

subsequent foraging decisions. Thus it is not the quality or abundance of any given food item in the baboons' range per se that "determines its inclusion in the diet but it is the animals' decisions themselves that 'determine' encounter probabilities with various food items" (p. 296). It is especially difficult to predict the optimal foraging strategies for species, like baboons, living in large ranges with unpredictable and widely scattered resources. Under these conditions, each decision involves a certain degree of risk and uncertainty and certain trade-offs.

There are three papers dealing with locomotor aspects of feeding. Grand describes how four primate genera (macaques, gibbons, howler monkeys, and spider monkeys) might move on the same hypothetical supports. He warns that in comparisons such as these the species should not be too closely related because their body structures may be "so similar that no significant contrast may be evident" and that "if the animals are too different the comparison may be gratuitous or absurd" (p. 56). Yet Grand's own choice of species and his nonquantitative approach lead to results that are impossible to evaluate.

Grand's warning could also be leveled at the paper by Temerlin *et al.* These authors compare orangutans and macaques and conclude that differences in the foraging and feeding behavior of these species are due mainly to differences in body size. Furthermore, they claim that, given the body size of each, behavioral differences are predictable. Yet many species of the same size have quite different feeding and foraging behavior and other species with different body sizes have convergent feeding patterns. Macaques and orangs differ greatly in many aspects of morphology, physiology, and behavior, and the conclusions of this chapter are highly questionable.

It is focused, quantitative field studies of closely related species that have led to a better understanding of relationships between morphology and behavior. Crompton's chapter comparing the foraging behavior, habitat structure, and locomotion of two species of *Galago* is an excellent example. Crompton describes how feeding behaviors of *G. senegalensis* and *G. crassicaudatus* converge in seasons of abundance but diverge in seasons of scarcity. During the latter periods, the smaller species (*G. senegalensis*) feeds mainly on insects caught on or near the ground whereas the larger species eats mainly gums high in the trees. Crompton illustrates the

relationship between body size, diet, energetics, support use, and locomotion in these two species and gives us an understanding of how these aspects are integrated into a total adaptive package.

Using a similar approach, Garber illustrates how the small Panamanian tamarin monkey (*Saguinus oedipus*) uses particular locomotor and postural behavior, and related morphological adaptations, in obtaining specific food types. Tamarins, like most primates, use their grasping hands and feet to grip thin, terminal branches while moving quickly to search for insects or hanging under branches to feed on fruits. A third important component of the diet, gums, is obtained by clinging to large trunks. Tamarins have evolved claw-like nails in order to exploit this resource. Before Garber's quantitative study, these primates were characterized as squirrel-like. The claws were assumed to be a primitive adaptation and to function as a locomotor adaptation for running up and down large tree trunks. However, most tamarins move mainly on thin supports (as do other primates) and use their claws almost exclusively while clinging to feed on gums. Thus the claws can be seen as a special, derived trait in these small primates, and the total adaptive pattern of the tamarins can be better understood.

Approximately half the papers in this book are of top quality and exemplify some of the best theoretical and methodological approaches to the study of foraging and feeding behavior. The other half leave much to be desired. Moreover, the editors do not provide an overview of the book or of the subject generally. Their introductory chapter presents a historical view of the field of primatology that emphasizes the contributions of one "school" (derived from the University of California at Berkeley) and does not put the subject into perspective. Nor do the editors define foraging and feeding, and no attempt is made to discuss the differences in adaptation and behavior related to these two distinct phenomena. In the final chapter, Cant and Temerlin attempt to summarize many of the ideas presented in the book. However, rather than developing themes that emerge from the papers, they conclude with a list of everything that came to mind that could possibly be related to primate foraging (and feeding). The usefulness of the book lies in the opportunity it provides to contrast good and not so good approaches to its subject.

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Books Received

Analysis and Simulation of Semiconductor Devices. Siegfried, Selberherr, Springer-Verlag, New York, 1984. xiv, 294 pp., illus. \$54.

Brain, Mind, and Behavior. Floyd E. Bloom, Arlyne Lazerson, and Laura Hofstadter. Freeman, New York, 1984. x, 323 pp., illus. \$23.95. An Annenberg/CPB Project.

Cardiology. An International Perspective. E. I. Chazov, V. N. Smirnov, and R. G. Oganov, Eds. Plenum, New York, 1984. Two volumes, xxviii, 1421 pp., illus. \$195. From a congress, Moscow, June 1982.

Decompression—Decompression Sickness. A. A. Bühlmann. Springer-Verlag, New York, 1984. x, 87 pp., illus. Paper, \$14.50. Translated from the German edition (Berlin, 1983).

The Effects of Autism on the Family. Eric Schopler and Gary B. Mesibov, Eds. Plenum, New York, 1984. xx, 363 pp. \$35. Current Issues in Autism. From a conference, Chapel Hill, N.C., May 1982.

Electrochemical Cell Design. Ralph E. White, Ed. Plenum, New York, 1984. viii, 398 pp., illus. \$65. From a symposium, Houston, March 1983.

Electromagnetic Wave Theory. James R. Wait. Harper and Row, New York, 1984. xii, 308 pp., illus. \$44.50.

Fungus-Insect Relationships. Perspectives in Ecology and Evolution. Quentin Wheeler and Meredith Blackwell, Eds. Columbia University Press, New York, 1984. xiv, 514 pp., illus. \$60. From a symposium, Ithaca and Syracuse, N.Y., Oct. 1981.

Games Programming. Eric Solomon. Cambridge University Press, New York, 1984. xii, 257 pp., illus. Paper, \$14.95.

Interferon. Research, Clinical Application, and Regulatory Consideration. K. C. Zoon, P. D. Noguichi, and T.-Y. Liu, Eds. Elsevier, New York, 1984. xiv, 314 pp., illus. \$49. From a workshop, Bethesda, Md., Sept. 1983.

Lipids in Cereal Technology. P. J. Barnes, Ed. Academic Press, Orlando, Fla., 1983. xii, 426 pp., illus. \$65. Food Science and Technology.

The Lives of Bats. Wilfried Schober. Arco, New York, 1984. 200 pp., illus. \$24.95. Translated from the German.

Microprocessors in Industry. Michael F. Hordeski. Van Nostrand Reinhold, New York, 1984. xiv, 523 pp., illus. \$49.50.

Milankovitch and Climate. Understanding the Response to Astronomical Forcing. A. Berger *et al.* Eds. Reidel, Boston, 1984 (distributor, Kluwer Boston, Hingham, Mass.). Two volumes. Vol. 1. xxxiv, 510, illus. Vol. 2. ix pp. + pp. 511–895, illus. The set, \$117. NATO ASI Series C, vol. 126. From a workshop, Palisades, New York, Nov. 1982.

Neural Transplants. Development and Function. John R. Sladek, Jr., and Don M. Gash, Eds. Plenum, New York, 1984. xx, 454 pp., illus., + plates. \$65.

Proceedings of the 1st Hellenic School on Elementary Particle Physics. (Corfu, Greece, Sept. 1982). Th. Papadopoulos and N. D. Tracas, Eds. World Scientific, Singapore, 1984 (U.S. distributor, Heyden, Philadelphia). xii, 689 pp., illus. \$67.

Proceedings of the Fourth Course of the International School of Intermediate Energy Nuclear Physics. (San Miniato, Italy, Aug. 1983.) Roland Bergere, Sergio Costa, and Carlo Schaerf, Eds. World Scientific, Singapore, 1984 (U.S. distributor, Heyden, Philadelphia). x, 460 pp., illus. \$51.

Proceedings of the Fourth International Symposium on Trichoptera. (Clemson, S.C., July 1983.) John C. Morse, Ed. Junk, The Hague, 1984 (U.S. distributor, Kluwer Boston, Hingham, Mass.). xxii, 486 pp., illus. \$85. Series Entomologica, vol. 30.

Quaternary Extinctions. A Prehistoric Revolution. Paul S. Martin and Richard G. Klein, Eds. University of Arizona Press, Tucson, 1984. x, 892 pp., illus. \$65.

Resource Inventory and Baseline Study Methods for Developing Countries. Francis Conant *et al.*, Eds. American Association for the Advancement of Science, Washington, D.C., 1984. xxvi, 539 pp., illus. Paper, \$22.95. AAAS Publication no. 83-3.

Reviews in Biochemical Toxicology 6. Ernest Hodgson, John R. Bend, and Richard M. Philpot, Eds. Elsevier, New York, 1984. x, 270 pp., illus. \$49.50.

Science for Every Student. Educating Canadians for Tomorrow's World. Science Council of Canada, Ottawa, 1984. 85 pp. Paper, \$5.25. Report 36.

Scientific Pascal. Harley Flanders. Reston (Prentice-Hall), Reston, Va., 1984. xii, 566 pp., illus. Paper, \$21.95.

IIIrd International Symposium on Brucellosis. (Algiers, Algeria, April 1983.) Karger, Basel, 1984. xiv, 779 pp., illus. \$96. Developments in Biological Standardization, vol. 56.

Third Report to the Fish Farmers. The Status of Warmwater Fish Farming and Progress in Fish Farming Research. Harry K. Dupree and Jay V. Huner, Eds. U.S. Fish and Wildlife Service, Washington, D.C., 1984. vi, 270 pp., illus. Paper.

Personnel Placement

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POSITIONS WANTED

Immunochemist. Ph.D. Background in synthetic peptides, monoclonal antibodies, protein purification, and tissue culture. Interested in projects related to (plant?) DNA technology. Seeking position in academia or industry in San Francisco Bay area. Box 281, SCIENCE. X

Microbiology/Molecular Biology. M.S. Extensive tissue culture, molecular virology, recombinant DNA technology, restriction mapping, plasmid construction, chemical and transposon mutagenesis, protein/toxin characterization, serological/immunological assay procedures, industrial scale fermentation. Five years of academics, 6 years of industrial experience. Box 277, SCIENCE. X

Molecular Biologist/Software Engineer. Ph.D. 1981. Graduate and postdoctoral research experience in microbial genetics and regulation of gene expression. Currently employed as computer programmer and consultant. Seeks position programming/designing computer systems for biological research. Box 282, SCIENCE. X

Pharmacologist. Ph.D. 1982. Experienced in cardiovascular pharmacology, renal function and renin secretion, isolated tissue techniques. Has teaching experience at undergraduate and postgraduate levels. Seeks research/teaching position with industry, university, or research laboratory in Detroit/Ann Arbor area. Box 283, SCIENCE. X

Writer. Ph.D., publications, teaching, research experience. Seeks free-lance work, books, articles. Biology. Box 185, SCIENCE. X

POSITIONS WANTED

Physician (M.D.) with clinical research and teaching experience in physiology requires postdoctorate in molecular/cell biology at university/research institute or position in biotechnology/pharmaceutical industry. Box 284, SCIENCE. 12/7, 14, 21

Recent Graduate with biochemistry and management degrees seeks employment and investment opportunity in a biochemically based firm. Reply to: Laurence Seenath, Number 7-5500 Rosedale Avenue, Cote St. Luc, Quebec, Canada H4V 2J1. Telephone: 514-486-7100. X

Research Assistant. M.S. experienced with recombinant DNA, enzymology, electrophoresis, radioisotopes, nick translation, DNA hybridization, autoradiography, sterile techniques, DNA isolation. Seeks challenging position in molecular biology. Box 285, SCIENCE. X

Toxicologist. Ph.D. Seeking industrial position: desk or laboratory. Postdoctoral research in DNA, mutagenesis mechanisms and assays, molecular biology of mitochondria, metabolism and distribution studies, halogenated hydrocarbons, development of analytical methods. Trained in safety evaluation and risk assessment. Additional academic experience in biochemistry, immunology, and dermatology. Experience in personnel training and supervision. Well organized researcher/administrator, excellent communicator. 1620 Argyle Crescent, Ann Arbor, Mich. 48103. Telephone: 313-995-0113. 12/7; 1/4

POSITIONS OPEN

ANIMAL BEHAVIOR: Villanova University. Assistant professor, tenure-track position in 13-member Psychology Department. Teach introductory, research methods, and comparative psychology at undergraduate level and special topics in area of interest at graduate level; direct theses in rigorous, experimentally-oriented M.S. program. We seek evidence of commitment to excellence in teaching and capacity to develop active research program. Ph.D. in psychology with concentration in some area of animal behavior required. Salary competitive. Position commences September 1985. Forward curriculum vitae and brief cover letter outlining your interests in teaching and research to: **Chairperson, Animal Behavior Search Committee, Department of Psychology, Villanova University, Villanova, Pa. 19085.** Villanova University is an Affirmative Action/Equal Opportunity Employer.

The Department of Biological Sciences anticipates a one-half time, non-tenure-track position for an **ANIMAL PHYSIOLOGIST**. This will be a 10-month, nonrenewable appointment as a sabbatic replacement. Duties include the teaching of animal physiology lectures and laboratories, and a nonmajors introductory biology course. Send curriculum vitae, reprints, and three recommendations to: **Mayerlyn Miller, Director of Personnel and Affirmative Action, (Physiologist), Department of Biological Sciences, Box 246, State University College of Arts and Science, Plattsburgh, N.Y. 12901.** Deadline for applications: 15 January 1985. We are an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR

The Department of Microbiology is searching for an assistant professor starting in fall 1985. Appointment at a higher rank is possible for an unusually qualified applicant. Preference will be given to individuals with experience in immunology, pathogenic mechanisms, transcriptional control, developmental biology, and eukaryotic microbial genetics. Applicants should submit curriculum vitae, including the names and addresses of three references, and a summary of research interests to: **Dr. Henry R. Bose, Jr., Chair, Department of Microbiology Search Committee, The University of Texas at Austin, Austin, Texas 78712.** Deadline is 1 March 1985. The University of Texas is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR, MEDICINE: The Division of Endocrinology is seeking a person to conduct research on metabolic regulation, provide clinical support for programs in nutrition, endocrinology and diabetes, and to participate in departmental teaching programs. Personal grant support, Board-certification in both medicine and endocrinology and metabolism are desirable. Candidates should submit curriculum vitae (including publications) to: **Dr. C. Goodner, Chairman, Search Committee, Endocrinology, Harborview Medical Center, 325 9th Avenue, Seattle, Wash. 98104.**

POSITIONS OPEN

ANIMAL OR MICROBIAL ECOLOGY

The Department of Biology, University of Oregon, solicits applications for an experimental ecologist at the assistant professor level, with possibility of tenure. Priority will be given to candidates with sound research publications and demonstrated ability to obtain research support. Postdoctoral experience is essential. Responsibilities include performing research and teaching both graduate and undergraduate students. Applicants should provide curriculum vitae, a bibliography, a statement of research interests, copies of publications, and the names of at least three references. Send applications to: **Ecology Search Committee, Department of Biology, University of Oregon, Eugene, Ore. 97403.** The deadline for receipt of applications is 1 February 1985. The University of Oregon is an Affirmative Action/Equal Opportunity Employer/Institution.

ASSISTANT PROFESSOR (tenure-track)—The College of Marine Studies, University of Delaware, announces a 12-month, tenure-track marine biology/biochemistry faculty position in one of the following areas (one position approved and several pending approval): (i) marine microbiologist/microbial biochemistry, physiology and/or ecology, (ii) genetics of marine organisms, and (iii) marine systems ecology (modeling). Responsibilities will include development of a vigorous research program, teaching and student advisement in the area of expertise. Applicants should send curriculum vitae, list of publications, summary of research goals, and names of three references by 1 January 1985 to: **Dr. Kent Price, Chairman, Search Committee, College of Marine Studies, UNIVERSITY OF DELAWARE, 700 Pilottown Road, Lewes, Del. 19958.** The University of Delaware is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR—ANATOMY

Applications are invited for a tenure-track position in the Department of Anatomy, University of North Dakota School of Medicine. Applicants must have a Ph.D., M.D., or equivalent with at least 2 years of postdoctoral training and research experience in cell biology, molecular biology, structural biology, biochemistry, or related areas. The successful applicant will be expected to carry on a vigorous research program and demonstrate excellence in his/her respective field. Faculty members are expected to obtain extramural support for their research activities. Applicants should be able to demonstrate excellence in teaching histology and developmental anatomy to medical students and contribute substantially to the departmental graduate program. Send curriculum vitae, descriptions of research and teaching experience, and at least three letters of reference by 15 February 1985 to: **Dr. Edward C. Carlson, Chairman, Department of Anatomy, University of North Dakota School of Medicine, Grand Forks, North Dakota 58202.** The University of North Dakota is an Equal Opportunity/Affirmative Action Employer and invites applications from all qualified individuals.

ASSISTANT PROFESSORS IN BIOLOGY

Applications invited for tenure-track positions available 1 September 1985. Ph.D. required. Duties include teaching undergraduate courses in general biology, and cell/molecular biology, microbiology, or developmental biology. Candidates should have a commitment to excellence in teaching. Salary commensurate with experience. *Minority applicants strongly encouraged to apply.* An Equal Opportunity/Affirmative Action Employer. Send letters of interest and curriculum vitae by 15 January 1985 to:

Dr. Pamela Rhyne
Department of Biology
Kennesaw College
P.O. Box 444
Marietta, Georgia 30061

ASSISTANT PROFESSOR—ENTOMOLOGY. Full-time, tenure-track position. Joint appointment with the Illinois Natural History Survey and the University of Illinois; 100 percent research. Develop programs in quantitative insect ecology with emphasis on population dynamics and systems analysis. Ph.D. in entomology or related discipline required. Competence in computer methods and mathematical analysis also required. Salary commensurate with training and experience. Please send a letter of application, curriculum vitae, and names and addresses of three references to: **Dr. W. G. Ruesink, 172 Natural Resources Building, 607 East Peabody Drive, Champaign, Illinois 61820,** by 15 January 1985. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.



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ONR Graduate Fellowship
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POSITIONS OPEN

ASSISTANT PROFESSOR, Ph.D. or M.D. degree with several years of postdoctoral experience in the area of cancer cell/molecular biology. Specific areas of research may include growth-transforming factors, oncogenes, DNA repair in eukaryotes, gene expression as related to differentiation, and so forth. The salary is negotiable and competitive. Selection will be based upon research experience, ability to develop an independent program which would attract grant support, and willingness to interact collaboratively with others in cell biology, carcinogenesis, nutrition, and/or virology. Submit curriculum vitae, three letters of recommendation, and a brief summary of your future research plans to: **Dr. Edward Bresnick, Eppley Institute for Research in Cancer, University of Nebraska Medical Center, Omaha, Nebraska 68105. Affirmative Action/Equal Opportunity Employer.**

ASSISTANT/ASSOCIATE PROFESSOR, Department of Entomology, University of Maryland, 12-month, tenure-track; available 1 July 1985. To develop and coordinate an interdepartment graduate level IPM course and to develop a research program emphasizing integrated pest management in agroecosystems. Preferred research areas are population genetics, vectors of plant pathogens, or plant resistance mechanisms. However, candidates with allied interests are sincerely encouraged to apply. Send application letter including a statement of how your research interests would contribute to the development of an IPM program, curriculum vitae, transcripts, and names and addresses of four references by 30 January 1985 to: **Dr. Michael Raupp, Chairman of Search Committee, Department of Entomology, University of Maryland, College Park, Md. 20742. The University of Maryland is an Equal Opportunity Employer.**

ASSISTANT PROFESSOR OF BIOLOGY

Applications are invited for a tenure-track position to begin August 1985. Teaching will include genetics, the team-taught introductory sequence, and any of the following general areas: behavior, cell biology, immunology, microbiology. Teaching in interdisciplinary programs like the Great Books Program is optional. Research involving undergraduates is encouraged. Ph.D. required.

Send curriculum vitae, a summary of academic training, a brief statement of research and teaching interests, and the names of three references to: **Dr. John D. Shepherd, Biology Department, College of Liberal Arts, Mercer University, Macon, Ga. 31207. Women and minority candidates are encouraged to apply. Application deadline: 11 January 1985. Mercer University is an Equal Opportunity Employer.**

ASSISTANT PROFESSOR AND EXTENSION RESIDENTIAL ENERGY SPECIALIST, in Department of Design, Housing and Apparel, College of Home Economics, University of Minnesota, St. Paul. Fifty percent time faculty appointment will be a 3-year fixed term position with statewide extension education responsibilities in residential energy. Ph.D. preferred; master's required. At least one degree in engineering, architecture, or other physical science field is required. For application information, contact: **Kathleen Dalgaard, Extension Personnel, 260 Coffey Hall, University of Minnesota, St. Paul, Minn. 55108. Telephone: 612-373-1865. Application deadline: 31 January 1985. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.**

CHAIRMAN, DEPARTMENT OF PHYSIOLOGY, Kirksville College of Osteopathic Medicine invites applications and nominations for the position of chairman, available after 1 July 1985. Applications will be accepted through 31 January 1985.

Qualifications include: Ph.D. or equivalent degree in physiology or related basic science discipline; a sincere commitment to excellence in medical education; established research program; success in attracting extramural funding; previous administrative experience desired; leadership ability.

Prospective applicants should submit a letter, current curriculum vitae, and the names of three professional references. Applications, nominations, or requests for additional information should be submitted to:

Allen W. Jacobs, D.O., Ph.D.
Associate Dean for Academic Affairs
Kirksville College of Osteopathic Medicine
Kirksville, Mo. 63501

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

POSITIONS OPEN

ASSISTANT PROFESSOR—BIOCHEMISTRY

The Department of Chemistry at the University of Notre Dame is seeking applications for a tenure-track faculty position beginning in fall 1985. Applications are encouraged from individuals interested in the chemical basis of biological processes. Preference will be given to applicants with previous postdoctoral experience. The successful candidate is expected to establish and support an active research program in any one of the following areas: DNA replication, gene expression, or nucleic acid structure and function. The candidate will be expected to participate in the teaching of undergraduate and graduate courses.

The department is situated in a new, modern research building. Colleagues with complementary research interests are available. Send a résumé, three references, and a description of your proposed research interests by 15 February 1985 to: **Dr. Thomas P. Fehlner, Chairman, Department of Chemistry, University of Notre Dame, Notre Dame, Ind. 46556.**

Notre Dame is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR OF BIOCHEMISTRY

Applications are invited for a tenure-track position at the level of assistant professor to begin 1 July 1985. Preference will be given to individuals whose research interests have current or potential medical relevance. Candidates should have a commitment to teaching and the ability to develop and maintain a vigorous and creative research program in biochemistry or molecular biology. Potential for collaboration exists with other departments of the medical school in a growing research environment that includes the Oregon Regional Primate Research Center, the Portland Shriners Hospital Research Unit, and a new Institute for Advanced Biomedical Research. Applicants should send curriculum vitae, bibliography, reprints of representative papers, a summary of career goals and research plans, and names of three references to: **Richard T. Jones, Chairman of Biochemistry, School of Medicine, L224, Oregon Health Sciences University, 3181 South West Sam Jackson Park Road, Portland, Oregon 97201. All applications received by 1 February 1985 will be considered. Women and minority candidates are especially invited to apply. An Equal Opportunity/Affirmative Action Employer.**

ASSISTANT PROFESSOR—BIOCHEMISTRY

A full-time, tenure-track appointment is available as of 1 July 1985 in the Section of Biochemistry, Division of Biology and Medicine, Brown University. The Section is responsible for an integrated biochemistry curriculum for undergraduate, graduate, and medical students, and is part of a graduate program in molecular and cell biology. The candidate should have a doctoral degree and at least 2 years of additional research experience. The successful candidate will have responsibilities for teaching and advising students, and will be expected to establish an independent research program. We seek someone investigating mechanisms of hormonal regulation in animal cells.

Send curriculum vitae, a brief statement of research plans, and three current representative reprints, and have three letters of recommendation forwarded no later than 1 February 1985 to:

Dr. Albert E. Dahlberg
Section of Biochemistry
Brown University, Box G—JWWL
Providence, R.I. 02912

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ASSISTANT PROFESSOR. We invite applications for a tenure-track position in **BIOLOGICAL CONTROL OF SOIL-BORNE PLANT PATHOGENS**. The appointee will be expected to initiate and conduct a research program using innovative approaches to solve fundamental and applied problems in biological control. We are seeking an individual who can make strong contributions to the department's overall program on research and graduate training. A Ph.D. degree in microbiology, plant pathology, soil science, or related field is required. Postdoctoral training and experience with biological control of soil-borne plant pathogens are desirable. Applicants should send curriculum vitae, list of publications, transcripts, three letters of reference, and a statement of interests and career goals by 21 December 1984 to: **Dr. R. Charudattan, Plant Pathology Department, University of Florida, Gainesville, Fla. 32611. Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

The Department of Genetics at Washington University School of Medicine, St. Louis, Missouri 63110, invites applications at the level of **ASSISTANT PROFESSOR** from persons whose primary research interests include molecular genetics in humans or other mammals, mammalian viruses, or somatic cells. Interested parties should forward to: **Daniel L. Hartl** at the above address, a résumé, a brief statement of research interests, and the names of three people who would provide recommendations. *Equal Opportunity/Affirmative Action Employer, M/F/H/V.*

UNIVERSITY OF CALIFORNIA, IRVINE, seeks individual at the level of **ASSISTANT PROFESSOR OF MEDICINE** in the Division of Basic and Clinical Immunology. Applicant should hold M.D. and Ph.D. degrees and have at least 4 years of postdoctoral research experience in immunology. Candidates with research interest in basic immunology preferred. Send curriculum vitae, list of publications, and at least three letters of reference by 20 December to: **Sudhir Gupta, M.D., Professor and Chief, Basic and Clinical Immunology, Med Sci I, C264A, University of California, Irvine, Calif. 92717. An Affirmative Action/Equal Opportunity Employer.**

ASSISTANT PROFESSOR OF MICROBIOLOGY AND IMMUNOLOGY VIRGINIA COMMONWEALTH UNIVERSITY

Applications are invited from highly qualified individuals for a full-time, tenure-track position. Applicants must hold a Ph.D. or equivalent degree and have at least 2 years of productive postdoctoral research experience. The department seeks to continue recently initiated growth in several areas. Individuals with expertise in molecular immunology, immunogenetics, mechanisms of pathogenesis, or eukaryotic microbiology are encouraged to apply. Individuals will develop and maintain strong, grant-supported independent research programs and participate in the training of graduate students and postdoctorals. Teaching in graduate and professional level courses is required. Send curriculum vitae, a statement of research interest, and the names of three references by 1 May 1985 to: **Dr. Phillip B. Hylemon, Department of Microbiology and Immunology, Box 678, MCV Station, Virginia Commonwealth University, Richmond, Virginia 23298. An Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.**

ASSISTANT/ASSOCIATE PROFESSOR PHARMACOGNOSY

Academic year, tenure-track position in pharmacognosy (natural product chemistry, bio-organic chemistry), effective 1 September 1985. Ph.D. degree in pharmacognosy, natural product chemistry, biochemistry, or related area. Pharmacy undergraduate degree and postdoctoral experience desirable. Potential for or evidence of excellence in teaching and research is essential. Salary open and commensurate with qualifications and experience. Interested persons should submit curriculum vitae and the names of three references by 15 February 1985 to: **Dr. Leonard R. Worthen, Chairman, Department of Pharmacognosy and Environmental Health Sciences, THE UNIVERSITY OF RHODE ISLAND, Kingston, Rhode Island 02881-0809. Affirmative Action/Equal Opportunity Employer, M/F.**

ASSISTANT PROFESSOR, tenure-track appointment in Stanford University, Department of Psychiatry and Behavioral Sciences. M.D. or Ph.D. with postdoctoral experience in neurochemistry/biochemistry/molecular biology. Will head Biochemical Regulation Section of the Laboratory of Developmental Neurochemistry. Expected to develop independently funded research program with focus on regulation of neurotransmitter enzymes, emphasizing transcriptional, translational and post-translational controls. Expertise in enzymology, neurochemistry, monoclonal and polyclonal antibodies, and tissue culture. Molecular biology experience desirable. Responsible for core tissue culture facility. Will interface with other core components of laboratory and help in the development of antibody, tissue culture, HPLC methodologies as needed by these groups. Shared teaching responsibilities in lecture and seminar courses for graduate, medical and undergraduate students in neurochemistry. *Stanford University is an Equal Opportunity Employer and welcomes nominations of women and minority group members and applications from them.* Please send applications to: **Dr. Roland D. Ciaranello, Department of Psychiatry, Stanford University School of Medicine, Stanford, Calif. 94305.** Include current curriculum vitae, names of referees, and two to three recent publications.

NIOSH ANNOUNCES RESEARCH AWARDS FOR Ph.D. & M.D. SCIENTISTS



The National Institute for Occupational Safety and Health announces outstanding opportunities for research in

- bioengineering
- biochemistry
- immunology
- mutagenesis
- pathology
- physiology
- pharmacology

The National Research Council in cooperation with the National Institute for Occupational Safety and Health will offer competitive research awards in 1985 for independent scientific research. Recipients will be free to work on problems of their own choice as guest investigators at NIOSH. This program is open to experienced senior scientists as well as to recent PhD and MD graduates. Stipends begin at \$26,350 for recent graduates and are appropriately higher for seniors. Relocation reimbursement and funds for professional travel on tenure are available, and a health insurance program is offered.

For further information and application materials please write to:

Associateship Programs (JH608/NI-1)

National Research Council

2101 Constitution Avenue, N.W.
Washington, D.C. 20418

**1985 Deadlines for application are
January 15, April 15 and August 15.**

LEADER, ATMOSPHERIC AEROSOL SAMPLING AND ANALYSIS GROUP

Ames Research Center (35 miles south of San Francisco) is seeking a senior investigator and leader for the atmospheric aerosol group. The group develops and flies advanced instruments to investigate specific problems, such as stratospheric-tropospheric exchange, the composition of the natural and perturbed troposphere, atmosphere-biosphere interactions, and climatic effects of aerosols and clouds.

Specified qualifications include: 1) Ability to advance, advocate, and defend programs. Ability to motivate, develop, evaluate, and recruit subordinates. Knowledge of current theories regarding important atmospheric aerosol problems and the relevance of measurements to these theories (double-weighted); 2) Ability to direct and conduct all phases of research projects that advance the state of knowledge of atmospheric aerosols; 3) Ability to design and develop state-of-the-art aerosol sampling/sensing instrumentation within cost and time constraints; 4) Skill in communicating schedules, plans, scientific goals, and operational constraints involved in flight missions. U.S. citizenship and Ph.D. or equivalent in atmospheric physics or chemistry are required. Permanent position in federal service. Projected salary: \$44,430 to \$67,940 commensurate with experience/education. For further information regarding requirements and application procedures, write 71-84B at the address below or phone (415) 694-5776. Formal applications must be filed by January 20, 1985. An equal opportunity employer.



National Aeronautics and
Space Administration

Ames Research Center
Moffett Field, California 94035

CLARKSON UNIVERSITY DEPARTMENT OF BIOLOGY

Announces the
**BAYARD D. AND VIRGINIA C.
CLARKSON CHAIR**

and an
Opening for a Second Faculty Position

The Clarkson University Department of Biology invites applications and nominations for this newly endowed Chair and for a second faculty position.

Clarkson has well-established PhD programs in Chemistry, Physics, Mathematics and Engineering, and a young undergraduate program in Biology. The Bayard D. and Virginia C. Clarkson Professor will be expected to play a leading role in developing Biology's contribution to an interdisciplinary graduate program in Chemical and Physical Biology, culminating in the offering of a PhD degree in Biology. The candidate may be considered for the position of Chairperson of the Biology Department, if desired. A new research facility will be occupied early in 1985. Several additional appointments will be made during the next few years in addition to the positions advertised here.

The candidate for the Clarkson Chair must be a distinguished research scientist. The candidate for the second position for which the rank is open must be capable of developing or maintaining a vigorous, quality research program. The research areas are open although preference will be given to Biochemistry, Cell Biology, Microbiology, Biophysics, Mathematical Biology, Bioengineering and other areas which could interface with existing programs in Chemistry, Physics, Mathematics and Engineering. Excellence in teaching is essential.

Please send CV and the names of at least three references to

**Department of Biology Search Committee
Clarkson University
Potsdam, New York 13676**

to arrive not later than January 15, 1985. Please specify which position is sought. Equal Opportunity Employer.

DIRECTOR BARTOL RESEARCH FOUNDATION

The Bartol Research Foundation, a division of The Franklin Institute of Philadelphia, announces a search for a new Director to succeed Dr. Martin A. Pomerantz who will retire at the end of 1986.

Bartol was established by The Franklin Institute in 1924 to conduct research in the physical sciences, emphasizing basic research that ranges from studies of the fundamental laws of nature to investigations that may be relevant to the solution of contemporary technological problems. Current research programs are in astrophysics, solar-terrestrial physics, cosmic rays, particle physics, condensed matter, and nuclear structure. Bartol is located on the campus of the University of Delaware in a building that is shared with the University Physics Department. A joint graduate program leading to MS and PhD degrees in Physics or Astrophysics is conducted by the combined faculty.

Qualifications. A senior research scientist having a broad interest in the physical sciences and a distinguished research record is sought. The Director must have the capacity to identify promising research scientists and areas of research, and the ability to administer a research institute.

Duties. The Director is expected to continue an active research program of his own that is compatible with the mission of Bartol. Administrative responsibility for programmatic, budgetary, and personnel matters at Bartol on behalf of The Franklin Institute is vested in the Director. The Director works with the scientific staff of Bartol, composed of faculty, research associates, post-doctoral fellows, and graduate students, in developing and funding the various research programs. The Director and Bartol faculty work cooperatively with the Physics Department in the implementation of the joint graduate program.

Nominations and Applications. The Search Committee invites the nomination of potential candidates as well as applications from interested candidates. The selection process will begin February 15, 1985. The date of appointment is flexible. Nominations and applications are encouraged from women and members of minority groups.

Correspondence should be directed to:

**Search Committee Secretary
Bartol Research Foundation
Sharp Laboratory
University of Delaware
Newark, DE 19716**

Immunodiagnostics

Cambridge BioScience Corporation, a biotechnology company specializing in infectious disease diagnostics offers exciting positions in its Hopkinton, Massachusetts laboratories. We are seeking advanced level scientists as well as research associates. The successful candidates will have the following experience:

Senior Scientist Molecular Biology

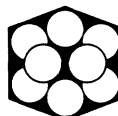
- Ph.D. level with extensive background in recombinant-DNA, cloning and expression, minimum of 2 years postdoctoral or industrial experience.

Director Product Development

- A strong track record in bringing products from feasibility through production.
- Good working knowledge of interdisciplinary functions of quality assurance, regulatory, and production. Capability to perform at the bench in a problem solving mode.
- Strong technical background in immunochemistry, utilizing monoclonal and polyclonal antibodies in clinical immunoassay kit development.

Cambridge BioScience offers a unique and stimulating environment and close working associations with academic institutions. This is a challenging opportunity for personal and financial growth.

Qualified applicants should send resume and salary requirements to:



**Cambridge
BioScience**

**Cambridge BioScience Corporation
Personnel Department
35 South Street
Hopkinton, MA 01748**

POSITIONS OPEN

ASSISTANT PROFESSOR—PSYCHOLOGY. The Psychology Department at Northeastern University seeks an experimental psychologist with a Ph.D. and research experience beyond the doctorate in an area compatible with one or more of the focal interests of the department (neuroscience, sensory psychology, perception, language and cognition, learning, personality, and social psychology). Responsibilities include teaching, direction of graduate and undergraduate research, and development of a research program. To begin September 1985. Competitive salary. Initial applications should include curriculum vitae and copies of research publications. Send applications or inquiries to: **Dr. Alex Skavenski, Departmental Search Committee, Department of Psychology—282 NI, Northeastern University, Boston, Mass. 02115. Northeastern University is an Equal Opportunity/Affirmative Action Employer.**

ASSISTANT PROFESSOR RADIATION BIOLOGY Radiation Research Laboratory University of Iowa College of Medicine Department of Radiology

Applications for a tenure-track position, available 1 July 1985, are invited from individuals with doctoral and postdoctoral experience in cellular radiation biology. The individual should have strong interest in the Graduate Program in Radiation Biology at the University of Iowa, credentials for teaching cellular radiation biology to graduate students, and the ability to teach the biological effects of radiation to diagnostic and therapeutic radiology residents. Research interests should encompass cellular and molecular radiation biology with special interest in repair mechanisms. Applications should include complete curriculum vitae, a statement of research interests, and the names of three scientists willing to write letters of recommendations. Applications should be sent to: **J. W. Osborne, Radiation Research Laboratory, 14 Medical Laboratories, University of Iowa, Iowa City, Iowa 52242.**

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

ASSOCIATE CHIEF OF STAFF FOR RESEARCH AND DEVELOPMENT

The Veterans Administration Medical Center (VAMC), Hampton, Virginia, and Eastern Virginia Medical School, Norfolk, Virginia, are seeking candidates for the position of Associate Chief of Staff for Research and Development at the VA Medical Center. Hampton VAMC is a major teaching hospital, affiliated with the Eastern Virginia Medical School, with over 400 acute beds including spinal cord injury. The ACOS/R&D is the administrative officer responsible for clinical and basic research programs at the center, for encouragement and support of newly developing investigators, and for liaison with the research activities at the medical school. Qualified candidates should have an M.D. or a Ph.D. in a medical science, a successful track record, and continuing interest in research. Will be eligible for a faculty appointment at the medical school in the appropriate department. Reply with curriculum vitae and three references to: **Michael A. Savin, M.D., Search Committee Chairman, Chief, Hematology-Oncology, Veterans Administration Medical Center, Hampton, Virginia 23667. An Equal Opportunity Employer.**

BIOCHEMISTRY—Tenure-track position available at assistant or associate professor level beginning fall term 1985. Teaching at graduate and undergraduate level and development of strong research program in some area of modern biochemistry expected. Ph.D. required. Curriculum vitae, list of publications, and description of proposed research program must be received by 15 January 1985. **Dr. David W. McClure, Department of Chemistry, Portland State University, Portland, Ore. 97207. An Equal Opportunity/Affirmative Action Employer.**

ENVIRONMENTAL PATHOLOGY/ TOXICOLOGY

Postdoctoral positions available in trace metal teratology, respiratory and inhalation toxicology and aquatic toxicology (cytogenetics or teratogenesis) beginning January or March 1985 for those with a Ph.D., M.D., D.V.M., D.D.S. degree. Send curriculum vitae, two reference letters, reprints, and research interest statement to: **N. K. Mottet, M.D., Professor of Pathology and Environmental Health, SM-30, University of Washington, Seattle, Wash. 98195.**

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

TWO POSITIONS

Animal Cell Biologist with competency to teach lower/upper division and graduate courses in cell physiology and invertebrate physiology.

Pathogenic Microbiologist with research interest in mechanisms of pathogenesis and competency to teach upper division and graduate courses in pathogenic microbiology and either medical mycology or animal virology.

Both are tenure-track, assistant professor positions with academic year salaries commensurate with experience. Earned Ph.D. required; postdoctoral experience preferred. Normal teaching load is two lecture or one lecture/laboratory course per semester. Development of active research program appropriate to M.S.-granting institution expected. Send curriculum vitae; three to four representative reprints; statement of proposed research direction; names and addresses of at least three references; and official transcripts to arrive no later than 31 January 1985 to:

**Dr. L. Raymond Fox, Chairman
Department of Biological Sciences
Wichita State University
Wichita, Kan. 67208**

All correspondence should identify position for which applying. *An Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR. New tenure-track position in the Department of Physiology. Applicants should have at least 2 years of postdoctoral training and hold the M.D. and/or Ph.D. degree in physiology. Interest and experience in teaching medical physiology are expected. Research interest in cardiovascular physiology with expertise in neural, endocrine, or humoral regulation is preferred. Applicant should send curriculum vitae, list of publications, a brief statement of research interests, and at least three names of references by 15 January 1985 to: **James P. Filkins, Ph.D., Professor and Chairman, Department of Physiology, Loyola University of Chicago, Stritch School of Medicine, 2160 South First Avenue, Maywood, Illinois 60153.**

Loyola University of Chicago is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR—Applications are invited for a position at the level of assistant professor in the Department of Pharmacology of the Yale University School of Medicine. Applicants must have the Ph.D. degree, postdoctoral experience, and a strong commitment to develop antineoplastic agents. The position is for a bioorganic chemist or a medicinal chemist with interest and experience in the design and synthesis of cancer chemotherapeutic agents and in elucidation of the molecular mechanisms by which they express their cytotoxic actions. Interested candidates should send curriculum vitae, transcripts, reprints, description of areas of research interests, and the names of three individuals who are familiar with the candidate's abilities by 31 January 1985 to: **Dr. Alan C. Sartorelli, Department of Pharmacology, Yale University School of Medicine, New Haven, Conn. 06510. An Equal Opportunity/Affirmative Action Employer.**

UNIVERSITY OF NEBRASKA—LINCOLN Chair, Department of Chemistry

Nominations and applications are invited for the position of chair and professor with tenure. A fall 1985 starting date is preferred. Candidates should have a nationally respected research program with major external funding, proven teaching ability, and demonstrated leadership. Applications with curriculum vitae or nominations should be sent by 1 February (or until suitable candidates apply thereafter) to: **Professor C. J. Eckhardt, Chairman, Chemistry Chair Search Committee, Department of Chemistry, University of Nebraska—Lincoln, Lincoln, Nebraska 68588-0304. Affirmative Action/Equal Opportunity Employer.**

ENVIRONMENTAL PHYSIOLOGIST. Tenure-track, assistant professor position. Postdoctoral experience required. Preference will be given to research experience with aquatic vertebrates and potential for development of a strong extramurally funded research program. Expected to participate in undergraduate and graduate teaching. Send curriculum vitae, names of three references, and statement of research goals to: **Dr. Timothy M. Casey, Department of Biological Sciences, Rutgers University, Piscataway, New Jersey 08854. An Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

CELL BIOLOGY/HISTOLOGY UCR/UCLA PROGRAM IN BIOMEDICAL SCIENCES

The UCR/UCLA Program in Biomedical Sciences, which offers an accelerated M.D. curriculum jointly between the University of California, Riverside (UCR), and the University of California, Los Angeles (UCLA), School of Medicine, has a **tenure-track faculty opening** in the Division of Biomedical Sciences at UCR. The prospective level of appointment is assistant professor, although an exceptionally qualified candidate may be considered for appointment at higher rank. Primary teaching responsibilities will be one-half of a 10-week course in medical histology and cell biology taught to 24 first-year medical students. Prior medical school teaching experience is strongly preferred. Applicants should have postdoctoral research experience, and should be able to develop or continue a strong independent research program. The area of research is open. *The University of California is an Affirmative Action/Equal Opportunity Employer.* Applications, including curriculum vitae, bibliography, a statement of research goals, and the names of three references, should be sent to:

**Richard A. Luben, Chair
Cell Biology/Histology Search Committee
Division of Biomedical Sciences
University of California, Riverside
Riverside, California 92521**

CHAIRMAN DEPARTMENT OF INTERNAL MEDICINE HENRY FORD HOSPITAL DETROIT, MICHIGAN (Affiliated with the University of Michigan)

Qualified candidates are invited to apply for the position as chairman of the Department of Internal Medicine at Henry Ford Hospital.

Applicants should submit curriculum vitae, bibliography, and the names of three references to:

**Fred W. Whitehouse, M.D., Chairman
Search Committee for
Department of Internal Medicine Chairman
c/o Janet L. Arntfield, Administration
Henry Ford Hospital, CFP-239
2799 West Grand Boulevard
Detroit, Michigan 48202**

Henry Ford Hospital is an Affirmative Action/Equal Opportunity Employer. Women and minorities are urged to apply. Applications should be received by 15 December 1984.

COMPUTER AND EDUCATIONAL TECHNOLOGY: The University of Pennsylvania invites applications for a senior administrative position, reporting to the dean of the School of Engineering and Applied Science, responsible for developing and overseeing all aspects of computing and educational technology (academic and administrative), serving as liaison between the School and the University's Vice Provost for Computing.

Minimum qualifications: Doctorate with at least 5 years of relevant experience in a university or corporate environment. Knowledge of long-range strategic computer planning and state-of-the-art computing technologies required. Knowledge of computer-communications technologies and educational technology desirable.

Recommendations and applications, accompanied by curriculum vitae and appropriate supporting material, should be sent to: **Dr. Joseph Bordogna, Dean, School of Engineering and Applied Science, University of Pennsylvania, Philadelphia, Pa. 19104.**

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

ACADEMIC POSITION: ENVIRONMENTAL CHEMIST

Post at Environmental Health Laboratory, rank of lecturer (nontenure) to senior lecturer or higher (tenure-track), depending on individual qualifications. Ph.D. and independent research experience required. Teaching areas: water and wastewater chemistry; industrial hygiene; toxicology; analytical methods. Knowledge of Hebrew desirable. Send résumé, list of publications, and names of three referees to: **Director, School of Public Health of the Hebrew University and Hadassah, P.O. Box 1172, Jerusalem, Israel, by 15 March 1985.**

NEW FACULTY POSITION

The Department of Psychology of the University of Minnesota invites applications for a position in **human behavior genetics**. The position will be either a tenure-track position at the assistant professor level, or a tenured position at the associate professor level.

We prefer applicants with experience in human psychopathology or quantitative genetics methods. Qualified candidates in all areas of specialization are, however, strongly encouraged to apply. Applicants with an interest in human psychopathology must have training in clinical psychology. All applicants must have completed their Ph.D. not longer than 7 years ago. Candidates are expected to carry on an active research program and be prepared to contribute to the research training of graduate students. Teaching responsibilities will include an advanced upper-division course in behavior genetics as well as graduate seminars in areas of interests.

Salary is competitive with institutions of equal stature. Rank will depend on the candidates' qualifications and experience.

Candidates should submit curriculum vitae, four letters of reference, copies of recent publications, and a statement of research interests and future research plans to:

Professor Auke Tellegen
Chair, Search Committee on
Behavior Genetics
Department of Psychology
N218 Elliott Hall
University of Minnesota
Minneapolis, Minnesota 55455

Applications must be received by 1 February 1985.

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

DEAN, SCHOOL OF MATHEMATICAL SCIENCES AND TECHNOLOGY, Eastern Washington University. Applications are invited for dean of the new school of Mathematical Sciences and Technology comprising the Departments of Mathematics, Computer Science, Physics, and Technology. Complementing existing graduate and undergraduate programs, these departments are actively developing new programs to serve the growing educational and technological needs of Spokane and the Pacific Northwest. The dean is the chief administrative officer of the School and reports to the Provost for Academic Affairs. This person will provide academic leadership; establish and strengthen contacts with business, industry, and government; represent the School within the University; and be responsible for developing and implementing policies and budgets for the School. Qualifications sought include an earned doctorate. Applicants should have a record of significant accomplishments in mathematics, computer science, physics, engineering, or technology as well as university teaching experience. Administrative experience demonstrating superior leadership is expected. Business, industrial, or governmental experience is desirable. Salary is competitive, with liberal fringe benefits. Eastern Washington University serves the Spokane metropolitan area and eastern Washington from a main campus in Cheney and a Spokane metropolitan area and eastern Washington from a main campus in Cheney and a Spokane center. The Spokane area offers many opportunities for outdoor recreation and cultural activities. A letter of application or nomination along with a current résumé, a separate statement of philosophy and professional objectives, and the names and telephone numbers of at least three references should be forwarded to: **Search Committee, Dean of the School of Mathematical Sciences and Technology, Office of the Provost for Academic Affairs, Eastern Washington University, Cheney, Wash. 99004**. Review of applications will begin in January 1985 and will continue until a qualified candidate is selected. *An Equal Opportunity Employer.*

**PHD
SCIENTISTS
& ENGINEERS!**
Unique opportunities offered for independent research in the fields of

- chemistry
- earth and atmospheric sciences
- engineering, mathematics and applied sciences
- life and medical sciences
- space and planetary sciences
- physics

The National Research Council in cooperation with selected Federal laboratories will offer approximately 250 awards in 1985 for independent scientific research. Recipients will be free to work on problems of their own choice as guest investigators at the participating Federal laboratories. Many of the 22 programs are open to experienced senior scientists as well as to recent PhD's. Stipends begin at \$26,350 for recent graduates and are appropriately higher for seniors. Relocation reimbursement and funds for professional travel on tenure are available, and a health insurance program is offered.

For further information and application materials please write to:

Association Programs (JH608/S-4)

National Research Council

2101 Constitution Avenue, N.W.
Washington, D.C. 20418

Deadlines for application are January 15, April 15 and August 15.

THE UNIVERSITY OF ADELAIDE

invites applications from both men and women for the following position:

RESEARCH ASSOCIATE

at the
**WAITE AGRICULTURAL RESEARCH
INSTITUTE**

(Reference: F4187) to commence early in 1985. The associationship may be held in any department of the Waite Agricultural Research Institute, namely the Departments of Agricultural Biochemistry, Agronomy, Animal Sciences, Entomology, Plant Pathology, Plant Physiology, Soil Science, and the Biometry Section.

Applicants should have gained their Ph.D. qualifications elsewhere than the University of Adelaide.

The associationship will be tenable for 2 years from the date of commencement and will not be renewable; no age limit governing eligibility has been specified but normally a 10-year limit since the award of the most recent higher degree qualification will apply.

TRAVEL PROVISION: The university will provide, for a person taking up appointment from outside South Australia, an economy class air fare to Adelaide by the shortest practicable route. There is no provision for transfer of personal effects.

FURTHER INFORMATION about the general conditions of all appointments may be obtained from the Senior Assistant Registrar (Personnel) at the university.

SALARY PER ANNUM: A\$21,411 × 5 to A\$24,528 (no provision for superannuation).

APPLICATIONS must be made on the prescribed form obtainable, together with a leaflet outlining conditions of appointment, from the Senior Assistant Registrar (Personnel) at the University. Applications must be lodged with: **The Senior Assistant Registrar (Personnel), University of Adelaide, GPO Box 498, Adelaide, South Australia, 5001, Telex UNIVAD AA 89141** not later than 11 January 1985.

The university reserves the right not to make an appointment or to appoint by invitation.

ANNOUNCEMENT FOR TWO POSITIONS IN THE SCHOOL OF FISHERIES, COLLEGE OF OCEAN AND FISHERY SCIENCES, UNIVERSITY OF WASHINGTON: (i) DIRECTOR OF THE SCHOOL OF FISHERIES; AND (ii) DIRECTOR OF THE FISHERIES RESEARCH INSTITUTE

Candidates are invited to apply for directorships of the School of Fisheries and of the Fisheries Research Institute (FRI) within the School of Fisheries. FRI is the primary contract research administrative unit of the School with a current budget of \$5 million.

This is a time of change for both the School as a whole and FRI. Both directors will therefore have the opportunity to provide strong leadership in developing significant new directions in emphasis. In both cases, candidates should be senior fisheries scientists with demonstrated track records of scientific achievement, scholarly publication and proven ability as administrators.

The primary requirement for the **directorship of the School** is to provide scientific leadership in research and teaching programs and in defining and implementing innovative new programs. The director should be an effective communicator as well as a leader, responsive to faculty and students and to external constituencies in industry, federal, state, and local government. Evidence of experience as a practitioner would also be a considerable asset.

The **director of FRI** is expected to provide leadership in addressing the changing research needs of fisheries science at regional and global levels. In addition to administering the Institute, the director will be expected to maintain close working relationships with other departments in the College and the University and with industry and management agencies at the state, federal, regional, and international levels.

The impending retirement of several senior members of the faculty in the School of Fisheries, as well as FRI, enhances the opportunity for both the director of the School and the director of FRI to strengthen and broaden programs of teaching and research. The appointments will be at the rank of professor and will involve some teaching as well in both positions.

Applications are due before 15 February 1985. It is expected that candidates chosen for the positions will be able to accept appointments for summer or early fall 1985 at the latest.

Applications for the position of director of the School of Fisheries should be addressed to:

Professor Edward L. Miles
Chairman, Search Committee for
the Directorship of the School of Fisheries
Institute for Marine Studies, HF-05
University of Washington
Seattle, Wash. 98195

Application for the position of director of FRI should be addressed to:

Professor Stanley Murphy
Chairman, Search Committee for the
Director of the Fisheries Research
Institute, School of Fisheries
Applied Physics Laboratory, HN-10
University of Washington
Seattle, Wash. 98195

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

POSITIONS OPEN

GEORGETOWN UNIVERSITY DEPARTMENT OF NEUROLOGY CHAIRMAN SEARCH

Search commenced 1 November 1984. Candidates should have the appropriate credentials and experience in research, administration, and teaching and be eligible for license to practice medicine in the District of Columbia. Send applications and nominations, including letter and brief résumé, to:

Dudley P. Jackson, M.D.
Chairman, Search Committee
2105 Hospital
Georgetown University Medical Center
3800 Reservoir Road, NW
Washington, D.C. 20007

Deadline for applications: 1 February 1985. *Georgetown University is an Affirmative Action/Equal Opportunity Employer.*

DEVELOPMENTAL/CELLULAR BIOLOGY

Tenure-track faculty position in biology starting fall 1985. The department is searching for an assistant or associate professor to interact with our dynamic, expanding research faculty. Applicants should have had at least 2 years of postdoctoral experience, with research experience and interests in biochemical/cellular/molecular aspects of development. The biological system employed is unrestricted and can be microbial, plant, or animal. The successful candidate is expected to maintain a vigorous research program, supervise graduate students, and teach in area of expertise. Applicants should submit curriculum vitae, a research summary, representative reprints, and three letters of reference to: **Dr. Henry R. Henney, Chair, Developmental Search Committee, Biology Department, University of Houston, Houston, Texas 77004.** Deadline: 15 January 1985. *An Equal Opportunity Employer.*

The Section of Reproductive Endocrinology at Northwestern University is seeking a qualified Ph.D. to **DIRECT THE LABORATORY PORTION** of an in vitro fertilization program. Research goals must be consistent with the program. Embryologist, andrologist, or experience with tissue culture techniques is preferred. Salary and academic rank are negotiable. Monies are available for a technician. Interested parties should contact: **Dr. Robert Rebar, Department OB/GYN, Northwestern University, 333 East Superior Street, Prentice, Suite 1190, Chicago, Ill. 60611.** *Northwestern University is an Equal Opportunity Employer.*

The University of Pennsylvania is seeking candidates who would qualify at the professorial or associate professorial level to fill the position of **DIRECTOR** of the Biology Division in the Department of Radiation Therapy. The individual's major interest could be in radiobiology, cell biology, immunology, molecular biology, or protein chemistry. Irrespective of special interests, however, as director of person should have an understanding of these several fields as they relate to cancer research. *The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.*

Interested individuals should correspond with:

Morton M. Kligerman, M.D.
Chairman, Search Committee
Department of Radiation Therapy
University of Pennsylvania
3400 Spruce Street
Philadelphia, Pa. 19104

EXPERIMENTAL CONDENSED MATTER PHYSICIST

The Department of Physics at Washington State University (WSU) invites applications for a tenure-track faculty position at either the assistant or associate professor level to start September 1985. The successful candidate will be expected to initiate an active experimental program in an area of condensed matter research compatible with current ongoing programs in the department. These areas include studies involving: radiation-enhanced reactive etching of surfaces, the physics of fracture, laser interactions with materials, shock-wave and high-pressure response of condensed materials, acoustics, and theoretical condensed matter physics. Candidates should have postdoctoral experience. Applications, including curriculum vitae and the names of three references, should be submitted before 28 February 1985 to: **Dr. J. Thomas Dickinson, Chairman, Search Committee, Department of Physics, Washington State University, Pullman, Wash. 99164-2814.** *WSU is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

BOTANIST

Assistant or associate professor, to teach botany and direct doctoral research in molecular aspects of radiation biology. Ph.D. degree required; postdoctoral experience preferred. Mail transcripts, three letters of recommendation, and curriculum vitae to:

Dr. F. Schwalm, Biology Department, Texas Woman's University, Denton, Texas 76204. Applications must be postmarked no later than 7 January 1985. *Texas Woman's University is an Equal Opportunity Employer.* The appointment will be effective for fall 1985.

CHAIRPERSON, DEPARTMENT OF ANATOMY. Loyola University of Chicago, Stritch School of Medicine, invites applications from distinguished anatomists for the position of chairperson of the Department of Anatomy. Applicants must have a record of accomplishment in research with a history of extramural funding, and experience in medical and graduate education and administration. Applications, including curriculum vitae, bibliography, and the names of three references, should be sent by 1 January 1985 to: **Dr. James P. Filkins, Chairman of Anatomy Search Committee, Department of Physiology, Loyola University, Stritch School of Medicine, 2160 South First Avenue, Maywood Illinois 60153.**

Loyola University of Chicago is an Equal Opportunity/Affirmative Action Employer.

CHAIR, MICROBIOLOGY EAST CAROLINA UNIVERSITY SCHOOL OF MEDICINE

Nominations and applications invited for chair, Department of Microbiology, East Carolina University School of Medicine. Accomplished scientist to lead the department with responsibilities in teaching and research. Excellent facilities, equipment, and budget. Currently there are ten faculty members. Candidates should hold M.D., M.D.-Ph.D., or Ph.D. degree; should have record of excellence in research, teaching, and administration. Applications accepted until position is filled. Screening to begin January 1985. Address inquiries to: **Dr. H. Thomas Norris, Chairman, Search Committee in Microbiology, Room 1F 79, Brody Building, East Carolina University School of Medicine, Greenville, North Carolina 27834-9990.** *An Equal Opportunity/Affirmative Action Employer.*

THE UNIVERSITY OF CALGARY POSITIONS IN DIABETES RESEARCH

The Julia McFarlane **DIABETES RESEARCH UNIT** at the University of Calgary seeks new faculty members with expertise in: (i) peptide chemistry, including peptide synthesis; (ii) glycoprotein biochemistry, as might be applied to studies of diabetic microangiopathy; and (iii) molecular biology of the gene. Candidates must be qualified to compete for funds from the Alberta Heritage Foundation for Medical Research or the Medical Research Council of Canada. Remuneration will be based on faculty rank salary scales at the University of Calgary. *In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.* Deadline for receipt of applications is 30 January 1985. Please send curriculum vitae and names of three referees to:

Dr. D. A. K. Roncari
Julia McFarlane Diabetes Research Unit
Faculty of Medicine
Health Sciences Centre, Room 2559
3330 Hospital Drive, NW
Calgary, Alberta, Canada T2N 4N1

ELECTRON MICROSCOPIST (M.S. or Ph.D.) at the level of research associate to assist in the supervision of an ultrastructure facility and collaborate on projects in plant/microbial ultrastructure. Knowledge of TEM/SEM, freeze-fracture, x-ray analysis, and DNA spreading techniques required. Primary responsibilities are to provide daily maintenance of the basic facility and equipment including a TEM and SEM, preparatory rooms and darkroom facilities, and also to provide basic instruction in the use of these facilities to staff members and graduate students. Secondary responsibilities will be to collaborate on research projects in plant/microbial sciences and molecular genetics. Demonstrated capability as evidenced by accomplishments in plant and/or microbial ultrastructure is essential. Please forward curriculum vitae with names of three references to: **Dr. Alfred E. Brown, Department of Botany, Plant Pathology, and Microbiology, Auburn University, Auburn, Alabama 36849,** by 21 December 1984. *An Equal Opportunity Employer.*

POSITIONS OPEN

The **BIOLOGY DEPARTMENT OF SPELMAN COLLEGE** invites applications for two full-time faculty members, beginning August 1985, to teach: (i) embryology, genetics, and general biology lectures and laboratories, and (ii) science of the environment and general biology lectures and laboratories. Salary and rank are commensurate with education and teaching experience. All requirements for the Ph.D. must be fulfilled. Send curriculum vitae, three current references, and transcripts to: **Dr. Barbara Carter, c/o Jacqueline Pollard, Office of Personnel Relations, Spelman College, 350 Spelman Lane, SW, Box 1238, Atlanta, Georgia 30314.** The review of applications began 19 November 1984. However, applications will be accepted until all positions have been filled. *Spelman College is an Equal Opportunity Employer and specifically encourages women and minorities to apply.*

EPIDEMIOLOGIST: Applications are invited for the position of assistant professor of epidemiology. Appointment to begin fall semester 1985. This is a tenure-track, state-funded position offering an opportunity to develop a creative research and teaching career. Applicants should hold the Ph.D., M.D., or equivalent degree with training applicable to epidemiology. The objective is to recruit an individual who will take responsibility for development of a course in an area of special interest, establishment and pursuit of an innovative research program in epidemiology, professional activities that serve the community, and shared teaching in introductory and advanced courses in epidemiology. Preference will be given to an individual with strengths in epidemiological methods.

Interested candidates should submit curriculum vitae, reprints, and a statement summarizing their interests in research and teaching. In addition, candidates should request that letters from three references be sent directly to: **Dr. S. Leonard Syme, Department of Biomedical and Environmental Health Sciences, School of Public Health, Warren Hall, University of California, Berkeley, Calif. 94720.** Deadline for application is 1 March 1985. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITIONS IN MOLECULAR GENETICS

Applications are invited for a senior and a junior tenure-track faculty position in the Department of Microbiology. Candidates should have made significant accomplishments in research and should be prepared to maintain an active, independent research program in molecular genetics. It is anticipated that at least one of the positions will be filled by a person working in the prokaryotic area. Teaching responsibilities are limited, and include participation in courses for graduate and professional students. The department provides a stimulating scientific environment, and administers several NIH Institutional Fellowship programs that will be available to provide stipend support for predoctoral and postdoctoral students.

Applicants should submit curriculum vitae, a statement of research plans, and the names of three people from whom letters of recommendation can be requested. Applications should be sent to: **Gillian Air, Chairman, Molecular Genetics Search Committee, Department of Microbiology, University of Alabama in Birmingham, Birmingham, Alabama 35294.**

An Equal Opportunity/Affirmative Action Employer

Ann Arbor Veterans Administration (VA) Medical Center has a full-time position available immediately for a **GERIATRIC PSYCHIATRIST.** Looking for energetic clinician researcher to develop a geropsychiatry program in this fully affiliated VA hospital with the University of Michigan. Applicants must have proven biomedical research ability and be eligible for Michigan licensure. A letter of interest and curriculum vitae should be sent to: **Spencer Falcon, M.D., Psychiatry Service (116A), VA Medical Center, 2215 Fuller Road, Ann Arbor, Michigan 48105.** *Equal Opportunity Employer.*

RESEARCH ASSOCIATE. B.S. or M.S. with 3 years of experience in computer programming and biology background to assist in the design and implementation of a microcomputer-based soybean pest management model. This position allows progress towards an advanced degree. Incumbent will design I/O forms, graphics, prepare flow charts, and user guides. Send curriculum vitae and names of three references to: **P. A. Backman, Department of Botany and Plant Pathology, Auburn University, Auburn, Ala. 36849,** by 21 December 1984. *Equal Opportunity/Affirmative Action Employer.*



THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Has an opening for:

Agricultural Research Administration Adviser.

FAO, under the provision of a World Bank loan to the Pakistan Agricultural Research Council (PARC), is assisting with the implementation of institutional reforms needed to provide Pakistan with quality agricultural research. One input is an Adviser to PARC Chairman who will be required to review and develop organizational set up of Federal and Provincial Research Institutions; linkage between the Provincial Research Institutions and those under the Federal Government; linkage between research and extension; mechanism for review and evaluation of research institutions, national programmes and individual scientists; career structure of scientists as technicians; management of research institutions.

Qualifications: Ph.D. in Agricultural Sciences with minimum ten years of experience with majority in research management and administration.

Language: Full working knowledge of English.

Duty Station: Islamabad, Pakistan.

Duration: Twenty-four months.

Emoluments: Salaries and benefits are liberal, commensurate with the responsibilities of the post and in line with the depth and breadth of experience.

Please send detailed curriculum vitae (FAO Personal History Form preferred) quoting AGO/AGR/84/17(PA) to:

Mr. Manuel F. Luján Ch.
Manpower Placement Unit, AGO
FAO
Via delle Terme di Caracalla
00100 Rome
Italy.

Candidates from North America contact FAO Liaison Office, 1001 22nd Street, N.W., Suite 300, Washington, D.C. 10437, U.S.A. Telephone No: 202-653-2398.

LEADER MASS SPECTROMETRY GROUP LABORATORY OF MOLECULAR BIOPHYSICS NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES NATIONAL INSTITUTES OF HEALTH

The Laboratory of Molecular Biophysics, National Institute of Environmental Health Sciences has an opening for Leader of the Mass Spectrometry Group. The Group has broad research interests in the application of mass spectrometry and related techniques to environmental health studies, in addition to providing a service to other scientists in the Institute. Current research areas include: the analysis of peptides and oligonucleotides by Tandem Mass Spectrometry; profiling and quantification of endogenous and exogenous compounds using highly selective detection techniques; application of secondary ion mass spectrometry to surface analysis; development and application of combined liquid chromatography-mass spectrometry (LC-MS) to the analysis of pesticides, drug metabolites and other samples of biological origin; and application of Tandem Mass Spectrometry in gas phase ion chemistry. Instruments available include VG ZAB4F Tadem Double-Focusing Mass Spectrometer; VG ZAB2F and 7070E Sector Instruments; Finnigan 3200 and VG 12-250 Quadrupoles; Nuclide Triple Quadrupole.

Duties of the Group Leader include the supervision of independent and collaborative research programs and of the analytical service provided to Institute scientists. Minimum educational requirements are a four year course of study in an accredited college or university leading to a Bachelor's degree with major study in chemistry, physics, physical chemistry or a related discipline and a doctorate in the specialty area. Applicants must have a demonstrable record of research achievement in the application of mass spectrometry to biochemical, pharmacological, toxicological or environmental problems. Some experience in research program planning and implementation is desirable.

This is a Civil Service Career- Conditional Appointment under the Merit Pay System at the GS-14/15 level with a salary range \$42,928 to \$65,642, depending on the qualifications of the applicant selected. Benefits include Civil Service Retirement/Social Security, Life and Health Insurance. This is a supervisory position and may require the incumbent to serve a one year probationary period. U.S. citizenship is required. Submit application package for Physical Sciences Positions (available at all Federal Job Information Centers and Federal Personnel Offices), curriculum vitae, and names of three references by December 31, 1984 to:

Mr. Bruce Wiggins, Code: HN-V2K(1)
National Institutes of Environmental Health Sciences
P.O. Box 12233
Research Triangle Park, N.C. 27709
(919) 541-3317

NIH is an Equal Opportunity Employer

KUWAIT INSTITUTE FOR SCIENTIFIC RESEARCH

Kuwait Institute for Scientific Research (KISR) is a nonprofit organization with a staff of more than one thousand employees engaged in applied research in the fields of Environmental and Earth Sciences, Food Resources, Engineering, Petroleum, Petrochemicals and Materials and Techno-Economics.

KISR HAS VACANCIES FOR

FOOD TECHNOLOGIST

Qualifications

Applicants should have a Ph.D. in Food Technology with minimum 5 years of R and D in food processing.

Major Duties

- Developing research proposals on quality control system for foods in Kuwait.
- Developing research projects related to food processing and food storage.

KISR offers attractive (tax free) salaries commensurate with qualifications and experience and generous benefits, which include gratuity, free furnished air-conditioned accommodation, school tuition fees for children, contribution to a savings plan, six weeks annual paid vacation, air tickets, free medical care and life insurance. Minimum employment contract is for two years.

Interested applicants are requested to send their curriculum vitae with supporting information not later than one month of this publication, to: **Mr. Habeeb Al-Sahhaf, Personnel Manager, Kuwait Institute for Scientific Research, P.O. Box 24885 Safat, Kuwait**

MARINE ECOLOGIST

Qualifications

Applicants should have a Ph.D. in Chemistry with minimum 5 years of experience in marine pollution research, emphasis on fate of oil pollution in the marine environment.

Major Duties

- Initiating and following up research projects.
- Addressing immediate and long term needs of government and industrial agencies concerned with environmental protection.
- Conducting and/or supervising research projects in marine pollution, including field activities and laboratory analysis.

POSITIONS OPEN

The University of Michigan Medical School, Department of Radiology, has on occasion open **FACULTY POSITIONS** within the department and its affiliated hospitals. Physicians filling these positions will take part in the programs of patient care, teaching, and research in the Department of Radiology. They will supervise the activities of house officers and aid in teaching of house officers and medical students. Qualified applicants must be American Board of Radiology-certified or Board-eligible. Previous training or work experience in an academic institution as well as demonstration of previous academic research and teaching experience are desirable. Academic rank will depend on qualifications and experience. Interested applicants should contact: **William Martel, M.D., Chairman, Department of Radiology, The University of Michigan Medical School, Ann Arbor, Michigan 48109.** A nondiscriminatory, Affirmative Action Employer.

FACULTY POSITIONS IN PHARMACOLOGY AND BIOPHARMACEUTICS

The Department of Basic Pharmaceutical Sciences at the University of South Carolina, College of Pharmacy, invites applications for two tenure-track positions at the assistant professor level. Applicants for the **pharmacology** position should have a Ph.D. in pharmacology and expertise appropriate for conducting investigations either in the biochemical pharmacology of anticancer drugs or in CNS pharmacology. For the **biopharmaceutics** position, preference will be given to applicants with a Ph.D. in pharmaceutical sciences and research experience in biopharmaceutics-pharmacokinetics. The successful candidate for each position will be expected to develop a vigorous research program which merits extramural support, and teach graduate and undergraduate students. Applications for these positions may be made by submitting curriculum vitae, description of current and proposed research, and names of three references no later than 31 January 1985 to:

Dr. J. Roberts, Chairman
Department of Basic Pharmaceutical Sciences
College of Pharmacy
University of South Carolina
Columbia, S.C. 29208
Telephone: 803-777-7824

FACULTY POSITIONS IN BIOLOGICAL SCIENCES

Nominations and applications are invited for four to six assistant and associate professor tenure-track positions available 1 September 1985. Applicants should have postdoctoral training and excellent research potential in any of these areas: cell, molecular and developmental biology, genetics, immunology, microbiology, neurobiology, or physiology. Applicants who use molecular and cellular approaches to experimental biology will be particularly welcome. One position will be filled by a person who will direct a new electron microscope facility housed in the new Science Research Building. Successful candidates will be expected to develop strong research programs capable of attracting extramural support and participate in teaching undergraduate and graduate courses and direct M.S. and Ph.D. students. All candidates should send detailed résumés, reprints, brief description of previous and future research interests, and the names, addresses, and telephone numbers of three to five referees by 1 February 1985 to: **Chairman, Search Committee, Department of Biological Sciences, North Texas State University, Denton, Texas 76203.**

An Affirmative Action/Equal Opportunity Employer

UNIVERSITY OF PENNSYLVANIA FACULTY POSITION IMMUNOLOGIST

Applications are invited for a junior faculty appointment in the Department of Dermatology. The candidate must have a Ph.D. in an area of immunology and have skills and interest in the following areas: (i) immunologic methods for study of cell growth and differentiation in normal and neoplastic cells; (ii) lymphocyte interactions and homing patterns in skin; (iii) lymphocyte products and mediators, and (iv) generation of hybridomas and monoclonal antibodies. Salary negotiable. Send detailed résumé and list of three references to: **Brian V. Jegasothy, M.D., Professor and Vice-Chairman, Department of Dermatology, University of Pennsylvania, 329 Medical Education Building, 36th and Hamilton Walk, Philadelphia, Pa. 19104.**

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

POSITIONS OPEN

FACULTY POSITION/MARINE MICROBIOLOGY. Applications are invited for a tenure-track faculty position in the general area of marine microbiology. The exact field of research interest is open, but it must involve a strong and continued commitment to the study of marine microorganisms in the areas of physiology, ecology, biochemistry, or molecular biology. Applicants must hold a Ph.D. degree and have demonstrated excellence and independence in research. The candidate will be expected to develop a vigorous grant-supported research program, teach in her/his specialty, and supervise graduate students in the doctoral program. Salary commensurate with qualifications and experience. Assistant level candidate will be expected to show evidence of their potential by means of a publication record appropriate for their experience and in their letters of recommendation. Associate or professorial level candidates must demonstrate a strong research record in their specialty. Deadline for receipt of applications is 1 February 1985. Send résumé, reprints of representative papers, statement of research interests, and names of three references to: **Chairman, Graduate Department, A-008, Scripps Institution of Oceanography, University of California, San Diego, La Jolla, Calif. 92093.** An Equal Opportunity/Affirmative Action Employer.

The Department of Pathology, Medical College of Georgia, Augusta, Georgia, invites applications for a **FACULTY POSITION** at the rank of **assistant or associate professor.** The candidate should have a Ph.D. degree with demonstrated leadership in research and teaching. The position will have the responsibility of directing a hospital laboratory performing service in immunochemistry and immunomorphology. Experience in flow cytometry is desirable. Applicants should submit curriculum vitae and references to: **Dr. R. N. Rao, Chief, Section of Anatomic Pathology, Medical College of Georgia, Augusta, Georgia 30912.** Equal Opportunity Employer/Affirmative Action Program. J 2257.

University of Pennsylvania School of Medicine Department of Pathology and Laboratory Medicine Division of Laboratory Medicine

Applicants are invited from individuals seeking **FACULTY POSITIONS** in the chemistry, microbiology, and blood bank sections. Applicants must have a strong commitment to excellence in research, patient care, and education. Medical graduates trained in laboratory medicine will be considered most seriously, but other M.D.'s or Ph.D.'s with relevant clinical training or experience are also sought. Academic appointment and salary will be commensurate with previous experience and service responsibility. Send curriculum vitae, list of at least three references, together with a statement about research goals and areas of service interest, to: **Donald S. Young, M.D., Ph.D., Director, William Pepper Laboratory, Hospital of the University of Pennsylvania, 3400 Spruce Street, Philadelphia, Pennsylvania 19104.** The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.

National Institutes of Health National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) Immunochemist

An **IMMUNOCHEMIST POSTDOCTORAL RESEARCH** position is available to study the membrane and cytoplasmic antigens of glioma-derived tissue culture lines. The presence of the antigenic proteins, their induction by differentiation agents, and their characterization are to be studied. A background in tissue culture and cell biology, as well as gel electrophoresis, is desirable.

Collaboration with other immunologists, molecular biologists, and tumor biochemists is essential. Immunochemistry laboratory facilities are available, as well as microcinematography, fluorescent microscopy, quantitative morphometrics, image analysis and processing, and SEM-EDX (microanalysis) to study the antigenic characteristics of brain tumors.

This position will be in the Surgical Neurology Branch, NINCDS, National Institutes of Health, Public Health Service. Salary range for this staff fellowship position is \$27,000 to \$35,467 per year, commensurate with experience. Send curriculum vitae and three references to: **Janet E. Follin, Personnel Department, NINCDS, National Institutes of Health, 9000 Rockville Pike, Building 31, Room 8A23, Bethesda, Md. 20205.** NIH is an Equal Opportunity Employer. (For more information, telephone: Ms. Follin on 301-496-6334.)

POSITIONS OPEN

FACULTY POSITION AT THE OHIO STATE UNIVERSITY

The Chemistry Department has an opening for a tenure-track position in **BIOCHEMISTRY** at the assistant professor level. Outstanding candidates requiring a higher level appointment may also be considered. Demonstrated excellence and a strong commitment to innovative research are essential, with nucleic acid biochemistry or protein chemistry related to molecular biology as preferred areas of research, but no absolute restriction to these areas. Teaching at the graduate and undergraduate levels is necessary. Please send résumé, statement of research and teaching interests, and three letters of recommendation to: **Dr. Heinz G. Floss, Biochemistry Search Committee, Department of Chemistry, The Ohio State University, Columbus, Ohio 43210.** An Equal Opportunity/Affirmative Action Employer. Closing date for applications is 21 December 1984.

GENETIC/REPRODUCTIVE TOXICOLOGIST

The Chemical Industry Institute of Toxicology (CIIT), an innovative leader in toxicology research, has a position open in the area of genetic and reproductive toxicology. The successful applicant will direct an original research program to study the molecular mechanisms by which chemicals may adversely affect testicular function and develop more relevant assays to assess the ability of chemicals to produce germ cell mutations in man. A Ph.D. degree in reproductive physiology, genetic toxicology, or a related area is required, and postdoctoral experience is preferred. Please apply and send complete résumé to:

Employment Office
CIIT
P.O. Box 12137
Research Triangle Park, N.C. 27709
Telephone: 919-541-2070
An Equal Opportunity/Affirmative Action Employer

DIVISION HEAD FOR HEMATOLOGY/ONCOLOGY

The Department of Pediatrics, University of Washington/Children's Orthopedic Hospital, Seattle, Washington, is recruiting for a director of its Hematology Division. The division has an active clinical, research, and teaching program with the University of Washington. The Children's Orthopedic Hospital, and the Fred Hutchinson Research Center. Candidates must have strong academic credentials.

Interested candidates should send curriculum vitae to: **C. Ronald Scott, M.D., Hematology Search Committee, Department of Pediatrics, RD-20, University of Washington, Seattle, Wash. 98195.**

The University of Washington/Children's Orthopedic Hospital is an Affirmative Action/Equal Opportunity Employer.

IVF TECHNICIAN

An in vitro fertilization technician is needed for a newly developed IVF Laboratory at Akron City Hospital, Akron, Ohio. Applicants must possess a B.S. degree in reproductive physiology or cell biology; M.S. preferred, with training in tissue culture techniques and/or 2 years of experience working in an established IVF Laboratory. The salary range for the position is \$20,000 to \$25,000 per annum. Excellent benefits, including educational reimbursement and on-site child care facility. Please submit complete curriculum vitae and the names and addresses of three references to:

Steven P. Schmidt, Ph.D.
Akron City Hospital
525 East Market Street
Akron, Ohio 44309
An Equal Opportunity Employer

NEUROBIOLOGIST. The Department of Physiology and Biophysics, University of Washington, invites applications for a tenure-track assistant professorship. We are seeking an individual with expertise in the autonomic nervous system and research interests in neural development and/or synaptic mechanisms. In addition to establishing an independent research program, the individual will be expected to teach and participate in our graduate student and postdoctoral training programs. Applicants should submit curriculum vitae, a statement of research interests, and the names of three references before 31 July 1985 to: **Marc D. Binder, Chair of Search Committee, Department of Physiology and Biophysics, SJ-40, University of Washington School of Medicine, Seattle, Wash. 98195.** Equal Opportunity/Affirmative Action Employer.

CELLULAR AND MOLECULAR BIOLOGY OF NEOPLASIA

The Department of Medicine, Oregon Health Sciences University has initiated a comprehensive development program for the Division of Hematology & Medical Oncology. The department expects to fill two full-time assistant or associate professorships during the current academic year with individuals who have completed clinical training in medical oncology or oncology/hematology and whose investigative interests relate directly to cellular and/or molecular biology of the neoplastic process. Although the minimum requirement is the MD degree, the positions are otherwise broadly defined and will be filled on the basis of excellence.

Please submit curriculum vitae, copies of selected publications, a brief statement (one page) of research interests and the names of three references to:

Grover C. Bagby, Jr., M.D.
Head, Division of Hematology
& Medical Oncology
Oregon Health Sciences University
3181 SW Sam Jackson Park Road
Portland, OR 97201

Review of applications will begin December 10, 1984.

Oregon Health Sciences University is an affirmative action, equal opportunity employer.

NATIONAL RESEARCH COUNCIL

COOPERATIVE RESEARCH ASSOCIATESHIP PROGRAM

OPPORTUNITIES IN BIOPHYSICS AT THE NAVAL RESEARCH LABORATORY

Research opportunities exist in the newly formed Bio/molecular Engineering Branch. The branch specifically encourages interdisciplinary basic research in biophysics, biochemistry, surface chemistry, and bioengineering. A wide variety of techniques, particularly optical spectroscopies, are employed. Currently under study are the synthesis and characterization of novel lipids, polymerized lipid microstructures, immunologically-based sensors, liposome encapsulation of proteins with primary emphasis on nonbiomedical applications (energy transfer studies, protective films and paints), reconstitution of proteins in polymerizable lipids, effects of pressure upon membranes, Langmuir/Bodgett-film modified electrodes, the design and fabrication of hybrid devices, and molecular graphics. Further research opportunity details may be obtained by contacting Dr. J. Schnur, Naval Research Laboratory, Code 6190, Washington, D.C. 20375-5000, (202) 767-4304.

The program is open to U.S. citizens who have had their Ph.D. for no more than five years. Current stipend is \$26,350 per annum. Associates wishing to pursue academic careers at the completion of their appointment are eligible to apply to the Office of Naval Research (ONR) for post-tenure funding.

The National Research Council will receive applications, conduct panel reviews, and make awards in 1985 for guest research under this program. Application deadlines are January 15 and April 15, 1985.

For information
on application
procedures write:

Associateship Programs

National Research Council: JH 608-NC-5

2101 Constitution Avenue, N.W.
Washington, D.C. 20418
AN EQUAL OPPORTUNITY EMPLOYER

U.S. Citizenship Required

DEAN OF SCIENCE CLARKSON UNIVERSITY

Clarkson University invites applications and nominations for the position of Dean of Science. Clarkson is a privately endowed university located in northern New York State with programs in engineering, science and management. Clarkson University is the home of the world famous Institute of Colloid and Surface Science (established in 1965). The School of Science is comprised of the Departments of Biology, Chemistry, Mathematics and Computer Science, and Physics. There are about 560 undergraduate students enrolled in science programs and there are approximately 75 graduate students enrolled in M.S. and Ph.D. programs. There are approximately 55 tenure track faculty positions in the School of Science.

Candidates should have an outstanding record of teaching and research. The Dean will be expected to provide leadership in bringing both the undergraduate and graduate programs to increasingly higher levels of excellence. In this regard a major effort will be devoted to the continued expansion of research and to the recruitment of distinguished faculty.

Please send nominations and applications to

Dr. Janos H. Fendler
Dean of Science Search Committee
Clarkson University
Potsdam, New York 13676

to arrive not later than March 1, 1985. Applications should include curriculum vitae and the names and addresses of several references. EO/AE.

Physicist Nuclear Chemistry

Lawrence Livermore National Laboratory is an applied science R&D facility of approximately 8,000 operated by the University of California for the U.S. Department of Energy.

LLNL is presently seeking a Physicist to design and construct complex experimental apparatus for a precise measurement of the tritium decay endpoint energy. The successful candidate will then use this equipment to deduce an upper limit for the neutrino mass of 5 eV.

To qualify candidates will have a background in both high-energy and low-energy nuclear physics. In addition you must have a proven record of designing and constructing complex experimental apparatus and have demonstrated the ability to work with and provide intellectual leadership for an experimental team of scientists and engineers. A PhD in experimental low-energy or high-energy nuclear physics or equivalent is required.

LLNL offers a competitive salary (\$40-\$60K/year) and a liberal benefits program. To apply, please send your resume, in confidence, to: **Art Wong, Professional Employment, LAWRENCE LIVERMORE NATIONAL LABORATORY, P.O. Box 5510, Dept. KSC-C74, Livermore, CA 94550.**

An equal opportunity employer m/f/h/v.

University of California
**Lawrence Livermore
National Laboratory**

POSITIONS OPEN

PENAEID SHRIMP SPECIALIST. Ph.D. in crustacean reproductive physiology or nutrition with particular reference to penaeid species. Demonstrated writing and analytical skills required. Desirable qualifications include knowledge of commercial shrimp production. Please include desired salary range and statement of personal research interests. Send résumé to: Nancy Roberts, Oceanic Institute, Waimanalo, Hawaii 96795.

Ph.D. OR POSTDOCTORAL RADIOBIOLOGIST/RADIOPHARMACOLOGIST, entry level, with training and experience in the development and application of state-of-the-art techniques in the use of radioisotopes in pharmaceutical research. U.S. citizens or permanent resident visa holders only. Send résumé and publication list to: Dr. Ted J. Logan, Manager, Ph.D. Recruiting, Radiobiologist Position, Procter & Gamble Company, P.O. Box 39175, Cincinnati, Ohio 45247. An Equal Opportunity Employer.

POSITIONS OPEN

UNIVERSITY OF SOUTHERN CALIFORNIA. The Department of Psychology is seeking for fall 1985: (i) a **PHYSIOLOGICAL PSYCHOLOGIST** (level open) with a record of significant research and (ii) a **FULL PROFESSOR** with an active research program in aging. Send curriculum vitae or letter of inquiry to: Chair, Search Committee, Department of Psychology, University of Southern California, Los Angeles, Calif. 90089-1061.

POSTDOCTORAL POSITION available immediately for recent Ph.D. to study regulation of gene expression and growth control in myocardium. Applicants should have experience in recombinant DNA, including DNA sequencing experience in gene transfer would be helpful; 2-year position. Send curriculum vitae and names of three references to: Dr. M. Benjamin Perryman, Department of Medicine, Section of Cardiology, Baylor College of Medicine/The Methodist Hospital, 6535 Fannin/Mail Station F-905, Houston, Texas 77030.

POSITIONS OPEN

IMMUNOLOGIST PATHOGENIC MICROBIOLOGIST

Assistant professors (two)—The Department of Biological Sciences, Rutgers University, invites applications for two tenure-track positions in the areas of immunology and pathogenic microbiology. For the latter position we will give preference to individuals whose research emphasizes the interaction of pathogens with the host immune system. The successful candidates will be expected to develop active research programs and to participate in graduate and undergraduate teaching in their area of specialty. Postdoctoral experience is required. Start-up funds will be available. Submit curriculum vitae, a brief statement of research interests, and three letters of recommendation to: Dr. Howard C. Passmore, Co-chairperson, I/P Search Committee, Department of Biological Sciences, Rutgers University, P.O. Box 1059, Piscataway, New Jersey 08854. Rutgers is an Affirmative Action/Equal Opportunity Employer.

MARINE BIOCHEMIST—University of Delaware, full professor. The College of Marine Studies seeks a scholar with a distinguished research and teaching record, a history of extramural funding, and the desire to contribute to a strong intellectual exchange among faculty and graduate students. The position is at the Marine Studies Complex in Lewes, Delaware. Excellent opportunities exist for interaction with a number of ongoing programs in biofouling, salt-tolerant whole plant and tissue culture research, estuarine and shelf oceanography, bivalve nutrition, chemical ecology, and marine natural products chemistry. In addition, other possibilities are developing as the result of the expansion of the Lewes-based faculty. We prefer a colleague who will develop programs to study intermediary metabolic processes of organisms growing under saline conditions. Send curriculum vitae before 31 January 1985 to: J. L. Gallagher, College of Marine Studies, UNIVERSITY OF DELAWARE, 700 Pilottown Road, Lewes, Del. 19958. The University of Delaware is an Equal Opportunity/Affirmative Action Employer.

NMR AND BIOCHEMISTRY POSTDOCTORATES. A number of postdoctoral positions for NMR spectroscopists and/or biochemists are available for projects exploring the application of NMR spectroscopy to the treatment and management of cancer. Three projects involve in vivo NMR spectroscopy. These include monitoring the effects of chemotherapeutic agents and x-radiation on tumors and detecting anthracycline-induced cardiotoxicity. A fourth project is directed at elucidating the molecular mechanism of the interaction of the anticancer agent bleomycin with metals and nucleic acids. Instruments include a 400-MHz wide bore spectrometer, a 4.7-T, 30-cm bore imaging spectrometer system, and a 2-T whole body imaging spectrometer system. Write and send letters of recommendation to: J. D. Glickson, Department of Radiology, The Johns Hopkins School of Medicine, Traylor 311, Baltimore, Md. 21205. Equal Opportunity/Affirmative Action Employer.

PATHOPHYSIOLOGY OF SICKLE CELL ANEMIA

Applicant should have experience in protein chemistry, measurement enzyme reactions, mitochondrial respiration; Ph.D. in biochemistry or physiology, or M.S. with 3-plus years of experience. Useful: ability to measure blood p50; knowledge of clinical hematology; ability to interact with patients, house-officers. Starting salary: \$18,000 to \$20,000 per year plus benefits. Send résumé to: Samuel Charache, M.D., Johns Hopkins Hospital, Baltimore, Md. 21205. Equal Opportunity Employer.

PLANT BIOLOGIST

The Department of Biology at Davidson College invites applications for a tenure-track position in biochemistry and/or molecular biology of plants, effective 1 August 1985. Ph.D. is required and postdoctoral experience is desirable. The successful applicant will have a strong commitment to undergraduate teaching and research program that encourages undergraduate participation. Teaching duties will be one laboratory course per term selected from biochemistry, an advanced plant biology course and introductory biology, as well as supervision of student research projects. Applications should be received by 15 February 1985. Send curriculum vitae, reprints/preprints, and names of four referees to: Dr. John H. Williamson, Department of Biology, Davidson College, Davidson, North Carolina 28036. Telephone: 704-892-2000. Equal Opportunity Employer.

PARASITOLOGY RESEARCH BIOCHEMISTRY/BIOCHEMICAL PHARMACOLOGY/ IMMUNOPARASITOLOGY

The Upjohn Company, a leader in the worldwide research, production and marketing of pharmaceuticals, has openings in its Parasitology Research Program.

Ph.D. Biochemist/Biochemical Pharmacologist (Opening #16828). The principal duties of this Scientist will be to assist in the identification, understanding, and development of novel veterinary parasiticides and/or biologicals. This scientist, as a member of a multidisciplinary research team, will lead in establishing a research program in parasite biochemistry aimed at understanding and manipulating biomembranes and metabolism, primarily of helminths, so as to further advance unit therapeutic objectives, discover novel methods of disease treatment or prevention, initiate and coordinate mode-of-action studies on a variety of known and experimental chemotherapeutic agents, devise novel *in vitro* and/or *in vivo* assay systems appropriate for the support of synthetic chemistry programs, and conduct original research to expand the knowledge of parasites and parasitic processes.

The position requires a Ph.D. with training in biochemistry or biochemical pharmacology and a minimum of two years relevant postdoctoral experience. Experience with parasites will be an advantage, but is not required. The position involves research into questions dealing with drug distribution, penetration, toxicity, and reactive/binding site as well as the drug's effect(s) on membrane function, energy metabolism, and DNA synthesis. The candidate should be able to integrate biochemical, physiological, morphological, and pharmacological data, must have demonstrated ability to conduct original and independent research, and have good communication skills.

BS/MS/Immunoparasitology (Opening #16514). This position requires an individual trained in parasitology with a strong emphasis in immunology. The position involves responsibilities in immunological techniques, histological and EM techniques, microscopic examination (qualitatively and quantitatively) of parasites and host tissues, photomicroscopy, routine maintenance and manipulation of rodent and ruminant parasite model systems, identification of parasites by stage and species, interpretation and recording of research findings, preparation of manuscripts for publication, routine and selected library and literature searches, identification of research topics, and computer techniques. In addition, the candidate must be willing and able to work as part of a team, cooperating and assisting on any or all parasitology projects. Qualified candidates will have a MS or BS and 3 years of directly related laboratory experience.

Upjohn offers a stimulating research environment, career potential, competitive salary and an outstanding benefits package. Kalamazoo is a medium-sized southwest Michigan community with immediate access to a mix of excellent cultural, educational, and recreational pursuits.

Ph.D.s - For confidential consideration, please send a current c.v., a list of publications, names and addresses of references, and graduate transcripts to: Ph.D. Recruitment Coordinator Department, The Upjohn Company, 7000 Portage Road, Kalamazoo, Michigan 49001. Please refer to Opening #16828 in your correspondence.

BS/MS - For confidential consideration, please call inside Michigan collect (616) 323-6767 or from outside Michigan, toll free 1-800-253-8600, ext. 3-6767, to request an employment application be sent to you immediately. Please refer to Opening #16514 when calling.

Upjohn

A century of caring

An Equal Opportunity Employer M/F/H/V

EPIDEMIOLOGIST

The **Los Alamos National Laboratory** has an opening for a Staff Member, Epidemiologist in its Health, Safety and Environment Division.

Responsibilities:

- Direct large epidemiological studies of radiation effects among nuclear workers and other populations.
- Develop new research initiatives.
- Provide technical supervision of interviewers, tracers, coders, programmers, and junior professional staff.
- Act as technical liaison with government agencies, health care institutions, universities, and study contractors.

Experience Requirements:

- Demonstrated professional level experience conducting research in the areas of occupational, cancer, or radiation epidemiology.
- Demonstrated ability to deal with government, research, health and industrial organizations.
- Strong publication record, preferably in occupational and radiation epidemiology.

- Strong quantitative skills.

Educational Requirements:

- Doctorate in epidemiology or equivalent training and experience.
- U.S. Citizenship required.

Los Alamos National Laboratory, one of the nation's foremost scientific research organizations is operated by the University of California for the Department of Energy. We are located in a beautiful mountain setting in northern New Mexico and offer competitive salaries and comprehensive employee benefits that include 24 days of vacation per year.

Send resume in confidence to:

Chuck Pacheco
Personnel Administration
Division, DIV 85-AA
Los Alamos National
Laboratory, #4182
Los Alamos, New Mexico 87545
An Affirmative Action/Equal
Opportunity Employer



NRL NAVAL RESEARCH LABORATORY SUPERINTENDENT, ACOUSTICS DIVISION

This is a Senior Executive Service Position, ES-1 to ES-6, \$59,223 to \$69,900 per annum.

The Superintendent provides executive direction and technical leadership for extensive Naval R&D programs in undersea acoustics. Specific areas of interest include signal processing for active and pas-

sive detection, tracking of underwater targets, target strength research, and system development. The Division consists of approximately 140 employees, the majority of whom are scientists and engineers.

The Superintendent plans and directs long range research programs, formulates operating policies for the Division and represents the Laboratory in contacts with other government organizations and industrial, university, and foreign laboratories.

To Apply: Interested applicants should contact Ms. Melanie Powell or Ms. Leah Reusché at (202) 767-3030 (call collect) to obtain application forms and information on procedures for applying. All applications must be postmarked by 31 January 1985.

NRL NAVAL RESEARCH LABORATORY Civilian Personnel Division

Code 51-093-11.1:LR (S)
4555 Overlook Avenue, S.W.
Washington, D.C. 20375-5000

AN EQUAL OPPORTUNITY EMPLOYER
U.S. CITIZENSHIP REQUIRED

Professional Training Courses

OAK RIDGE ASSOCIATED UNIVERSITIES announces its radiation protection and radionuclide application courses for 1985.

Applied Health Physics—April 8-May 10 and September 9-October 11, 1985, to provide training in the principles of radiation protection.

Safe Use of Radionuclides—January 28-February 1 and June 17-21, 1985, to introduce the health concerns and safety procedures required for users of radionuclides.

Internal Dosimetry for Fixed Nuclear Facilities—March 25-29, 1985, to teach the newer techniques for calculating the radiation dose from internally deposited radionuclides.

For more information, telephone 8 a.m. to 5 p.m. Eastern:

800-362-5555 in continental U.S., except Tennessee
615-576-3434 or FTS 626-3434

or write: Registrar, Professional Training Programs
Oak Ridge Associated Universities
P.O. Box 117
Oak Ridge, TN 37831-0117

POSITIONS OPEN

GENETICIST—A tenure-track position is anticipated for September 1985 in the Department of Zoology. Appointment at or near the entry level. Ph.D. required. Teaching responsibilities include beginning genetics and advanced genetics, embryology, and introductory zoology. Research involving students as research assistants will be encouraged. Supervision of independent study and advisement of undergraduate students is expected.

Send official undergraduate and graduate transcripts, résumé, and three letters of reference by 15 January 1985 to: **Dr. Sigurd Nelson, Jr., Chairperson, Department of Zoology, State University College of New York at Oswego, Oswego, New York 13126.** Subject to budget confirmation. *Women and minorities are encouraged to apply. An Equal Opportunity/Affirmative Action Employer.*

MOLECULAR/BIOCHEMICAL PARASITOLOGIST—Division of Biomedical Sciences, Meharry Medical College, seeks tenure-track faculty member with M.D. or Ph.D. degree and relevant postdoctoral experience to maintain an active research program in malaria or schistosomiasis and join an active interdisciplinary program in tropical diseases. Rank and salary commensurate with qualifications. Send curriculum vitae, a summary of research interests, and three letters of recommendation by 31 January 1985 to: **Dr. George C. Hill, Director, Division of Biomedical Sciences, Meharry Medical College, 1005 D.B. Todd, Jr. Boulevard, Nashville, Tenn. 37208; telephone: 615-327-6193.** *An Equal Opportunity/Affirmative Action Employer.*

MOLECULAR AND CELL BIOLOGIST—Tenure-track position, assistant or associate professor level. Research interest in cellular differentiation using recombinant DNA and/or hybridoma technologies will be given special consideration. Ph.D. or M.D. degree and postdoctoral experience required. The appointee will be expected to maintain a funded research program and contribute to graduate and medical student teaching. Submit curriculum vitae, brief description of teaching and research interests, and three letters of recommendation by 31 January 1985 to: **Dr. George C. Hill, Director, Division of Biomedical Sciences, Meharry Medical College, 1005 D.B. Todd, Jr. Boulevard, Nashville, Tenn. 37208.** *An Equal Opportunity/Affirmative Action Employer.*

MOLECULAR BIOLOGY. The College of Veterinary Medicine, University of Minnesota, invites applications for a tenure-track faculty position at the assistant or associate professor level. Candidates must have Ph.D. degree in appropriate discipline. Assistant professor must have at least one year of postdoctoral experience. Associate professor must have at least five years of postdoctoral research experience and demonstrated success in independent research and funding. Primary emphasis is on development of molecular biology research program with strong focus on animal biology. Teaching and advising at the graduate student level is expected. Opportunities exist for interaction and collaborative research with faculty in basic and clinical disciplines within the College and other molecular biologists in Colleges of Agriculture, Biological Sciences, and the Health Sciences. Position available 1 July 1985. Applicants should submit letter of application, description of research and academic interests, curriculum vitae, and names of three references by 1 March 1985 to: **Dr. Sally Jorgensen, Department of Veterinary Biology (G), College of Veterinary Medicine, University of Minnesota, 1988 Fitch Avenue, St. Paul, Minn. 55108.** *The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.*

POSTDOCTORAL POSITION available immediately to join a research team working on the molecular genetics of growth control in *Drosophila*. Ph.D. required, preferably in genetics, molecular biology, or developmental biology. Experience in *Drosophila* molecular genetics desirable.

Please submit curriculum vitae, statement of research interests, and the names of three individuals willing to write letters of recommendation to:

**Dr. Peter J. Bryant
Developmental Biology Center
University of California, Irvine
Irvine, Calif. 92717**

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

POSITIONS OPEN

Opening for **MOLECULAR BIOLOGIST**, Ph.D., with an interest in eye research. University-based program. Primary interest should be in mechanisms of control and expression of epithelial cell differentiation. Recruitment will be at the assistant professor level with appropriate salary and fringe benefits. Please send résumé, statement of research and teaching interests, and three letters of recommendation to: **Richard A. Thoft, M.D., Department of Ophthalmology, University of Pittsburgh School of Medicine, Eye & Ear Hospital, Pittsburgh, Pa. 15213.** *Equal Opportunity/Affirmative Action Employer.* Closing date for applications 31 January 1985.

MOLECULAR GENETICS—ZOOLOGY

The Department of Zoology at Arizona State University invites applications for a tenure-track position at the **assistant professor** level starting August 1985. Experience with recombinant DNA technology is required and postdoctoral experience is expected. Applicants specializing in evolutionary biology or gene expression/regulation are preferred but exceptional candidates in other areas will be considered. Applicants must demonstrate ability to conduct a vigorous research program. Teaching responsibilities may include human genetics and a course in a specialty area. Detailed curriculum vitae, a description of research interests and teaching experience, and the names of three references should be sent to: **Dr. Elliott S. Goldstein, Chair, Search Committee, Department of Zoology, Arizona State University, Tempe, Ariz. 85287.** Applications must be received by Monday 14 January 1985.

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

MOLECULAR GENETICIST

ASSISTANT PROFESSOR: Tenure-track position available, 1 July 1985. The Biology Department at Hamilton College seeks a molecular geneticist to teach general genetics and molecular genetics. The candidate should have postdoctoral experience with a demonstrated research accomplishment in plant, animal, or microbial genetics, possibly employing recombinant DNA technology. Newly renovated facilities for both teaching and research will be available to the successful candidate. Applicants should have a strong interest in liberal arts education and an active research program that will involve students. Applications should be received by 7 January 1985 and include curriculum vitae, transcripts, and the names of three references. Send résumé to: **Professor Tom Brady, Chairman, Biology Department, Hamilton College, Clinton, N.Y. 13323.**

Hamilton College is an Equal Opportunity Employer. Women and members of minority groups are strongly encouraged to apply.

PLANT MOLECULAR BIOLOGY

Applications are invited for a tenure-track position in plant molecular biology in the Biochemistry Department, College of Life Sciences and Agriculture, University of Maine at Orono, a land grant university. Research areas to be considered include, but are not limited to, plant cell transformation and plant nuclear and organelle genome structure and expression. New research facilities for molecular biology are under development. Apply with curriculum vitae, names of references, and description of proposed research to: **Biochemistry Department Chairman, 227 Hitchner Hall, University of Maine, Orono, Maine 04469.**

PLANT PHYSIOLOGIST: Plant Breeding Division, Pioneer Hi-Bred International, Inc. is seeking a person to provide research support for our plant breeding effort in the area of germination and seedling establishment. In addition, the applicants will provide information and experimental support to others in the Plant Breeding Division and the Production Divisions of Pioneer. Primary emphasis will be on corn but support of other crops may also be required. The individual will work closely with plant breeders, other physiologists in the department, and members of the Germination Department. Research facilities are located near Des Moines, Iowa. Salary is competitive and commensurate with experience and benefits are excellent. Applicants should have a Ph.D. in plant physiology or a related discipline. Experience in plant breeding or genetics would be helpful but is not essential. Interested individuals should send résumé and names of three references to: **Dr. Anthony J. Cavalieri, Department of Research Specialists, Pioneer Hi-Bred International, Inc., P.O. Box 85, Johnston, Iowa 50131. Telephone: 515-270-3354.**

POSITIONS OPEN

NEUROBIOLOGIST CORNELL UNIVERSITY

The Section of Neurobiology and Behavior in the Division of Biological Sciences seeks a faculty member using molecular, biochemical, or biophysical approaches to study the nervous system. The position can be filled at the rank of assistant or associate professor, beginning September 1985. Applicants should send their curriculum vitae, selected reprints and a statement of research and teaching interests, and have three letters of recommendation sent to: **Search Committee, Section of Neurobiology and Behavior, Cornell University, W363 Seeley G. Mudd Hall, Ithaca, New York 14853.** Screening will begin 15 January 1985 and will continue until suitable candidates are found. *Cornell is an Affirmative Action/Equal Opportunity Employer.*



Cornell University

NEUROSCIENCES UCR/UCLA PROGRAM IN BIOMEDICAL SCIENCES

The UCR/UCLA Program in Biomedical Sciences, which offers an accelerated M.D. curriculum jointly between the University of California, Riverside (UCR), and the University of California, Los Angeles (UCLA), School of Medicine, has a **tenure-track faculty opening** in the Division of Biomedical Sciences at UCR. The prospective level of appointment is assistant professor, although an exceptionally qualified candidate may be considered for appointment at higher rank. Primary teaching responsibilities will be in a 10-week course in neuroanatomy/neurophysiology taught to 24 first-year medical students. Prior medical school teaching experience is strongly preferred. Applicants should have postdoctoral research experience, and should be able to develop or continue a strong independent research program. The area of research is open. *The University of California is an Affirmative Action/Equal Opportunity Employer.* Applications, including curriculum vitae, bibliography, a statement of research goals, and the names of three references, should be sent to:

**Mary Ann Baker, Chair
Neurosciences Search Committee
Division of Biomedical Sciences
University of California, Riverside
Riverside, California 92521**

POSTDOCTORAL POSITIONS available for studies in various aspects of cancer research in the Center in Molecular Toxicology through the Departments of Biochemistry, Chemistry, Pharmacology, and Pathology. Areas of investigation include synthetic chemistry related to toxic chemicals, isolation and characterization of natural products, mechanistic bioorganic chemistry, chemistry of heavy metal antidotes, DNA-carcinogen physical interactions, enzymology and regulation of animal and human cytochrome P-450, cloning of genes coding for DNA repair enzymes, cytochromes P-450, and chromatin proteins, the basis of metal carcinogenesis, chromatin function, hepatocarcinogenesis, eicosanoids, regulation of glutathione metabolism, and developmental mass spectrometry. Salaries negotiable. Applicants should submit curriculum vitae and three letters of recommendation to: **Dr. F. P. Guengerich, Center in Molecular Toxicology and Department of Biochemistry, Vanderbilt University School of Medicine, Nashville, Tenn. 37232.** *An Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSOCIATE (POSTDOCTORAL) ROCKEFELLER UNIVERSITY

Position available for research in area of membrane receptor biochemistry related to chemotherapy. Required: Strong background in modern protein isolation and analytical electrophoretic techniques. Send résumé and references to: **Box 197, Rockefeller University, 1230 York Avenue, New York, N.Y. 10021.** *An Equal Opportunity Employer.*

CONGRESSIONAL SCIENCE AND ENGINEERING FELLOWSHIPS

Applications Invited

The American Association for the Advancement of Science (AAAS) invites applications for two 1-year Congressional Science and Engineering Fellowships it will offer for the period beginning 1 September 1985. The fellowship program provides an opportunity for accomplished and societally aware postdoctoral to mid-career scientists and engineers to participate in and contribute to the public policy-making processes within the Congress for approximately 1 year. Fellows work as special legislative assistants within the congressional staff system.

Persons may apply from any physical, biological, or behavioral science or any field of engineering. The term "science" is used broadly to include the system sciences, public health, and other technical professions. In addition to the fellowships awarded by the AAAS, about 25 others are given by other participating professional societies. The AAAS runs a year-long educational program for the set of Congressional Science and Engineering Fellows. Addresses of all participating societies are available from the address listed below.

The 1985-1986 AAAS Congressional Science and Engineering Fellows will receive a stipend of \$25,200; an additional \$1,500 is available for relocation expenses and travel in connection with the program.

In order to obtain detailed information on the program and specific application requirements write:

**Congressional Science and Engineering Fellow Program
American Association for the Advancement of Science
1776 Massachusetts Avenue, NW
Washington, D.C. 20036**

The deadline for application is 1 February 1985. The award will be announced around 1 May 1985.

BIO-ORGANIC CHEMIST/ BIOCHEMIST

Applications are invited for a chemist position in the Environmental Criteria and Assessment Office, U.S. Environmental Protection Agency in Cincinnati, Ohio. This is a permanent full-time Federal Civil Service position with a salary range of \$30,549 to \$39,711 depending upon experience.

The successful candidate will be expected to (i) perform analysis of chemical interactions to predict the effects exposures to specific environmental pollutants and combinations of pollutants have on human health; (ii) evaluate structure-activity relationships in order to predict properties like persistence, fate and transport, pharmacokinetic disposition and biological effects, and toxicity of chemicals with marginal data bases; (iii) serve as document/chapter author/reviewer/manager for selected criteria documents and/or health assessment documents/reports; (iv) closely collaborate with other scientists of the Environmental Criteria and Assessment Office and the Office of Health and Environmental Assessment, and (v) author/coauthor publications dealing with or relating to the toxic effects of environmental pollutants on living organisms. Principally, the incumbent will provide the office with expertise in the broad area of biochemistry and bio-organic chemistry specifically as it relates to assessing the potential health effects from human exposure to environmental pollutants.

The candidate should (i) possess a Ph.D. in bio-organic chemistry, biochemistry, pharmacology/pharmacokinetics or a closely related field, (ii) have experience in estimating health and environmental effects based upon structure/activity relationships between chemicals, (iii) have experience in preparing assessment documents and/or planning and conducting documentation projects, and (iv) have demonstrated research ability as evidenced by publications in peer-reviewed journals.

Further information, including detailed qualification requirements, may be obtained from: Nancy A. Foster, Personnel Management Division, U.S. Environmental Protection Agency, 26 West St. Clair Street, Cincinnati, Ohio 45268. Telephone: 513-684-7804. Applications (SF-171, Personal Qualifications Statement), accompanied by current curriculum vitae and bibliography, must be submitted to Nancy A. Foster prior to 31 December 1984. *An Equal Opportunity Employer.*

SCIENCE, ENGINEERING, AND DIPLOMACY FELLOWSHIP

Applications Invited

The American Association for the Advancement of Science (AAAS), in cooperation with the Agency for International Development (AID) and the Department of State (STATE), is seeking applicants for two or more Science, Engineering, and Diplomacy Fellowships. Fellows will spend 1 year, beginning 1 September 1985, working either in the Bureau of Oceans and International Environmental and Scientific Affairs of the Department of State or in one of the bureaus of the Agency for International Development. Other assignments may also be possible.

Prospective fellows must demonstrate exceptional competence in some area of science or engineering, be flexible, have some experience and/or a strong interest in applying knowledge toward the solution of problems in the area of foreign affairs, and have a Ph.D. or equivalent in years of experience. Awardees will work on scientific and technical subjects in international affairs: foreign policy for STATE and international development for AID. In general, individuals are urged to apply from any area of physical, biological, behavioral, and social science and engineering and whose experience and training is applicable to any one of the following areas: Food and agriculture; health and population; nuclear nonproliferation; scientific exchange; forestry, natural resources and ecology; oceans and fisheries; communications; national security; and nutrition among others.

The fellows will serve a 1-year appointment at a salary consistent with education level and experience, if possible, but not exceeding, in the case of STATE, the GS-12 level (beginning at \$31,600). A security clearance process will be initiated after selection. The clearance must be obtained before a selectee can begin work in the State Department or AID.

Deadline for receipt of application is 15 February 1985. For more information and application details write:

**Science, Engineering and Diplomacy Fellows Program
American Association for the Advancement of Science
1776 Massachusetts Avenue, NW
Washington, D.C. 20036**

Senior Scientist PLANTEK INTERNATIONAL

Plantek International (Pte.) Ltd. is a Singapore based biotechnology joint venture between NPI (USA), Tata Industries (India), Sumitomo Corp. (Japan) and Kyowa Hakko (Japan). We are seeking a highly qualified senior scientist to direct our ongoing and future research and development efforts in Singapore. Personal research history in plant physiology, genetics or biochemistry is required. Experience in the application of plant cell and tissue culture methods for plant improvement are desirable. The successful candidates will interact with concurrent programs in plant molecular biology, soil microbiology, phytochemistry and fermentation. Compensation and benefit packages are commensurate with experience. Interested applicants should send current curriculum vitae, publication list and statement of research interests to:

Vice President/Corporate Planning
NPI
University Research Park
417 Wakara Way,
Salt Lake City, Utah 84108 USA
telex: 820832 NPISLC



POSITIONS OPEN

PHYSIOLOGIST to teach courses in general zoology, physiology, and related area. Tenure-track, at any level. Preference given to applicants demonstrating successful undergraduate teaching, involvement in successful pre-med program, and commitment to a liberal arts education. Successful applicant will advise pre-med students and may qualify for Smith-Stanford Chair. Salary negotiable. Send curriculum vitae, three letters of recommendation, and transcripts to: **Dr. Gunnar Wikstrom, Jr., The College of Idaho, Caldwell, Idaho 83605**, by 15 February 1985. *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS IN MONTREAL. Biosynthesis of natural products. Biochemists organic synthetic chemist, or bioorganic chemist. Send résumé and names and telephone numbers of three references to: **Dr. Lolita Zamir, Université du Québec, Institut Armand-Frappier, 531 boulevard des Prairies, Laval, Quebec, Canada H7V 1B7.**

POSTDOCTORAL POSITION

Work with university research group on the study of single channels in artificial bilayers. Experience with channel electrophysiology is preferred and experience with bilayers is helpful. The project concerns the synthesis and characterization of ion channels which are linked to receptors and can be made to respond to specified agonists. The position is located at a major university in western New York and is available immediately. Salary: \$19,000 to \$23,000. Send curriculum vitae and references to: **Box 275, SCIENCE.**

POSTDOCTORAL POSITIONS available immediately to study microtubules in mammalian cells. Mutations in the genes for tubulin are being used to explore the assembly, function, and regulation of this cytoskeletal component. A background in recombinant DNA technology, protein chemistry, or genetics is highly desirable. Successful candidates will work in the Texas Medical Center, which provides a varied and vigorous research environment for biomedical science. Interested individuals should send their curriculum vitae and the names of three references to: **Dr. Fernando Cabral, Ph.D., Division of Endocrinology, University of Texas Medical School, P.O. Box 20708, Houston, Tex. 77225.** *An Equal Opportunity Employer. Women and Minorities are encouraged to apply.*

POSTDOCTORAL POSITION available to study phagocyte biochemistry with special emphasis on the role of oxidants and proteases in host defense and inflammation [see *Science* 222 625 (1983); *J. Biol. Chem.* 259 399 (1984); *J. Clin. Invest.* 73 1297 (1984)]. Aggressive individual with Ph.D. or M.D. and strong background in cell biology-biochemistry are essential. Send curriculum vitae and three references to: **Dr. Stephen J. Weiss, Simpson Memorial Research Institute, Division of Hematology/Oncology, 102 Observatory Street, Ann Arbor, Michigan 48109.**

POSTDOCTORAL POSITION available immediately. Relationship of gene expression to cell lineage specification in normal and experimentally perturbed sea urchin embryos, using a variety of techniques including in situ detection of mRNAs. Preference will be given to individuals with experience in nucleic acid molecular biology and/or development biology. Salary at current NIH levels. Send résumé and letters of recommendation to: **Dr. Robert Angerer, Department of Biology, University of Rochester, N.Y. 14627.** *Equal Opportunity Employer.*

POSTDOCTORAL POSITION available immediately for 1 to 2 years to work on 1 and 2-D NMR (500 MHz) studies of drug-oligonucleotide complexes and the effect of DNA polymorphism on drug binding using equilibrium and stopped-flow methods. Send curriculum vitae and names of three references to: **Dr. Richard Shafer, Department of Pharmaceutical Chemistry, University of California, San Francisco, Calif. 94143.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL RESEARCH in motor control available starting immediately. A quantitative oriented neurophysiologist/biomedical engineer is wanted to collaborate in studies of the human motor system. Candidates should be interested in mathematical modeling of experimental data. Contact: **Gerald L. Gottlieb, Department of Physiology, Rush Medical Center, 1753 West Congress Parkway, Chicago, Illinois 60612.**

Rush is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL ASSOCIATE: CELLULAR NEUROBIOLOGY. Challenging opportunity to employ combination of biochemical and electrophysiological methods to study a wide range of physiological and pharmacological properties of CNS presynaptic nerve terminals. Position available in spring/summer 1985. Biochemical and/or electrophysiological experience required. Send curriculum vitae, bibliography, and three letters of reference to: **Dr. M. P. Blaustein, Department of Physiology, University of Maryland School of Medicine, 655 West Baltimore Street, Baltimore, Md. 21201.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOW, ANATOMY, University of Washington. Ph.D. in anatomy (**HUMAN OR COMPARATIVE**) with postdoctoral experience preferred. Salary dependent upon grant funding. To start 1 January 1986. Areas of research: development biology, morphogenesis of the heart, computer assisted three-dimensional reconstruction from serial sections. Skills in light to electron microscopy required. Send curriculum vitae and three letters of recommendation to: **Dr. J. W. Prothero, Department of Biological Structure, H.S.B., SM-20 University of Washington, Seattle, Washington 98195.** Deadline for completed applications is 31 December 1984.

POSTDOCTORAL FELLOW in molecular and cell biology to study the mechanism of action of oncogenes (*v-fms/c-fms*) and their role in growth control. Experience with contemporary molecular biological technology required. Positions available immediately in a basic science department with possible clinical and/or university collaborations. Salary commensurate with experience. Send complete résumé and names, addresses, and telephone numbers of three references to: **Dr. Charles J. Sherr, Chairman, Department of Tumor Cell Biology, St. Jude Children's Research Hospital, 332 North Lauderdale, P.O. Box 318, Memphis, Tenn. 38101.**

THE UNIVERSITY OF CHICAGO POSTDOCTORAL LECTURESHIPS Vertebrate Biologist

Two 12-month positions for 1985-1986 to begin anytime between July and September 1985. The successful candidates will share responsibility with departmental faculty for laboratory instruction and assistance in the department's human morphology course. This commitment requires about 150 contact hours (average of 2.5 afternoons per week) over the fall and winter quarters. The successful candidates are expected to pursue their research interests with a departmental faculty member during the rest of the year.

Applicants must have completed the Ph.D. and a course in human gross anatomy. Send curriculum vitae, statement of research interests, and three letters of reference to: **Dr. George V. Lauder, Department of Anatomy, The University of Chicago, 1025 East 57 Street, Chicago, Ill. 60637**, by 15 January 1985.

The University of Chicago is an Equal Opportunity Employer; women and members of minority groups are specifically encouraged to apply.

POSTDOCTORAL/RESEARCH ASSOCIATE

Available immediately for Ph.D. or M.D. interested in the sterilizing and mutagenic effects of cancer chemotherapy/radiotherapy on male reproductive potential. Investigator can pursue projects ranging from basic studies on animal systems to clinical studies of the effects observed on treated patients. Salary range: \$19,000 to \$30,000. Send curriculum vitae, names and telephone numbers of references, and statement of research interests to: **Dr. Marvin Meistrich, Experimental Radiotherapy—Box 66, University of Texas, M. D. Anderson Hospital & Tumor Institute, Houston, Texas 77030.**

POSTDOCTORAL RESEARCH ASSOCIATE. Position available immediately for a recent Ph.D. in chemistry or biochemistry to do bioorganic mechanistic studies on the mammalian cytochrome P-450 heme enzymes. Research involves protein purification, organic synthesis, enzyme kinetics, stable isotopes, peptide isolation and identification. Send curriculum vitae to:

**Dr. Ronald E. White
Pharmacology Department
University of Connecticut Health Center
Farmington, Conn. 06032**
An Affirmative Action/Equal Opportunity Employer, M/W/H

POSITIONS OPEN

BERKELEY PHYSICS Tenure-Track Appointments

The Department of Physics of the University of California, Berkeley, expects during the next year to make one tenure appointment and two appointments at the assistant professor level. The search will cover all fields of physics but with emphasis upon theoretical astrophysics, theoretical statistical physics, high-energy particle theory, experimental plasma physics, and experimental condensed matter physics. One appointment is tenable 1 July 1985, and the other two are tenable 1 July 1986, although arrangements for getting a successful applicant to Berkeley in some other capacity before that date could be pursued.

Applicants should write, as soon as possible, and definitely before 1 April 1985 to: **The Chairman, Department of Physics, University of California, Berkeley, California 94720**, giving curriculum vitae, publication list, and references. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL RESEARCH ASSOCIATE position will be available 1 January 1985 to study the genotoxicity of carcinogenic N-nitroso compounds with emphasis on the detection of promutagenic DNA adduct using the effect these compounds have on the fidelity of DNA copolymer replication. The candidate should have a Ph.D. in biochemistry with a good background in organic chemistry. Send curriculum vitae and the names of three references to: **Dr. Barry Gold, Eppley Institute for Research in Cancer, University of Nebraska Medical Center, Omaha, Neb. 68105.** *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL RESEARCH ASSOCIATE in biochemistry and molecular biology of enzymes involved in lipid metabolism. Send curriculum vitae and a list of references to: **P. E. Kolattukudy, Institute of Biological Chemistry, Washington State University, Pullman, Wash. 99164-6340**, by 15 January 1985.

POSTDOCTORAL RESEARCH FELLOW

Available immediately. Primary research interest is in analyzing cellular proteins by 2-D electrophoresis and HPLC for the detection of genetic variants and of alterations in neoplastic cells. *The University of Michigan is an Equal Opportunity/Affirmative Action Employer.* Send curriculum vitae to: **Dr. S. M. Hanash, Department of Pediatrics, F6515 Mott Children's Hospital, University of Michigan Medical School, Ann Arbor, Michigan 48109.**

ENDOWED PROFESSORSHIP IN PHARMACEUTICAL SCIENCES

The School of Pharmacy, Auburn University, invites nominations and applications for the W. W. Walker Endowed Professorship in the Department of Pharmaceutical Sciences. Candidates for this position should have a distinguished record of research achievement in the disciplines of pharmaceuticals, medicinal chemistry, pharmacology-toxicology, or an allied discipline. Candidates should hold an earned doctorate in their discipline and be eligible for appointment at the rank of associate or full professor. Salary for this position will be commensurate with the candidate's credentials. Letters of application, curriculum vitae, descriptions of research achievements, and names, addresses, and phone numbers of three references should be submitted no later than 28 February 1985 to: **Thomas N. Riley, Head, Department of Pharmaceutical Sciences, School of Pharmacy, Auburn University, Ala. 36849.** *An Affirmative Action/Equal Opportunity Employer*

QUANTITATIVE FISHERIES MANAGEMENT. Research Associate/Adjunct Faculty Position to do research on adaptive control and parameter estimation for fisheries management. Applicant should have strong background in mathematical statistics and dynamics system modelling, and some experience with renewable resource problems. Preference will be given to individuals interested in working cooperatively with government resource managers and fishing industry representatives. Submit résumé and three letters of reference to: **Dr. Carl J. Walters, Institute of Animal Resource Ecology, University of British Columbia, Vancouver, British Columbia, Canada V6T 1W5.**

POSITIONS OPEN

PROFESSOR OF BIOLOGICAL CHEMISTRY

Harvard Medical School is seeking a Professor of Biological Chemistry. Candidates should have a research background in Bio-chemistry of the eukaryotic chromosome. Research interest in enzymology and molecular biology of replication, recombination, and repair as well as the structure of the eukaryotic chromosome and its constituents to the extent that they pertain to these processes preferred. Participation in academic programs in the Harvard Medical School and graduate school of the faculty of Arts and Sciences. Please send application by December 31, 1984 to: Dr. Philip Leder, Chairman, Search Committee, Department of Genetics, Harvard Medical School, 45 Shattuck Street, Boston, MA 02115. Harvard is an Equal Opportunity Employer with an Affirmative Action program and it encourages applications from women and members of minority groups.

VISITING PROFESSORSHIP. New College has been honored by an endowment from the MacArthur Foundation. The position will be in the Division of Natural Sciences, which includes mathematics, physics, chemistry, biology, experimental psychology, and computer science. We seek a scholar who is committed to teaching motivated undergraduates. This is a 1-year appointment. Compensation will be between \$25,000 and \$35,000 depending on qualifications. Applications from any discipline listed above or related to them should be sent by 11 February 1985 to: L. Moravec, Chairman MacArthur Search Committee, Natural Sciences, New College of University of South Florida, Sarasota, Florida 33580.

POSITIONS OPEN

PROGRAMMER ANALYST (Q.A./Medical Computer): Needed to coordinate, analyze, and design projects in medical computer. Require M.S. degree in computer science, and B.S. degree in applied mathematics, applied statistics, or medical technology; knowledge of quality assurance and medical computing or health related programming areas, Cyber computers, PL/I, RATFOR, C, Assembler, and good knowledge of FORTRAN, mathematics, statistics, or medical technology and 2 years of experience in programming. Salary: \$2,300 per month. Contact: Utah Job Service, 1234 South Main Street, Salt Lake City, Utah 84101. Job Order Number: 76818

RESEARCH ASSISTANT OR ASSOCIATE

To participate in biochemical studies on vertebrate visual transduction. M.S. and experience in monoclonal antibody production, immunological techniques, and gel electrophoresis desirable. Salary commensurate with experience. Send résumé and names of three references to: Dr. Heidi Hamm, Department of Physiology and Biophysics, University of Illinois at Chicago, Health Sciences Center, Box 6998, Chicago, Ill. 60680. The University of Illinois is an Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE. Permanent position for a biochemist or immunochemist to participate in research on tumor-specific glycolipids. Laboratory experience in analytical and preparative biochemical techniques for glycolipid work essential. Excellent salary and benefits. Please send résumé to: Dr. P. Desai, Immunochemistry Research, Evanston Hospital, 2650 Ridge Avenue, Evanston, Ill. 60201. Equal Opportunity Employer, M/F.

STAFF FELLOW position available immediately to Ph.D. graduates to investigate oncogene-linked cell surface antigens using immunochemical and biochemical techniques. Applicants should have a strong background in gene transfer and recombinant DNA technology. Send résumé and three references to: Jack A. Roth, M.D., Surgery Branch, National Cancer Institute, Building 10, Room 2B07, Bethesda, Md. 20205.

POSITIONS OPEN

PROTEIN KINASE/ BIOCHEMIST

Positions available immediately for Ph.D.-level post-doctoral associates to study protein kinase and mechanism of actions of growth factors. Send résumé to: Dr. James Tam, Box 294, Rockefeller University, 1230 York Avenue, New York, N.Y. 10021. Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE. Assist in the diagnostic electrophysiology of psychophysiological sleep disorders. Must be able to understand the neurophysiological variables of human sleep. Duties include intake workup, all-night polysomnographic recording, patient data collection, data processing, analysis and treatment plan. Forty hours per week; \$15,000 per year; bachelor of science in medicine; 1 year of experience in job offered or 1 year in medical training program; on call in the evenings; must be willing to work weekends and irregular hours. Apply at: Texas Employment Commission, Houston, Texas or send résumé to: Texas Employment Commission, TEC Building, Austin, Texas 78778. Job Order Number 3661124. Ad paid for by an Equal Opportunity Employer.

RESEARCH SPECIALIST IN MAGNETISM AND MAGNETIC RESONANCE

The Department of Chemistry at Arizona State University is seeking a research specialist having expertise in magnetic measurements and/or EPR spectroscopy to work within an interdisciplinary magnetism and magnetic resonance facility. Candidates must have a strong record of accomplishments in either or both of these areas. Ph.D. preferred. Responsibilities include maintaining equipment in prime operating condition, assisting users with experiments, and actively participating in advancing instrumental capabilities. Exciting opportunities for collaborative as well as individual research. To apply, send résumé and three letters of recommendation to: Dr. W. S. Glaunsinger, Department of Chemistry, Arizona State University, Tempe, Ariz. 85287, by 1 February 1985. Arizona State University is an Affirmative Action/Equal Opportunity Employer.

ELECTRON MICROSCOPIST

An Electron Microscopist Postdoctoral Research position is available to study the cell surface (SEM) and subcellular organelle changes (SEM) induced in glioma-derived tissue culture cell lines. The qualitative and quantitative *in vitro* effects of chemotherapy and differentiating agents are to be studied to assess mechanisms of action on nuclear and cytoplasmic constituents. Immunocytochemistry (monoclonal antibody labels) and cytochemistry of tissue culture cells is desirable.

Collaboration with immunologists, immunochemists and tumor biochemists is essential. Microcinematography, fluorescent microscopy, quantitative morphometrics, image analysis and processing and SEM-EDX (microanalysis) are tools available for further development to study the oncogenetic changes of brain tumors.

This position will be in the Surgical Neurology Branch, NINCDS, National Institutes of Health, Public Health Service. Salary range for this Staff Fellowship position is \$17,000-\$35,467 per year commensurate with experience. Send curriculum vitae and three references to: Janet E. Follin, Personnel Department, NINCDS, National Institutes of Health, Building 31, Room 8A23, 9000 Rockville Pike, Bethesda, Maryland 20205. For more information, call Ms. Follin on (301) 496-6334.

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T CELL SCIENCES INC. is a young company, located in Cambridge, Massachusetts, with a premier of scientific positions in developing products for clinical immunology. We are seeking qualified Ph.D./M.S./B.S. scientists at all levels with the following expertise:

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CELLULAR IMMUNOLOGISTS with expertise in human T cell cloning, assays for T cell functions, and immunochemistry.

PROTEIN CHEMISTS with the experience in the isolation and characterization of membrane and soluble proteins, protein sequencing and chemical modifications.

The positions offer the opportunity to interface with internationally recognized scientists in converting their discoveries into products, and provide an environment to advance your career. The Company, an equal opportunity employer, offers comprehensive medical/dental plans and competitive salary along with equity participation. The Company is funded by both institutions and corporations.

Please send your resume in confidence to:

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T Cell Sciences, Inc.
840 Memorial Drive
Cambridge, MA. 02139

POSITIONS OPEN

POSTDOCTORAL POSITION to undertake in vitro studies of the interactions with DNA of several *Escherichia coli* proteins involved in replication and recombination. Projects involving biochemical, biophysical, and recombinant DNA techniques are active in the laboratory. Send curriculum vitae and the names of three references to: **Dr. T. M. Lohman, Department of Biochemistry and Biophysics, Texas A&M University, College Station, Texas 77843.**

RESEARCH ASSOCIATE/INSTRUCTOR position available for a recent Ph.D. graduate in neuropharmacology/neuroscience. Successful candidate should have experience in the techniques of (i) microinjection of drugs into brain sites and/or the intrathecal space of rodents, and (ii) analgesic testing paradigms. Familiarity with neurochemical methods for opioid and monoaminergic neuronal systems, as well as multiple opiate receptors is desirable. Individual must be willing to participate with an interdisciplinary team studying the pharmacology of supraspinal and spinal mechanisms involved in antinociceptive drug action. Send curriculum vitae, statement of research interests to: **David J. Smith, Ph.D., Professor of Anesthesiology and Pharmacology, Department of Anesthesiology, West Virginia University Medical Center, Morgantown, West Virginia 26506.** Deadline for submitting applications is 15 January 1985. *West Virginia University is an Affirmative Action/Equal Opportunity Employer.*

Research positions in a small, growing biotechnology company near the University of Pennsylvania campus.

VIROLOGIST/IMMUNOLOGIST, with experience in eukaryotic viral immunology, to help lead an interdisciplinary research team.

VIROLOGY TECHNICIAN, with a bachelor's degree and at least 3 years of laboratory experience in eukaryotic virology.

Both positions provide competitive salaries and stock options. Send curriculum vitae and names of at least three references to: **Kenneth Ford, President, Molecular Biophysics Technology, Inc., 3508 Market Street, Philadelphia, Pa. 19104.**

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Geo-Centers, Inc. has immediate openings for two (2) research positions.

Position 1: Research position for immunochemist for research on development of liposomal based detection systems. Ph.D. in immunology or related area is required, with experience in unilamellar structures and membrane technologies a plus.

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TUMOR IMMUNOLOGIST

Ph.D. in tumor immunology with 2 years of experience, including discovery, extraction, and purification of tumor-specific antigens; development and characterization of tumor specific antibodies; protein purification; immunoperoxidase, immunoassay and histology experience; isotope labeling of tumor antigens and antibodies. Also essential, experience in laboratory monitoring of patients receiving mouse monoclonals under IND.

Duties to include all of the above activities. Applicant will be part of a clinical and laboratory team, working in state-of-the-art laboratory and university hospital. Salary: \$35,000 to \$40,000, with small equity portion in start-up company located in Seattle, Washington. Willing to move and start immediately.

Send résumés to: **NeoRx Corporation, 410 West Harrison, Seattle, Washington 98119.**

POSITIONS OPEN

SENIOR ENVIRONMENTAL SCIENTIST—Vermont-based consulting firm, involved in international development work, seeks senior environmental scientist for home-office technical support of projects in renewable energy, agriculture, forestry, and other resource management. Primary skills in EIA, resources inventories, and field research; laboratory experience useful but not essential. Some short-term overseas travel required. Willingness and ability to develop domestic work desirable. Applicants should send curriculum vitae, including reference and salary history, to: **Dr. George Burrill, President, Associates in Rural Development (ARD), Inc., P.O. Box 1397, Burlington, Vt. 05402.** *ARD is an Equal Opportunity Employer.*

SENIOR RESEARCH SCIENTIST to supervise cardiovascular research program in cardiovascular pharmacology for discovery of new drugs through application of drug receptor theory. Ph.D. with minimum of 2 years of experience in research, classification of drugs and drug receptors, and in-depth knowledge of drug receptor theory and its application to the achievement of drug-organ selectivity for therapeutic advantage. Salary: \$2,000 per month. Contact: **Employment Security Commission, 516 North Mangum Street, Durham, N.C. 27701** or **Job Service Office** nearest you. Reference Job Order Number: 4167480.

TROPICAL PLANT BIOLOGY

Applications are invited for two tenure-track positions in tropical plant biology at the University of Miami at the assistant or associate professor level, effective August 1985, for research-oriented scientists in the following areas:

Co-evolutionary Biologist with a research program in the field of plant-insect interactions, with emphasis on biochemical or evolutionary aspects.

Plant Ecological Physiologist with a quantitative, field-oriented research program.

Curriculum vitae, statement of research plans, not more than two reprints or preprints, and three letters of reference must be received by 1 February 1985.

David P. Janos, Co-Chair
Tropical Plant Biology Search Committee
Department of Biology
University of Miami
P.O. Box 249118
Coral Gables, Fla. 33124

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VIROLOGIST/IMMUNOLOGIST

We are seeking to appoint to a probationary position, an individual with at least 2 years of postdoctoral experience and demonstrated productivity, with particular reference to the use of molecular techniques in the study of immune responses to viral infections. The appointment will be effective 1 July 1985 at the level of assistant professor.

The deadline for applications is 28 February 1985.

In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

The University of Western Ontario is an Equal Opportunity Employer.

Address correspondence to: **Dr. N. R. Sinclair, Chairman, Department of Microbiology and Immunology, University of Western Ontario, London, Ontario, Canada N6A 5C1.**

SCIENTIFIC EXCHANGES

NAS SCIENTIFIC EXCHANGE PROGRAMS WITH USSR AND EASTERN EUROPE

Applications are invited from American scientists who wish to make professional visits in the USSR, Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, Romania, and Yugoslavia, between January and December 1986. Applicants must be U.S. citizens and have a doctoral degree or comparable research training and experience in the natural, biomedical, or social and behavioral sciences by the time of visit. Deadline for requesting applications is 15 February 1985. Please contact:

National Academy of Sciences
Section on USSR and Eastern Europe
2101 Constitution Avenue, N.W.
Washington, D.C. 20418
Telephone: 202-334-2644

GRADUATE STUDY

NEUROSCIENCES AT BAYLOR COLLEGE OF MEDICINE

Baylor College of Medicine offers an interdepartmental Neuroscience Program for students interested in advanced study leading to the Ph.D. in neuroscience. Applications must be completed by 1 April 1985, and applicants will be notified regarding admission and financial support by 15 May 1985. Information regarding the program curriculum, faculty, research opportunities, and application procedures may be obtained from:

Scott F. Basinger, Ph.D., Director
Predocutorial Program in Neuroscience
Cullen Eye Institute, Baylor College of Medicine
Texas Medical Center
Houston, Texas 77030

PROGRAMS

Ph.D. PROGRAM IN THE BASIC MEDICAL SCIENCES

A multidisciplinary core curriculum includes courses in all of the basic medical sciences plus biostatistics, scientific writing, scientific ethics and effecting teaching techniques. The core coursework is followed by classical research training in a discipline selected by the student (anatomy, biochemistry, microbiology/immunology, pharmacology, physiology), or training in an interdisciplinary program tailored to the student's career goals, for example, molecular biology.

The program is offered by the University of South Alabama Graduate School in the College of Medicine. The College of Medicine is on the university campus in Mobile, Alabama. Mobile is located on Mobile Bay and is a center of educational, cultural, and industrial development for the Gulf Coast. All students admitted receive a stipend (\$6000 per year) and tuition waiver. To apply, request information and application forms from:

Dr. Edwin R. Hughes, Director
University of South Alabama
MSB 1015
Mobile, Alabama 36688
Telephone: 205-460-6153

The Department of Psychiatry, Yale University School of Medicine, announces the inception of a 2-year **POSTDOCTORAL INTERDISCIPLINARY TRAINING PROGRAM** in clinical research. The program, supported by the National Institute of Mental Health, is available to postdoctoral psychology fellows and to advanced psychiatric residents and will offer training in the investigation of major clinical disorders (for example, schizophrenia, depression, substance abuse, and neuropsychological disorders) as well as the processes of therapeutic change.

Inquiries should be addressed to: **Sidney J. Blatt, Ph.D., Director, Postdoctoral Training Program in Clinical Research, Department of Psychiatry, Yale University School of Medicine, 25 Park Street, New Haven, Conn. 06519.**

Ph.D. PROGRAM IN MEDICAL SCIENCES

The University of Massachusetts Medical School offers an interdisciplinary program leading to the Ph.D. degree in medical sciences with specialization in cell biology (anatomy), biochemistry, immunology, molecular genetics and microbiology, pharmacology, or physiology. The objective of the program is to train biomedical scientists/educators to conduct research with direct relevance to human disease, who will possess both a broad interdisciplinary background in the medical sciences and a specialized knowledge in one of the medical sciences. After taking the interdisciplinary core curriculum, the student takes courses in the area of specialization. On successful completion of a qualifying examination, the student carries out a research project in his/her area of specialization to satisfy the thesis requirement. Stipends are available for the entire period of training.

The graduate catalog, departmental brochures, and application forms may be obtained from: **The Office of Graduate Studies, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, Massachusetts 01605.** The deadline for submission of completed applications is 1 March 1985.

The University of Massachusetts Medical Center is an Equal Opportunity/Affirmative Action Employer. The Ph.D. Program in Medical Sciences recruits minority and women candidates and considers all applicants.



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A position opening is available for a senior technical staff member who will technically manage and direct the preparation of complex NEPA evaluations and related documentation for nuclear and non-nuclear facilities. The position requires an advanced degree in an environmental discipline and three years of experience in preparing NEPA documents. Knowledge of ecology, health physics, engineering, and environmental regulations, including Department of Energy regulations, is also required.

We seek resumes from all qualified individuals. Minority candidates are encouraged to apply. For consideration, send your resume to: **Staffing and Development (TD-4), P.O. Box 1625, Idaho Falls, ID 83415 USA.**

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Ayerst Laboratories Research Inc., a subsidiary of American Home Products Corporation, has an opening for someone with biomedical instrumentation experience. This person will be responsible for supervising and coordinating a technical support team in the regular maintenance and calibration of existing equipment and in the design and production of custom made apparatus for research scientists in various departments.

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Interested candidates should forward their resume indicating current salary earnings to:



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COLLEGE OF GRADUATE STUDIES, MEDICAL UNIVERSITY OF SOUTH CAROLINA, offers **PROGRAMS** leading to Ph.D. and M.D./Ph.D. degrees in anatomy, biochemistry, biometry, basic and clinical immunology and microbiology, molecular and cellular biology and pathobiology, pathology, pharmaceutical sciences, pharmacology, and physiology. Stipends of \$9000 available to highly qualified students. Contact: **Dean, College of Graduate Studies, Medical University of South Carolina, 171 Ashley Avenue, Charleston, S.C. 29425.**

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP available in the area of regulation of DNA methylation during carcinogenesis, starting 1 January 1985, for U.S. citizen or permanent resident. Studies focus on alterations in DNA composition, function, and enzymology of the methylase system. Experience in recombinant DNA technology and/or protein chemistry is required. Send curriculum vitae and three references to: **Jean-Numa Lapeyre, Ph.D. Department of Pathology, Box 85-E, The University of Texas System Cancer Center, M.D. Anderson Hospital and Tumor Institute, 6723 Bertner Avenue, Houston, Texas 77030. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL RESEARCH FELLOWSHIPS IN HUNTINGTON'S DISEASE

Applications invited for postdoctoral fellowships in clinical and/or basic research in studies relating to problems of Huntington's disease. Applications must have M.D., Ph.D., or equivalent before fellowship can be activated. Fellowships awarded for 1 year but second year may be applied for. Candidates welcomed whose background and research proposal are within one of following: Basic sciences, including neuroscience, biochemistry, molecular biology, pathology, and pharmacology, and clinical sciences including neurology, psychiatry, and human genetics. Stipend from \$15,500 to \$17,000 depending on background of fellow. May be done at any institution with adequate facilities and appropriate sponsor. Application deadline: 15 February 1985. Awards announced by 15 March 1985. Fellowship to begin 1 July 1985. Send for application materials: **National Huntington's Disease Association, 1182 Broadway, Number 402, New York, N.Y. 10001.**

PREDOCTORAL FELLOWSHIPS IN BIOMEDICAL AND PHYSICAL SCIENCES

Physics	Physiology	Molecular Cell Biology
Anatomy	Biochemistry	Computer Sciences
Biology	Oral Biology	Biophysical Sciences
Genetics	Pharmacology	Biomathematics
Chemistry	Biostatistics	Physiological Optics
Pathology	Neurosciences	Biomedical Engineering
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Well-funded faculty with diverse interests. Good postgraduation placement record. Above average stipends include payment of tuition. Contact: **The Graduate School (A), University of Alabama at Birmingham, Birmingham, Ala. 35294; telephone 205-934-8227. Equal Opportunity/Affirmative Action Institution.**

POSTDOCTORAL FELLOWSHIP available for person who has recently received Ph.D. in biology/biochemistry or related fields. Research will center on enzymology of metabolism of vitamin K, the relationship of this metabolism to vitamin K-dependent gamma glutamyl carboxylation, the purification and characterization of newly discovered gamma carboxyglutamyl-containing proteins. Send curriculum vitae and names, addresses, and telephone numbers of three references to: **Dr. Paul A. Friedman, Department of Pharmacology, Harvard Medical School, 25 Shattuck Street, Boston, Mass. 02115.**

RESEARCH FELLOWSHIP IN EXPERIMENTAL HEMATOLOGY at Emory University available July 1985. Research involves phospholipid analogues with selective antineoplastic activity in murine leukemia and human systems. Experience in experimental design, cell biology, and biochemistry is offered. Prefer M.D. with clinical training in hematology interested in pursuing a research career. Send curriculum vitae and three references to: **W. R. Vogler, M.D., Leukemia Research Laboratory, 718 Woodruff Memorial Building, Emory University School of Medicine, Atlanta, Ga. 30322. An Equal Opportunity/Affirmative Action Employer.**

FELLOWSHIPS

THE GOLDA MEIR FELLOWSHIP FUND

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At the Hebrew University of Jerusalem

Golda Meir Fellows are selected on the basis of demonstrated excellence in their studies, promise of distinction in their chosen fields of specialization, and qualities of mind, intellect, and character. Candidates may apply not later than 3 years after completion of their doctoral dissertation. The fellowships are tenable for 1 year but may be extended for an additional year. The grant covers travel and reasonable living expenses. Prospective candidates, including Israelis abroad, may obtain application forms by writing to the above address. Completed application forms must reach Jerusalem not later than 31 January 1985. *Note:* The university has a number of other funds for the award of postdoctoral fellowships. Applicants who are not awarded a Golda Meir Fellowship will automatically be considered for one of these other awards.

POSTDOCTORAL FELLOWSHIP/COASTAL MARINE SCHOLAR: The Marine Sciences Research Center is seeking recent Ph.D.'s as candidates for a postdoctoral research position in any aspect of marine science, coastal zone management, or related disciplines. Two years of academic year stipend (\$18,400 for 10 months) will be provided and scholars are encouraged to pursue their own research interests. Summer support should be sought through faculty sponsors. Appointments available 1 September 1985. All requirements for Ph.D. must be completed by time of appointment. Submit résumé, detailed statement of research interests, and three letters of recommendation by 15 February 1985 to: **Dr. J. Kirk Cochran, Marine Sciences Research Center, State University of New York (SUNY), Stony Brook, Stony Brook, N.Y. 11794-5000. SUNY Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer. AK Number 289A-84.**

The **GEORGETOWN UNIVERSITY, DEPARTMENT OF BIOLOGY**, affords a graduate student an excellent opportunity to obtain a broad education in biology with an appropriate specialization. Graduate students are given considerable individual attention. Our areas of active research are animal fertilization, behavior, biochemistry, cell physiology, developmental biology, ecology, entomology, enzymology, evolution, human genetics, immunology, membrane biology, microbiology, molecular genetics, plant-animal mutualism, neurochemistry, neurophysiology, phycology, protozoology, radiobiology, tissue culture (animal, embryonal carcinoma, plant, hybridoma), toxicology, and ultrastructure. Ph.D. **FELLOWSHIPS** are available to qualified students. Awards are made on a competitive basis, and applications should be submitted directly to Professor Henderson no later than 1 February 1985 to be considered for September 1985. G.R.E. scores are required. For further information, please contact: **Professor E. J. Henderson, Department of Biology, Georgetown University, Washington, D.C. 20057; telephone 202-625-4126.**

POSTDOCTORAL FELLOWSHIPS (TWO)—An interdisciplinary team studying enzyme-catalyzed reactions by high-field NMR spectroscopy has openings for two postdoctoral fellows. One should have experience in enzyme purification, assay, and mechanism. The second should be experienced in 2D-NMR methods applied to molecular structure. Salary in the range \$20,000 to \$22,000 per annum depending on experience. Send curriculum vitae and the names of two referees to: **Professor A. I. Scott, Center for Biological NMR, Department of Chemistry, Texas A&M University, College Station, Texas 77843. Texas A&M University is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL FELLOWSHIP available 1 January 1985 for recent Ph.D. to study invertebrate neurobiology and reproduction. Knowledge of parasitology and vitellogenesis useful; experience with cytochemical, immunological, and biochemical methods essential. Send résumé, names and telephone numbers of three references to: **Dr. Paul Basch, Room S-142 School of Medicine, Stanford University, Stanford, California 94305. Affirmative Action/Equal Opportunity Employer.**

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIPS UNIVERSITY AT BUFFALO DEPARTMENT OF BIOLOGICAL SCIENCES

POSTDOCTORAL POSITIONS available as early as February 1985 to study: (i) membrane protein synthesis and regulation (Darrell Doyle, Richard Almon), (ii) fungal viruses (Jeremy Bruenn), (iii) gene regulation in pro and eukaryotes (Almon, Berezney, Doyle, and Bruenn), (iv) hormones and their membrane receptors (O. P. Bahl), (v) intracellular protein routing (Harold Segal & Stephen Free), (vi) muscle biochemistry and physiology (Almon and Michael Hudecki), (vii) epithelial transport (Christopher Loretz), (viii) nuclear matrix: eukaryotic genomic organization, function and regulation (Ronald Berezney), (ix) isolation and characterization of membrane proteins (Mary Bisson), and (x) effect of proteins on aging (Morton Rothstein). Appropriate background required for each area, salary up to \$20,000 depending upon experience. Send curriculum vitae, including names of three references to: **Dr. Darrell Doyle, Chairman, Department of Biological Sciences, State University of New York at Buffalo, Buffalo, N.Y. 14260.**

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POSTDOCTORAL FELLOWSHIP TUMOR IMMUNOLOGY

To study tumor dormant states in animal models and patients with breast cancer. A murine model of tumor dormancy under study for 10 years, is now being used to test the therapeutic efficacy of recombinant interferons, interleukin-2, and other lymphokines, individually and in combination.

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