

Personnel Placement

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Positions Wanted: 40¢ per word; \$4 extra for use of box number. \$10 minimum charge, per insertion. Prepayment required. This rate is available only to individuals; personnel agencies, companies, colleges, and universities take display rate for all advertising.

Display (Positions Open, Market Place, and so forth): \$5.80 per millimeter; \$145 minimum charge, per insertion (covers 25 millimeters on single column; 25 millimeters equals 10 lines of 50 spaces per line). No charge for use of box number. No agency commission for ads under 103 millimeters (4 inches). No cash discount. Prepayment required for foreign advertising. Purchase orders and billing information required for all other ads.

SCIENCE is published weekly, on Friday. Copy must be received in writing by Wednesday, 3½ weeks before Friday issue date required. Send copy for all positions wanted ads and display ads under 5 inches to:

SCIENCE, Room 207
1515 Massachusetts Ave., NW
Washington, D.C. 20005
Telephone: 202-467-4456

Send copy for display ads, 1/6 page and larger, to:

Scherago Associates, Inc.
1515 Broadway
New York, N.Y. 10036
Telephone: 212-730-1050

Blind ad replies should be addressed as follows:

Box (give number)
SCIENCE
1515 Massachusetts Ave., NW
Washington, D.C. 20005

Effective 1 January 1979, the display rate for SCIENCE will be \$160 per 25 millimeters, minimum, per insertion.

POSITIONS WANTED

Evolutionist/Generalist: seeking 1979 academic position. Ph.D. Harvard, 1973. Courses taught: genetics, comparative vertebrate anatomy, cytogenetics, vertebrate ecology, biogeography, invertebrate biology (marine), and general biology. Research: comparative population cytogenetics, modes of speciation and evolution, evolutionary biogeography, systematic herpetology, and evolutionary epistemology. Field experience: United States, Mexico, West Indies, Poland, Israel, Iran, and Australia. Grants, publications. Available for interviews, spring 1979. Write: W. P. Hall, University Research Fellow, Department of Genetics, University of Melbourne, Parkville, Victoria 3052, Australia. 12/8; 1/5, 26

Ph.D. Freelance Editor/Writer, chemistry, other sciences. Extensive experience, major contributions to research literature. Box 352, SCIENCE. X

Gross Anatomist. Excellent teacher. D.D.S., M.S. (pathology), M.A. (anatomy). Competent also in neuroanatomy, histology, and embryology. Experienced. Seeks stable position. Box 378, SCIENCE. 12/8, 15

Immunodiagnostics. Ph.D. with proven track record for R & D of latex and red blood cell systems. Nine years of industrial experience in all aspects of product development from concept through marketed licensed products. Box 380, SCIENCE. X

Lipid Biochemist. Ph.D. with active and funded research program, extensive research experience in lipid enzymology, purification of lipids and lipid carriers, 20 plus publications; seeks industry or institute research position. Box 366, SCIENCE. X

Nutritionist, Ph.D., seeks challenging and rewarding research and/or teaching position. Past research activities include: development of nutrition program for Fortune 500 company, mineral metabolism, trace mineral interactions, zinc absorption, biological evaluation and chemical separation of plant extracts, and development of insolubilized ruminal protein sources. Strong background in biochemistry. Box 375, SCIENCE. X

POSITIONS WANTED

Oceanographer/Ecologist. M.S. 1978. Teaching assistant, 2 years of research experience plus thesis research—toxicology study of insecticides on phytoplankton. Broad background and interests. Seeking research/teaching position. Box 376, SCIENCE. X

Paleobotanist/Angiosperm Taxonomist. Strong background in plant morphology, plant anatomy, palynology. Postdoctoral research in Tertiary paleobotany, Quaternary palynology. Publications. Graduate and undergraduate teaching experience in botany and biology. Seeking teaching/research position. Box 381, SCIENCE. X

Pharmacologist. Ph.D. Postdoctoral, teaching, and research experience. Strong background in gastrointestinal and hepatic pharmacology, biological transport and drug interaction studies. Publications. Seeks industrial, government, or academic position. Box 379, SCIENCE. 12/8, 22; 1/5

Physiologist. Experienced quantitative physiologist seeks opportunity to utilize enthusiasm for using microprocessor computers in physiology, especially for teaching dynamic interrelationships. Box 377, SCIENCE. 12/8, 15

Toxicologist/Biochemist. Ph.D. 1967. Metabolic fate studies in animals/plants. Involved in short- and long-term toxicology programs for industrial sponsors. Seeking position in industry, government, or research institute. Box 382, SCIENCE. X

Vertebrate Paleontologist. Ph.D. Eight years as department head in major African museum. Publications. Teaching experience. Seeks museum/academic position. Box 363, SCIENCE. X

POSITIONS OPEN

ANATOMY FACULTY POSITION

The Department of Anatomy, Michigan State University, invites applicants for an assistant or an associate professorship. Candidates should have the D.V.M., D.O., M.D., and/or Ph.D. degree (with postdoctoral experience) and a strong research and teaching background. Duties of this position include teaching gross anatomy in the professional and graduate program, and active participation in research, preferably in cell biology or neurobiology. Applicants should send their curriculum vitae and names of three referees to: **Dr. Stephen T. Kitai, Professor and Chairman, Department of Anatomy, A519 East Fee Hall, Michigan State University, East Lansing, Mich. 48824.**

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

AQUATIC ECOLOGIST FOR ENVIRONMENTAL STUDIES

Ph.D. or equivalent in ability and experience, to supervise ongoing study of the effects of a coastal power generating station on mysid shrimps. Duties include overseeing five technicians in field collections and laboratory work, planning research, analyzing data, and writing technical reports and scientific papers. Experience with plankton or crustacean population biology desirable. Salary from \$20,000 to \$24,000 plus fringe benefits. Send résumé and names of three referees to:

Marine Ecological Consultants
of Southern California
533 Stevens Avenue, Suite D-57
Solana Beach, California 92075

ASSISTANT PROFESSOR OF ANATOMY. Two positions are available in microscopic (including developmental) and gross (including applied) anatomy for a D.V.M. and/or Ph.D. beginning 1 July 1979. Salary dependent on experience and qualifications. The successful appointee will be expected to teach in the professional and graduate program of the department in the candidate's area of interest and competence. The appointee will be expected to develop a productive research program or participate in one of the ongoing departmental research programs, including those in neuroendocrinology, neurosciences, cardiovascular and respiratory systems, and teratology. Send curriculum vitae, names of three references, and recent reprints to: **H.-Dieter Dellmann, Department of Veterinary Anatomy, Pharmacology and Physiology, Iowa State University, Ames, Iowa 50011.** Closing date: 15 January 1979. *Iowa State is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

Position open: **ASSISTANT PROFESSOR, Ph.D.,** to teach anatomy-physiology, beginning September 1979, in a small college setting. Salary: commensurate with experience. Application deadline: March 1979. Send résumés and three letters of reference to: **Dr. Betty Thacker, Chairperson, Department of Biology, Wheeling College, Wheeling, W. Va. 26003; telephone: 304-243-2229.** *An Equal Opportunity Employer.*

ASSISTANT PROFESSOR OF ANATOMY DEPARTMENT OF SURGERY

University of California, San Diego (UCSD), School of Medicine is seeking a qualified anatomist to fill a position in the group responsible for teaching gross anatomy. Candidates should have experience and expertise in teaching this discipline as well as a long-term commitment to it; solid background and motivation in research. Starting date negotiable but not later than 1 July 1979. Salary related to qualifications and experience. Please send curriculum vitae and names of three references to: **Nicholas A. Halasz, M.D., Head, Division of Anatomy, Department of Surgery, 225 West Dickinson Street, San Diego, California 92103.** *UCSD is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT/ASSOCIATE PROFESSOR, ANATOMY—The College of Medicine and Dentistry of New Jersey—New Jersey School of Osteopathic Medicine, anticipates recruitment of an assistant or associate professor of anatomy with an active research program, to assist in teaching gross anatomy. Doctorate is required and postdoctoral experience is desirable. Appointment may be made as early as 1 July 1979. Submit curriculum vitae, the names of three references, and a statement of research and teaching interests to: **Dr. Alfonso Solimene, Chairman, Anatomy Search Committee, College of Medicine and Dentistry of New Jersey—New Jersey School of Osteopathic Medicine, P.O. Box 55, Piscataway, N.J. 08854.** *Equal Opportunity/Affirmative Action Employer, M/F.*

ASSISTANT PROFESSOR OF BIOLOGY for 15 August 1979. Ph.D. required. Seeking a broadly trained plant physiologist. Responsibilities include involvement in general biology and developing courses in botany and area of specialty. Research strongly encouraged. By 30 January 1979 send résumé, graduate and undergraduate transcripts, statement on teaching and research interests, equipment needs, and three letters of recommendation to: **Dr. James Watrous, Chairman, Department of Biology, Saint Joseph's University, 54th Street and City Avenue, Philadelphia, Pennsylvania 19131.** *We are an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR, PHARMACOLOGY. Applications are invited for the anticipated position of assistant professor of pharmacology in the College of Medicine and Dentistry of New Jersey (CMDNJ)—New Jersey School of Osteopathic Medicine. The individual selected will participate in teaching in collaboration with faculty members of the Department of Pharmacology of CMDNJ—Rutgers Medical School, and will be encouraged to conduct independent research with extramural support. Qualifications include a Ph.D. and postdoctoral experience broadly related to biochemical or biophysical actions of therapeutic and toxic agents. The position is available beginning 1 July 1979. Please submit résumé, including names of three references, to: **Dr. Stephen M. Penningroth, Department of Pharmacology, College of Medicine and Dentistry of New Jersey, New Jersey School of Osteopathic Medicine, P.O. Box 55, Piscataway, N.J. 08854.** *Equal Opportunity/Affirmative Action Employer, M/F.*

Ph.D. IMMUNOLOGIST WANTED

Position open in Tumor Immunology Laboratory of the Division of Surgical Oncology, University of Illinois. Would assist two surgeons in ongoing projects, help in development of new studies, and undertake independent investigations. Should have experience in a variety of techniques, including tissue culture, cell and serum mediated assays, and tumor transplantation. The research will involve both human and animal systems. Send curriculum vitae and bibliography along with letters of recommendations to:

Edward L. Felix, M.D.
University of Illinois Medical Center
Division of Surgical Oncology
840 South Wood Street
Chicago, Illinois 60612
Telephone: 312-996-6666

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

ASSISTANT PROFESSOR, IMMUNOLOGY

Immunologist/immunogeneticist required at assistant professor (and postdoctoral fellow) level to join others in a medical school immunology group. Special research strengths of this group are a good HLA laboratory (international workshop standard), complement allotyping, collaborative relationships with the blood bank, biochemical genetics, cytogenetics and with clinical investigators, plus the availability of large families. Our group is also involved in teaching, in a clinical immunology diagnostic laboratory, and with a transplantation program. For more information please write, preferably sending detailed curriculum vitae plus any relevant reprints, to: **Dr. W. H. Marshall, Professor of Immunology, Faculty of Medicine, Memorial University of Newfoundland, St. John's, Newfoundland, Canada A1B 3V6.**

ASSISTANT PROFESSOR NEUROPHYSIOLOGY

The Department of Physiology and Biophysics at the University of Iowa College of Medicine invites applications from individuals with well-defined interests in cellular aspects of integrative CNS neurophysiology for tenure-track appointment at the assistant professor level. Applicants must have the Ph.D. and/or M.D. degree and two or more years of postdoctoral training, with a record of productivity in original research. Candidates should be prepared to conduct a strong independent research program in developmental, regulatory, or endocrine vertebrate neurobiology, and to take an active role in the medical and graduate teaching activities of the department. Please send curriculum vitae and a brief description of research interests, teaching experience, and career objectives, with names of at least three references to: **Dr. Robert E. Fellows, Department of Physiology and Biophysics, University of Iowa College of Medicine, Iowa City, Iowa 52242.**

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

ASSISTANT/ASSOCIATE PROFESSOR, PHYSIOLOGY—Applications are invited for an anticipated opening at the assistant or associate professor level starting July 1979. The successful candidate will be expected to initiate and maintain an independent research program of high quality and participate in the instruction of mammalian physiology to freshmen medical students. Candidates should hold a doctoral degree and have postdoctoral research experience. Preference will be given to applicants with research interests in cardiovascular or renal physiology. Send curriculum vitae, a brief summary of research interests, and the names and addresses of three references who may be contacted by 15 February 1979, to: **Dr. Richard Schimmel, Department of Physiology, College of Medicine and Dentistry of New Jersey—New Jersey School of Osteopathic Medicine, P.O. Box 55, Piscataway, New Jersey 08854. Equal Opportunity/Affirmative Action Employer, M/F.**

BIOCHEMIST—To direct lipid analysis laboratory, teach lipid metabolism, and conduct research in lipid transport and atherosclerosis. This is a full-time, tenure-possibility position. Assistant professor with postdoctoral experience preferred, but extensive experience in the field would qualify for instructorship. Salary commensurate with education and experience. Send curriculum vitae and letters of recommendation to: **Dr. Peter Kuo, Department of Medicine, College of Medicine and Dentistry of New Jersey, Rutgers Medical School, P.O. Box 101, Piscataway, N.J. 08854. Equal Opportunity/Affirmative Action Employer, M/F.**

BIOCHEMIST—MEMBRANE BIOLOGIST to join group working on the chemical and physical properties of the red cell membrane. Applicant should have a working knowledge of protein structure and enzymology. Salary commensurate with experience. Position available now. Please send curriculum vitae and three letters of reference to: **S. B. Shohet, M.D., M1282, University of California, San Francisco, San Francisco, Calif. 94143.**

CELLULAR PHYSIOLOGIST

Tenure-track position, postdoctoral experience desirable. Successful candidate expected to develop an active research and graduate training program. Submit curriculum vitae, a statement of research interests, and names of at least three referees to: **Physiology Search Committee, Department of Biology, University of Houston, Houston, Texas 77004.**

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

UNIVERSITY OF MARYLAND MARINE PRODUCTS LABORATORY (MPL)

Position: ASSOCIATE PROFESSOR.

Location: University of Maryland, Marine Products Laboratory, Crisfield, Maryland 21817.

Job Summary: position requires applied and basic research (with emphasis on the applied) in food microbiology, food, and non-food products to meet the needs of the Maryland seafood industry. Responsibilities include food microbiological analysis with emphasis on microorganisms of public health significance, heat processing determination, sterility tests and shelf-life studies. Experience in fisheries technology is desirable but not necessary. The position carries a part-time academic administrative responsibility.

Qualifications: Ph.D. in food microbiology or in microbiology with experience and/or interest in marine food and marine products. Postdoctoral experience is desirable.

Salary: Dependent on qualifications and experience.

Applicants are advised to submit résumé, other relevant information, and names and addresses of three references by 15 December 1978 to: **MPL Search Committee, Marine Products Laboratory, CEES, University of Maryland, Crisfield, Maryland 21817.**

The University of Maryland is an Equal Opportunity Institution with respect to both education and employment. The University's programs and policies are consistent with pertinent federal and state laws and regulations on nondiscrimination regarding race, color, religion, age, national origin, sex, and handicap. Inquiries concerning this policy should be directed to the office of the association director for administration of Center for Environmental and Estuarine Studies.

BIOCHEMICAL TOXICOLOGIST

An immediate opening exists for an individual with an M.S. or Ph.D. in toxicology or pharmacology with background in organic or analytical chemistry. The position involves studies on the metabolism and action of toxic chemicals in vivo and in vitro in mammals. Experience in isolation and identification of metabolites of foreign chemicals, and/or cell culture is desirable.

FISHERIES BIOLOGIST

An immediate opening exists for an individual with an M.S. or Ph.D. in aquatic biology to study the effects of toxic chemicals on fish and aquatic organisms. Experience in studying acute and chronic effects, fish physiology, or reproductive biology is desirable.

The positions provide an opportunity for the successful candidate to develop his/her own area of interest.

The Syracuse Research Corporation (SRC) is a multidisciplinary not-for-profit organization located on the south campus of Syracuse University. SRC offers a competitive salary, excellent benefits, and a stimulating research environment.

For confidential consideration, please send résumé including salary history, and three references to:

**Personnel Manager
Syracuse Research Corporation
Merrill Lane
Syracuse, New York 13210**

An Equal Opportunity/Affirmative Action Employer

FACULTY POSITIONS

The Department of Biomedical Sciences, as part of its continued development, anticipates the appointment of several tenure-track scientists at the assistant professor level, through 1979. Disciplinary preference would be given to pharmacologists, biochemists, or physiologists, but individual candidate strength will receive the highest consideration and those having related or interdisciplinary expertise may apply. Significant research performance must be demonstrated in addition to a commitment to excellence in teaching. Ideal candidates will have successfully completed 3 to 4 years of postdoctorate experience in dynamic research environments and have their academic goals clearly defined. A supportive infrastructure, new facilities, competitive salaries, and a highly acceptable living environment make these positions particularly attractive. Candidates possessing the above prerequisites should send their curriculum vitae and the names of at least three references to: **B. Salafsky, Ph.D., Department of Biomedical Sciences, Rockford School of Medicine, University of Illinois, 1601 Parkway Avenue, Rockford, Illinois 61101. An Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

BIOCHEMIST—MOLECULAR BIOLOGY OF CONNECTIVE TISSUE—One-year appointment (may be renewable) as soon as convenient for an **ADJUNCT ASSISTANT PROFESSOR**. Challenging opportunity to work with energetic team of biochemists to do research on genes for collagen and related proteins with cDNA and other techniques, to manage one research laboratory, and assist teaching biochemistry.

Successful candidate must possess a Ph.D. in biochemistry; experience must include 2 to 4 years of work in appropriate areas of molecular biology. Salary range: \$23,855 to \$26,969 depending on background and experience. Excellent benefits and working conditions.

Please send curriculum vitae including summary of pertinent experience, and names of three individuals who may be contacted for references to: **Department of Biochemistry, College of Medicine and Dentistry of New Jersey, Rutgers Medical School, P.O. Box 101, Piscataway, N.J. 08854. Equal Opportunity/Affirmative Action Employer, M/F.**

OKLAHOMA MEDICAL RESEARCH FOUNDATION

Applications are invited from **BIOCHEMISTS** with Ph.D. for a **RESEARCH ASSOCIATE** position available immediately for up to 3 years for structural studies on apolipoproteins. Experience in protein separation and characterization desirable and in trace metals helpful. Starting salary range: \$12,000 to \$13,500 depending on background. Excellent benefits and working conditions. Send curriculum vitae, description of research experience and techniques, two letters of reference, and a copy of college transcripts as soon as possible to: **Dr. Diana Lee, Laboratory of Lipid and Lipoprotein Studies, Oklahoma Medical Research Foundation, 825 Northeast 13 Street, Oklahoma City, Okla. 73104.**

Equal Opportunity/Affirmative Action Employer

BIOCHEMIST. Applications invited for tenure-track teaching position starting September 1979. Superior teaching ability and experimental research experience in biochemistry are sought. Teaching responsibilities in the areas of biochemistry, general chemistry, and possibly physical chemistry. Rank open but assistant professor preferred. Ph.D. by 1 September 1979 required. Send résumé, transcript, statement of research plans, and three letters of recommendation to: **Dr. James H. Hammons, Chemistry Department, Swarthmore College, Swarthmore, Pa. 19081.** Closing date for applications is 31 January 1979. *An Equal Opportunity Employer.*

BIOLOGY/CHEMISTRY

Instructor or assistant professor rank. M.S. or Ph.D. required in a biological science with equivalent of B.S. in chemistry. This person will teach general biology, microbiology, and general chemistry (for liberal arts and health-science students). Application deadline is 15 January 1979 and position starts 1 September 1979. For complete job description contact: **Dr. O. C. Lam, Division of Natural Sciences and Mathematics, Clayton Junior College, Morrow, Georgia 30260. Clayton Junior College, a unit of the University System of Georgia serving South Metropolitan Atlanta, is an Affirmative Action/Equal Employment and Educational Opportunity Institution.**

ENDOCRINOLOGIST. Assistant professor, Ph.D. or M.D. We are seeking an individual with demonstrated research ability to assume supervisory responsibility for the clinical endocrinology laboratory. Experience in development of radioimmunoassays, steroid chemistry, or receptorology essential. Excellent opportunity to conduct independent and collaborative research programs. Please send résumé, including a statement of research goals, and the names of three references by 15 December to: **Dr. Robert M. MacLeod, Division of Endocrinology and Metabolism, University of Virginia School of Medicine, Charlottesville, Va. 22908.**

We are an Equal Opportunity/Affirmative Action Employer.

Florida Institute of Technology Jensen Beach, Florida 33457

The School of Applied Technology at Florida Institute of Technology (FIT) invites applications for possible **FACULTY OPENINGS** in: mathematics, physics, or computer science; physical, chemical, or geologic oceanography; civil, mechanical, or ocean engineering. All positions require some teaching experience; all require an M.S. or Ph.D. Please state approximate expected salary per 9-month academic year. Reply to: **M. F. Gerstell.**

POSITIONS OPEN

CELL BIOLOGIST

Applications are invited for position at assistant professor level. Applicants should hold Ph.D. degree and preferably have postdoctoral experience. Successful applicant will conduct an active teaching and research program, including instruction in undergraduate cell biology courses, participation in academic program of Oakes College, and training of graduate students. We particularly seek someone with expertise in study of plant or animal cells at molecular and/or developmental level. Salary is based on candidate's qualifications and experience. Please send résumé, statement about future research and teaching plans, and names of four references to: Biology Research Committee, Thimann Laboratories, University of California, Santa Cruz, Calif. 95064. Applications close 1 February 1979. An Equal Opportunity/Affirmative Action Employer.

LINCOLN COLLEGE New Zealand

CHAIR IN ENTOMOLOGY (Agricultural Zoology)

The Council of Lincoln College, University College of Agriculture, invites applications for the chair in entomology, resulting from the impending retirement of Professor R. A. Harrison.

Applicants should hold an advanced degree in science or agricultural science and have an established record of research and/or teaching in some branch of agricultural zoology.

The successful applicant will be appointed as head of department and will be responsible to the college principal for the administration of the department.

The appointment will be made within the existing range of professorial salaries, NZ\$23,012 to NZ\$29,188 per annum, the commencing salary being determined by the College Council.

Expenses of appointment reimbursed up to specified limits. New Zealand government super-annuation is available.

Further details and general conditions of appointment are obtainable from: Secretary General, Association of Commonwealth Universities (Appointments), 36 Gordon Square, London WC1H 0PF, England, or from the registrar of the University.

Applications close on 15 January 1979.

CHAIRMAN DEPARTMENT OF BIOCHEMISTRY Medical University of South Carolina

Applications are invited from highly qualified individuals to assume the position of professor and chairman of the department. Candidates must have the Ph.D. and/or M.D. degree, administrative-leadership abilities, and a strong ongoing research program in some aspect of the biochemical sciences. Exciting opportunities exist in this dynamic, growing institution dedicated to education in the health sciences, research, and health care delivery. Nominations or applications should be sent to: Dr. Hiram B. Curry, Chairman, Search Committee for Biochemistry, Department of Family Practice, Medical University of South Carolina, 171 Ashley Avenue, Charleston, South Carolina 29403. An Equal Opportunity/Affirmative Action Employer.

DIRECTOR AND PROFESSOR OF NUTRITIONAL SCIENCES for newly formed interdepartmental DIVISION OF NUTRITIONAL SCIENCES, University of Illinois at Urbana-Champaign. Responsibilities: (i) administration, technical leadership, and coordination of existing graduate program in nutritional sciences; (ii) provide leadership in obtaining resources for expanding the base of the Nutritional Sciences Division; (iii) allocating budgetary resources assigned to the division and developing budget proposals for additional support. Will report to dean of College of Agriculture for administration of division. Contractual teaching and research responsibilities in department and/or school most suitable for director's scholarly activity.

Must hold Ph.D. in nutrition or related science and/or M.D. with established record of nutrition research and scholarly achievement. Evidence of capability to administer and coordinate interdisciplinary research and academic program essential. Full-time position, available immediately.

To assure full consideration résumé should be received by 1 February 1979. Send to: Willard J. Visek or A. J. Siedler, Co-Chairmen of Search Committee, 190 Medical Sciences Building, University of Illinois, Urbana, Ill. 61801; telephone: 217-333-0119.

The University of Illinois is an Equal Opportunity Employer.

POSITIONS OPEN

CHAIRMAN, MEDICAL BIOLOGY DIVISION—The Oklahoma College of Osteopathic Medicine and Surgery invites applications and nominations for the position of chairman of the Medical Biology Division which encompasses 23 faculty in the basic medical sciences. Qualifications: Ph.D. or equivalent and demonstrated record of accomplishment in biomedical education and research. Applicants should have a commitment to academic leadership and excellence in medical education. Salary and benefits negotiable. A review of applications and nominations will begin 1 January 1979 and continue until position is filled. Send complete curriculum vitae and a list of references to: George Brenner, Ph.D., Chairman, Medical Biology Division Search Committee, The Oklahoma College of Osteopathic Medicine and Surgery, P.O. Box 2280, Tulsa, Oklahoma 74101. An Affirmative Action/Equal Opportunity Employer.

CHIEF ELECTRON MICROSCOPY TECHNOLOGIST

New position opening in the Department of Anatomy at the West Virginia University Medical Center. Responsible for coordinating activities of a central departmental electron microscope facility. Qualifications/requirements include: B.S. degree or equivalent experience, work experience in and thorough working knowledge of electron microscopy and related techniques, and supervisory ability. Send résumé and salary requirements to: Jack Podeszwa, Personnel Officer, West Virginia University, Morgantown, W. Va. 26506. An Equal Opportunity/Affirmative Action Employer, M/F.

CLINICAL DIRECTOR FOR MULTIPLE SCLEROSIS CENTER

Professor or associate professor of neurology. M.D. degree required. Must have interest in clinical trials and supervision of a health care team for multiple sclerosis patients. Research background in multiple sclerosis is highly desirable. Contact: Dr. James Austin, Chairman, Department of Neurology, Box B-182, University of Colorado School of Medicine, 4200 East Ninth Avenue, Denver, Colorado 80262.

The University of Colorado is an Equal Opportunity Employer.

Central Michigan University is seeking a DEAN for the School of Arts and Sciences. Duties commence 1 July 1979. Minimal requirements include: an earned doctorate in a discipline taught within the school, scholarly productivity, recent teaching experience at the university level, and 2 years of academic administrative experience.

Application: letters of application, complete curriculum vitae, and names of five references must be received by 1 January 1979. Central Michigan University is an Equal Opportunity/Affirmative Action Employer. Send to:

Professor Calvin Enders
Chairperson, Dean's Search Committee
Box 116A, Warriner Hall
Central Michigan University
Mt. Pleasant, Michigan 48859

Women and minority persons are encouraged to apply.

DEVELOPMENTAL BIOLOGIST

Applications are invited for a faculty position to begin September 1979. Candidates should have Ph.D. in appropriate field and postdoctoral experience. Rank and salary open. Duties include teaching at undergraduate and graduate levels and development of a vigorous research program. Send curriculum vitae, statement of research plans, copies of publications, and arrange for three letters of recommendation to be sent by 15 January 1979 to: Professor G. M. Happ, Department of Zoology, University of Vermont, Burlington, Vermont 05405.

An Affirmative Action Employer

EVOLUTIONARY BIOLOGIST

Applications are invited for a faculty position to begin September 1979. Ph.D. required in appropriate discipline (genetics, ecology, behavior, morphology, taxonomy, physiology) and postdoctoral experience desirable. Rank and salary open. Duties include teaching at undergraduate and graduate levels. Send curriculum vitae, statement of research plans, copies of publications, and arrange for three letters of recommendation to be sent by 15 January 1979 to: Professor G. M. Happ, Professor of Zoology, University of Vermont, Burlington, Vermont 05405.

An Affirmative Action Employer

POSITIONS OPEN

ECONOMIC GEOLOGY, CRYSTAL CHEMISTRY, CHEMICAL GEOLOGY THE JOHNS HOPKINS UNIVERSITY

The Department of Earth and Planetary Sciences of Johns Hopkins University anticipates making a non-tenured appointment in economic geology, crystal chemistry, or chemical geology, starting September 1979. Applicants should have a demonstrated capacity for innovative research in one of these areas, and an ability to relate his/her specialty to geological problems. Duties will include graduate and undergraduate teaching, and supervision of graduate research. Applications should include a complete résumé and the names of at least two referees, and should be sent to: Dr. George W. Fisher, Chairman, Department of Earth and Planetary Sciences, Johns Hopkins University, Baltimore, Md. 21218.

Johns Hopkins is an Equal Opportunity Employer

GEOPHYSICAL FLUID MECHANICS THE JOHNS HOPKINS UNIVERSITY

The Department of Earth and Planetary Sciences at Johns Hopkins University anticipates making a non-tenured faculty appointment in the area of atmospheric or oceanic dynamics, starting September 1979. Candidates should have a demonstrated capacity for innovative research, an interest in a wide range of areas of geophysical fluid mechanics and an ability to teach at both graduate and undergraduate levels. Applications should include a complete résumé, list of publications, and names of at least two referees, and should be sent to: Dr. George W. Fisher, Chairman, Department of Earth and Planetary Sciences, The Johns Hopkins University, Baltimore, Md. 21218.

Johns Hopkins is an Equal Opportunity Employer

CHEMISTRY DEPARTMENT HEAD—Nominations and applications are invited for the position of head of the Department of Chemistry, Kansas State University (KSU), effective 1 July 1979. Candidates should have demonstrated excellence in research and teaching with a proven record of external research funding. The successful applicant would be expected to carry out an active research program complementing present programs, be an effective administrator of the department (20 faculty in analytical, inorganic, organic, and physical chemistry), and give leadership in developing new programs and proposed construction. Applications must include curriculum vitae, summaries of research, and names of three reference persons. Nominations and completed applications must be made by 1 January 1979 to: Dr. R. N. McDonald, Department of Chemistry, Kansas State University, Manhattan, Kansas 66506; telephone: 913-532-6680. KSU is an Affirmative Action/Equal Opportunity Employer.

HEAD, DEPARTMENT OF ENTOMOLOGY. Ph.D. entomology with broad background in teaching, research, or extension and demonstrated administrative ability. Must be able to provide strong interdisciplinary leadership in coordination of both applied and basic biological research, including development of integrated pest management programs. Must possess ability and desire to seek a broad base of support and funding for departmental programs. Must possess dynamic leadership qualities to provide impetus, motivation, and the climate for furthering academic and research excellence. Applications or nominations with current curriculum vitae and names and addresses of five references should be forwarded on or before 1 February 1979 to: Glenn W. Hardy, Chairman, Entomology Search Committee, 205 Agriculture Building, University of Arkansas, Fayetteville, Ark. 72701.

MARQUETTE UNIVERSITY

Two tenure-track positions, assistant professor level, starting September 1979.

IMMUNOBIOLOGIST-MICROBIOLOGIST. Teaching duties: undergraduate laboratory course in microbiology and graduate course and seminar in cellular immunology. Expected to develop independent research program and supervise graduate students.

CELL BIOLOGIST-ELECTRON MICROSCOPIST. Teaching duties: undergraduate lecture course in cell biology and graduate course and seminar in candidate's specialty. Expected to develop independent research program and supervise graduate students.

Send curriculum vitae, reprints, brief statement of research interests, and names of three references to: Dr. Peter Abramoff, Biology Department, Marquette University, Milwaukee, Wis. 53233.

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

FACULTY POSITION

The Department of Electrical Engineering and Computer Science of the Massachusetts Institute of Technology (MIT) is considering the appointment of one or more new faculty, effective 1 September 1979. We are primarily interested in superior candidates who have recently completed their doctorate or who expect to complete it this year, but more experienced candidates will also be considered. All areas of specialization within the department's programs in electrical engineering and computer science will be considered. These areas include: systems and control; computer science and artificial intelligence; electronics and digital systems; energy conversion devices and systems; electromagnetics and dynamics; electronic materials and devices; communication and probabilistic systems; and bioelectrical engineering. Duties of a faculty member include graduate and undergraduate teaching, research, and thesis supervision. Candidates should supply a résumé; a description of their professional interests and goals; copies of published papers, if any; and the names and addresses of three or more individuals who will provide letters of recommendation. Applications should be sent to: **Professor F. C. Hennie, Room 38-435, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139**, and candidates should arrange to have their letters of recommendation sent directly to the same address. Indicate citizenship and, if not a U.S. citizen, explain your visa status. MIT is an Equal Opportunity/Affirmative Action Employer.

GENETICS—UCLA. The Department of Biology will appoint a geneticist at the assistant professor level. While the specific area of research is open, applicants must be committed to excellence in undergraduate and graduate education in genetics and have an outstanding research record. Applicants with graduate degrees from Departments of Genetics or from institutions with strong genetics programs are especially sought. Postdoctoral experience is required. Application material, to include the names of three references to be used for letters of reference, curriculum vitae, and list of publications, teaching records and a summary of research plans, should be sent before 1 February 1979 to: **Genetics Search Committee, Department of Biology, University of California, Los Angeles, Calif. 90024.** An Equal Opportunity/Affirmative Action Employer.

GEOLOGY. One probable faculty position in structure or paleontology for fall 1979. Position is full-time, tenure-track, to be filled at assistant or associate level to teach in an undergraduate program. Ph.D. required. Research interest should be adaptable to southeastern United States. Salary competitive. Standard benefits. Closes 15 January 1979. *University of Tennessee is an Equal Opportunity/Affirmative Action Employer.* Contact: **Dr. William Black, Geosciences, University of Tennessee at Chattanooga, Chattanooga, Tenn. 37401.**

INSECT ECOLOGY

The Department of Ecology and Evolutionary Biology, University of California, Irvine, invites applications for a faculty position in insect ecology. Preference will be given to persons active in experimental research with phytophagous insects and with skills in such areas as population ecology, nutrition, physiology, biochemistry, and population genetics. The position begins July 1979 at assistant or associate professor rank. *All qualified candidates are welcome; women and minorities are encouraged to apply.* Send curriculum vitae, publications, statement of interest and qualifications, and three letters directly from references to:

Dr. Peter R. Atsatt
Chair of the Search Committee
Department of Ecology and Evolutionary Biology
University of California
Irvine, California 92717

The closing date for applications is 15 February 1979.

INSECT GENETICIST—RESEARCH LEADER. To assume leadership of an established research group investigating insects of agricultural and veterinary importance. Salary based on qualifications and experience. GS-13/14 level position. For information, contact: **L. E. LaChance, Director, Metabolism and Radiation Research Laboratory, P.O. Box 5674, State University Station, Fargo, N.D. 58105.** Telephone: 701-237-5771, extension: 5401. For application forms, contact: **James Knox, North Central Region Administrative Office, USDA/SEA/AR-1, 2000 West Pioneer Parkway, Peoria, Ill. 61614.** An Equal Opportunity Employer.

POSITIONS OPEN

HUMAN ANATOMY. Assistant professor in Department of Health Sciences to begin 1 September 1979. Undergraduate and graduate instruction in human gross anatomy and human neuroanatomy to students in the allied health professions. Development of personal research program. Send résumé and list of references to: **Anthony J. Godfrey, Ph.D., Chairman, Department of Health Sciences, Sargent College of Allied Health Professions, Boston University, 36 Cummings Street, Boston, Mass. 02215.** Boston University is an Affirmative Action/Equal Opportunity Employer.

NEUROSCIENCES PROGRAM UNIVERSITY OF OREGON

The University of Oregon intends to make three appointments in a new Interdisciplinary Program in Neuroscience. Two positions will be in the Biology Department and one in the Chemistry Department. Although junior positions are envisaged, applications from more senior candidates will be considered. Applicants should have an active research program as well as an interest in training students. Qualified persons should contact: **Chairman, Neuroscience Search Committee, Department of Biology, University of Oregon, Eugene, Oregon 97403.** Application deadline is 15 February 1979. *The University of Oregon is an Equal Opportunity/Affirmative Action Employer.*

PATHOLOGISTS. Applications are sought for two anticipated full-time positions at the assistant or associate professor level in the Pathology Department of the College of Medicine and Dentistry of New Jersey—New Jersey School of Osteopathic Medicine. Applicants must have a doctoral degree with appropriate postdoctoral training. The appointment will begin 1 July 1979, and will involve teaching students, research, and service work at an affiliated hospital. Please send curriculum vitae to: **Dr. David Della-Croce, D.O., Chairman, Pathology Search Committee, College of Medicine and Dentistry of New Jersey, New Jersey School of Osteopathic Medicine, P.O. Box 55, Piscataway, N.J. 08854.** Equal Opportunity/Affirmative Action Employer, M/F.

Ph.D.'s—INDUSTRY

Directors, Assistant Directors, Managers

Many openings in all specialties in all medical related industries.

- Clinical Pharmacology
- Microbiology
- Toxicology
- Virology
- Chemists
- R & D
- Biochemistry
- Cardiovascular
- Phase I, II, III, IV
- Psychopharmacology

Our clients are major corporations and pay all fees. Send your curriculum vitae in confidence with salary requirements, geographic preference, and type of position you are seeking to:

Gary S. Bell Associates, Inc.
393 Crescent Avenue
Wyckoff, N.J. 07481
Attention: Allen Cayne
Telephone: 201-891-5900

POPULATION BIOLOGIST

The Department of Biology of Princeton University is seeking applicants for a position at the assistant professor level. Preferential consideration will be given to candidates whose interests overlap and complement those of existing members of Princeton's population biology group: Gould, Horn, May, and Terborgh. Appropriate areas are: the ecology and adaptive behavior of animals and plants, population dynamics, sociobiology, and biogeography. Field experience and a wide ranging interest in organisms are desirable qualifications. Evidence of exceptional promise in research is essential. Teaching duties will consist of one undergraduate and one graduate level course and counseling students in research. Applicants should send curriculum vitae, a statement of research experience and interests, and three letters of recommendation to: **Dr. John Terborgh, Department of Biology, Princeton University, Princeton, New Jersey 08540.** Equal Opportunity/Affirmative Action Employer, M/F.

POSITIONS OPEN

PHYSICIAN

Director of the Department of Surgery

Presbyterian—University of Pennsylvania Medical Center, a major affiliate of the University of Pennsylvania, is inviting applicants/nominees for the position of director of the Department of Surgery. The medical center engages in research activities plus active undergraduate and postgraduate training programs in general surgery, orthopedics, E.N.T., cardiothoracic and oral surgery. The surgeon we seek must have clinical eminence, an established record as a scholar, and demonstrated evidence of academic administrative experience. Applications should be sent to: **Peter White, M.D., Chairman, Search Committee, Presbyterian—University of Pennsylvania Medical Center, 51 North 39 Street, Philadelphia, Pa. 19104.** Equal Opportunity Employer.

BERKELEY—PHYSICS

The Physics Department of the University of California, Berkeley, expects during the next 2 years to be making one or two appointments at the assistant professor level. Preferred areas of research are astrophysics, atomic and plasma physics, condensed matter physics, nuclear physics, and particle physics, with some priority given to theoretical condensed matter physics, experimental plasma physics, and theoretical particle physics.

Applicants should write before 1 February 1979, to: **Chairman of the Physics Department, University of California, Berkeley, Calif. 94720**, giving curriculum vitae, publication list, and references. *The University of California is an Affirmative Action Employer.*

PHYSIOLOGIST—PHARMACOLOGIST at the level of assistant professor in a multidisciplinary department. Available 1 July 1979. Requirements include teaching physiology and pharmacology and developing and pursuing active research program. Ph.D. required and interest in one or more of the following areas preferred: oral physiology, neurophysiology, neuropharmacology, and dental therapeutics. Send curriculum vitae and names of three references to: **Dr. W. Sprague, Chairman, Department of Oral Biology, University of Nebraska College of Dentistry, 40th and Holdrege, Lincoln, Nebraska 68583**, by 1 March 1979.

Equal Opportunity/Affirmative Action Employer

PLANT ECOLOGIST. Assistant or associate professor level. Ph.D. required. Candidates may have research interests in either terrestrial or aquatic habitats, but should have a broad background in ecology with particular emphasis on physiological aspects. Duties include undergraduate and graduate teaching, development of a research program, and training of graduate students. Curriculum vitae, reprints, a summary of future research plans, and three letters of recommendation should be sent to:

Dr. Jan Savitz
Chairman, Search Committee
Biology Department
Loyola University of Chicago
6525 North Sheridan Road
Chicago, Illinois 60626

An Equal Opportunity/Affirmative Action Employer

PLANT SYSTEMATIST. Assistant professor, Ph.D., for September 1979, to teach undergraduate courses in plant systematics and field botany of seed plants, and develop graduate courses in the area of the applicant's research interest. The successful candidate will be expected to develop a strong research program in the systematics of flowering plants. Salary range: \$14,000 to \$16,000, depending on experience. Submit complete résumé, including a brief summary of teaching philosophy and research interests, transcripts, and three letters of recommendation, to: **Dr. Kittie F. Parker, Botany Search Committee, The George Washington University, 2029 G Street, NW, Washington, D.C. 20052.** Closing date: 15 February 1979. *The George Washington University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITIONS. Biosynthesis of alkaloids and antibiotics, stereochemistry of enzyme reactions. Applicants should have experience in organic synthesis. Experience in one of the following desirable: (i) tracer methods, (ii) enzymology, and (iii) plant tissue culture. Starting salary: \$9,500 to \$10,000. Send curriculum vitae and names of two references to: **Dr. Ronald Parry, Department of Chemistry, Rice University, Houston, Texas 77001.**

POSITIONS OPEN

POLYMER PHYSICS/ENGINEERING UNIVERSITY OF FLORIDA

Senior faculty appointment in a leading Materials Science Department increasing polymer emphasis to complement highly regarded metal and ceramic materials programs. Associate or full professor level depending upon experience. Key role for further development of polymer science and engineering curriculum and for research on physical properties of polymers, especially metal-polymer composites and biomedical polymer systems. Seek person from university or industrial research with outstanding record of accomplishment in mechanical and thermodynamic properties, morphology, rheology, and polymer processing with strong interest in fundamental property-structure relationships. *The University of Florida is an Equal Opportunity/Affirmative Action Employer.*

Please send résumé and references by 15 February 1979 to: Dr. E. P. Goldberg, Department of Materials Science and Engineering, University of Florida, College of Engineering, Gainesville, Florida 32611.

POSTDOCTORAL APPOINTMENTS

The Ames Laboratory of the U.S. Department of Energy has a number of vacancies for postdoctoral fellows in the fields of chemistry, physics, metallurgy, and engineering. The appointments would be for 1 year, renewable for a second year if mutually agreeable. In some instances there may be a possibility for continued employment beyond the 2-year postdoctoral appointment if circumstances warrant.

Interested persons should submit a complete résumé, along with the names and addresses of three professional references, to:

Ames Laboratory
Personnel Office
127 Spedding Hall
Iowa State University
Ames, Iowa 50011

An Equal Opportunity Employer

POSTDOCTORAL POSITIONS. Veterans Administration Medical Center (VAMC) is inviting applications from postdoctoral-level scientists to assist with research programs in the areas of: (i) molecular mechanisms of chemical mutagenesis and carcinogenesis, and (ii) metabolism of chemical toxicants. Applicants should have training in chemistry, pharmacology, or biochemistry. Interested persons should send curriculum vitae and three names for reference to: Dr. K. D. Straub, ACOS for Research, VAMC, 300 East Roosevelt Road, Little Rock, Ark. 72206.

POSTDOCTORAL POSITION—Available immediately to do research on electromicroscopic and biochemical study of sleep. Send résumé and names of three references to: Dr. A. K. Sinha, Department of Physiology and Biophysics, College of Medicine and Dentistry of New Jersey, Rutgers Medical School, P.O. Box 101, Piscataway, N.J. 08854. *Equal Opportunity/Affirmative Action Employer, M/F.*

POSTDOCTORAL POSITION IN PHARMACOLOGY available immediately. Must be interested in clinical pharmacology program. Familiarity in working with gas chromatography-mass spectrometry helpful or must be willing to learn. Send curriculum vitae to: Dr. Joseph R. Bianchini, Department of Pharmacology, The Ohio State University College of Medicine, Columbus, Ohio 43210. *The Ohio State University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION IN BIOCHEMISTRY AND MOLECULAR BIOLOGY, to conduct research on mammalian mitochondrial ribosomes. Protein composition, structure, function and biosynthesis of mammalian mitochondrial ribosomes; immunochemical methods, cell culture, affinity probes of ribosome active sites and protein chemistry. Apply to: Dr. T. W. O'Brien, Department of Biochemistry and Molecular Biology, University of Florida College of Medicine, Gainesville, Fla. 32610.

POSTDOCTORAL POSITION available immediately. Ph.D. in biochemistry or microbiology. Experience with protein purification is essential. To study factors regulating hemopoiesis in an RNA tumor virus-induced, acute leukemia. Salary: \$10,000 to \$12,000. Send résumé to: Box 374, SCIENCE.

POSITIONS OPEN

POSTDOCTORAL POSITION—BIOCHEMISTRY

To study interferon-carbohydrate interaction. Background in tissue culture essential; experience with viral assays desirable. The position is available immediately; the salary is \$12,000 per annum or more, depending on previous experience. Send inquiries, including curriculum vitae and names of three references, to:

Dr. Helmut Ankel
Department of Biochemistry
Medical College of Wisconsin
8701 Watertown Plank Road
P.O. Box 26509
Milwaukee, Wisconsin 53226

POSTDOCTORAL POSITION

Available 1 January 1979 for research on the role of accessory proteins in DNA synthesis in mammalian cells. Background in protein and/or nucleic acid techniques required. Two-year position at \$12,000 per year. Send curriculum vitae and three letters of recommendation to: Dr. Ralph R. Meyer, Department of Biological Sciences, University of Cincinnati, Cincinnati, Ohio 45221.

An Equal Opportunity Employer, M/F

POSTDOCTORAL POSITION in reproductive biochemistry. Applicant should have a strong bioorganic background with interest in enzyme regulation in mammalian cells. Research involves the proacrosin-acrosin system and includes active site characterization, mechanisms of action, membrane-protein interactions, and synthesis of enzyme inhibitors. Send curriculum vitae to: Dr. K. Polakoski, Obstetrics-Gynecology Department, Washington University, 4911 Barnes Hospital Plaza, St. Louis, Mo. 63110. *Equal Opportunity/Affirmative Action Employer, M/F/H.*

POSTDOCTORAL POSITION available immediately for research in tumor immunology. Experience desired in immunology and cell surface analysis to be applied to the definition and quantitation of tumor antigens occurring in preneoplastic and transformed cells derived from rat respiratory tracts. Submit curriculum vitae and names of three references to: Training Office, University of Tennessee—Oak Ridge Graduate School of Biomedical Sciences, Biology Division, Oak Ridge National Laboratory, P.O. Box Y, Oak Ridge, Tenn. 37830. *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITIONS. Interdisciplinary research program in pharmacology which includes studies carried out at the chemical, biochemical, biophysical, morphological, physiological, and clinical levels. Areas of research include studies on the role of vasoactive substances (for example, catecholamines, renin, kinins, and prostaglandins) in control of arterial pressure, the molecular and biophysical basis for cardiac and vascular diseases and cardiovascular drug action, metabolism of drugs, action of drug metabolites, new drug development, organoanalytical chemistry, and biomedical mass spectrometry.

Stipends are available and applications from individuals holding the Ph.D. and/or M.D. degree with backgrounds in the biomedical and/or physical sciences should be addressed to: Postdoctoral Training Committee, Department of Pharmacology, Medical University of South Carolina, 171 Ashley Avenue, Charleston, S.C. 29403. *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION, CELL BIOLOGY. Available 1 July 1979 for study of regulation of DNA replication in mammalian cells. Background in cell culture required. Training in molecular biology of nucleic acids, animal virology, or somatic cell genetics helpful. Recent Ph.D. preferred. Group includes other postdocs and graduate students. Opportunity available for interaction with other groups interested in nucleic acids research. Send curriculum vitae and references to: Professor Roger Hand, Department of Microbiology, McGill University, 3775 University Street, Montreal, Quebec, Canada H3A 2B4.

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately for a Ph.D. biochemist with immunological experience. Previous training in the regulation of mammalian cellular proliferation in tissue culture systems desirable. Salary: \$11,400, renewable. Send curriculum vitae and three letters of recommendation by 22 December 1978 to: Dr. A. J. Ferro, Department of Microbiology, Nash Hall, Oregon State University, Corvallis, Oregon 97331. *Oregon State University is an Affirmative Action/Equal Opportunity Employer and complies with Section 504 of the Rehabilitation Act of 1973.*

TWO IMMUNOLOGY POSTDOCTORAL POSITIONS—One for studies on characterization of lymphocyte subpopulations; another for basic immunologic studies involving parasitic infection. Strong background and experience in cellular immunology (in vitro and in vivo reactions) required. Send curriculum vitae and names of three references to: Dr. F. Kierszenbaum, Department of Microbiology and Public Health, Michigan State University, East Lansing, Mich. 48824. *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITIONS available immediately to Ph.D. in biochemistry or physiology for research on the metabolism of rat adipose tissue. Emphasis on actions of insulin. Send curriculum vitae and two references to: Dr. R. L. Jungs, Department of Physiology, University of Connecticut Health Center, Farmington, Conn. 06032. *An Equal Opportunity Employer, M/F.*

POSTDOCTORAL POSITIONS available in tissue culture and biochemistry laboratories of Pathology Department. Research concerns metabolism of and cell responses to environmental carcinogens. *Equal Opportunity/Affirmative Action Employer.* Contact: Marion J. Balish, Department of Pathology, University of Wisconsin, 470 North Charter Street, Madison, Wis. 53706.

POSTDOCTORAL POSITION. Two-year program provides training in clinical chemistry beginning 1 June 1979. Applicants should be recent recipients of Ph.D. degree with good background in analytical chemistry, human biochemistry, and use of computers. Submit résumé, transcript, three letters of reference, and statement of career goals by 2 January 1979 to: Professor G. F. Grannis, Department of Pathology, Ohio State University, 320 West 10 Avenue, Columbus, Ohio 43210.

POSTDOCTORAL POSITION. Two fellowships are available in leukocyte membrane immunology. The research includes: (i) structural analysis of lymphocyte membrane receptors, (ii) characterization of leukemia-specific surface markers, and (iii) analysis of the function of membrane receptors. Previous training in cellular immunology or membrane biochemistry is desirable. Send curriculum vitae and three references to: Dr. Gordon D. Ross, Division of Immunology, 932 F.L.O.B. 831H, University of North Carolina, Chapel Hill, North Carolina 27514.

POSTDOCTORAL RESEARCH ASSOCIATE. Position available 1 July 1979 to study ocular secretory IgA mechanisms. Applicants must possess a strong background in secretory IgA immunobiology with emphasis on immunization procedures to elicit secretory IgA, measurement of secretory IgA antibody, and immunofluorescence localization of secretory component and various immunoglobulins. Fellowship is for 2 years in the Department of Ophthalmology, Harvard Medical School, and the Department of Cornea Research, Eye Research Institute of Retina Foundation. Send curriculum vitae and three letters of recommendation to: Mathea R. Allansmith, M.D., 20 Staniford Street, Boston, Mass. 02114. Stipends: \$10,000 to \$13,000, yearly.

POSTGRADUATE POSITIONS IN OCEANOGRAPHY. Two research positions at postgraduate level are available at Scripps Institution of Oceanography and the Jet Propulsion Laboratory. Applicants must have a Ph.D. in physical oceanography, geophysics, or equivalent. Duties will include analysis of data from radar altimeters and microwave radiometers carried on SEASAT and other satellites, in combination with conventional oceanographic data. Close interaction with the staff of both institutions will be stressed. Salary range: \$11,800 to \$14,916. Curriculum vitae should be mailed to either: Dr. Robert Bernstein A-030, Scripps Institution of Oceanography, La Jolla, Calif. 92093, or to Dr. George Born, 264-737, Jet Propulsion Laboratory, 4800 Oak Grove Drive, Pasadena, Calif. 91103. *Both institutions are Equal Opportunity Employers.*

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE

A position for a postdoctoral research associate is available in the Department of Genetics, North Carolina State University, effective immediately and through 31 July 1980. Applicants must have a strong background in genetics and biochemistry or related areas and must hold the Ph.D. degree. Individual is expected to participate in an ongoing project studying structure function and evolution of long pyrimidine tracts in *Drosophila* DNA under R. R. Sederoff. Studies will involve molecular hybridization techniques, analysis of chromatin structure, and some nucleic acid sequencing.

Please send résumé, reprints, and the names of three people who may be asked for letters of reference to:

John G. Scandalios
Professor and Head
Department of Genetics
North Carolina State University
P.O. Box 5487
Raleigh, N.C. 27650

or telephone: 919-737-2291.

North Carolina State University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE position available to study the genetic control of the malignant and transformed phenotypes in human cells. Experience in cytogenetics and analysis of the human karyotype essential. Position available for a period up to 3 years. *Applications from all qualified candidates are welcomed; minorities and women are encouraged to apply.* Applicants should send curriculum vitae and three reference letters to: **Dr. Eric Stanbridge, Department of Microbiology, University of California, Irvine, College of Medicine, Irvine, California 92717.**

POSTGRADUATE RESEARCH PHYSIOLOGIST. Immediate openings for two positions to participate in research in cardiovascular physiology. Positions are affiliated with the Bioengineering Group of the Departments of Applied Mechanics and Engineering Science and of Surgery. Candidates should be recent or imminent Ph.D.'s in physiology and have experience with small and large animals. Salary commensurate with qualifications. Send curriculum vitae to: **Arnost Fronck, M.D., Professor of Surgery and Bioengineering, 5028 Basic Science Building, M-005, University of California, San Diego, Calif. 92093.** *University of California is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL RESEARCH TRAINING positions are available in the areas of endocrinology, metabolism, and diabetes under the guidance of one of ten training faculty in six basic or clinical departments of Emory University School of Medicine. Ph.D. or M.D. graduates interested in advanced research and training in basic and clinical endocrinology and metabolic disorders for 1 or 2 years should send curriculum vitae, area of research interest, and names of two references to:

Dr. Mario DiGirolamo
Program Director
Emory University School of Medicine
69 Butler Street
Atlanta, Georgia 30303

Deadline for applications is 15 January 1979, with awards being made by 28 February 1979. *An Equal Opportunity/Affirmative Action Employer.*

BUMPUS PROFESSORSHIP

Brown University invites applications from qualified candidates in vertebrate ecology for appointment at the rank of full professor with tenure as the Hermon Carey Bumpus Professor of Biology. Applicants should have an established program in vertebrate ecology, a specific interest in evolutionary biology, and be qualified to relate to such areas as behavior, genetics, morphology, and physiology. In addition to carrying out an original research program, she/he will participate in the eventual development of a graduate program in evolutionary biology. Teaching responsibilities include vertebrate ecology plus another course in the candidate's area of expertise. Applicants should send curriculum vitae, bibliography, a brief description of research and teaching, and names and addresses of three references by 31 January 1979 to: **Richard J. Goss, Dean of Biological Sciences, Division of Biology and Medicine, Brown University, Providence, Rhode Island 02912.**

Brown University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL TRAINEES in environmental toxicology. Research areas include chemical carcinogenesis, mutagenesis, food-borne toxins, pesticides, aquatic chemistry, immunotoxicology, pharmacology, and behavioral toxicology. Requires Ph.D., D.V.M., or M.D. and U.S. citizenship or permanent residency. Send curriculum vitae, transcripts, and three letters of reference to: **Dr. Vernon Dodson, Center for Environmental Toxicology, University of Wisconsin, 1550 Linden Drive, Madison, Wis. 53706.** Telephone: 608-263-4580. *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL TRAINING in RNA tumor virology. Stipend from NIH training grant in tumor virology available immediately. Interests include the genetics of avian RNA tumor viruses and the biochemistry of viral gene products in infection and transformation. Applicants should have training in cell or molecular biology. Participating faculty include P. Nieman, R. Eisenman, M. Linial, and R. Rohrschneider. Send curriculum vitae, including names of three references, to: **Dr. Robert Nowinski, Fred Hutchinson Cancer Research Center, 1124 Columbia Street, Seattle, Wash. 98104.**

The deadline for applications will be 1 January 1979.

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

PRESIDENT

The Utah State Board of Regents invites nominations and applications for the position of president of Utah State University (USU). Located 80 miles north of Salt Lake City in the scenic prime outdoor recreational community of Logan (population 25,000), USU is a land-grant institution serving 10,000 students.

The university includes a Division of Extension and Continuing Education and the Utah Agricultural Experiment Station under supporting federal legislation, as well as Colleges of Agriculture, Business, Education, Engineering, Family Life, Humanities-Arts-Social Sciences, Natural Resources, and Science; a School of Graduate Studies; a Summer School; and a Division of International Studies and Programs. USU conducts programs of undergraduate, master's, and doctoral instruction, together with extensive research programs related to agriculture, land, water, forestry, food sciences, and the development and maintenance of natural resources.

Applications with résumé or nominations may be sent to: **Office of the Commissioner, Utah State Board of Regents, Attention: Dr. Don A. Carpenter, Secretary, Search Committee, 807 East South Temple, Salt Lake City, Utah 84102.** The position will be filled by mutual agreement between 1 April and 1 July 1979. Deadline for nominations/applications is 15 January 1979.

Equal Opportunity/Affirmative Action Employer

QUANTITATIVE EXPERIMENTAL BIOLOGIST. Assistant professorships—1 July or 1 September 1979. Preference to applicants with active research interests. Minimum of 2 years of postdoctoral experience. Successful applicants expected to develop vigorous research program and teach undergraduate and graduate programs. Send résumé, research interests, and three references to: **Dr. Frank M. Fisher, Jr., Biology Department, Rice University, Box 1892, Houston, Texas 77001.** *Equal Opportunity/Affirmative Action Employer.*

RESEARCH ASSOCIATE IN AQUATIC PLANT PHYSIOLOGY

Postdoctoral laboratory and field research on physiology of marine and freshwater angiosperms; root metabolism in relation to rhizosphere microflora and sediment chemistry. Twelve-month basis for 1 or 2 years, available January 1979. Submit curriculum vitae and three letters of reference to: **Dr. Robert G. Wetzel, W. K. Kellogg Biological Station, Michigan State University, Hickory Corners, Michigan 49060.** *Michigan State University is an Equal Opportunity Employer.*

RESEARCH ASSOCIATE. Seeking Ph.D. or M.A. with expertise in scanning and transmission electron microscopy to participate in investigations of blood vessel changes in hypertension and of glomerular changes in kidney disease. Position available immediately. Send curriculum vitae and references to: **Dr. Robert H. Heptinstall, Department of Pathology, The Johns Hopkins University School of Medicine, Baltimore, Maryland 21205.** *An Equal Opportunity Employer.*

POSITIONS OPEN

RESEARCH in the cause of **AUTOIMMUNE DISEASES.** Biochemical and immunologic studies of nucleic acids. Develop experimental models in animals resembling systemic lupus erythematosus. Work with C-type virus as relates to SLE. Train and supervise three. M.D. degree and 5 years of DNA biochemistry and immunopathology experience required. Salary: \$27,500 per annum. Interested individuals should submit curriculum vitae, list of publications, and three letters of reference by 31 December 1978 to: **Elinore Howie, Employment Development Department, San Diego Job Bank, 4235 National Avenue, San Diego, Calif. 92113.** Advertisement paid for by the employer. *Equal Opportunity Employer.*

RESEARCH ASSOCIATE ELECTRON MICROSCOPIST

Position available in the Department of Neurology, Stanford University School of Medicine, for Ph.D. or M.D. to join program in morphology and physiology of normal and pathological nervous tissue. Experience in electron microscopy desirable. Send curriculum vitae, reprints of publications, and three letters of reference to: **Stephen G. Waxman, M.D., Ph.D., Neurological Unit (127), Veterans Administration Medical Center, 3801 Miranda Avenue, Palo Alto, Calif. 94304.**

Stanford University is an Equal Opportunity Employer and welcomes nominations of women and minority group members and applications from them.

UNIVERSITY OF OTAGO

**Cancer and Medical Research Institute
Clinical School of Medicine
Wellington, New Zealand**

RESEARCH OFFICER (MEDICAL OR NONMEDICAL)

Applications invited from medical/science graduates. Science graduates should possess higher qualification (Ph.D.). Medical graduates without higher qualification expected to enroll for higher degree. Person with previous research experience preferred. Appointee will work in field of atherogenesis and experimental pathology under institute director. Commencing salary according to qualifications and experience. Scale: NZ\$14,673 to NZ\$25,729 (medical), NZ\$11,894 to NZ\$18,380 (science).

Further particulars from: **Secretary-General, Association of Commonwealth Universities (Appointments), 36 Gordon Square, London WC1H 0PF, England; Registrar, P.O. Box 56, Dunedin, New Zealand, or from Director of Institute (Professor W. E. Stehbens), Wellington Clinical School, Wellington Hospital, Wellington, New Zealand.**

Send applications quoting Ref. No. A.78/71, curriculum vitae, experience, qualifications, publications, and names of three referees in triplicate to: **D. W. Girvan, Registrar, P.O. Box 56, Dunedin, New Zealand by 31 January 1979.**

RESEARCH POSITION in iron and copper metabolism in Hematology Division of University of Utah Medical Center. Research faculty position for candidate with doctoral degree in biological or chemical science and expertise in metalloenzymes, preferably in iron and copper biochemistry. The research is funded by NIH grant with three plus years to run. Appointments and salary are dependent on qualifications. *Applications from women and members of disadvantaged minority groups especially welcome.* Interested candidates should send curriculum vitae and references to:

Dr. Robert E. Lynch
4C132 University of Utah
Medical Center
Salt Lake City, Utah 84132
Telephone: 801-581-7417

RESEARCH TECHNOLOGIST

\$1019 to \$1475 per month

One position is currently open for a person highly skilled in either immunochemistry, including preparation and purification of antibody components, or lipoprotein biochemistry. Salary will be commensurate with experience. Send résumé, including research experience and specific technical skills, to: **Bruce F. Miller, Health Sciences Personnel, SC-66, University of Washington, Seattle, Wash. 98195 by 22 December 1978.**

Equal Opportunity/Affirmative Action Employer

**RESEARCH ASSOCIATES
EAST-WEST CENTER**

The East-West Center is a national educational institution founded by the U.S. Congress in 1960 to promote better relations and understanding among nations through cooperative programs of study, research, and training. Applications and nominations for three academic staff positions of **NATURAL RESOURCE-ENVIRONMENTAL ECONOMIST** and of **MARINE RESOURCE ECONOMIST** in the Environment and Policy Institute and a **NATURAL RESOURCE-ENVIRONMENTAL ECONOMIST** in the Resource Systems Institute are being sought. The research associate positions are full-time and may be permanent (subject to successful probationary period) or fixed-term. Applications for research fellow appointments in these areas are also sought. All Center programs are multinational and multidisciplinary. Academic staff, visiting scholars, professionals, and graduate degree students form teams which work on problems with significant mutual consequences for the United States and nations of Asia and the Pacific.

A **NATURAL RESOURCE-ENVIRONMENTAL ECONOMIST** will work on a multidisciplinary team on topics including analysis of current and evolving theory and practice of natural resource and environmental economics as related to environmental assessment in development activities, the procedures of aid and planning agencies in the Asia/Pacific region, and the development and application of new methodologies and approaches.

A **NATURAL RESOURCE-ENVIRONMENTAL ECONOMIST** will work with a multidisciplinary team on topics of conservation and economic efficiency in resource systems. Projected research areas include the development and application of new methodologies and approaches to the resource implications of problems of stability and resilience for food and energy resources in the Asia-Pacific region. The projected research areas also include attention to planning and management policy options in the interrelated project areas.

The **MARINE RESOURCE ECONOMIST** will work on a multidisciplinary team on topics including application and adaptation of economic theory to ocean resource assessment and management policy options in Asia and the Pacific. Projected research areas include the relationships among national resource and environmental management policies in extended jurisdictional zones, and transnational aspects of fisheries, energy resources, transportation, scientific research, marine regionalism, and other political and economic interests.

Candidates must have a Ph.D. or its academic equivalent in economics or a closely related field plus at least 5 years of experience in the relevant areas of resource-environmental economics or marine resource economics as appropriate. Cover letter should give examples of demonstrated ability to: (i) discover knowledge about natural resource and environmental issues, especially at the international level; (ii) develop applications of this knowledge, for example, curricula, educational materials, policy aids; and (iii) design and implement research and education projects and activities in a team context, preferably multinational. Experience in Asia/Pacific region preferred. Working proficiency in the English language required. Experience in natural resource and environmental analysis and assessment processes desirable.

Salary commensurate with extent of experience and qualifications. Additional current cost-of-living allowance of 15 percent (subject to change). All nominees will be contacted to determine interest. Applications with cover letter, complete curriculum vitae, and names and addresses of three professional references must be postmarked no later than 1 March 1979. Starting date flexible. Send to: Personnel Division, Department 19, East-West Center, 1777 East-West Road, Honolulu, Hawaii 96848.

An Equal Opportunity Employer, M/F

**LINCOLN COLLEGE
(University College of Agriculture)
New Zealand**

CHAIR IN HORTICULTURE

The Council of Lincoln College, University College of Agriculture, invites applications for the position of Professor of Horticulture and Head of the Department of Horticulture, Landscape and Parks. This Chair has become vacant on the appointment of Professor T. M. Morrison to the position of Director of the Queensland Agricultural College.

Applicants should hold an advanced degree in a field appropriate to any of the responsibilities of the Department which cover horticultural sciences, production, management, parks and recreation, and landscape architecture, and should have an established record in teaching and/or research.

The successful applicant will be appointed as Head of Department and will be responsible to the College Principal for the administration of his Department. Previous administrative experience will therefore be taken into consideration.

The appointment will be made within the existing range of professorial salaries, NZ\$23,012-NZ\$29,188 per annum, the commencing salary being determined by the College Council. Academic salary scales are at present under review.

Expenses of appointment reimbursed up to specified limits. New Zealand Government Superannuation is available.

Further details and General Conditions of Appointment are obtainable from the Secretary General, Association of Commonwealth Universities (Apts), 36 Gordon Square, London WC1H 0PF, or from the Registrar of the College.

Applications close on 15 January 1979.
Please quote Vacancy No. 78/60.

**DEAN OF THE SCHOOL OF MEDICINE
GEORGETOWN UNIVERSITY**

Georgetown University is the oldest Catholic Church-related institution of higher learning in the United States. In terms of enrollment, the School of Medicine is the second largest private medical school in the country and the eighth largest of all schools of medicine.

The Medical School and the University offer both undergraduate medical degrees and graduate degrees in accredited health science-related programs.

RESPONSIBILITIES: to administer the school by providing leadership, direction, evaluation, and supervision as the chief administrative officer of the school, responsible to the Chancellor of the Medical Center. Maintain a planning initiative and provide executive leadership for accomplishment of the programs, curriculum, faculty, staff, student body, space, equipment, supply, service, and other functions for quality achievement of the school objectives. Responsible for the maintenance and further extension of excellence for the educational, research, and service objectives of the school in a time of changing needs and challenging opportunities. Responsible for the development, submission for approval, and effective execution of annual fiscal plans and the immediate long-range fiscal plan of the school. Coordinates the objectives, plans, and functions of the school with other schools, hospitals, and activities of the Medical Center and the University.

DESIRED QUALIFICATIONS: doctoral degree, preferably an M.D.; educational, clinical, and research competence; respected reputation in a specialty discipline; qualified for professorial rank; proven administrative track record in academic health science education; and qualifications necessary to provide effective intramural and extramural leadership in medical education.

Applications and nominations should be submitted no later than 1 January 1979, and should be addressed to: Robert J. Coffey, M.D., Chairman, Search Committee, Department of Surgery, School of Medicine, Georgetown University Hospital, Washington, D.C. 20007.

Georgetown University is an Equal Opportunity/Affirmative Action Institution in employment and admissions.

STATE OF KUWAIT

**KUWAIT
UNIVERSITY**

**ADVERTISEMENT FOR
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GEOLOGY DEPARTMENT**

A highly qualified technician is needed for the departmental laboratory workshop. The position involves routine processing of standard geological services (thin sections, core treatment, grain mounting etc. . .) and organization and supervision of the workshop. The successful candidate must possess basic knowledge in repair and maintenance of electrical laboratory appliances and instruments. A BS in geological or physical sciences is desirable. Strong command of the English language is essential.

Send resume to:

**CHAIRMAN
GEOLOGY DEPARTMENT**

**KUWAIT
UNIVERSITY**

**P.O. BOX 5969,
KUWAIT.**

POSITIONS OPEN

ABMAC SABBATICAL PROFESSORSHIPS IN TAIWAN

Opportunities for teaching and research in the Republic of China on Taiwan are offered by several of its academic institutions.

Well-established medical faculties and newly established schools offer 3-month, 6-month, and 10-month professorships in basic sciences, medical and surgical specialties, and other health disciplines, including nursing, dentistry, and public health. Inquiries for these positions, 1 to 4 years in advance, are invited. **American Bureau for Medical Advancement in China, Inc., 1790 Broadway, New York, N.Y. 10019.**

SCIENTIFIC APPLICATIONS PROGRAMMER

Computer programmers with a background in scientific applications are invited to apply for a position with the Climatic Research Institute of Oregon State University. Duties will include working with geophysical fluid dynamics models of the atmosphere and oceans and large data bases on a variety of fourth- and fifth-generation computers. Requires at minimum a B.S. degree in a relevant scientific field. At least 3 years of relevant experience preferred. Starting salary: \$14,000 to \$18,000. Application deadline is 1 January 1979, with duties beginning approximately 1 February 1979. Please send résumés, including names, addresses, and telephone numbers of two references, to: **Robert L. Mobley, Director of Computations, Climatic Research Institute, Oregon State University, Corvallis, Ore. 97331.** *Oregon State University is an Equal Opportunity/Affirmative Action Employer and complies with Section 504 of the Rehabilitation Act of 1973.*

THE JACKSON LABORATORY

Will have new **STAFF POSITIONS** available to be filled by scientists with established research programs in the biomedical sciences. For consideration, send curriculum vitae, list of publications, and a brief description of current research interests to: **Chairman, Staff Search Committee, The Jackson Laboratory, Bar Harbor, Maine 04609.** *An Affirmative Action/Equal Opportunity Employer.*

STAFF ASSOCIATE

Seeking postdoctoral Ph.D. or M.D. for laboratory devoted to molecular genetics and developmental cell biology. Salary dependent on postdoctoral level. To begin on or after 1 July 1979.

Send curriculum vitae, résumé, and names of three referees who have direct knowledge of candidate to:

**Deputy Director of Administration
Cancer Center/Institute of Cancer Research
701 West 168 Street
New York, New York 10032**

Equal Opportunity/Affirmative Action Employer

VERTEBRATE BIOLOGIST. Assistant or associate professor to teach pathophysiology, vertebrate physiology, embryology, and vertebrate natural history. Requirements: Ph.D. by September 1979 and commitment to teaching and research. *Texas Eastern University is a nonresident upper-level and graduate institution and invites applications from all qualified persons.* Send curriculum vitae, names of three references, and list of courses taken to: **Dr. L. Lynn Sherrod, Dean, School of Sciences and Mathematics, Texas Eastern University, Tyler, Texas 75701.**

VISUAL PSYCHOPHYSICS

Eye Research Institute of Retina Foundation intends to hire two permanent staff members specializing in visual psychophysics. One person will emphasize clinical applications of psychophysical techniques while the other will emphasize basic research. Both should be interested in a physiological approach to explaining visual performance. The successful candidates should be sufficiently advanced to initiate and pursue their own independent program of research and compete successfully for grant funds. Seed money for the initial period will be provided from institutional funds to allow the psychophysics research programs to start immediately.

Send curriculum vitae and names of references to:

**Director
Department of Retina Research
Eye Research Institute of Retina Foundation
20 Stanford Street
Boston, Massachusetts 02114**

POSITIONS OPEN

STRUCTURAL BIOLOGIST

The Department of Biological Sciences, Carnegie-Mellon University, invites applications from individuals whose research interests include the use of biochemical and biophysical techniques to study biological structures. The candidate should have postdoctoral experience. The position is at the assistant or associate professor level. Responsibilities include teaching at the undergraduate and graduate level and carrying out an active research program. The applicant should forward curriculum vitae, three or more letters of reference, and a brief résumé of research plans to: **Search Committee (A), Department of Biological Sciences, Carnegie-Mellon University, 4400 Fifth Avenue, Pittsburgh, Pa. 15213.** *Carnegie-Mellon University is an Equal Opportunity/Affirmative Action Employer.* Please respond by 15 December 1978.

TEACHING POSITION. Available March 1979. Microbiologist preferably with an aquatic orientation. Applicants must show strong teaching credentials in microbiology and general biology at the introductory level. Appointment will be at the instructor or assistant professor level. Master's degree minimum. Closing date: 1 January 1979. Applicants must send curriculum vitae, transcripts, and three letters of recommendation to: **Dr. Donald M. Meisner, Chairman, Biology Department, Raymond Walters General and Technical College, University of Cincinnati, 9555 Plainfield Road, Cincinnati, Ohio 45236.** *Equal Opportunity/Affirmative Action Employer.*

TECHNOLOGY AND PUBLIC POLICY

The Department of Engineering and Public Policy of Carnegie Institute of Technology, and the School of Urban and Public Affairs and the College of Humanities and Social Science, Carnegie-Mellon University, have one or more joint faculty openings: (i) for **APPLIED SOCIAL SCIENTISTS** interested in doing collaborative policy research with engineers or (ii) for **ENGINEERS** interested in doing collaborative policy research with social scientists. Problem areas of interest include social impacts of computers and telecommunications, product liability and safety, electric power load management, retrospective technology assessment, and energy and environmental systems. Desirable areas of skill include decision analysis, optimization techniques, organizational analysis, and regulatory process and law. Send résumé with list of publications to:

**Dr. M. Granger Morgan
Department of Engineering and Public Policy, 19816
Carnegie-Mellon University
Pittsburgh, Pa. 15213**

TRAINEESHIPS

Postdoctoral Training Program CELLULAR AND MOLECULAR ENDOCRINOLOGY

Postdoctoral traineeships are available immediately and for 1979 in a new NIH-supported program. Trainees with a Ph.D. or M.D. degree will participate in a research program of 1 of 12 faculty from the Biochemistry Department and the Program in 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 four major areas of focus.

- 1) Cell culture model systems for hormone action;
- 2) Intracellular events in control of cell growth and metabolism;
- 3) Endocrinology of vitamin D, calcium, and phosphorus metabolism; and
- 4) Structure and properties of hormones and their receptor.

For detailed information and application forms write to:

**Dr. Anthony W. Norman, Program Director
Department of Biochemistry
University of California
Riverside, California 92521
Telephone: 714-787-4227**

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NOTICE

This serves to correct the application closing date shown in the 3 November 1978 issue for *Science* (page 547) for the following advertisement: **FACULTY POSITIONS, ENVIRONMENTAL HEALTH SCIENCES, DEPARTMENT OF PUBLIC HEALTH, THE MEDICAL CENTER, UNIVERSITY OF ALABAMA IN BIRMINGHAM.** Application closing date should be 20 December 1978.

SYMPOSIUM

An international and interdisciplinary **SYMPOSIUM "Chemical Signals in Vertebrates and Aquatic Animals"** will be held 30 May to 3 June 1979 at the College of Environmental Science and Forestry, Syracuse, New York.

Information and registration forms are available from:

**School of Continuing Education
College of Environmental Science and Forestry
State University of New York
Syracuse, New York 13210**

CONFERENCE

International Conference and Poster Presentation on ELECTROKINETIC PROPERTIES AND FUNCTIONS OF BIOPARTICLES

**Martinsried near Munich, Germany
18 and 19 October 1979**

Topics: Dynamics of cell membranes, Surface proteins; changes during cell growth and transformation, Assembly and turnover of subcellular structures, and Analytical cell electrophoresis and its application in clinical diagnosis.

Information: **Professor Dr. Kurt Hannig
Max-Planck-Institut für Biochemie
8033 Martinsried, Germany**

TRAINING PROGRAM

PRE- AND POSTDOCTORAL TRAINING IN ENDOCRINOLOGY- REPRODUCTIVE PHYSIOLOGY

The University of Wisconsin Endocrinology-Reproductive Physiology Program is an interdepartmental program. Graduate education leading to the Ph.D. degree in endocrinology-reproductive physiology as well as postdoctoral training are available. Research emphasis is on various aspects of mammalian reproductive physiology and biochemistry and is centered in several laboratories. *The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.* For further information write to: **Dr. Richard C. Wolf, Program Director, Wisconsin Regional Primate Center, University of Wisconsin, 1223 Capitol Court, Madison, Wisconsin 53706.**

GRADUATE STUDY

The Department of Biological Sciences, in cooperation with the basic science faculty of the University of Maryland at Baltimore, provides graduate education toward the M.S. and Ph.D. degrees in the areas of molecular biology and biochemistry, genetics, cell, developmental, organismic, and population biology.

TEACHING ASSISTANTSHIPS and MINORITY STUDENT FELLOWSHIPS are available for qualified applicants. For details write to: **Dr. Paul Lovett, Department of Biological Sciences, University of Maryland Baltimore County, Catonsville, Maryland 21228.**

GRADUATE ASSISTANTSHIPS IN LIFE SCIENCES are available for M.A. and Ph.D. candidates with research interests in animal, aquatic, physiological, and plant ecology; bacterial and physiological genetics; cardiac, comparative, endocrine, and sensory physiology; cellular biology; immunobiology; mycology; neurobiology; parasitology; and virology. Contact: **Chairman, Department of Life Sciences, Indiana State University, Terre Haute, Indiana 47809,** for applications and information. *Indiana State University is an Equal Opportunity/Affirmative Action Employer.*

ANNOUNCEMENT

The U.S. Army Medical Research and Development Command is conducting a limited program for the synthesis and development of new prophylactic antiradiation drugs. Proposals for the synthesis of new antiradiation agents in support of the program are required. Primary interest lies in developing the "no nitrogen" type of agent, alpha acetamidinium thiol derivatives, or modifications of aminoalkylamino ethyl or -propyl phosphorothioates designed to increase oral absorption and maintain activity. Proposals should be supported by a compelling chemical, biochemical, biological, or pharmacological rationale. Proposals that request support for basic chemical research, not related to the anti-radiation program, will not be supported. Proposals should include organizational information, previous experience in the area, a technical presentation including methods of approach, resumes for key personnel, and a description of facilities.

Proposals may be written to cover research for more than one year; however, contracts are funded on a yearly basis. All proposals are subjected to peer review by a study group. The original and two copies of the informal proposal should be submitted to:

Acquisition Group
U.S. Army Medical Research
and Development Command
Fort Detrick
Frederick, Maryland 21701

Inquiries on technical matters may be directed to:

Division of Experimental Therapeutics
Walter Reed Army Institute of Research
Walter Reed Army Medical Center
Washington, D.C. 20012

SENIOR SCIENTIST



RESEARCH and DEVELOPMENT, CROP PROTECTION

This challenging position with Sandoz, Inc., (located in New Jersey) a long-established pharmaceutical/fine chemical company respected worldwide and with a tradition of important innovation, will focus on residue analysis of pesticides in plants, animals, and soils in order to help develop new products for crop protection.

Responsibilities include management of a small analytical-metabolism group; adaptation of analytical procedures for use in USA and by EPA; keeping abreast of the latest EPA requirements concerning residue analysis.

Candidates should have a PhD or equivalent in Organic Chemistry, or Biochemistry with a minimum of at least 5 years experience in the analysis of pesticides in plants, soils, animals and animal by products. Experience in plant and soil metabolism is also desirable. A background managing less experienced scientists and technicians is a must.

For the Senior Scientist well qualified in these areas, the position offers inviting conditions, compensation, career outlook and benefits. Please send resume in confidence to: J. Castellano.



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DEAN, COLLEGE OF LIFE SCIENCES AND AGRICULTURE UNIVERSITY OF NEW HAMPSHIRE

The University of New Hampshire invites nominations and applications for the position of dean, College of Life Sciences and Agriculture, for appointment effective 1 July 1979. The dean serves both as principal administrator of the college and as director of the Agricultural Experiment Station. The administrative officers of the college include the Director of Cooperative Extension (Associate Dean), Associate Academic Dean of the College, and Assistant Director of the Experiment Station.

The University of New Hampshire is the Land Grant institution of the University System of New Hampshire and is located in the town of Durham (population 10,000). It has a total undergraduate enrollment of 9100 and a graduate student body of 1000. The College of Life Sciences and Agriculture is the second largest college, with 2127 undergraduate majors. It offers 23 4-year baccalaureate programs and associate degree programs in the Thompson School of Applied Science. Advanced degrees may be earned in one of the ten master's or four Ph.D. programs.

Resident Instruction, the Agricultural Experiment Station (research), and the Cooperative Extension Service are the three major components of the college. Candidates for the position should have demonstrated administrative skill, be familiar with the organization and management of land-grant programs, and show evidence of creative research/scholarship. The candidate would be expected to develop an effective working relationship with faculty, staff, and the people of New Hampshire.

SALARY: commensurate with qualifications.

APPLICATIONS: applications should be submitted in writing to:

Professor W. C. Skoglund, Chairman
Dean's Search Committee
University of New Hampshire
Kendall Hall
Durham, New Hampshire 03824

Applications must include current curriculum vitae and the names and addresses of at least three professional references. Confidentiality requirements of candidates will be strictly observed.

CLOSING DATE FOR APPLICATIONS: 29 December 1978.

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

Senior Development Engineer

Abbott Laboratories has an immediate need for a highly creative, imaginative Engineer to lead the design of fluid handling systems for automated clinical chemistry analysis.

We seek an innovator with a proven performance record in new product design and development and strong skills in fluid, optical, and mechanical systems. A BS in Mechanical or Clinical Engineering is required along with at least five years of industrial experience.

This individual will be responsible for all aspects of the fluid system design from concept through pilot production. Responsibilities include developing specifications, building breadboards and prototypes, generating manufacturing documentation and evaluating system performance. Close coordination with chemical, electronic and optical systems is essential, along with overseeing the activities of outside vendors.

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GRADUATE STUDY

A new **INTERDISCIPLINARY GRADUATE PROGRAM IN CELL AND MOLECULAR BIOLOGY** has been established at Saint Louis University School of Medicine. Research areas under investigation by the faculty include animal virology, immunobiology, eukaryotic protein synthesis, membrane-associated functions in microorganisms, mechanisms of hormone action, chemotaxis, physical biochemistry and biogenesis of eukaryotic membranes and cell surfaces, cellular differentiation, molecular mode of action of vitamins, microtubules, mitochondrial molecular biology, contractile proteins, alkaloids in higher plants and brain, regulation of bacterial viruses, electrophysiology and ultrastructure of neuromuscular transmission, and others. Applications are accepted at any time during the year but are preferred by 15 April for entrance during the following September. Fellowships are available for qualified trainees. Contact: **Dr. Thomas S. Ruh, Admissions Chairman, Cell and Molecular Biology Program, Saint Louis University School of Medicine, 1402 South Grand Boulevard, Saint Louis, Missouri 63104.**

ASSISTANTSHIPS

GRADUATE RESEARCH AND TEACHING ASSISTANTSHIPS leading to M.S. and Ph.D. degrees are available in the Laboratory of Agricultural Biochemistry at the University of Nebraska-Lincoln. Departmental interests include biochemical aspects of plant disease, nitrogen fixation, photosynthesis, plant lipids, animal nutrition, avian lipid metabolism, and the structural and physicochemical properties of enzymes and proteins. Apply now for fall 1979 to: **Dr. Robert V. Klucas, Laboratory of Agricultural Biochemistry, University of Nebraska, Lincoln, Neb. 68583.**

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIPS (SIX). Available in environmental toxicology and physiology funded by an institutional NIEHS award to Yale University School of Medicine. Areas of research training include perinatal toxicology, biochemistry physiology and pharmacology of lung function, inhalation toxicology, factors affecting release of mediators of inflammation, pathogenesis of occupational disease, sensory measurement in olfaction and taste, and regulation of circulatory and body fluids during exercise and thermal strain. The positions are open to U.S. citizens or permanent residents who have M.D., D.V.M., Ph.D., or equivalent degrees and are available on 1 July 1979. Applicants should send curriculum vitae with two references and specify area of interest to: **M. Hitchcock, Ph.D., John B. Pierce Foundation Laboratory, Yale School of Medicine, 290 Congress Avenue, New Haven, Conn., 06519, by 1 February 1979. Yale University is an Affirmative Action/Equal Opportunity Employer.**

FELLOWSHIPS IN MARINE POLICY AND OCEAN MANAGEMENT

Applications are invited for 1-year **POSTDOCTORAL FELLOWSHIPS** from scholars and practitioners from relevant fields in the natural sciences, social sciences, and management who are interested in applying their disciplinary training and experience to investigations into questions of marine policy and ocean management in which marine science is an important factor. Recipients of awards are expected to pursue research full-time, basing themselves in Woods Hole.

Applicants must have completed their doctorate degree or possess superior professional qualifications through career experience. Opportunities for investigators on **sabbatical** are also available. Fellowship stipend is \$15,000. Appointees are eligible for group health insurance and a modest research budget. Application deadline is 15 February 1979 for 1979-1980 awards. Awards will be announced in March. Write for application forms to: **Dean of Graduate Studies, Marine Policy and Ocean Management Program, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts 02543.**

Equal Opportunity/Affirmative Action Institution

FELLOWSHIPS

PREDOCTORAL FELLOWSHIPS

The Division of Experimental Pathology at the University of Kentucky College of Medicine has predoctoral fellowships available to students seeking the Ph.D. degree. An interdisciplinary program is available with research opportunities in the areas of cellular immunology, immunochemistry, tumor immunology, neuroimmunology, molecular and tumor virology, cell biology, and tumor cytogenetics. For further information contact: **Dr. Thomas L. Roszman, Division of Experimental Pathology, Department of Pathology, University of Kentucky, Lexington, Kentucky 40506.**

POSTDOCTORAL FELLOWSHIP AVAILABLE IN OPHTHALMOLOGY/BIOLOGICAL ENGINEERING. Subject of research is the mathematical analysis of strabismus. Applicant should be familiar with mechanics, vector algebra, and computer programming. A knowledge of strabismus is helpful but not necessary. Inquiries to: **Dr. David A. Robinson, Department of Ophthalmology, The Johns Hopkins Hospital, 601 North Broadway, Baltimore, Md. 21205.**

GRADUATE TRAINING IN PHARMACOLOGY. Research training and course work leading to the Ph.D. degree and realistically designed for career opportunities in this expanding field are offered. Major departmental research programs include molecular, cardiovascular, renal, and nervous system pharmacology; the toxicology of therapeutic and environmental agents including drugs of abuse; clinical pharmacology. A limited number of fellowships offering stipend and tuition are available. Early application for August 1979 is advised. Apply to: **Director of Graduate Studies, Department of Pharmacology and Therapeutics, Medical School, State University of New York at Buffalo, 127 Farber Hall, Buffalo, N.Y. 14214. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL TRAINING. Fellowships for M.D.'s and Ph.D.'s interested in infectious disease are available for a training program on the molecular basis of host-parasite interactions run jointly by the University of Rochester Pediatric Infectious Diseases Division and Microbiology Department. The program includes research with one of 21 faculty members, a seminar series, journal club discussion groups, and formal courses. The main areas of concentration are (i) the genetic and biochemical basis of microbial pathogenicity, with particular emphasis on the role of cell surfaces; (ii) immunology; and (iii) viral replication and pathogenicity. For further information, contact: **Dr. A. M. Haywood, Department of Pediatrics, University of Rochester Medical Center, P.O. Box 777, Rochester, New York 14642. An Equal Opportunity Employer, M/F.**

Postdoctoral Fellowships in Medical Information Science

Special focus on design and evaluation of information-based technology in health care and health services research.

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Write to:

**Donald A. B. Lindberg, M.D.
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University of Missouri
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IMPERIAL CANCER RESEARCH FUND LONDON, ENGLAND

POSTDOCTORAL FELLOWSHIP offered for 2 years in first instance, for research on the mechanisms by which host cells control the expression of tumour-inducing viruses. Familiarity with nucleic acid hybridization and allied techniques would be an advantage. Salary according to qualifications and experience. Applications with curriculum vitae and names of two referees to: **The Secretary, Imperial Cancer Research Fund, Lincoln's Inn Fields, London WC2A 3PX, England, as soon as possible. Reference 30/79.**

FELLOWSHIPS

POSTDOCTORAL POSITIONS

Positions are available for recent Ph.D. graduates interested in advanced training and research on the mechanisms of selectivity of drug action. Areas currently under study are: (i) the biochemical-pharmacological basis for the effects of anticancer and antiviral treatments, inclusive of pharmacokinetics, drug biotransformation and target cell determinants of drug action; (ii) the selective effects of drugs on the various components and interactions involved in immune responses to tumor and nontumor antigens; (iii) the regulation of cell metabolism by hormones, nucleotide pools and cyclic nucleotides, particularly cyclic CMP; (iv) the pharmacological and cellular basis for chemical carcinogenic transformation in animals and in tissue culture; and (v) clinical pharmacological studies on drug selectivity. Nucleosides, antifolates, carbohydrates affecting the plasma membrane, and anthracycline antibiotics are among the classes of agents studied. Reply in writing to: **Dr. E. Mihich, Department of Experimental Therapeutics, Grace Cancer Drug Center, Roswell Park Memorial Institute, Buffalo, N.Y. 14263.** Please include curriculum vitae and indicate at least two references. *We are an Equal Opportunity Employer, M/F.*

POSTDOCTORAL FELLOWSHIP FOR RESEARCH TRAINING IN MEDICAL MYCOLOGY

Applications are invited for a 1-year fellowship (renewable) in medical mycology with special emphasis in regulation of morphogenesis, membrane biology, host-parasite relationships, and extended training in laboratory medical mycology. Background of the applicant should include recent Ph.D., M.D., D.V.M., or D.D.S. degree with training in mycology, microbiology, and/or biochemistry. Inquiries should be addressed to:

**George Kobayashi, Ph.D.
Department of Internal Medicine
Division of Infectious Diseases
Box 8051
Washington University School of Medicine
St. Louis, Missouri 63110**

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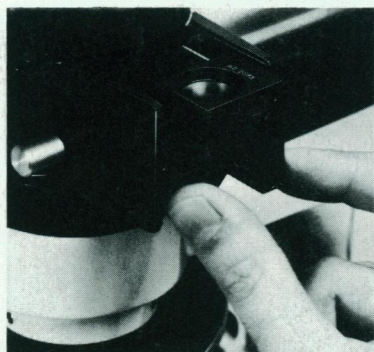


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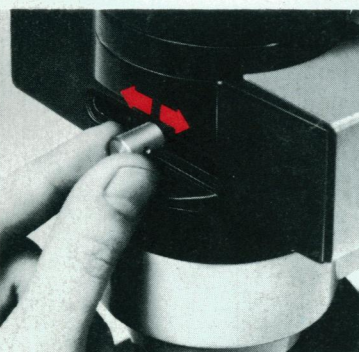
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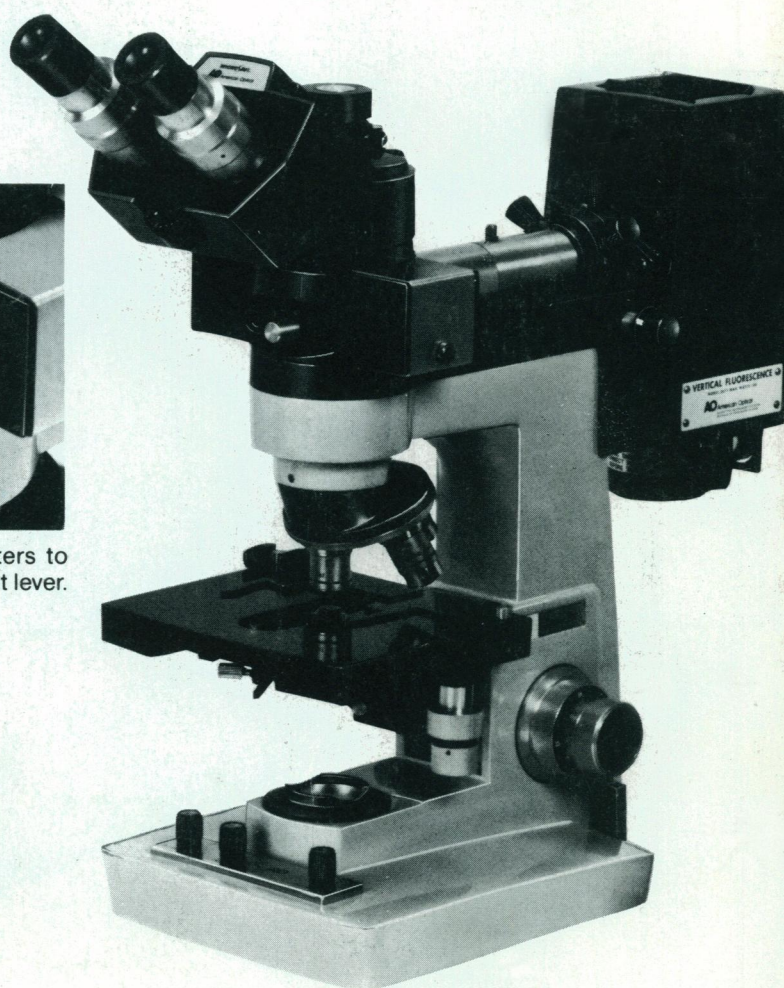
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vapor lamp assures intense excitation regardless of specimen thickness or density.

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