3 letters of reference to:

**Dr. Ira B. Black, Chairman
Department of Neuroscience and Cell
Biology (SCI)
UMDNJ-Robert Wood Johnson
Medical School
675 Hoes Lane
Piscataway, NJ 08854-5635**

The UMDNJ is an Affirmative Action/Equal Employment Opportunity Employer, M/F/H/V, and a member of the University Health System of New Jersey.



POSITIONS OPEN

FACULTY POSITION AVAILABLE

We seek a cellular or molecular biologist with a strong physical science, mathematics, or engineering background, an individual who views mathematics and physical science as natural accompaniments to molecular and cellular experimentation. Appropriate research interests include (but are not limited to) structure-function relation of molecular assemblies, gene regulation and expression, or second-messenger control systems. Candidates must have an earned doctoral degree, must have demonstrated independent research productivity, and must be capable of attracting peer-reviewed research support. Qualified candidates should submit curriculum vitae, list of publications, up to three selected reprints, a statement of research plans, and the names of three referees whom we can contact.

Department of Biomedical Engineering
710 Traylor Building
720 Rutland Avenue
The Johns Hopkins School of Medicine
Baltimore, MD 21205

Women and minority candidates are encouraged to apply. The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.

AMERICAN CANCER SOCIETY BASIC CANCER RESEARCH EMINENT SCHOLAR CHAIR UNIVERSITY OF FLORIDA (EDWARD R. KOGER PROFESSORSHIP)

Applications are invited for candidates to fill a faculty professorship in basic cancer research, funded through an Eminent Scholar Chair sponsored by the American Cancer Society. The candidate should have demonstrated a strong commitment to academic medicine. Candidates must hold Ph.D., M.D., or both, and have an accomplished research record in the investigation of fundamental processes of neoplasia. A highly interactive individual would be desirable to take advantage of the research collegiality available at the University of Florida. The scholar could be appointed in a basic science department or jointly with a clinical department. Salary is negotiable and will be based on credentials. Deadline for receipt of applications is 1 June 1990.

Candidates for this position should be nominated or they should submit a letter of application stating teaching and research goals, and include curriculum vitae and at least three names of reference, to: **Edward M. Copeland III, M.D., Chairman of Professorship Search Committee, Department of Surgery, Box J-286, JHMC, Gainesville, FL 32610.**

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

THE UNIVERSITY OF CALGARY DEPARTMENT OF BIOLOGICAL SCIENCES

The University of Calgary Department of Biological Sciences invites applications for an **INSTRUCTOR** effective as early as 1 July 1990. The successful candidate will have primary responsibility for the laboratories in a large junior course on animal biology. Other duties include coordination of senior zoology laboratories and supervision of technical staff. Limited lecturing assignments can be arranged in animal biology or other courses where the candidate has expertise. If desired, a modest research program may be developed in conjunction with divisional faculty members.

Requirements include a graduate degree (Ph.D. preferred) in animal biology or zoology with a specialization in morphology or morphogenesis. Remuneration is commensurate with qualifications and experience (current salary scale: \$26,560 to \$52,822).

Interested individuals should send up-to-date curriculum vitae and arrange for three letters of reference to be sent by mail or FAX (403-289-9311) by 30 April 1990 to:

Dr. R. W. Davies, Head
Department of Biological Sciences
The University of Calgary
2500 University Drive, N.W.
Calgary, Alberta, Canada T2N 1N4

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

POSITIONS OPEN

FACULTY POSITION IN APPLIED MOLECULAR BIOLOGY. Nontenure track. The Department of Biological Sciences at the University of Maryland Baltimore County (UMBC) has a **LECTURER** position for a molecular biologist. Compensation will be based on experience and can equal that offered to starting assistant professors. The successful applicant will be responsible for the laboratory component of the well-respected M.S. program in Applied Molecular Biology (AMB). This program prepares students to enter the biotechnology area of industrial and academic research. Applicants should have a Ph.D. in an applicable field or an M.S. with appropriate experience. The area covered by the AMB laboratory courses include recombinant DNA technologies, cell culture, eukaryotic and prokaryotic gene expression, microbiology, and molecular genetics. Interested parties should submit, by 20 April 1990, curriculum vitae, a statement of technical skills, and the names and addresses of three references to: **Dr. Ronald E. Yasbin, Chair, Department of Biological Sciences, University of Maryland Baltimore County, Baltimore, MD 21228.** UMBC is an Equal Opportunity Employer.

POSITIONS IN DEPARTMENTS OF OBSTETRICS AND GYNECOLOGY AND PHYSIOLOGY AND PHARMACOLOGY

Faculty positions with joint appointments in the Departments of Physiology and Pharmacology and Obstetrics and Gynecology are available at the Bowman Gray School of Medicine for investigators interested in perinatal research. Individuals with interest and expertise in receptor development, molecular endocrinology, endogenous opioid systems, or cardiovascular regulation are encouraged to apply. Opportunities are excellent for collaboration with other faculty interested in perinatal biology. Teaching responsibilities will include involvement with medical students, graduate students, and individuals in fellowship programs in the Departments of Anesthesia, Obstetrics and Gynecology, and Pediatrics. Interested individuals should send recent curriculum vitae, a brief statement of research experience and interests, and the names of three references to: **Dr. Jim Rose, Department of Physiology and Pharmacology, Bowman Gray School of Medicine, 300 Hawthorne Road, Winston-Salem, NC 27103.** Affirmative Action/Equal Opportunity Employer.

FACULTY POSITIONS IN CELL, MOLECULAR, AND STRUCTURAL BIOLOGY

Applications are invited for tenure-track positions in the newly formed Department of Cell, Molecular and Structural Biology at Northwestern University Medical School. Positions are available at all levels from **ASSISTANT TO FULL PROFESSOR**. Applicants must have a Ph.D., M.D., or equivalent degree, with research experience in cell, molecular, or structural biology. Applicants will be screened with respect to their ability to carry on vigorous independent research and to participate in the various teaching programs administered by the department. Send complete curriculum vitae, brief description of research interests, and at least three letters of recommendation to: **Dr. Robert D. Goldman, Chairman, Department of Cell, Molecular and Structural Biology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611.**

Northwestern University is an Equal Opportunity/Affirmative Action Educator and Employer and invites applications from all qualified individuals. Applications from women and minorities are especially sought.

INSTRUCTOR/LECTURER IN BIOLOGY

Applications are invited for a 9-month, renewable, non-tenure-track teaching position at Florida International University (FIU) at the level of instructor, (master's required) or lecturer (Ph.D. required). The candidate will teach three introductory level courses per term, and one course per year in an area of specialty. Summer teaching is available. The candidate should have broad training and teaching experience in biology. Applicants should send curriculum vitae, three letters of recommendation, and transcripts of final degree to: **Dr. Thomas Pliske, Chair, Instructor/Lecturer Search Committee, Department of Biological Sciences, FIU, University Park, Miami, FL 33199** by 19 April 1990. FIU is a member of the State University System of Florida, and is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

JOINT FACULTY POSITION DEPARTMENTS OF OPHTHALMOLOGY AND VISUAL SCIENCES AND BIOCHEMISTRY UNIVERSITY OF LOUISVILLE SCHOOL OF MEDICINE

Candidates for a position of either **ASSISTANT** or **ASSOCIATE PROFESSOR** (tenure track) must hold a Ph.D. or equivalent degrees, have several years of postdoctoral training, and have demonstrated quality research abilities. Preference will be given to individuals applying molecular and biochemical approaches to areas of research involving wound healing/growth factors, ocular cancer, molecular basis of vision, retinal degeneration, or cataract development. Applicants should not currently be employed in an ophthalmology unit. They will be expected to develop and maintain an independent, funded research program and to participate in medical and graduate student training. Curriculum vitae, at least four professional references, and statement of research interests should be submitted to: **Search Committee, Attention: Dr. Christopher A. Paterson, Department of Ophthalmology and Visual Sciences, University of Louisville, Louisville, KY 40292.** Applications will be accepted until 1 May 1990 or until a suitable candidate is identified. Affirmative Action/Equal Opportunity Employer.

The Massachusetts General Hospital (MGH) and Harvard Medical School announce a search for **INVESTIGATORS** for the new MGH Cardiovascular Research Center (CVRC). Investigators for the CVRC will be selected by an appointments committee on the basis of excellence in their scientific investigation and their interest in cardiovascular biology. The initial appointments will be of scientists who focus upon genetics, molecular genetics, and structural biology, and preference will be given to those who bring to bear truly novel approaches relevant to cardiovascular biology or therapeutics. Research space and funds for up to 5 years will be provided to pursue independent investigations. Appointments will be to the staff of the Massachusetts General Hospital and at Harvard Medical School at an appropriate level. CVRC investigators must have an M.D. or Ph.D. degree and have appropriate postdoctoral training. Applications for a position as a junior faculty investigator at the CVRC should include a letter of interest, a one-page outline of prior research, and a one- to two-page outline of proposed research, curriculum vitae, and the names, addresses, and telephone numbers of three references. Applications should be mailed to: **Ms. Patricia Cohen, c/o Dr. Mark C. Fishman, Cardiovascular Research Center, Massachusetts General Hospital, MZ-3, Boston, MA 02114.** Women and minorities are encouraged to apply. The Massachusetts General Hospital and the Harvard Medical School are Equal Opportunity Employers.

Openings currently exist for an **ASSISTANT/ASSOCIATE STAFF INVESTIGATOR** with 2 to 7 years of postdoctoral experience, and a **POSTDOCTORAL FELLOW**. The work involves studies of the activation and regulation of blood coagulation and fibrinolysis, using kinetic and physical biochemistry methods to evaluate protein interactions and conformational changes. Excellent salary, fringe benefits, and advancement possibilities. Interested applicants should send curriculum vitae and the names of three references to: **Dr. J. D. Shore or Dr. S. T. Olson, Division of Biochemical Research, Henry Ford Hospital, 2799 West Grand Boulevard, Detroit, MI 48202.** We are Affirmative Action/Equal Opportunity Employers.

MICROBIAL MOLECULAR BIOLOGIST

A position is available in our Microbial Genetics Group to participate in the development of bacterial diagnostics. You will be responsible for developing gene transfer systems, gene expression systems, and marker exchange systems in relatively uncharacterized bacterial genera. Experience with gene expression and gene transfer systems in both Gram-negative and Gram-positive organisms is desirable. A Ph.D. in microbiology, molecular biology, or related field is required, and some postdoctoral experience is preferred. Send curriculum vitae and names of three references to: **Dean Gallinatti, Director of Human Resources, DNA Plant Technology Corporation, 6701 San Pablo Avenue, Oakland, CA 94608.** An Equal Opportunity Employer. DNA Plant Technology Corporation is the world's largest independent agricultural biotechnology company dedicated to developing products for the food and related industries.

POSITIONS OPEN

McMASTER UNIVERSITY MEDICAL PHYSICIST

The Department of Physics at McMaster University invites applications for a tenure-track position in medical physics. The successful candidate will be expected to establish a research program centered in the Physics Department and contribute to the teaching of both the existing M.Sc. program in health and radiation physics as well as a developing medical physics doctoral program. These programs are currently run by a group of seven medical physicists who are associate members of the department and whose primary appointments are in Hamilton hospitals or the Regional Cancer Center. Favorable research areas for the successful applicant might be: medical lasers, magnetic resonance, positron emission tomography, ultrasound, biomedical computing, or prosthetics and biomaterials. The expected start date is 1 July 1991, subject to university budget approval. The initial level of appointment and starting salary will depend upon the qualifications of the successful applicant. The closing date for receipt of complete applications for the position is 30 June 1990. Please send curriculum vitae, an outline of proposed research, and letters from three referees to:

Dr. P. G. Sutherland, Chairman
Physics Department
McMaster University
Hamilton, Ontario, L8S 4M1
Canada

MOLECULAR OR CELLULAR BIOLOGIST

Nontenure-track FACULTY POSITION. Recent Ph.D. with experience in gene cloning techniques to study the structure and transcriptional regulation of pulmonary surfactant. The candidate will develop genetically mutated transgenic animals deficient in surfactant apoproteins and use appropriate constructs in immortalized cell lines to study the promoters of surfactant protein genes. The studies provide the opportunity to combine techniques of gene mutation with analysis of lipoprotein structure by NMR and electron microscopy and to collaborate in the supervision of graduate students. Please send curriculum vitae and list of references to: **Richard J. King, Ph.D., Professor, Department of Physiology, University of Texas Health Science Center, 7703 Floyd Curl Drive, San Antonio, TX 78284-7756. Telephone: 512-567-4342.** Interviews will be conducted at ASBMB/AAI Meeting. *The University of Texas Health Science Center is an Affirmative Action/Equal Opportunity Employer.*

NMR SPECTROSCOPIST

The University of Minnesota Medical School is inviting applicants for a tenure-track or tenured faculty position to be filled by a scientist specializing in the study of biological macromolecules by high resolution NMR spectroscopy. This position, which can be at the level of **ASSISTANT, ASSOCIATE, or FULL PROFESSOR**, will be available in the fall of 1990. We seek a faculty member with a minimum of 3 years of experience who will interact with and complement the existing structure groups in several programs, such as protein x-ray crystallography, electron microscopy, and EPR. Presently, three NMR spectrometers (250, 360, and 500 MHz) are available, and additional high-resolution instruments are planned.

Senior candidates must demonstrate an internationally recognized research program, while junior candidates should provide evidence of ability to develop a strong research program involving modern approaches to analyzing and predicting protein structure and function.

This position will be affiliated with the newly formed Institute of Biomedical Engineering. Teaching duties will be associated primarily with the Department of Biochemistry in the medical school.

Interested candidates should send, by 15 May 1990, curriculum vitae, documenting qualifications, professional accomplishments and future research plans, together with names and addresses of three references to:

H. P. C. Hogenkamp, Professor and Head
Department of Biochemistry
University of Minnesota Medical School
4-225 Millard Hall
435 Delaware 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.

30 MARCH 1990

ASSOCIATE SCIENTIST

PROTEIN ENGINEERING

SmithKline Beecham Pharmaceuticals, a worldwide leader in pharmaceutical research, has an exciting opportunity for an Associate Scientist in its Macromolecular Sciences Department. The selected candidate will do protein biochemistry as a key part of a small, multidisciplinary team conducting protein structure/function and protein design experiments.

The qualifications for this position are a BS or MS in chemistry, biochemistry or a related field, 2-5 years of lab experience, and excellent math and communications skills. Important technical requirements are experience in protein purification and characterization, including HPLC/FPLC and gel electrophoresis. Additional experience in chemical modification of polypeptides and in computer data management and analysis is a plus.

Job responsibilities include design, execution and interpretation of experiments, oral and written presentation of results, maintaining laboratory equipment and supplies, and training of other workers.

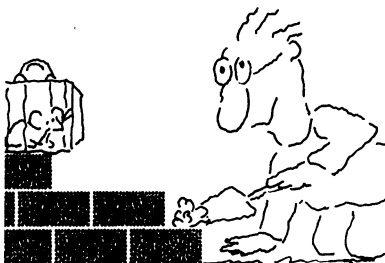
We offer a competitive salary, comprehensive benefits and a team-oriented environment. Send your resume and salary requirements to: Barbara Schwartz, S0119, Senior Employment Administrator, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406-0939. EOE, M/F/H/V.

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New York, NY 10036

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THE INTERNATIONAL ATOMIC ENERGY AGENCY
seeks

DIRECTOR

with Ph.D. degree in one field of marine science
for the INTERNATIONAL LABORATORY OF
MARINE RADIOACTIVITY
(RIML) in Monte Carlo (Monaco)

which is now located in new facilities recently established in the principality of Monaco. Three sections: Radiochemistry/Geochemistry, Radioecology and the Marine Environmental Studies Laboratory together form the three major scientific units of RIML.

The Director will be responsible for leading the development of the Laboratory including the scientific programme and budget, technical cooperation activities and the overall administration of a significant facility engaged in radioactive and non-radioactive contaminant studies in the marine environment. He/she must be a nationally recognized scientist with at least 15 years relevant experience and have had substantial involvement in the day-to-day management of a similar organization and a comprehensive knowledge of the workings of international organizations engaged in the marine field.

Tax free emoluments of approx. US\$ 66,400 p.a. Initial contract for three years. Additional allowances if married. Six weeks annual leave. Travel and removal expenses paid.

Applicants should send their curriculum vitae quoting Vacancy Notice No. 90/002 to the Division of Personnel, INTERNATIONAL ATOMIC ENERGY AGENCY, P.O. Box 100, Wagramerstrasse 5, A-1400 Vienna, Austria, before 16 May 1990.

RESEARCH POSITION MOLECULAR BIOLOGIST

Major academic health center is seeking a qualified molecular biologist for new Bone Marrow Transplant Unit. Individuals at the post doctoral or assistant professor level are invited to apply. Individual should be experienced in PCR and cloning techniques in order to carry out studies related to marrow purging in autologous and allogeneic transplantation. Salary commensurate with experience.

For more information, please contact Jeffrey Shogan, M.D., or write to the following address:

Jeffrey Shogan, M.D.
Director, Bone Marrow
Transplant Program
Allegheny General Hospital
Assistant Professor of
Medicine
Allegheny Campus, Medical
College of Pennsylvania
Pittsburgh, PA 15212
(412) 359-6900

Please include a C.V. and resume of experience.

An Equal Opportunity Employer

Microbiologist Pharmaceutical Research

□ Alcon Laboratories, Inc. is the leading pharmaceutical manufacturer of products for the diagnosis and treatment of ophthalmic disorders and is headquartered in Fort Worth, Texas.

□ We currently have an opening in our R&D Division for a Research Fellow of Microbiology. The successful candidate will direct and manage our microbiology resources for pharmaceutical development and antimicrobial research and provide Alcon with a supply of patentable antibiotics, anti-infectives, contact lens disinfectants and antimicrobial preservatives for development into new products.

□ The ideal candidate should have a PhD in microbiology, 8-10 yrs of pharmaceutical experience, 5 yrs experience managing research programs (preferably those involving antimicrobial agents or therapy), and proven interpersonal and leadership skills and written and oral presentation abilities.

An Equal Opportunity Employer - M/F/H/V

Resumes to **Mr. Faver**
Alcon Employment Dept. (T1-3)
Alcon Laboratories, Inc.
PO Box 6600
Fort Worth, Texas 76115

POSITIONS OPEN

DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
(USDA/ARS)

MICROBIOLOGIST/
VETERINARY MEDICAL OFFICER
LEPTOSPIROSIS/MYCOBACTERIOSIS
RESEARCH UNIT
NATIONAL ANIMAL DISEASE CENTER
AMES, IOWA

ARS is seeking a microbiologist or veterinary medical officer to conduct basic and applied research on mycobacterial infections of food-producing animals. Mechanisms of intracellular survival of *Mycobacterium paratuberculosis* in bovine macrophages, variation in pathogenicity of *M. paratuberculosis* isolates, and the immune response of cattle vaccinated or infected with *M. paratuberculosis* will be investigated. Candidates must have knowledge of microbiology and immunology and preferably knowledge of cell biology, cell culture techniques, and immunoassays. For veterinary medical officer position a D.V.M. degree is required; Ph.D. is desirable for veterinary medical officer or microbiologist. Must be a U.S. citizen. Salary is commensurate with experience: \$29,891 to \$55,381. For information on research program or position, contact: **Dr. Carole Bolin**, telephone: 515-239-8325. For information on application procedures/forms, contact: **Janie Carr**, telephone: 301-344-4569. Applications should be marked ON019 and must be received by 1 May 1990. Mailing address:

USDA, Agricultural Research Service
Personnel Operations Branch
Northern Section
Building 419, BARC-East
Beltsville, MD 20705

An Equal Opportunity Employer.

MOLECULAR PARASITOLOGIST. Applications are being accepted for a tenure-track **ASSISTANT PROFESSOR** in biology. Starting date: 15 September 1990. Candidates should have at least 4 years of postdoctoral experience in molecular parasitology. The individual must have expertise in recombinant DNA studies on: ribosomal genes, OFHAGE and TAFE studies with *Giardia*, cyst and cyst wall proteins of *Giardia*, and hydrogenosomal enzymes of trichomonads. The individual will be expected to establish a research program in the areas mentioned above. Courses in recombinant DNA technology and molecular parasitology as well as undergraduate and graduate biochemistry and undergraduate majors biology are to be taught. Curriculum vitae, list of publications, reprints, a statement of current and projected research and teaching interests, and the names of three references should be mailed to: **Donald G. Lindmark, Ph.D., Chairman, Department of Biology, Cleveland State University, East 24th and Euclid Avenue, Cleveland, OH 44115** by 1 May 1990. This position is dependent on the availability of funds. *Cleveland State University is an Equal Opportunity/Affirmative Action Employer and encourages applications from qualified minority groups and women.*

PHYSIOLOGICAL ECOLOGIST, Colgate University. One-year **ASSISTANT PROFESSORSHIP** with possible renewal, beginning 1 August 1990. Teaching duties include an undergraduate course in animal physiology, introductory biology, and a research tutorial in the applicant's area of specialization. Ph.D. in hand or near completion, commitment to teaching and involving undergraduates in research. Review of applications will begin 16 April 1990. Send curriculum vitae, graduate transcripts, and three letters of reference to: **Dr. Nancy L. Pruitt, Department of Biology, Colgate University, Hamilton, NY 13346.** *An Equal Opportunity/Affirmative Action Employer. Applications from women and minorities are especially encouraged.*

POSTDOCTORAL POSITION IN MOLECULAR GENETICS

Available immediately to study mutations and the regulation of gene expression in human genetic diseases. Approaches will include gene cloning, PCR sequencing, transfectional analysis, and in vitro mutagenesis experiments. Ph.D. and/or M.D. degree with training in biochemistry and molecular biology essential. Salary negotiable. Send curriculum vitae and three letters of reference to: **Y. T. Chen, M.D., Ph.D., Department of Pediatrics, Duke University Medical Center, Box 3028, Durham, NC 27710.** *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

NEUROBIOLOGY
CLINICAL FACULTY POSITION

The Sanders-Brown Center on Aging at the University of Kentucky invites applications for a tenure-track faculty appointment at the **ASSISTANT PROFESSOR** level from Board-eligible/certified neurologists or psychiatrists with research interest in Alzheimer's disease. The successful candidate will have a faculty appointment in the appropriate academic department of the College of Medicine. The appointee will be expected to develop his/her own research program and be willing to participate in multidisciplinary research and have some limited clinical responsibilities primarily related to dementing illness. An excellent start-up package is available. The Sanders-Brown Center is one of the NIA-funded Alzheimer's disease research centers and has a separate 40,000-square-foot building with excellent laboratory facilities. A letter of interest, recent curriculum vitae, and names of three references should be submitted to: **William R. Markesbery, M.D., or David R. Wekstein, Ph.D., Sanders-Brown Center on Aging, University of Kentucky, Lexington, KY 40536.** *The University of Kentucky is an Equal Opportunity Employer.*

The Department of Pediatrics at the University of Michigan is seeking a Board-eligible/certified **PEDIATRIC HEMATOLOGISTS/ONCOLOGISTS.** Duties include patient care, teaching, and research activities. *The University of Michigan is an Equal Opportunity/Affirmative Action Employer.* If interested, please send curriculum vitae to: **Laurence A. Boxer, M.D., Director, Pediatric Hematology/Oncology Division, F6515 C. S. Mott Children's Hospital, 1500 East Medical Center Drive, Ann Arbor, MI 48109-0238.**

PLANT PHYSIOLOGIST

Tenure-track position in biology for September 1990 at the **ASSISTANT PROFESSOR** or **INSTRUCTOR** level. Ph.D. required for assistant professorship; A.B.D. required for instructorship. Current salary range of \$21,749 to \$30,404 may be higher depending on qualifications, experience, and increases in the New Jersey Board of Higher Education Compensation Plan. Duties include courses in plant physiology, introductory biology, laboratory methods in plant cell/molecular biology, supervision of student research, and courses for non-majors. Stockton State College is an undergraduate liberal arts and sciences college located in the New Jersey Pine Barrens near Atlantic City, 1 hour from Philadelphia. Stockton's newly renovated science laboratories include walk-in environmental growth chambers, a greenhouse, tissue culture facilities, and modern chemical instrumentation. Excellence in teaching is stressed; modest support for research is available. Screening will begin on 16 April 1990. Send a resume and three letters of recommendation to: **Dr. Donald Plank, Dean, Faculty of Natural Sciences and Mathematics, Stockton State College, Pomona, NJ 08240.** *Stockton is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply. R003380.*

POSTDOCTORAL POSITION, PLANT PHYSIOLOGICAL ECOLOGY. Field and laboratory research on interspecific competition for water and nutrients by plant roots. Required: Ph.D. completed at time of application in some aspect of plant/soil relationships. Send curriculum vitae, copy of transcripts, and names of three references to: **Martyn Caldwell, Ecology Center, Utah State University, Logan, UT 84322-5230.** Closing date: 1 May 1990 or until suitable applicant is found. *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION MICROBIAL ECOLOGY

Available for independent, highly motivated, and well-qualified individual to study microbial ecology/ecological genetics of bacteria in highly stressed soil and aquatic environments. Applicants with training in gel electrophoresis, DNA hybridization, plasmid techniques as well as strong background in ecology are encouraged to apply. Position available after 1 April 1990. *Applicant must be U.S. citizen.* Salary: approximately \$27,000. The Savannah River Ecology Laboratory is operated by the University of Georgia. Send curriculum vitae and four letters of recommendation to: **Dr. J. Vaun McArthur, Savannah River Ecology Laboratory, Drawer E, Aiken, SC 29801.** Telephone: 803-725-2472. *The Savannah River Ecology Laboratory is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

PLANT PROTECTION ENGINEER

ASSISTANT PROFESSOR and ASSISTANT AGRICULTURAL ENGINEER in the Experiment Station, 11-month (tenure-track) position, with joint appointment in the College of Agriculture and Environmental Sciences and in the College of Engineering. Requires a doctorate in engineering, or a doctorate in a related field with at least one graduate degree in engineering. Research emphasis will be on analyzing and developing plant protection systems, strategies and equipment to deal with pests such as insects, nematodes, pathogens, and weeds that threaten California crops. The successful candidate will also assist with departmental undergraduate and graduate teaching programs and advising. Send curriculum vitae and the names and addresses of at least three references to: **Dr. John Miles, Search Committee Chair, Department of Agricultural Engineering, University of California, Davis, CA 95616.** Application must be received by 15 July 1990. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

POLYMER SCIENCE AND ENGINEERING UNIVERSITY OF MASSACHUSETTS AT AMHERST

The Department of Polymer Science and Engineering is seeking to make a professorial appointment in the area of structure/morphology. The appointment will most likely be at the **FULL PROFESSOR** level but exceptionally promising candidates at the **ASSISTANT/ASSOCIATE** level will also be considered. Qualifications for a senior appointment include an international reputation in the morphology/structure of polymers field and a proven ability to attract external funding. Qualifications for appointment at a junior level include exceptional evidence of promise for establishing an internationally recognized research program and an appropriate level of postdoctoral, industrial, or previous academic experience. Salary commensurate with qualifications and experience. It is desired to fill the position by the beginning of the fall semester of 1990 or as soon thereafter as possible. Applications are requested by 1 June 1990, but the search will remain open until the position is filled. Send résumés, and the names of at least three references, to: **William J. MacKnight, Polymer Science and Engineering, University of Massachusetts, Amherst, MA 01003.** *The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS UNIVERSITY OF MISSOURI

The Department of Biochemistry has postdoctoral positions available in the areas of: genetics of the sulfate-reducing bacteria, plant protein phosphorylation, translocation and control of development in monocots, molecular genetics of streptomyces, embryo-maternal interaction in early pregnancy, nucleotide binding purinoreceptors from cardiovascular and neuronal tissues, mechanism of action of GABA and acetylcholine receptors, regulation of selenoenzymes and proteins, and developmental regulation of symbiotic nitrogen fixation. Applicants should send curriculum vitae and names of three references to: **Dr. Warren Zahler, Department of Biochemistry, M121 Medical Science Building, University of Missouri (MU), Columbia, MO 65211.**

MU is an Equal Opportunity Employer.

POSTDOCTORAL POSITION

A position is available immediately for a Ph.D. or M.D. to study the histopathological and regenerative sequelae of CNS injury. Experience with immunocytochemistry, tract-tracing techniques, and autoradiography essential. Expertise in electron microscopy, blood-brain barrier function, molecular biology helpful. Candidate will join multidisciplinary team studying the molecular and cellular response to brain injury. Please send curriculum vitae, a letter describing research interests, and names of three references to: **Tracy K. McIntosh, Ph.D., Department of Surgery, University of Connecticut Health Center, Farmington, CT 06032.** *An Affirmative Action/Equal Opportunity Employer, M/W/H.*

POSITIONS OPEN

POSTDOCTORAL POSITION. Immediately available for qualified Ph.D. interested in purifying and characterizing novel growth factors in the central nervous system. Candidate must have a strong background in protein biochemistry. Send curriculum vitae and three letters of reference to: **Dr. Lorraine Iacovitti, Center for Neurological Research, Department of Neurology, Mail Stop 423, Hahnemann University, Philadelphia, PA 19102.**

POSTDOCTORAL POSITION. To assist in a project examining mechanisms of T-cell activation in cell populations derived from the intestine. Experience with Northern blots, in situ DNA/RNA hybridization, and tissue culture required. Position available in June 1990; salary commensurate with experience. Send curriculum vitae and the names of two referees to: **S. Hamlin, James A. Baker Institute for Animal Health, New York State College of Veterinary Medicine, Cornell University, Ithaca, NY 14853.**

POSTDOCTORAL POSITION AVAILABLE IMMEDIATELY

Successful candidate will apply cDNA techniques to monoclonal antibodies used in the treatment of human cancers. The objective of the research is to develop novel forms of antibodies to increase their effectiveness in imaging and therapy, and to develop high-level expressions of antibodies in yeast. Experience in molecular biology and yeast is desired.

The Wistar Institute is a center for investigating the basic molecular mechanisms of a broad range of diseases. The institute is located on the University of Pennsylvania campus and is equipped with the latest biotechnology support facilities. Interested applicants should send curriculum vitae and the names of three references to: **Dr. Peter Curtis, Professor, The Wistar Institute, 36th and Spruce Streets, Philadelphia, PA 19104.** *Equal Opportunity Employer, M/F.*

POSTDOCTORAL POSITION. Available at the New England Regional Primate Research Center, Harvard University, to study lentiviral pathogenesis. Our aim is to understand the effect of lentiviral infection of tissue macrophages. Our approaches include the study of: (i) functional parameters of infected alveolar macrophages and (ii) the mechanisms responsible for the control of SIV replication within rhesus alveolar macrophages. Familiarity with mammalian cell culture, protein chemistry, and immunocell biology is desirable. This position is located 25 miles west of Boston in Southboro, Massachusetts. To apply send curriculum vitae, a list of three references, and statement of research interest to:

**Dr. Douglas J. Ringler
Harvard Medical School
New England Regional Primate Research Center
1 Pine Hill Drive
Southboro, MA 01772**

SEQUENCING THE GENOME OF CAENORHABDITIS ELEGANS WASHINGTON UNIVERSITY SCHOOL OF MEDICINE DEPARTMENT OF GENETICS AND MEDICAL RESEARCH COUNCIL LABORATORY OF MOLECULAR BIOLOGY

Starting from the well-developed physical and genetic maps of *C. elegans*, we intend to determine the sequence of the entire DNA sequence of 100 Mb by the end of the decade. A pilot project is scheduled for 1990-1993 to establish procedures and yield at least 3 Mb of sequence. The work will be divided equally between the St. Louis and Cambridge laboratories. The emphasis will be on maximizing automation, both by using the latest technology and by developing appropriate logistics to employ it effectively. Positions will be available, for 3 years in the first instance, at both **POSTDOCTORAL** and **POSTGRADUATE** levels. Informal inquiries may be directed to: **Bob Waterston, telephone: 314-362-2657.** Applications, including curriculum vitae, publication list, and the names and addresses of two referees, should be sent to:

**Robert H. Waterston
Department of Genetics
Washington University
660 South Euclid Avenue
St. Louis, MO 63110**

Washington University is an Equal Opportunity/Affirmative Action Employer, M/F/H/V.

STERLING RESEARCH GROUP

Discover Inflammatory Pharmacology At Sterling.

Discover a bright future at Sterling Research Group, the worldwide pharmaceutical research and development organization of Sterling Drug Inc. Sterling Research Group recently established a new inflammatory program and now has several positions open. The key positions are the following.



SECTION HEAD OF INFLAMMATION

This position will establish and then direct an expanding group of scientists in the discovery and early development of molecules for the treatment of inflammatory diseases. This involves the development of assays to measure the actions of enzyme inhibitors, receptor agonists and antagonists and free radical attenuators in whole cell systems in vitro and in vivo. The successful candidate will co-chair the inflammation therapeutic group and recommend a program portfolio to Sterling's management.

A Ph.D. in pharmacology, cell biology, physiology, biochemistry or molecular biology, and a minimum of 5 years' related experience are required. Industrial experience preferred. A broad understanding of inflammatory processes and the ability to lead a multidisciplinary group are required.



SENIOR SCIENTISTS

The Sterling Research Group's new inflammatory group has other Senior Scientists positions open. Candidates with experience in cell biology, neutrophil and macrophage function, in vivo biochemistry, joint physiology and pulmonary biology are encouraged to apply. The minimum requirements for these positions are a Ph.D. in a related discipline and expertise in one of the areas listed above.

In exchange for your talents, we offer a competitive salary and benefits package. For confidential consideration, please send your resume with salary history/requirements to: Human Resources, Sterling Research Group, A Division of Sterling Drug Inc., RS-097, 81 Columbia Turnpike, Rensselaer, New York 12144. An equal opportunity employer M/F/H/V.



STERLING RESEARCH GROUP

A Division of Sterling Drug Inc.
A Subsidiary of Eastman Kodak Company
Build A Future With Sterling.

POSITIONS OPEN

POSTDOCTORAL POSITION. Available starting between July and December 1990 to study the structure, distribution, and mechanism of regulation of the proton pumps involved in acidification of intracellular compartments and their role in receptor-mediated endocytosis and intracellular membrane traffic. Experience in membrane protein chemistry, cell biology, or molecular biology desirable but not essential. Send curriculum vitae, reprints, and three references to: **Dr. Mike Forgac, Department of Physiology, Tufts University School of Medicine, 136 Harrison Avenue, Boston, MA 02111.**



Leading genetic engineering company in La Jolla is offering a **POSTDOCTORAL POSITION** available 1 June 1990. Will participate in the study of genetic rearrangements in *E. coli*. Experience in bacterial genetics, cloning, and sequencing is desirable.

Please forward curriculum vitae along with names and telephone numbers of three references to:

Stratagene
Attention: Human Resources Department
11099 North Torrey Pines Road
La Jolla, CA 92037

POSTDOCTORAL POSITION

A postdoctoral position is available to study retroviral integration with emphasis on HIV. From existing clones HIV integrase is being purified, mutagenized, and interacted with its DNA targets. Excellent facilities, midtown Manhattan. Recent Ph.D. molecular biologist preferred. Send curriculum vitae and names of three references to: **Karl Drlica, Public Health Research Institute (PHRI), 455 First Avenue, New York, NY 10016.** PHRI is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS. Available for the study of protein-DNA interactions, using biophysical, biochemical, and molecular biological approaches. Current projects include studies of the interaction with and unwinding of DNA by helicases and helix destabilizing proteins. Send curriculum vitae and the names of three references to: **T. M. Lohman, c/o Ms. Debra Faupel, Biochemistry and Molecular Biophysics, Washington University School of Medicine, Box 8094, 660 South Euclid Avenue, St. Louis, MO 63110.** Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION. Candidates preferred with experience in operating the surface force apparatus are being sought to fill a vacant 1-year postdoctoral position (renewable up to 3 years). Measurements of intermolecular forces in biological systems such as between proteins and polymeric surfaces will be one of the areas of focus. Applicants should have a strong background in protein structure and an interest in experimental measurement of intermolecular forces. Send curriculum vitae and three references to: **Professor Georges Belfort, Bioseparations Research Center, Department of Chemical Engineering, Rensselaer Polytechnic Institute, Troy, NY 12180-3590. Telephone: 518-276-6948. FAX: 518-276-4030.** Equal Opportunity/Affirmative Action Employer.

THE JACKSON LABORATORY

POSTDOCTORAL POSITIONS are available immediately to study:

Position 1: Development of the mammalian oocyte-cumulus cell complex: the follicular regulation of oocyte meiotic maturation, expression and role of the *Mos* proto-oncogene in oocyte development, and the role of the oocyte in granulosa/cumulus cell development. Experience in techniques of molecular biology is desirable, but not essential.

Position 2: Mammalian developmental genetics: the genetics of lineage determination during mouse development, genetic analysis of the *t* complex, or gene mapping and genome organization. Familiarity with molecular techniques is required.

Applicants should send a letter describing previous work and future research interests, curriculum vitae, and three letters of reference to either: **Dr. John Eppig (Position 1) or Dr. Joe Nadeau (Position 2), The Jackson Laboratory, Bar Harbor, ME 04609.**

POSITIONS OPEN

POSTDOCTORAL POSITION

Available to study the cell and molecular biological basis of receptor-mediated endocytosis and protein targeting. Candidates should submit curriculum vitae and names of two references to: **Dr. Alan L. Schwartz, Departments of Pharmacology and Pediatrics, Box 8116, Washington University School of Medicine, St. Louis, MO 63110.** An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION IN MOLECULAR BIOLOGY. Immediate opening for an individual with a strong background in standard molecular biology techniques to collaborate with a team studying nuclear genome structure and gene expression in the cambium of forest tree species. An interest in plant histochemistry and biochemistry is desirable. Position is for 2 years with a salary of \$32,000 (Canadian) and is sponsored by Forestry Canada-Maritimes Region. Please send, by 30 April 1990, your curriculum vitae and two letters of reference to: **Dr. R. T. Riding, Department of Biology, University of New Brunswick, Bag Service No. 45111, Fredericton, New Brunswick, E3B 6E1, Canada.**

POSTDOCTORAL POSITION IN MOLECULAR GENETICS OF HYPERTENSION. Available for the identification and characterization of genes controlling blood pressure in genetically hypertensive rats. Techniques include library construction, cloning, gene regulation, RFLP analysis, and transgenic animals. Applicants must have Ph.D., M.D., D.V.M., or equivalent degrees and be citizens or permanent residents of the United States. Experience in molecular biology is not required, but experience in biochemistry or microbiology is desirable. Send curriculum vitae to: **Dr. John Rapp, Department of Medicine, Medical College of Ohio, C.S. 10008, Toledo, OH 43699.** An Equal Opportunity Employer.

POSTDOCTORAL POSITION

To study cis- and trans-acting factors of hepatitis B virus which regulate gene expression [e.g., see *Nature* 344, 72 (1990)]. Must have recent Ph.D. or equivalent degree and experience in molecular biology and cell culture. Send letter of interest, copies of reprints and/or preprints, and names of three references to:

T. S. B. Yen
Department of Pathology
University of California
San Francisco, CA 94143-0506

POSTDOCTORAL POSITION. A position is available immediately in enzymology/molecular biology to study the interrelationship between protein structure and function [see *Science* 241, 669 (1988)]. Molecular biology techniques will be utilized to create altered enzymes to study specific aspects of their catalytic and regulatory mechanisms. Mutant proteins will be characterized by kinetics, NMR, UV, and fluorescence spectroscopy, as well as x-ray diffraction. Candidates should have a Ph.D. degree and experience in at least some of the methods mentioned above. Send curriculum vitae and names and telephone numbers of three references to: **Dr. Evan R. Kantrowitz, Department of Chemistry, Boston College, Chestnut Hill, MA 02167.**

POSTDOCTORAL RESEARCH POSITION. The Rheumatic Diseases Division at University Hospitals/Case Western Reserve University has an NIH training grant position available for M.D., M.D./Ph.D., or Ph.D. to study (i) lymphocyte biology/dysfunction or complement metabolism in human and in murine models, or (ii) cartilage and/or extracellular matrix biology in human and animal models of osteoarthritis. Faculty include Drs. G. Kammer (T lymphocyte biology); H. Smith (autoimmune models/antiphospholipid syndrome); T. Haqqi (T cell receptor/collagen-induced arthritis); T. Hering (cartilage matrix/link protein); C. Malenud (proteoglycans/osteoarthritis); R. Moskowitz (animal models of osteoarthritis/spondylosis); J. Wineski (complement). U.S. citizenship or permanent visa required. Send curriculum vitae and three references to: **Dr. R. Moskowitz, University Hospitals, 2074 Abington Road, Cleveland, OH 44106.** Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION. NIH-funded. Available 1 July 1990 to participate in research in the molecular biology and regulation of airway mucins. The candidate should have experience in molecular cloning and in the eukaryotic system. Salary range: \$18,000 to \$20,000. Send curriculum vitae and references to: **Dr. G. P. Sachdev, College of Pharmacy, University of Oklahoma Health Science Center, P.O. Box 26901, Oklahoma City, OK 73190.** An Affirmative Action/Equal Opportunity Employer.

TWO POSTDOCTORAL POSITIONS CANCER RESEARCH

Available immediately to study genetic alterations in ageing and cancer. Emphasis will be placed on measurement of DNA lesions during carcinogenesis. One position involves development of models for chemical/physical DNA damage. Modulation of genetic alterations by nutritional and pharmacological effects will be studied. Experience in biochemistry/molecular biology, pharmacology, or toxicology desirable. Contact: **Dr. K. Randerath, Department of Pharmacology, Baylor College of Medicine, Houston, TX 77030. Telephone: 713-798-4465.** Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCHERS

The Department of Physiology, University of California, Irvine, is developing a postdoctoral candidate pool for possible openings during the remainder of the 1989-1990 fiscal year. Openings may be available in the following research areas: ion channels in lipid bilayers, physical chemistry of membranes, mechanisms and regulation of steroid hormone biosynthesis, exercise physiology, molecular properties of ion channels in excitable cell membranes, and molecular and electrophysiological aspects of lymphocyte activation. Salary is in accordance with current NIH/NSF postdoctoral stipends which are based upon qualifications and years of prior, relevant postdoctoral experience. Minorities and women are encouraged to apply. Send curriculum vitae and names of three references to: **Scott E. Fraser, Chairman, Department of Physiology, University of California, Irvine, CA 92817.**

RESEARCH ASSOCIATE. M.D. or Ph.D. with strong background in protein biochemistry and immunochemistry related to muscular dystrophy research. Familiar with animal experimental research. Duties include purification of antigens, monoclonal and polyclonal antibodies production, tissue section staining and immunoblot assay, and daily cyclosporin animal injection and exercise. Salary at \$20,000 per year. Send résumé and three recommendation letters by 30 April 1990 to: **Jack Hilzheim, Tennessee Job Service, 1295 Poplar, Memphis, TN 38104.**

RESEARCH ASSOCIATE. To carry out research to analyze the mechanism of T cell transformation using biochemical and immunological approaches. The experiments will be undertaken to determine, identify, and characterize novel cell-surface molecules expressed on T cells during the process of transformation. For this purpose, antibodies will be generated against surface determinants and these antibodies will be used in immunofluorescence and cell analysis, enzyme immunoassays, tissue staining, etc. Specific molecules detected on transformed cells will then be purified employing various chromatographic procedures used for membrane proteins. Purified proteins will be completely characterized by various biochemical and immunological techniques such as radio-immunosuppression, 2-D gel electrophoresis, electrofocusing, metabolic labeling studies, peptide mapping, ELISA, binding studies (e.g., radioreceptor binding assays), etc. Efforts will also be made to determine the function of these molecules in cell growth and differentiation using cell biology techniques, e.g., cell culture and mitogenic and protein kinase assays. The candidate will have a background of extensive research in protein biochemistry and immunology, including ELISA, generation and purification of antibodies by affinity and chromatography, etc. Knowledge of secretory immunity, lymphocyte biology, and immunology. Ph.D. in biochemistry, 3 years of experience, and record of publications required. Salary: \$2708.34 per month. Job site and interview: Stanford, California. Send this ad and your résumé to Job #DC-12637, P.O. Box 9560, Sacramento, CA 95823-0560, no later than 21 April 1990.

CANCER RESEARCH FACULTY

The Eppley Institute for Research in Cancer and Allied Diseases at the University of Nebraska Medical Center has tenure-leading faculty positions open in four areas of cancer research. Applicants with the following expertise are encouraged to apply.

1) **Carcinogenesis:** Protein or nucleic acid structure analysis, regulation of gene expression, regulation of carcinogen metabolism, or DNA repair.

2) **Regulation of cell proliferation and differentiation:** Fundamental regulatory mechanisms of oncogene or anti-oncogene expression, growth factors and their receptors, hematopoietic growth factors, signal transduction, programmed cell death, or cell cycle progression.

3) **Tumor cell surface markers and metastasis:** Biochemistry of cell surface glycoproteins, glycolipids, or extracellular matrix components, especially as they relate to metastasis; isolation, characterization, and/or regulation of expression of tumor associated antigens; and development of novel antibodies to tumor antigens.

4) **Developmental therapeutics and gene therapy:** Immunotherapy; therapeutic approaches utilizing gene transfer, antisense transcripts, oligonucleotides, or peptides; and fundamental mechanisms of anticancer drug action.

Appointment may be at any rank from Assistant to Full Professor depending on research experience and background. All faculty are expected to have joint appointments in a UNMC basic science or clinical department. Qualifications include a Ph.D., M.D. or D.V.M. degree with a strong research background and an established independent research program, or clear promise and ability to develop one. Individuals conducting research programs involving mechanistic studies and employing molecular approaches will be given preference. Teaching experience is also desirable. The Eppley Institute is an NCI Designated Laboratory Cancer Research Center and has excellent physical resources and start-up funding for new faculty.

Submit curriculum vitae, statement of research plans, and names of at least three references by June 1, 1990 to:

Dr. Raymond Ruddon, Director
Eppley Institute for Research in Cancer
and Allied Diseases
University of Nebraska Medical Center
600 South 42nd St.
Omaha, NE 68198



University
of Nebraska
Medical Center

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

BIOCHEMICAL PHARMACOLOGIST Inflammation Program

NOVA PHARMACEUTICAL CORPORATION, a leading Research and Development Pharmaceutical Company, seeks a PhD with at least 2 years' postdoctoral experience in the areas of ligand binding assays and enzyme assays, particularly in the area of signal transduction pathways. Experience with small animal models of inflammation particularly useful, but not essential.

Your duties will include overseeing the routine screening of libraries of compounds in several ligand binding assays and enzyme assays; overseeing and performing specialized mechanistic studies of novel anti-inflammatory agents in a group searching for and developing anti-inflammatory drugs in several therapeutic classes.

NOVA PHARMACEUTICAL CORPORATION offers a state-of-the-art facility, a competitive compensation and benefits package which includes profit sharing and 401(k) plans, 100% tuition reimbursement and relocation assistance.

For immediate consideration, please send resume along with the names of three references and salary history to:

NOVA PHARMACEUTICAL CORPORATION
Personnel Department-BK/RB
6200 Freeport Centre
Baltimore, MD 21224-2788

Nova is an equal opportunity employer offering
a smoke-free work environment.



POSITIONS AVAILABLE:

Cell Biologist: Assistant / Associate Professor

University of Minnesota Biomedical Engineering Center

Positions are available at Assistant Professor (tenure track) or Associate Professor (tenured) depending on qualifications for candidates who hold a Ph.D. in cell biology with a minimum of two years postdoctoral experience in the field of growth factors.

Candidates being considered at the Assistant Professor level will have a minimum of two years experience beyond the degree with emphasis in growth factors. Demonstration of research productivity is necessary with evidence of publications in peer reviewed journals and ability to attract national funding.

Candidates being considered at the Associate Professor level will have a minimum of five years experience beyond the degree with emphasis in growth factors with professional distinction in research, demonstrated effectiveness in teaching and advising and ability to attract national funding.

Individuals will be expected to develop a strong independent research program which will address key issues in the problems of biomaterials, cell adhesion, motility and growth. Demonstration of prior research productivity is necessary for Assistant Professor candidates and an established record of research productivity is needed for Associate Professor candidates including publications in peer reviewed journals.

Successful applicants will interact extensively with individuals from a variety of disciplines such as other cell biologists, molecular biologists, and biomedical engineers. Primary teaching responsibilities will be in the Department of Laboratory Medicine and Pathology. Salary is negotiable.

Applicants should send curriculum vitae and three letters of reference to:

Cell Biologist Search Committee
Biomedical Engineering Center
Department of Laboratory Medicine and Pathology
Box 198 UMHC-420 Delaware Street SE
Minneapolis, MN 55455

Deadline for receipt of applications is May 15, 1990. The University of Minnesota is an equal opportunity educator and employer and specifically invites and encourages applications from women and minorities.

COMPUTATIONAL SCIENTISTS

Tripes Associates has set the standard in computational chemistry for over ten years by coupling its scientific excellence in new methods and strategies for compound design with quality software engineering. Our growth has created openings for computational chemists to join the Tripes Research Center.

We are currently seeking outstanding candidates for the following areas:

Applications Chemist – Ph.D. scientists who can apply modern computational tools to problems in compound design. Candidates will also be expected to help develop new compound design methodology and support development of software tools targeted to meet these needs.

Applications Support Chemist – Scientists who can assist our clients in developing the technical knowledge they need to use Computer Aided Design methods. Candidates will also work with our Applications Chemists to define new software tools.

Software Engineer – Candidates will develop new algorithms and support development of new software tools for Computer Aided Molecular Design. Experience with FORTRAN, C, Unix, VMS required.

Tripes offers excellent compensation and benefits. Please send curriculum vitae and salary requirements to

Personnel
Tripes Associates
1699 South Hanley Road, Suite 303
St. Louis, MO 63144.



POSITIONS OPEN

RESEARCH ASSOCIATE. To conduct research in genetics. Position requires experience in population and forensic genetics, typing of classical markers, and knowledge of DNA testing for paternity. Must have previous experience and ability to conduct independent research. Ph.D. in genetics required, together with four or more years of laboratory experience in genetic typing. Salary: \$25,000. Send application to: **Bernie Childerston, P.O. Box 94600, Lincoln, NE 68509.** Refer to: **Job Order #0512645.**

RESEARCH ASSOCIATE/POSTDOCTORAL FELLOW, Department of Medicine, University of California, San Francisco; Ph.D. (biochemistry, cell biology, molecular biology). Join research project studying the molecular mechanisms underlying calcium-induced differentiation of keratinocytes. Experience with immunocytochemical techniques, intracellular calcium measurements, and DNA cloning and sequencing procedures preferred. Salary commensurate with experience. Send curriculum vitae and references to: **D. D. Bikle, M.D., Ph.D., Veterans Administration Medical Center (111N), 4150 Clement Street, San Francisco, CA 94121.** *Equal Opportunity Employer.*

RESEARCH ASSOCIATE who will plan and conduct independent research in the molecular and cell biology of human leukemia; specifically, to identify, characterize, and examine cell surface antigens, oncogenes, and associated molecular alterations of human leukemia cells. Perform techniques of protein purification, radiolabeling, immunoprecipitation, conjugation of monoclonal antibodies with fluorochromes, cell sorting, gene cloning, restriction mapping, and analysis of minute amounts of DNA and RNA. Ph.D. degree in biochemistry. Three years research experience in protein and nucleic acid chemistry and human leukemia cell biology. Forty hours per week; \$30,725 annual salary. Contact: **Texas Employment Commission, Houston, Texas,** or send résumé to: **Texas Employment Commission, Place Unit, TEC Building, Austin, TX 78778.** **Job Order #5518093.** *Ad paid for by an Equal Opportunity Employer.*

ACADEMIC POSTGRADUATE RESEARCHER. Needed to design and supervise controlled human environmental (air pollution) chamber exposures and drug research related to pulmonary effects. Ph.D. or M.D. degree, multidisciplinary background, and interest in academic career preferred. Send curriculum vitae to: **Henry Gong, M.D., Pulmonary Division, Department of Medicine, University of California, Los Angeles (UCLA), Medical Center, Los Angeles, CA 90024-1690.** Telephone: 213-825-9235. *UCLA is an Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSISTANT AT NIH. Our FDA lab on the NIH campus seeks an individual to join us in studies on the expression of EGF-receptor binding growth factors in neoplasia and wound healing. A bachelor's or master's degree is required and experience in cell culture, electrophoresis, chromatography, immunoassays, and receptor binding assays is helpful. Position available immediately. *U.S. citizenship necessary.* Salary negotiable based on qualifications and research experience. Send résumé with references to: **Kurt Stromberg, M.D., Division of Cytokine Biology, Center for Biology Evaluation and Research, HFB-830, Building 29A, Room 2B-08, 8800 Rockville Pike, Bethesda, MD 20892.**

CARBOHYDRATE RESEARCH

Three-year old biotechnology company in the San Francisco Bay area employing recent advances in carbohydrate chemistry to uncover and develop novel carbohydrate-based pharmaceuticals is actively recruiting chemists and biochemists at the B.S./M.S. level with experience in the following areas:

- Carbohydrate separation science including HPLC
- Synthetic/organic chemistry
- Mass spectrometry and NMR
- Receptor assay systems
- Cell biology
- Molecular cloning of enzymes

The company offers an exciting research and development environment of the highest quality for scientists wishing to pursue carbohydrate research in a multidisciplinary field. Salaries and benefits are highly competitive. Please send résumé in confidence to: **Box 37, SCIENCE.**

POSITIONS OPEN

SUPERVISORY RESEARCH CHEMIST. The Fruit and Vegetable Chemistry Laboratory, Pasadena, California, U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), is seeking an individual for a research leader position to provide leadership to a program of basic and applied research on the biochemistry and physiology of citrus and subtropical fruits, arid-region plants, and their products. Knowledge of plant biochemistry and plant physiology is required. Ph.D. is desirable. *Must be U.S. citizen.* Salary is commensurate with experience (GM-14: \$50,342 to \$65,444; GM-15: \$59,216 to \$76,982 per annum). For information on the research program, contact: **Dr. William Chace or Dr. Dan Niffenegger, telephone: 415-559-6000, USDA, ARS, Pacific West Area, 800 Buchanan Street, Albany, CA 94710.** For application forms/information, contact: **Ms. Pat Roberts, telephone: 301-344-3138, USDA, ARS, Personnel Division, 6305 Ivy Lane, Room 318, Greenbelt, MD 20770-1435.** Application deadline is 30 April 1990. *An Equal Opportunity Employer.*

RESEARCH CHEMIST. To focus on basic and applied aspects of microbial and plant biochemistry; conduct research into chemical processes of living organisms; conduct research in biosynthesis of isoprenoid compounds in plants and micro-organisms; isolate, analyze, and identify hormones, vitamins, allergens, minerals, and enzymes, and determine effects on plant functions; examine chemical aspects of formation of antibodies and conduct research into chemistry of plant and micro-organism cells; conduct bioanalytical studies, enzymology, and protein chemistry analysis of carotenoids and related compounds and their biosynthesis; direct and coordinate chemistry studies of living processes of plants and micro-organisms (mechanisms of development of normal and abnormal cells including gene isolation and cloning and DNA sequencing) and living energy changes; prepare reports of findings for presentation to management and senior research chemists. Ph.D. in biology or chemistry required as well as 2 years of experience in job offered or 2 years of experience as postdoctoral research fellow; 2 years of experience must have involved biosynthesis of isoprenoid compounds with emphasis on carotenoids in plants, fungi, and algae and analytical biochemistry and molecular biology studies including gene isolation, M13 gene cloning, and dideoxy DNA sequencing. Forty hours, 9:00 a.m. to 5:00 p.m.; \$46,500 per year. Send résumé to: **Illinois Department of Employment Security, 401 South State-3 South, Chicago, IL 60605, Attention: R. Felton, Ref. #V-IL-1157-F.** *Employer-paid ad.*

SCIENCE RESEARCHER

The Washington office of Akin, Gump, Strauss, Hauer & Feld (215 attorneys) seeks a science researcher for its toxic tort litigation practice. B.S. in biology or chemistry required. Graduate science courses desirable. Position requires solid writing, laboratory, and field research skills. Job duties include researching scientific and medical issues arising from claims of damaged health and environment from exposure to alleged toxins. Excellent salary/benefits. Send a résumé to: **Recruitment Administrator, Suite 400, 1333 New Hampshire Avenue, N.W., Washington, DC 20036.**

MOLECULAR VIROLOGY RESEARCH MAYO CLINIC-ROCHESTER

The Division of Experimental Pathology and Laboratory Medicine at Mayo Clinic, Rochester, Minnesota, is seeking an established investigator to carry out a program of basic research into the molecular mechanism and pathogenesis of herpesvirus infections. *Candidates for this staff position must be U.S. citizens or permanent residents trained in molecular virology techniques with an established track record of successful investigation in the field of virology.*

This is an excellent opportunity for an individual to carry out basic research in a clinical environment. We seek an individual who is interested in the problems of viral latency and reactivation in organ transplantation. State of the art facilities, space, equipment, and start-up support and the extensive resources of the Mayo Clinic research community will be available to the incumbent.

Qualified candidates should submit detailed curriculum vitae and bibliography to: **Thomas P. Moyer, Ph.D., Department of Laboratory Medicine and Pathology, Mayo Clinic, Rochester, MN 55905.**

An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

RESEARCH INSTRUCTOR. To investigate cAMP-dependent and tissue-specific regulation of steroid hydroxylase gene expression. Ph.D. in biochemistry or related area plus postdoctoral experience required. Experience in cloning, DNA sequencing, cell culture and transfection, gel retardation analysis, DNA footprinting, and protein purification required. Curriculum vitae, summary of previous research experience, and two letters of reference should be sent to: **Dr. Michael R. Waterman, Department of Biochemistry, University of Texas at Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-9038.**

An Equal Opportunity Employer.

RESEARCH SCIENTIST/VIROLOGY

Kansas manufacturer of veterinary biologicals has position available for a research scientist/virology specializing in development of equine vaccines. Position requires a Ph.D. or Doctor of Veterinary Medicine degree with at least 7 years of experience in animal health industry. Requires 3 to 5 years of experience involving planning, scheduling, and execution of biological research projects; analysis and reporting of technical data; and experience in training and supervising support personnel. Incumbents at this level must have demonstrated at least five accomplishments such as development of new products, publications, or patents. Requires handling and performing tests upon small (laboratory) and large (farm) animals. Requires experience utilizing computers for data analysis as well as a working knowledge of statistics. Requires experience with plaque assays, serum neutralization tests, cell culture including suspension culture, ELISA techniques, and electrophoresis.

Excellent company benefit package. Send résumé including salary history to:

**Mobay Animal Health Division
Human Resources Department
P.O. Box 390
Shawnee, KS 66201**

Affirmative Action/Equal Opportunity Employer.

MICROPROBE CORPORATION DNA PROBE TECHNOLOGY DIAGNOSTIC PRODUCTS

MicroProbe is an innovative, rapidly growing company which utilizes DNA probe technology to develop diagnostic and therapeutic products. The company has an immediate opening for a scientist within the diagnostics research group.

The ideal candidate should have experience in both general molecular biology techniques and nucleic acid chemistry, particularly in the chemical manipulation of synthetic oligonucleotides. The ability to design and perform experiments and write concise, accurate reports is required. Prior applied research experience with infectious disease organisms would be an advantage.

Suitable candidates should have a Ph.D. with at least 2 years of postgraduate experience.

MicroProbe is located in suburban Seattle and offers a stimulating R&D environment, a competitive salary and benefits package, and an equity position. *MicroProbe is an Equal Opportunity Employer.*

Send curriculum vitae and cover letter in confidence to:

**Human Resources Department
MicroProbe Corporation
1725 220th Street, Building 104
Bothell, WA 98021**

ASSOCIATE RESEARCH SCIENTIST IN PHARMACOLOGY

Applicant to perform research in cardiac arrhythmias using microelectrode and intact animal techniques. Requirements include extensive prior training in microelectrode and intact animal methods. Prior clinical training in cardiology preferred, with background in human arrhythmia studies. Please send curriculum vitae and the names of three references to:

**Michael R. Rosen, M.D.
Professor of Pharmacology and Pediatrics
Department of Pharmacology
Columbia University
630 West 168th Street
New York, NY 10032**

Columbia University is an Equal Opportunity/Affirmative Action Employer.

Human Gene Therapy

Somatix is creating cell-based protein delivery systems which may be implanted into patients to produce and deliver therapeutic proteins. The expertise of Somatix is both in genetic augmentation of somatic cells and in advanced drug delivery. Gene transfer into human cells using recombinant retroviral vectors is a technology that was pioneered by the founding scientist of the company, Dr. Richard Mulligan of the Whitehead Institute at MIT.

RESEARCH SCIENTIST/Cell Transplantation

Somatix is currently seeking a PH.D. level scientist with a minimum of 2 years post-doctoral experience in cell biology to develop cell-based protein delivery systems for *in vivo* and *ex vivo* use. The successful candidate will have had research experience in angiogenesis. A preference will be given to those individuals having a familiarity with biomaterials, microencapsulation or artificial cells.

RESEARCH ASSOCIATE/Cell Transplantation

Somatix is currently seeking a B.S. and/or M.S. level Scientist to be involved in the development of delivery systems for genetically augmented somatic cells. The successful applicant will have had a minimum of 3 years of academic or industrial experience in the areas of cell biology and/or cell transplantation. Preference will be given to those individuals possessing skills in tissue culture, animal handling, enzymatic assays and/or biomaterials.

Somatix provides excellent career potential in a rapidly growing company and provides a competitive compensation and benefits package. If you are a self-motivated individual interested in being an important and valued member of a multi-disciplinary team, then please forward your applications quoting reference LH 90/19.

Somatix

1 Kendall Square, Building 650, Cambridge, MA 02139



Biochemical Research Senior Scientist

CIBA-GEIGY Pharmaceuticals Division invests more than a million dollars a day to support innovative research and development of new products that help enhance the quality of life.

Your challenging projects at our 100-acre headquarters complex in Summit, New Jersey will involve studying receptor-based mechanisms as they relate to drug discovery efforts in the areas of inflammation and cardiovascular diseases in the Biochemical Profiling group in the Research Department. Credentials should include a PhD in Pharmacology or Biochemistry, 2-5 years post-doctoral experience with extensive knowledge of receptor pharmacology and experience in receptor isolation and autoradiography techniques. Experience in molecular biology, particularly the regulation of receptor expression, is an asset. You will supervise 3 non-PhD Scientists.

We offer competitive salaries, excellent benefits, and opportunities for advancement. Please send resume with salary history and requirements to: **Al Aronson, Staffing Center, CIBA-GEIGY Corporation, Pharmaceuticals Division, Dept. MAS, 556 Morris Avenue, Summit, New Jersey 07901.** We Are An Equal Opportunity Employer M/F/H/V.

Science Serving Mankind

CIBA-GEIGY



Novo Nordisk
Bioindustrials, Inc.

NATURAL PRODUCTS CHEMIST

PhD in organic or analytical chemistry with 2-5 years experience in natural products chemistry for isolation and structure elucidation of microbially-derived natural products with pesticidal activities.

PROTEIN/ANALYTICAL CHEMIST

BS/MS/PhD in a chemistry field with 3-5 years experience in protein purification/characterization and analytical methods development.

FORMULATION SPECIALIST

BS/MS/PhD in a chemistry field with 3 years industry experience in formulation of biological/chemical pesticides.

Entotech, Inc., a new biopesticide subsidiary of Novo Nordisk Bioindustrials, is expanding its operations and has the following positions open at its new facility under construction in Davis, CA:

SENIOR ENTOMOLOGIST

MS/PhD in entomology with 5 years experience in insectary management and bioassay to coordinate screening/rearing operations. Experience with microbial/microbially derived pesticides preferred.

SENIOR ENTOMOLOGIST

MS/PhD in entomology with 2 years experience in running and coordinating field trials and advanced greenhouse/laboratory tests of chemical/biological pesticides.

ENTOMOLOGISTS

BS/MS in entomology or other biological field to assist in insectary and screening operations; development of new bioassays.

POST-DOCTORAL RESEARCH FELLOW

PhD in entomology or biochemistry to study the mechanism of action of *Bacillus thuringiensis* crystal proteins. Two year appointment, with a possibility for permanent employment.

SENIOR MICROBIOLOGISTS

PhD microbiologist/microbial physiologist with 1-3 years experience in soil microbiology, microbial ecology, molecular physiology. PhD mycologist/fungal physiologist with 2-5 years experience in fungal morphology, physiology, and taxonomy. Both positions require development of innovative microbial isolation techniques, pre-screening methods, and genetic characteristics of microorganisms.

Entotech, Inc. is a wholly-owned subsidiary of Novo Nordisk Bioindustrials. Novo Nordisk is a world leader in biotechnology including diabetes treatment, industrial enzymes, and more recently in discovery and development of biological insecticides.

We offer a competitive salary and a comprehensive benefits program. If you are an energetic, innovative person who likes challenges and the opportunity to be part of Entotech's exciting new team, send a resume, including salary history, and three names of references to:

Dr. Pam Marrone, President, Entotech, Inc., Novo Nordisk Bioindustrials, 33 Turner Road, Danbury, CT 06810. An equal opportunity employer M/F/H/V. No agency referrals, please.

POSITIONS OPEN

ASSISTANT RESEARCHER. The Department of Physiology and Biophysics at the University of California, Irvine, invites applications for a position at the level of assistant researcher. Ph.D. in physiology and at least 4 years of postdoctoral training required. Candidates should have experience characterizing ion channel expression in T cell subsets using the patch-clamp technique in combination with fluorescent antibody staining. Preference will be given to candidates familiar with quantitative video microscopy, cloning ion channel genes into transcription vectors, and using the *Xenopus* oocyte expression system for characterizing channels encoded by these genes. We are especially looking for individuals with an active research interest in the role of lymphocyte ion channels in autoimmune disorders. Send curriculum vitae, a brief description of research experience, and the names of three referees before deadline date of 1 May 1990 to: **Dr. Scott E. Fraser, Chairman, Department of Physiology and Biophysics, University of California, Irvine, CA 92717.**

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

RESEARCH WILDLIFE BIOLOGIST OR ECOLOGIST. Position offered in Clemson, South Carolina. Position is **PROGRAM MANAGER** for Fish and Wildlife Research Program of Southeastern Forest Experiment Station (SEFES) and is located at Clemson University. The program consists of two Research Units: work unit at Clemson investigates habitat requirements of endangered and threatened species and develops guidelines for integrating management of species into multiple-use forestry programs; the second unit, located at VPI in Blacksburg, Virginia, researches factors influencing distribution and abundance of trout in Southern Appalachian streams with emphasis on habitat relationships and impacts of sedimentation.

Incumbent's personal research is in wildlife biology/terrestrial ecology with emphasis on (i) population dynamics of red-cockaded woodpeckers and (ii) relationships between vertebrate populations and probability of species persistence. Applicants should have a Ph.D. in wildlife biology or ecology with demonstrated ability to provide leadership to research program of considerable size and scope.

Starting salary will range from \$42,601 to \$50,342 depending upon qualifications.

Send résumé/curriculum vitae to: **Nathan Presley, SEFES, Box 2680, 200 Weaver Boulevard, Asheville, NC 28802.**

Women and minorities are encouraged to apply.

TECHNICAL SERVICES VETERINARIAN. To provide field technical services and scientific research in avian pathology and diseases including advanced bacterial and viral techniques. Technical liaison for new product development. Deliver technical lectures, present training programs for clients, and represent the company in domestic and international scientific and technical meetings in support of marketing and sales. Requires M.S. in avian/veterinary medicine and 2 years of experience. Ph.D. in avian/veterinary medicine may be substituted for 2 years of experience before or after obtaining M.S. Demonstrated ability to perform stated duties. Salary: \$40,000 per year minimum depending on experience. Apply with résumé to: **Georgia Department of Labor, 2419 Corporate Drive, S.W., Gainesville, GA 30503** or to nearest Georgia Job Service Center (#GA 5414763).

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIPS DEPARTMENT OF CELLULAR AND DEVELOPMENTAL BIOLOGY ORGANISMIC AND EVOLUTIONARY BIOLOGY HARVARD UNIVERSITY

A limited number of postdoctoral research positions become available from time to time. Some appointments are funded through research grants awarded to faculty members and are ordinarily for 1 year, sometimes renewable, other appointments are possible through postdoctoral fellowships. For a list of faculty members who have postdoctoral positions available, write to the respective department office: **Harvard University, 16 Divinity Avenue, Cambridge, MA 02138.** (Do not send applications.) *Harvard University is an Equal Opportunity Affirmative Action Employer.*

POSITIONS OPEN

WATERSHED SCIENTIST. The Department of Geography, Utah State University (USU), invites applications for a tenure-track **ASSISTANT PROFESSOR** position in watershed science. The successful candidate will also be a member of the interdepartmental Watershed Science Unit in the College of Natural Resources. Although broadly defined, we are especially interested in fluvial geomorphologists with training and expertise in multiple use of wildland resources (forestry, range, wildlife, etc.). Candidates must have a Ph.D. or be near completion in watershed science, hydrology, fluvial geomorphology, physical geography, or a closely related field. This position is a 9-month appointment with 50% teaching and 50% research. Responsibilities will include teaching one undergraduate course in wildland water quality, one graduate course in fluvial geomorphology of wildland watersheds, and one course in his/her area of expertise along with developing an interdisciplinary research program. Send a letter of application, résumé, transcripts, and names and addresses of at least three references to: **Dr. James P. Dobrowolski, Watershed Science Search Committee Chair, Department of Geography, Utah State University, Logan, UT 84322-5430.** The application deadline is 15 April 1990 or when a suitable candidate is found. *USU is an Affirmative Action/Equal Opportunity and Immigration Reform and Control Act Employer.*

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIPS

Postdoctoral fellowships are available in the Metabolism Training Program which provides training in the uses of molecular biology in metabolic and nutritional studies. *Only U.S. citizens or permanent residents need apply.* Send inquiries or curriculum vitae and the names of three references to: **Dr. Richard W. Hanson, Chairman, Department of Biochemistry, Case Western Reserve University School of Medicine, Cleveland, OH 44106.** *An Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL RESEARCH FELLOWSHIP

A position is available in the area of gene cloning and expression associated with pigs.

Applicants should have a Ph.D. in a related field and experience for molecular biology research. For consideration, please send résumé and names of references to:

**Dr. Redman M. Chu
Senior Researcher and Director
P.O. Box 23, Chunan, Miaoli
35099 Taiwan, Republic of China**

POSTDOCTORAL RESEARCH FELLOW. Molecular biologist with training in gene expression systems to join a medical genetics research group at McGill University investigating Tay Sachs disease mutations. Two-year appointment starting 1 July 1990. Salary negotiable. Send curriculum vitae, reprints, and references to: **Dr. Feige Kaplan, Biochemical Genetics, Montreal Children's Hospital, 2300 Tupper Street, Montreal, Quebec, Canada H3H 1P3.** Closing date: 10 May 1990.

CHEVRON POSTDOCTORAL FELLOWSHIP ENVIRONMENTAL SCIENTIST SCHOOL OF PUBLIC HEALTH UNIVERSITY OF CALIFORNIA BERKELEY

Two-year postdoctoral fellowship available for engineer or physical scientist with strong mathematical and computer skills to work on modeling and analysis of environmental transport and human exposure to benzene and similar organic air pollutants. Will be affiliated with group of engineers, statisticians, and biological scientists working on mechanisms of benzene toxicity and pharmacodynamic modeling of these mechanisms. Goals of the research team are to understand extent of human exposure, mechanisms of benzene toxicity, and translation of this knowledge into more reliable procedures for risk assessment. Desirable beginning dates between 1 July and 1 October 1990. Annual salary range: between \$25,020 and \$37,512, depending on qualifications. Modest relocation allowance is available. Send résumé and names of two references to: **Dr. Robert C. Spear, School of Public Health, 322 Warren Hall, University of California, Berkeley, CA 94720** by 1 May 1990. *The university is an Equal Opportunity/Affirmative Action Employer.*

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP. In molecular biology of genes expressed in connective tissues. Opportunities will be provided to learn current recombinant DNA technologies and to develop new ones. Applicants must have a Ph.D. in biochemistry or related areas. Salary competitive. Apply to and send letters of recommendation to: **D. J. Prockop, Jefferson Institute of Molecular Medicine, Department of Biochemistry, Thomas Jefferson University, 1020 Locust Street, Philadelphia, PA 19107-6799.** *Equal Opportunity Employer.*

POSTDOCTORAL FELLOWSHIPS

Two positions are available immediately in cellular and molecular immunology. Research projects include: (i) functional and molecular characterization of self-reactive T lymphocytes and (ii) molecular analysis of gene expression in B lymphocytes in development.

A Ph.D. or equivalent degree in molecular biology, genetics, biochemistry, or cell biology/immunology is desirable. Please send application with names and phone numbers of several references to: **Drs. Jan Cerny and Dan Schulz, Department of Microbiology and Immunology, University of Maryland, School of Medicine, 655 West Baltimore Street, Baltimore, MD 21201.**

POSTDOCTORAL FELLOWSHIP in molecular immunology, University of Miami. M.D. or Ph.D. degree required; cellular or molecular background in immunology desired. Offer training in molecular biology techniques and culture of cloned T-cells (CTL); research in molecular mechanisms of CTL-mediated cytotoxicity and DNA degradation. Position open as of fall 1990. Please send curriculum vitae and names of two references to: **Eckhard R. Podack, M.D., Professor, Department of Microbiology and Immunology, University of Miami School of Medicine, P.O. Box 016960 (R-138), Miami, FL 33101.** Telephone: 305-548-4680. FAX: 305-548-4623.

MOLECULAR NEUROBIOLOGY POSITIONS FOR SENIOR, STAFF, AND FOREIGN FELLOWS NATIONAL INSTITUTE FOR DRUG ABUSE

The Laboratory of Molecular Neurobiology, National Institute for Drug Abuse (NIDA)/Addiction Research Center (ARC) wishes to enhance efforts in: (i) cloning drug and neurotransmitter receptors, (ii) characterizing neurotransmitter gene expression to transgenic mice, and (iii) understanding mechanisms of neurotransmitter gene regulation in brain. Approaches include: *Xenopus* oocyte expression and sib selection of cDNAs, transgenic mice, protein purification and antibody production, and liquid binding. Salary and benefits are competitive. Applicants with expertise and interests in molecular biology, molecular neurobiology, *Xenopus* expression systems, and behavioral, biochemical, and genetic characterization transgenic animals are encouraged to apply to:

**George R. Uhl, M.D., Ph.D.
Laboratory of Molecular Neurobiology
Box 5180
Baltimore, MD 21224**

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

COURSES AND TRAINING

CARDIOVASCULAR PATHOPHYSIOLOGY FOR ENGINEERS AND PHYSICAL SCIENTISTS

A 1-week intensive **COURSE** sponsored by the Massachusetts Institute of Technology (MIT), 11 to 15 June 1990, Cambridge, Massachusetts. Dr. Richard J. Cohen, Program Director. Basic Principles of Cardiovascular Physiology, Cardiovascular Medicine, Diagnostic and Therapeutic Technologies. Contact: **Director of the MIT Summer Session, telephone: 617-253-2101.**

CAREER CHANGE OPPORTUNITY

This unique program offers the candidate with an earned doctorate in the sciences the opportunity to obtain the Doctor of Optometry (O.D.) degree in two calendar years. Employment opportunities exist in private practice, industry, education, and research. Contact: **Dr. D. Chauncey, Program Director, Accelerated Program, The New England College of Optometry, Room S, 424 Beacon Street, Boston, MA 02115.**

RESEARCH ASSOCIATE

Biomaterial Research

At Baxter Healthcare Corporation, our commitment to R&D is evident in our Applied Sciences Technology group, where state-of-the-art facilities, superb funding and top-of-the-line employees come together. Today, this division of the Fortune 75 Baxter Healthcare Corporation is seeking a Research Associate to assist our project manager in conducting biomaterial research.

The selected individual will have an M.S., or equivalent degree in Biochemistry, Chemistry, or the Biological Sciences and have a minimum of 3 years experience in the areas of protein chemistry, protein modification, coupling proteins to solid surfaces and enzyme kinetics. Knowledge in coagulation and platelet physiology is desired.

In addition to a challenging environment, Baxter can offer a competitive salary and comprehensive benefits, including 401(k) and stock purchase. For confidential consideration, please forward your curriculum vitae with salary history to: Pam Miller, Human Resources Director (WG1-1N), Baxter Healthcare Corporation, Technology Park, Rte. 120 & Wilson Rd., Round Lake, IL 60073. Equal Opportunity Employer.

Baxter

RESEARCH SCIENTIST

Pharmacokinetics

Organon Teknika Corporation/Biotechnology Research Institute conducts research for the Pharma Division of Akzo, N.V., a fully integrated multinational pharmaceutical and diagnostic company. Our focus is on basic research and product development in the areas of cancer and retroviruses.

We are seeking an individual who will be responsible for the design of pre-clinical and clinical pharmacokinetic studies for human monoclonal antibody radionuclide and drug conjugates, analyzing data and writing reports and summaries for regulatory submission. A Ph.D. in pharmaceutical science with up to 2 years' experience in pharmacokinetics and related computer programs is required.

Biotechnology Research Institute offers competitive salaries and benefits including relocation assistance and a generous company-matched, pretax savings plan.

For consideration, please send your curriculum vitae with a cover letter including salary history and names and telephone numbers of references.

**Organon Teknika Corporation
Biotechnology Research Institute
1330-A Piccard Drive
Rockville, MD 20850**

Principals Only.
OTC/BRI is an Equal Opportunity
Employer M/F/H/V.



TRUDEAU INSTITUTE, INC.

POSITIONS AVAILABLE

BASIC RESEARCH SCIENTISTS

As part of its ongoing recruiting program, the TRUDEAU INSTITUTE is interested in hiring one or two appropriately trained CELLULAR or MOLECULAR IMMUNOLOGISTS at the level of ASSISTANT OR ASSOCIATE PROFESSOR. The successful applicants will be provided the resources to develop their own research programs emphasizing cellular or molecular immunology. However, it is hoped that they would also use the opportunity to investigate some of the well established *in vivo* models of immunity being studied here. Research at the Institute is directed at studying the immune response to infectious agents, cancers, and allografts at the physiological and cellular levels.

POST-DOCTORAL POSITION

A POSTDOCTORAL POSITION in IMMUNOLOGY is available to study the immune response to tumors and certain bacterial pathogens as models of immunoregulation. Candidates with training in cellular and/or molecular immunology who are interested in using their training to analyze *in vivo* models of successful and unsuccessful immune responses should apply. A competitive salary and fringe benefits are offered and institute housing will be made available. Future employment is possible, depending on performance.

THE TRUDEAU INSTITUTE is a free-standing, not-for-profit, basic research institute with modern facilities, up-to-date equipment, in-house animal production, efficient management and an international reputation for excellence. Current staff interests include: cancer immunology, transplantation immunology, immunity to infectious and parasitic diseases, regulation of immune responses, and the production and function of cytokines. Adequate start-up funding for new projects is available from Institute resources. Salaries and benefits are competitive, and working conditions are conducive to a productive research career.

Applications consisting of a curriculum vita, the names and addresses of three references, and a brief description of research interests, should be addressed to:

**Dr. Robert J. North, Director
Trudeau Institute, Inc.
P.O. Box 59
Saranac Lake, NY 12983**

Marine Biological Laboratory

WORKSHOP ON MOLECULAR EVOLUTION

August 19 - August 31, 1990

This workshop will consist of a series of lectures, discussions, and computer workshops exploring multiple approaches to molecular evolution. This program is designed for established investigators, postdoctoral fellows, and advanced graduate students. The theoretical basis of comparative sequence analysis and phylogenetic tree construction will be presented. The evolution of mutation rates and multigene families will be examined. Model systems for the study of microevolution and the applicability of molecular phylogeny data towards understanding the evolutionary history of living systems will be described. Enrollment limited to 60 students.

Director: Mitchell L. Sogin, Center for Molecular Evolution, Marine Biological Laboratory.

Cost: \$450 includes tuition, room and board

Application Deadline: June 1, 1990

Contact: Admissions Coordinator
Marine Biological Laboratory
Woods Hole, MA 02543
(508) 548-3705, ext. 216



COURSES AND TRAINING

POSTDOCTORAL TRAINING in molecular reproductive and developmental biology. Positions are available for postdoctoral trainees (Ph.D. and/or M.D.) to obtain 2 to 3 years of training in a multidisciplinary program with specialization in various topics associated with molecular and cellular aspects of fertilization, reproductive biology/endocrinology, and developmental biology. These fellowships are provided by NIH (NRSA), and applicants must be U.S. citizens or permanent residents. To apply, please submit a letter and curriculum vitae and have three reference letters mailed to: **Dr. J. David Puett, REPCEND Laboratories (D-5), University of Miami (UM), P.O. Box 016960, Miami, FL 33101.** UM is an Affirmative Action/Equal Opportunity Employer.

GRADUATE STUDENTS in earth and biological sciences are invited to apply to participate in the Third Annual Global Change Institute sponsored by the Office for Interdisciplinary Earth Studies of the University Corporation for Atmospheric Research (UCAR). The theme of this year's Institute is Earth System Modeling and will take place in Snowmass, Colorado, on 16 to 27 July 1990. Support for travel and living expenses provided. Apply by submitting a letter of interest by 15 April to: **Dr. John Eddy, Director, Office for Interdisciplinary Earth Studies, UCAR, P.O. Box 3000, Boulder, CO 80377.** Notification of acceptance will be made by 15 June 1990. For further information, contact: **Barbara Anderson, telephone: 303-497-1686.**

NEUROSCIENCE AT BAYLOR COLLEGE OF MEDICINE

The Division of Neuroscience at Baylor College of Medicine offers a program for advanced study of the nervous system leading to the Ph.D. degree in neuroscience. Applications for 1990-1991 must be completed by 1 June 1990, but earlier submission is encouraged. Information regarding the program, financial support, and application procedures may be obtained from: **David Sweatt, Ph.D., Admissions Chairman, Division of Neuroscience (S603), Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030.** Telephone, toll-free: 1-800-367-9149.

National Institute on Aging MEDICAL STAFF FELLOW

Physician-Scientist wanted for studies on the immune deficit and impaired function of T cells in aged individuals related to the rapid progression of AIDS in this population. Applicants must be graduates of an accredited medical school and a citizen of the United States or permanent resident. Salary dependent upon training and experience. Individuals primarily involved in AIDS research may have up to \$20,000/year of their qualified educational loans repaid. Submit curriculum vitae to:

Dr. William H. Adler
Chief, Clinical Immunology Section
National Institute on Aging
Gerontology Research Center
4940 Eastern Avenue
Baltimore, MD 21224
(301) 550-1755
Fax (301) 550-1888

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COURSES AND TRAINING

POSTDOCTORAL TRAINING PROGRAM CELLULAR AND MOLECULAR ENDOCRINOLOGY

Postdoctoral traineeships are available starting in 1990 in an NIH-supported program. Trainees with a Ph.D. or M.D. degree having U.S. citizenship or permanent residence in the United States will participate in a research program with 1 of 13 faculty from the Biochemistry Department and the Division of Biomedical Sciences on the campus of the University of California, Riverside. The purpose of the program is to provide for research training at the postdoctoral level in the following five major areas of focus:

- (i) insulin, related growth factors, and their actions;
- (ii) endocrinology of vitamin D, calcium and bone cell metabolism;
- (iii) production of actions of lymphokines, hemopoietic growth factors and cytokines;
- (iv) molecular and cell biology of hormone synthesis and action; and
- (v) transductive and intracellular events in hormone action.

For detailed information and application forms, write to:

Dr. Anthony W. Norman, Program Director
Division of Biomedical Sciences
University of California
Riverside, CA 92521
Telephone: 714-787-5705

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POSTDOCTORAL RESEARCH TRAINING FELLOWSHIPS

Fellowships available to residents of North America with Ph.D., M.D., or comparable degree and less than 1 year of postdoctoral laboratory experience by application date for beginning training in basic biomedical research. The 3-year award consists of a stipend of \$20,000 for the first year, with increments of \$1,000 for each of the next 2 years; \$1,000 per annum research allowance; travel to fellowship location; annual meeting. Application deadline: 15 August 1990; fellowships activate the following July. For application forms, write or telephone: **The Helen Hay Whitney Foundation, 450 East 63rd Street, New York, NY 10021.** Telephone: 212-751-8228.

POSTDOCTORAL TRAINING PROGRAM IN THE BIOCHEMISTRY AND PHYSIOLOGY OF ARTERIOSCLEROSIS

Advanced research training positions are available to join an established group studying lipid and lipoprotein metabolism and cardiovascular physiology. The projects emphasize problems relevant to atherosclerosis and heart disease. The approach is multidisciplinary and collaborative, drawing from cell biology, molecular biology, enzymology, physical biochemistry, protein chemistry, vascular physiology, and nutrition. Areas of investigation under the direction of 12 preceptors include: the effects of fish oils on hepatic triglyceride and apolipoprotein synthesis, diet and intestinal apolipoprotein gene expression, cholesterol transport between high density lipoproteins and cells, intracellular trafficking of cholesterol, cellular metabolism and molecular biology of cholesteryl esters and retinoids, apolipoprotein conformation and interactions with lipids, lipoprotein metabolism in hypercholesterolemic animals, thrombospondin and cell adhesion, electrolyte flux, and arterial wall function. Candidates should be U.S. citizens or permanent residents, committed to a career in research, and hold a Ph.D. or M.D. degree. Appointments to begin as early as 1 June 1990 are normally for 2 years with annual salaries in the range of \$22,000 to \$31,000. Send curriculum vitae, a short summary of research experience and future research objectives, and names of three references to: **Dr. Michael C. Phillips, Department of Physiology and Biochemistry, Medical College of Pennsylvania, 3300 Henry Avenue, Philadelphia, PA 19129.** The Medical College of Pennsylvania is an Affirmative Action/Equal Opportunity Employer.

MEETINGS

SCANNING 90
17 to 20 April 1990
Hyatt Regency Crystal City
Arlington, Virginia

Sponsored by the Foundation for Advances in Clinical Medicine and Science (FACMS) and SCANNING, the 3-day scientific program includes technical sessions, workshops, exhibits, and posters in analytical, biological, imaging, and materials sciences.

Organizing Committee: Alan Boyde, Chairman, University College London; Peter J. Lea, Co-chairman, University of Toronto; Dwight Cavanagh, Georgetown University Medical Center; Richard J. Colton, Naval Research Laboratory; James V. Jester, Georgetown University Medical Center; Michael T. Postek, National Institute of Standards and Technology; Joel M. Schnur, Naval Research Laboratory; James A. Sprague, Naval Research Laboratory; and William P. Wergin, Natural Resources Institute.

For registration information, contact: **Mary K. Sullivan, FACMS, Inc., The JBI Building, Box 832, Mahwah, NJ 07430.** Telephone: 201-818-1010. FAX: 201-818-0086.

ANNOUNCEMENTS

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.

Grant applications are evaluated by the Scientific Advisory Board to the council and will be judged solely on the basis of scientific merit and relevance.

Deadlines for submission of grant applications are 31 December for 1 July funding and 30 June for 1 January funding. Address inquiries or requests for applications to: **The Smokeless Tobacco Research Council, Inc., 420 Lexington Avenue, New York, NY 10170.** Telephone: 212-697-3485.

SITUATIONS WANTED

BIOCHEMIST, Ph.D. (1987). Seeks industrial/academic (research associate) position in Raleigh/Durham area. Experience in enzymology, mutagenesis, and molecular biology. Telephone: 212-409-3916.

CHEMIST/BIOCHEMIST/PHYSIOLOGICAL SCIENCES, Ph.D. Extensive teaching; experience in clinical biochemistry, cancer research, instrumentations. Prefer academic, government, hospital/research institute. Box 354, Rochelle Park, NJ 07662.

M.D. PHARMACOLOGIST. Five years of postdoctoral academic/industrial experience in cardiovascular and renal pharmacology. Seeks position in academia or industry. Box 36, SCIENCE.

SCIENCE EDITOR/WRITER, M.A. Part-time. Extensive experience Bureau of Standards, International Geophysical Year, International Atomic Energy Agency, National Science Foundation. Box 30, SCIENCE.

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POSITION AVAILABLE
DIRECTOR, MEDICATIONS DEVELOPMENT DIVISION
NATIONAL INSTITUTE ON DRUG ABUSE
ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION
PUBLIC HEALTH SERVICE
DEPARTMENT OF HEALTH AND HUMAN SERVICES

The Alcohol, Drug Abuse, and Mental Health Administration invites nominations and applications for the position of Director, Medications Development Division, National Institute on Drug Abuse.

This is a Senior Executive Service position in the career civil service, with an annual salary range of \$71,200 to \$79,200. Physicians may also be eligible for a Physicians' Comparability Allowance of up to \$20,000 per year. The position is located in Rockville, Maryland.

The Director, Medications Development Division provides programmatic, administrative, and general management of the five branches of the Division: the Biometrics Research Branch, the Clinical Trials Branch, the Regulatory Affairs Branch, the Chemistry and Pharmaceutics Research Branch, and the Pharmacology and Toxicology Branch. The Director is also responsible for coordinating the activities and medications development requirements of the three ADAMHA Institutes into the scientific and management activities of the Division and maintains close contact with designated medications development staff at the National Institute on Alcoholism and Alcohol Abuse and the National Institute of Mental Health.

The Director is also responsible for maintaining close working relationships with senior staff at the Food and Drug Administration on matters relating to operational and scientific procedures involved in medications development as well as the development of policy affecting ADAMHA's programs. Additionally, the Director provides authoritative advice and consultation to senior agency officials on a wide range of matters pertaining to the treatment of brain and behavior disorders and the pharmacological evaluation of new treatment agents.

Minimum qualifications requirements include a degree of Doctor of Medicine, Doctor of Osteopathy, or a bachelor's degree or higher degree in an academic field related to the health sciences pertinent to the work of the position. Candidates must demonstrate evidence of progressively responsible experience in managing large, complex science/research programs in the biomedical/behavioral areas; supervising or collaborating with senior-level scientists in academia, private industry, or the Federal Government; extensive current knowledge of research methodology in the biomedical, behavioral, pharmacological, or clinical sciences in areas relevant to drug abuse.

Further information about the position and qualifications requirements may be obtained by contacting Ms. Leslie Everheart at (301) 443-5030. An SF 171 (Application for Federal Employment) accompanied by a current curriculum vitae and bibliography should be submitted to Ms. Everheart at the Division of Personnel Management, Alcohol, Drug Abuse, and Mental Health Administration, 5600 Fishers Lane, Room 15C-26, Rockville, Maryland 20857. Complete Application material (including the SF 171) must be postmarked by the closing date of April 30, 1990. *Resumes are not acceptable for entrance into the Senior Executive Service.*

Applications from women and minority group members are encouraged.

THE ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION IS AN EQUAL OPPORTUNITY EMPLOYER

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Abbott Laboratories' Chemical & Agricultural Products Division is a worldwide leader in the manufacture of biorational pesticides and bulk pharmaceuticals. With a reputation for developing ecologically safe products, our success continues to grow. To support our efforts, we now seek the following individuals:

MOLECULAR BIOLOGIST

The selected candidate will work with a principal investigator using genetic techniques to increase yields of antibiotic fermentations. A B.S. degree with strong molecular biology background is required. Industrial laboratory experience involving streptomyces molecular biology preferred. **Job #7511.**

BIOCHEMIST

This position requires a B.S. or M.S. in Biochemistry with experience in Protein and Enzyme Purification, Microbial Physiology and Immunoassay development. Strong HPLC, TLC, Radioisotope, and Antibody Assay skills are essential. **Job #7632.**

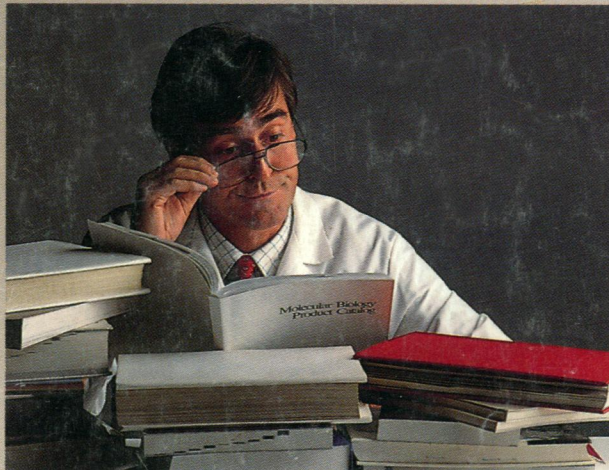
Abbott provides competitive compensation and benefits including a profit sharing and a stock retirement plan. We are located in an attractive suburban area approximately 30 miles north of Chicago. For consideration, please send your resume, indicating Job Number interested in, to: **R.M., Corporate Placement, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064.** Abbott is an Affirmative Action Employer.

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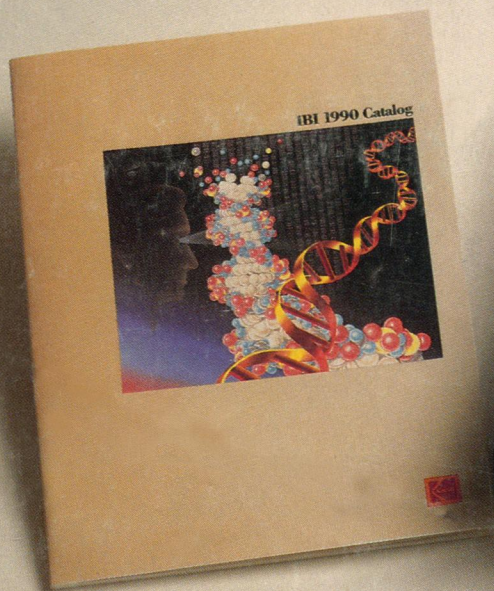


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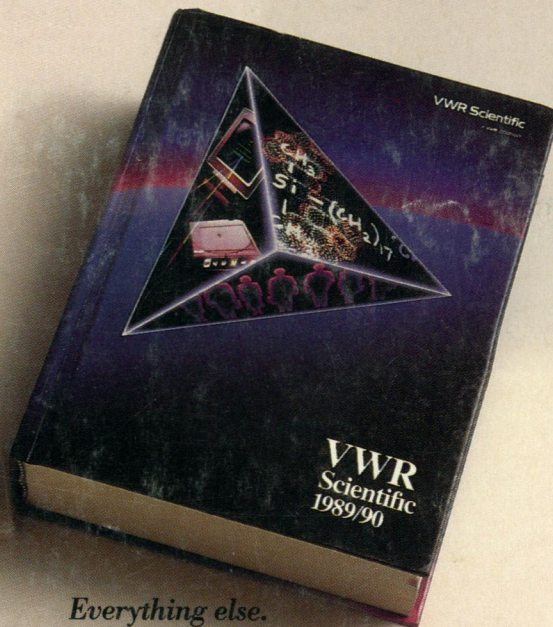
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