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 Iron-55
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 Nickel-63
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 Potassium-42
 Promethium-147
 Rubidium-86
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 Sodium-22
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 Strontium-85
 Strontium-90
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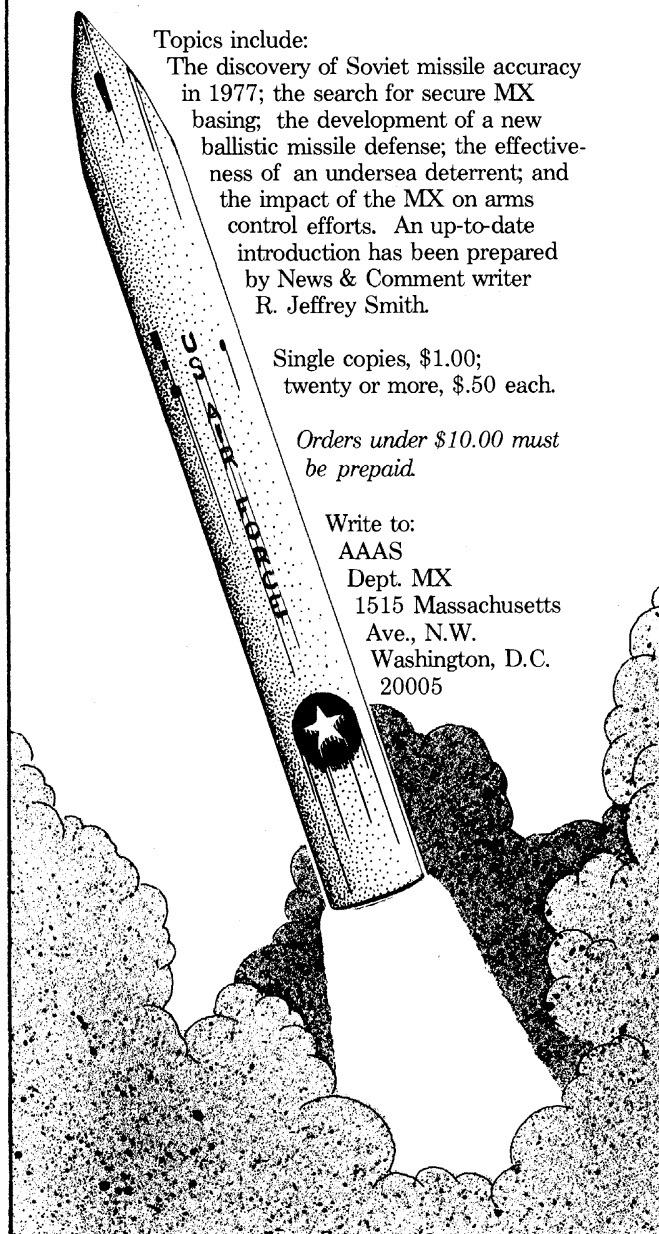
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Administration. M.S., Ph.D., postdoctoral, senior postdoctoral; 16 years of teaching, administration, chairman at universities; full professor; foreign government, NASA, NIH, NSF, HEW research in biology, medical and space science disciplines. Seeks administrative post in industry, government, or university. Box 251, SCIENCE. X

Chemist. B.A. 1982. Research-oriented individual capable of performing and implementing instrumental analysis. HPLC, GC, IR, UV, MS, AA theory, application, and data analysis. Presently studying computer and information science at Brooklyn College. Greater New York area. Write: B. R. De Torres, 1230 Avenue Y, Brooklyn, N.Y. 11235. X

Biostatistician. M.A., knowledge of computer programming and research technique. Desires position in research/analysis. S. Friesen, 308 Boulder, Lawrence, Kansas 66044. 9/17, 24; 10/1

Bio-Organic Chemist. Ph.D.; 12 years of organic synthesis, radiosynthesis, enzyme modifications and kinetics, instrumentation, chromatography, pharmaceutical analysis; publications. Seeks academic/industrial position. Box 250, SCIENCE. X

Biochemist/Molecular Endocrinologist. Ph.D. 1977. Experienced in protein purification and characterization; nucleic acid biochemistry and recombinant DNA techniques. Seeks position in industry or research institution. Box 256, SCIENCE. 9/17, 24

Decision Analyst/Operations Research. Ph.D. 1972; international record of publications, RA, TA in energy, health, and environmental areas; strong economics/mathematics background; academic positions in United States, Australia, Europe; 10 years of international consulting experience; extensive knowledge of systems analysis for computer applications; at present, department head at R & D center. Seeks challenging research/teaching or research management position. Box 248, SCIENCE. X

POSITIONS WANTED

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Editing. Prompt help with style, organization, and substance. Experienced with proposals, reports, books; non-native speakers of English; all technical fields (former journal editor; teacher of scientific writing at major universities and in private industry). S. H. Schwartz, 1236 Oxford Street, Berkeley, Calif. 94709; telephone: 415-848-9358. 9/17, 24; 10/1

Entomologist/Behavioral Ecologist. Ph.D. 1979. Teaching experience. Innovative research on biology of the Neuroptera; many publications. Desires academic, museum, research position. Box 242, SCIENCE. X

Environmental Scientist. Ph.D. Four years of research on heavy metal pollution from applied wastes; several publications. Entomological background; broad research interests. Seeks industry or research position. Box 243, SCIENCE. X

Information Biologist. Ph.D. Online search experience with all major commercial and governmental vendors. Expertise in toxicology, biotechnology, biomedicine, chemistry, business, and patents. Experience in database design, vocabulary development, and thesaurus construction. Thorough knowledge of Digital DEC and VAX systems. Programming experience in BASIC. Graduate level teaching experience in botany and ecology. Box 252, SCIENCE. X

African Obstetrician—Gynecologist/Scientist. M.D., C.M., Ph.D. (McGill), with publications, Flex and U.S. license. Residency completed June 1982. Active candidate for American and Canadian Boards. Seeks teaching, clinical and/or research position in general obstetrics—gynecology, reproductive endocrinology and/or perinatology in United States. Box 245, SCIENCE. 9/17, 24; 10/1

Programmer. B.S. physics; 15 years of online laboratory computer experience in life/physical sciences. Familiar with data acquisition, instrument interfacing, signal processing, and graphics systems. Seeks major system or project responsibility in academic or industrial laboratory. Box 249, SCIENCE. 9/17; 10/15

Psychobiologist. Ph.D. in biology with psychology/physiology emphasis. Postdoctoral training, undergraduate and graduate teaching experience. Extensive research experience, including publications and grant proposals. Seeks academic position in small college or university. Box 253, SCIENCE. X

Psychopharmacologist. Ph.D. Behavioral and neurochemical analysis of drug action. Postdoctoral work; publications; experienced in supervision of laboratory personnel and in laboratory management. Seeks position in industry. Box 254, SCIENCE. X

Toxicologist. Ph.D. in pharmacology/toxicology. Board-certified. Ten years of postdoctoral experience in conducting and directing research, primarily in safety assessment. Excellent communication skills and managerial background. Experience with government agencies and trade associations. Presently employed but seeking challenging change. Box 255, SCIENCE. X

POSITIONS OPEN

ANATOMY ASSISTANT PROFESSOR.—The Department of Anatomy, The Medical College of Pennsylvania, has a tenure-track position at the assistant professor level beginning 1 July 1983. Applicants should be qualified to teach gross anatomy and embryology. Candidates should have postdoctoral research experience and a significant record of research accomplishment with the capacity to function as an independent researcher in the field of cellular or developmental neurobiology. Current research areas in the department include: neurobiology, muscle biology, and cell biology. Salary is dependent upon qualifications and experience. Applicants are invited to submit curriculum vitae, names of three references, and statement of research interests and teaching experience by 1 December 1982 to: **Dr. Leonard L. Ross, Chairman, Department of Anatomy, MEDICAL COLLEGE OF PENNSYLVANIA, 3300 Henry Avenue, Philadelphia, Pa. 19129. Equal Opportunity Employer, M/F.**

ASSISTANT IN NEUROSCIENCE/SURGERY (SCIENTIFIC PROGRAMMER). Develop software and maintain hardware for sensory research and microprocessor development laboratories. Both laboratories configured around PDP-11 (LAB 40 and 03), respectively. Experience in assembly language programming and digital design essential. Salary: \$18,000, negotiable annually. Send complete résumé to: **Dr. Charles J. Vierck, Jr., Department of Neuroscience, Box J-244, JHMHCC, University of Florida, Gainesville, Florida 32610.** Application recruiting deadline: 14 October 1982. Anticipated starting date: 28 October 1982. *An Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR: The Department of Biology of Georgia Southern College anticipates a faculty position (tenure-track) opening September 1983, to teach principles of animal physiology, human anatomy and physiology (for allied health majors), and general biology. Candidates should possess the Ph.D. degree in biology or one of the biological specialties, evidence of scholarly activities, and a lively interest in research. The successful candidate will be expected and encouraged to maintain scholarly activities in teaching and research in his or her specialty.

Persons to be considered should submit the following by 15 November 1982:

- 1) Letter of application, including a statement of his or her teaching philosophy, and
- 2) Complete résumé containing: personal data, employment experience, education, transcripts, and publications (references will be requested from the top candidates at a later date).

Forward materials to:

Dr. D. V. Hagan
Department of Biology
Georgia Southern College
Statesboro, Ga. 30460

Georgia Southern College is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR. The Department of Chemistry of Syracuse University invites applications from applicants in the general area of inorganic chemistry for a tenure-track position as **assistant professor of chemistry.** A new NIH Research Resource in multi-nuclei NMR and data processing is one of the unique research facilities operated by the department. Applicants should send complete curriculum vitae, list of publications, summary of teaching experience, and a statement of research plans, and should arrange for at least three letters of recommendation to be forwarded to support the application. Nominations and applications should be mailed by 29 October to: **Professor J. C. Dabrowiak, Chairman, Search Committee, Department of Chemistry, Syracuse University, Syracuse, New York 13210. Syracuse University is an Equal Opportunity/Affirmative Action Employer.**

A TENURE-TRACK POSITION at the **ASSISTANT PROFESSOR** level will be available for fall 1983. Preference will be given to individuals with interests in developmental biology, immunology, medical microbiology, or microbial physiology. Appointment at higher rank for an unusually qualified individual may be possible. Preference will be given to those who apply before 30 November 1982. Interested applicants please send résumé, a description of research interests, and the names of three references to: **Search Committee Chairman, Department of Microbiology, The University of Texas at Austin, Austin, Texas 78712-1095. The University of Texas is an Equal Opportunity/Affirmative Action Employer.**

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Cardiovascular/Renal Pharmacology

SmithKline Beckman, a world leader in health care and technology is seeking a Post Doctoral Scientist to join an interdisciplinary research program in an environment designed to foster creative, innovative research and to promote personal and professional growth.

We consider post doctoral studies to be of major importance in an individual's career and encourage publication of findings in leading journals and a full interaction with the scientific community.

Our post doctoral appointments are of 1 year duration and with mutual agreement renewable for a 2nd year. The successful candidate will undertake an independent program in cardiovascular and renal pharmacology devoting primary effort to the study of dopaminergic agonists. This includes the development and evaluation of *in vivo* and *in vitro* models for characterization of vascular dopamine receptors.

Candidates are required to have:

- a PhD in Pharmacology or Physiology with 0 to 2 years post doctoral experience
 - experience in using isolated tissue techniques and animal surgery
- Preference will be given to those having a background in autonomic pharmacology and publications in major scientific journals.

We offer excellent compensation and benefits and an attractive relocation policy. For confidential consideration, send your C.V. and names of 3 references to: Mr. Walter B. Flagg, SMITHKLINE BECKMAN CORPORATION, 1538 Spring Garden Street, Philadelphia, PA 19101. We are an equal opportunity employer, M/F/H/V

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Post Doctoral Scientist

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Our post doctoral appointments are of 1 year duration and with mutual agreement renewable for a 2nd year. The successful candidate will a) participate in the drug discovery effort investigating the role of calcium and calcium antagonists on smooth muscle, and b) develop and evaluate models which characterize the effects of calcium and calcium antagonists on tissue culture cells.

Candidates are required to have:

- a PhD in Pharmacology, Physiology or Biochemistry with 0-2 years post doctoral experience.
- Preference will be given to those candidates who have:
- experience with calcium technologies and the electrophysiology of smooth muscle
 - experience with smooth muscle tissue culture

We offer excellent compensation and benefits and an attractive relocation policy. For confidential consideration, send your C.V. and names of 3 references to: Mr. Walter B. Flagg, SMITHKLINE BECKMAN CORPORATION, 1542 Spring Garden Street, Philadelphia, PA 19101. We are an equal opportunity employer, M/F/H/V.

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POSITIONS OPEN

UNIVERSITY OF BRITISH COLUMBIA DEPARTMENT OF BIOCHEMISTRY ASSISTANT PROFESSORS

Applications are invited for two tenure-track positions. The first position requires someone with research and teaching interests in the area of **enzymology**. The second position is for a person who has research and teaching interests preferably in **metabolism and/or regulation**. Applicants must have a Ph.D. or M.D. degree and at least 2 years of postdoctoral experience. The position will be available on 1 July 1983, or at a suitable subsequent date. Applications will be received until the position is filled. The salary range is \$25,000 to \$30,000 per year.

Send curriculum vitae, list of publications, a brief description of future research interests, and the names of three referees to:

Dr. Dennis E. Vance
Department of Biochemistry
University of British Columbia
2146 Health Sciences Mall
Vancouver, British Columbia, Canada V6T 1W5

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

ASSISTANT PROFESSOR OF BIOCHEMISTRY

Two new tenure-track positions will become available in September 1983. Preference will be given to candidates with two or more years of postdoctoral experience, an established record of productivity, funded or pending research grant, and teaching experience. Candidates conducting research in any area are encouraged to apply. Duties will involve teaching graduate and/or introductory level biochemistry and molecular biology courses. The appointment is for 9 nine months at a salary commensurate with experience. Please submit curriculum vitae, research synopsis (two to three pages), and letters of recommendation from three references as soon as possible. Send material to: **Dr. Wesley Wicks, Department of Biochemistry, University of Tennessee, Knoxville, Tennessee 37996-0840.**

ASSISTANT PROFESSOR OF BIOLOGY

The Department of Biology, The University of Alabama, invites applications for tenure-track positions at the **assistant professor** level to begin in August 1983. We seek individuals with research interests in modern developmental, cellular, and/or molecular biology. Successful candidates will be expected to develop an active, independent research program and participate in undergraduate and graduate teaching programs. The Ph.D. is required and postdoctoral experience is preferred. Applicants should submit curriculum vitae, transcripts, statement of research and teaching interests, and the names and addresses of at least three references by 29 October 1982 to:

Dr. Ronald Lindahl, Chairman
Search Committee
Department of Biology
P.O. Box 1927
University of Alabama
University, Ala. 35486

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

ASSISTANT PROFESSOR MOLECULAR GENETICS

Candidates sought to conduct independent research in the field of molecular genetics, preferably with an interest in eukaryotic cells or their viruses. Tenure-track position with light teaching load, excellent lab facilities, and strong research environment. Applicants are invited to submit a curriculum vitae, representative publications, and three letters of recommendation by 1 November 1982 to: **Chairman of the Search Committee, Department of Human Genetics, Yale University School of Medicine, 333 Cedar Street, New Haven, Conn. 06510. Yale is an Equal Opportunity/Affirmative Action Employer.**

ASSISTANT RESEARCH BIOCHEMIST. University of California at San Francisco seeks a Ph.D. biochemist for a faculty position (nontenure-track) in the research series. At least 3 years of postdoctoral experience in enzymology, enzyme kinetics, and purification of integral membrane proteins. Send curriculum vitae and three letters of reference to: **Dr. David Zakim, 151K, VA Medical Center, 4150 Clement Street, San Francisco, Calif. 94121.** Deadline for applications: 20 October 1982. *An Equal Opportunity/Affirmative Action Employer.*

Genetic Engineering Research Scientists

Connaught Laboratories Limited is one of the world's largest producers of biological products. Opportunities exist for a number of highly qualified research scientists to join an established group who are exploiting the technology emerging from recombinant DNA work to develop a range of biological products.

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POSITIONS OPEN

ASSISTANT PROFESSOR, GENETICS. Applications are invited for a tenure-track position in the Genetics Department at the University of Washington. Applicants must be strongly motivated toward research in eukaryote genetics and must be qualified to supervise graduate student training and to teach genetics. We are especially interested in research programs that combine genetic and molecular approaches to developmental biology. While primary consideration will be given to candidates who have just completed their postdoctoral research training, exceptionally well-qualified individuals with additional experience will be considered for an appointment at a level beyond starting assistant professor. To apply, send curriculum vitae, list of publications, and a brief statement of research interests (three pages or less) and, in addition, have three letters of recommendation sent to:

Professor Benjamin D. Hall, Chairman
Genetics Department SK-50
University of Washington
Seattle, Washington 98195

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

CORNELL UNIVERSITY ASSISTANT PROFESSOR INVERTEBRATE DEVELOPMENTAL BIOLOGY

The Section of Genetics and Development, Division of Biological Sciences, is seeking a person with research interests in the developmental biology of invertebrates for fall 1983. The successful candidate will be expected to develop a course in invertebrate development, participate in a course in basic developmental biology, and maintain an active research program. Candidates should send curriculum vitae, a statement of research interests, and the names of three references. Please arrange to have three letters of reference sent directly to:

Ross J. MacIntyre
Chairman, Developmental Biology Search Committee
Section of Genetics and Development
Cornell University
Ithaca, New York 14853

Deadline for applications is 30 October 1982.

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Develop radiopharmaceuticals labeled with cyclotron-produced positron emitters for research and medical practice. Study the biological behavior of each agent by determining its biological fate in animals. Use radiopharmaceutical techniques including safe handling methods of positron emitting radionuclides, and rapid chemical preparative procedures. Evaluate research data, prepare manuscripts, and present seminars. Ph.D. in organic chemistry, 3 years of postdoctoral experience including 1 year of experience in the use of short-lived radionuclides (for example, handling, manipulation, and so forth) and synthesis of radiopharmaceuticals labeled with ^{18}F , ^{15}O , and ^{11}C . \$22,900 per year. Send résumé and names of three references to: **Laboratory Personnel Officer, JB, Laboratory of Biomedical and Environmental Sciences, 900 Veteran Avenue, Los Angeles, Calif. 90024.** An Equal Opportunity Employer, M/F/H.

The University of Pennsylvania Department of Dermatology is expanding its clinical and investigative efforts. Applications are being accepted for the following positions:

- 1) **Ph.D. BIOCHEMIST** with expertise in proteinase chemistry, enzymology, protein purification, and mast cell physiology. Assistant research professor level; salary negotiable.
- 2) **Ph.D. CELL BIOLOGIST AND IMMUNOLOGIST** with expertise in cell culture including epidermal cells. Applicant should have expertise with immunoglobulin preparation and delayed hypersensitivity, including cytotoxicity. Assistant research professor level; salary negotiable.

Reply to:

Gerald S. Lazarus, M.D.
Professor and Chairman
Department of Dermatology
University of Pennsylvania
229 Medical Education Building
36th and Hamilton Walk
Philadelphia, Pa. 19104

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

POSITIONS OPEN

ASSISTANT PROFESSOR, Orthopaedic Research Laboratory, Division of Orthopaedics, University of North Carolina School of Medicine, Chapel Hill, N.C. Position available immediately. Minimum requirements include specialized training in one of four fields: biomechanics (advanced degree in engineering); biochemistry of bone (Ph.D.); biochemistry of cartilage (Ph.D.); or histomorphometry and ultrastructure of hard tissue (Ph.D.). Will be expected to develop a research program in one of above areas, and participate in education of students and residents. Voluntary participation in clinical research programs. Expected to seek outside research support. Salary negotiable. Submit curriculum vitae, bibliography, and references to: **Roy V. Talmage, Ph.D., Director, Orthopaedic Research, University of North Carolina School of Medicine, Chapel Hill, N.C. 27514.** The University of North Carolina is an Equal Opportunity/Affirmative Action Employer and is keenly interested in attracting outstanding women and minorities.

ASSISTANT PROFESSOR OF PHYSIOLOGY

The Department of Biology at Clark University invites applications for a tenure-track position in physiology beginning 1 January 1983. Candidates with postdoctoral experience in neurophysiology, neuroendocrinology, or cellular and organismal physiology are preferred. The candidate should be prepared to conduct an independent research program and teach an introductory physiology course for majors and other appropriate courses at the undergraduate and graduate levels. Deadline date for applications is 1 November. Applications should include curriculum vitae with career objectives and names of at least three references and should be submitted to: **Dr. Vernon Ahmadjian, Chairman, Biology Department, Clark University, Worcester, Mass. 01610.** Clark University is an Equal Opportunity/Affirmative Action Employer. Applications from women and minorities are encouraged.

ASSISTANT OR ASSOCIATE PROFESSOR TERATOLOGY

Tenure-track position available in the Department of Pediatrics, Children's Hospital Medical Center. Academic appointments are in the University of Cincinnati College of Medicine and joint appointments in candidate's basic discipline are available. Candidates should possess an M.D. or Ph.D. degree and are expected to develop their own research program and to pursue independent research in the area of teratology as it relates to cellular, molecular, or developmental biology. Potential exists for clinical interaction with these basic research areas. Applicants should send curriculum vitae, a bibliography, and a description of research interests to: **Ernest F. Zimmerman, Ph.D., Chairman, Search Committee, Institute for Developmental Research, Children's Hospital Medical Center, Cincinnati, Ohio 45229.** An Equal Opportunity/Affirmative Action Employer.

ASSOCIATE RESEARCH BIOPHYSICIST. The Department of Physiology and Biophysics, University of California, Irvine, is searching for an associate researcher in the area of time-resolved infrared spectroscopy of bacterial rhodopsin and related membrane pigments. Expertise in the following areas required: (i) planning of instrumentation to be built, (ii) ability to build a computer controlled infrared/visible flash spectrometer and put it into operational state, (iii) perform experiments with thin films of bacterial rhodopsins, and (iv) interpret data and design model compounds on which to test hypotheses. Qualified applicants should send their curriculum vitae by 1 October 1982 to the attention of: **Dr. Janos Lanyi, Department of Physiology and Biophysics, University of California, Irvine, MED SCI 1, D340, Irvine, California 92717.** Equal Opportunity Employer.

CARDIOVASCULAR PHYSIOLOGIST UNIVERSITY OF NEBRASKA MEDICAL SCHOOL

The Department of Radiology is seeking a cardiovascular physiologist to head its research laboratory. Immediate opening at the assistant professor level. Ph.D. preferred, but not necessary. Send curriculum vitae and three references before 31 October:

Thomas J. Imray, M.D.
Professor and Chairman
Department of Radiology
The University of Nebraska Medical Center
42nd and Dewey Avenue
Omaha, Nebraska 68105

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

BIOCHEMISTRY/MICROBIOLOGY RESEARCH ASSOCIATE. We are seeking a highly qualified individual to fill a research associate position in the Bio-materials Conversion Laboratory, U.S. Department of Agriculture, Northern Regional Research Center, Peoria, Illinois. The appointee will be expected to be a major participant in an ongoing research program designed to elucidate the biochemical mechanism of lignocellulosic degradation by microorganisms. Preference will be given to candidates with experience in enzyme purification techniques and/or membrane biochemistry. This position is a term appointment (up to 2 years) at the GS-11 level (approximately \$23,500 per year). U.S. citizenship is required. Send curriculum vitae and three letters of recommendation to: **Dr. J. M. Gould, Northern Regional Research Center(S), 1815 North University Street, Peoria, Illinois 61604.** Telephone: 309-685-4011. Equal Opportunity Employer.

BIOCHEMIST: The Department of Chemistry at the University of Oklahoma has an opening for a permanent faculty member in biochemistry. Minimum qualifications for applicants include a Ph.D. in biochemistry or chemistry and excellent credentials in, as well as a strong commitment to, both research and teaching in biochemistry. The successful applicant will be expected to teach at both the undergraduate and graduate level and to maintain an active research program. Depending on background and experience, the appointment could be made at the rank of professor, associate professor, or assistant professor. *Minority candidates are most strongly encouraged to apply.* Applicants should submit a complete résumé, including research and teaching experience, future research plans, and any other supporting material, and have at least three letters of reference sent to: **Dr. Bruce Roe, Department of Chemistry, University of Oklahoma, 620 Parrington Oval, Norman, Oklahoma 73019.** Applications must be postmarked by 15 November 1982. *The University of Oklahoma is an Equal Opportunity/Affirmative Action Employer.*

BIOCHEMISTRY. Williams College has an opening for fall 1983 for a 3-year assistant professor position (with the possibility of reappointment and consideration for tenure) in biochemistry (Ph.D. required; postdoctoral experience preferred). Applicants should have a strong commitment to both teaching and research. Teaching duties each semester include complete responsibility for one course with laboratory and supervision of senior research projects. For an exceptionally well-qualified candidate, this appointment may be made at the associate or full professor level. Send résumé, description of research interests for undergraduates, and names of three references to: **Dr. Raymond Chang, Acting Chairman, Department of Chemistry, Williams College, Williamstown, Mass. 01267,** by 29 October 1982. *Affirmative Action/Equal Opportunity Employer. We are especially eager to identify minority and women candidates.*

BIOLOGY/MICROBIOLOGY/GENETICS. The Division of Liberal Studies, Biological and Physical Science Concentration Area, invites applications for a tenure-track position, available 1 January 1983, at the level of assistant professor. The responsibilities include instruction, both lecture and laboratory, in a beginning microbiology course designed for nursing and allied health students and an upper-level genetics course for preprofessional and allied health students. Although the prime responsibilities are teaching, faculty activities also include research and service. Desired qualifications include an earned doctorate and teaching experience in the above areas. Salary is competitive. Send résumé, three letters of reference, and copies of all transcripts by 15 October 1982 to: **Dr. Robert R. Roales, Coordinator of Natural Sciences and Allied Health, Indiana University at Kokomo, 2300 South Washington Street, Kokomo, Indiana 46902.** Indiana University is an Equal Opportunity/Affirmative Action Employer.

CURATOR/INSECT SYSTEMATIST

Assistant professor—tenure-track position. Duties include research on systematics of a major arthropod taxon, management and improvement of a large entomological collection, and teaching of introductory insect biology. Qualifications include a Ph.D. in systematic entomology. Send curriculum vitae, post-secondary transcripts, and names of three or four referees to: **M. J. Tauber, Chairman, Department of Entomology, Cornell University, Ithaca, N.Y. 14853.** Application deadline: 1 December 1982. *Cornell University is an Equal Opportunity/Affirmative Action Employer.*

**ASSISTANT PROFESSOR OF
ENVIRONMENTAL SYSTEMS
ANALYSIS (ESA)
DEPARTMENT OF
ENVIRONMENTAL HEALTH SCIENCES
HARVARD SCHOOL OF PUBLIC
HEALTH**

A position is open for a qualified person holding a Ph.D. or equivalent degree in environmental management or systems analysis or related disciplines. Additional background in quantitative disciplines, such as computing, microeconomics, mathematical optimization techniques, benefit/cost-effectiveness, and biostatistics-epidemiology is desirable. Publications and experience in the teaching, research, and application of these methodologies to problems in environmental systems are required.

The successful applicant will be expected to participate in selected departmental activities, including: (i) development of independent research in environmental systems analysis; (ii) collaborative work on modeling of air pollution exposure, risk assessment for radiation health effects, setting priorities for reducing population exposures to ionizing radiation, and evaluation of the health effects of airborne particles; (iii) shared teaching of an introductory environmental management course; (iv) supervision of doctoral students; and (v) perhaps, the development of a degree program in toxic waste management.

Harvard University is an Equal Opportunity Employer and has an Affirmative Action Program.

Applications, including curriculum vitae and names of three references, should be sent to:

Dr. John Bailar
Chairman of the Search Committee/ESA
Harvard School of Public Health
677 Huntington Avenue, Room 714
Boston, Mass. 02115

THE AUSTRALIAN NATIONAL UNIVERSITY invites applications to the following two positions in **DEPARTMENT OF GEOLOGY, FACULTY OF SCIENCE**, which the university hopes to fill, subject to funds being available.

LECTURER IN BASIN ANALYSIS. The appointee will be required to give lectures and practical courses on the principles of basin analysis, particularly as they are applied to the understanding of Australian Phanerozoic sedimentary basins. These courses would be expected to cover sedimentological, palaeontological, and geophysical approaches to the topic; numerical analysis of basin data would be an important part of practical courses. Research specialism in a relevant field of geoscience will be expected. The appointee will be required to undertake supervision of honours and postgraduate students in own field of specialization. In addition, he/she will be required to assist with the teaching of first year classes and with undergraduate fieldwork. Applicants must have a higher degree in geology. Experience in industry would be an advantage.

LECTURER IN PETROLOGY. A specialization in metamorphic and/or volcanic rocks is preferred. The successful applicant would be required to teach courses at all undergraduate levels, and undertake supervision of honours and postgraduate students in own field of specialization. Assistance with fieldwork would also be expected. Applicants must have a higher degree in geology.

Salary will be in accordance with qualifications and experience within the ranges: lecturer, \$22,430-\$29,467 per annum. Current exchange rates: A\$1=U.S.\$98=U.K.\$57p. Appointment will be: lecturer for 4 years in the first instance with the possibility of reappointment, after review, to retiring age. Reasonable appointment expenses are paid; superannuation; assistance with housing. The university reserves the right not to make an appointment or to make an appointment by invitation at any time. Applicants may obtain further particulars from: **The Registrar, The Australian National University, P.O. Box 4, Canberra, A.C.T., Australia**, with whom applications close on 30 October 1982.

**HENRY LUCE PROFESSORSHIP
IN AGRICULTURAL PRODUCTION
AND SOCIETY
TUFTS UNIVERSITY**

The Tufts University School of Nutrition invites applications and nominations for the Henry Luce Professorship in Agricultural Production and Society.

The appointee to this nontenured position will develop courses and curricula for non-farming students. The curricula will be directed toward undergraduates and graduate students in nutrition, public health, and development studies whose careers will entail decision-making in areas affecting and affected by agriculture.

Areas of particular research and teaching interest include implications of agricultural policies and technology on nutrition and food safety; the relationship between agriculture and the larger economy; and the influence of agriculture on policies on environmental quality and rural economic and social life.

The candidate must have demonstrated the ability to work in an exceptionally broad range of agricultural areas—scientific, technical, and social—required to fulfill the promise of this chair.

The Tufts School of Nutrition is a multidisciplinary faculty including biomedical, social, and political scientists whose mission is to conduct research, and educational and community service programs in nutrition.

Applications and nominations should include curriculum vitae, names of three references, and statements of teaching and research interests, and should be submitted by 15 October 1982 to:

Stanley N. Gershoff, Ph.D., Dean
School of Nutrition
Tufts University
Medford, Mass. 02155

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RESEARCH CHEMIST

The Toxicology Research and Testing Program of the National Institute of Environmental Health Sciences, Research Triangle Park, NC has a permanent position for a qualified research chemist at the annual salary of \$33,586. The qualification requirements are a Ph.D. or equivalent in Chemistry, Biochemistry or Toxicology and five or more years postdoctoral experience and independent research involving design and conduct of studies of xenobiotic metabolism including isolation and identification of metabolites. Experience which is evidenced by manuscripts should include hands-on use of analytical chemical techniques including gas and high pressure liquid chromatography, preparation and analysis of chemical derivatives and chemical analysis by mass spectrometry.

Applicants must be found to be eligible on a Civil Service Register. If interested, please send a curriculum vitae by Oct 17, 1982 to Personnel Office T-53, NIEHS, P.O. Box 12233, Research Triangle Park, NC 27709.

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MICROBIOLOGIST OR MICROBIAL PHYSIOLOGIST

We are seeking applications for a position in our Research and Development Laboratories in the area of fermentation.

The successful candidate must have extensive training and state-of-the-art experience in:

- Strain selection techniques and mutagenesis
- Protein isolation techniques
- Enzymology

The candidate should be capable of initiating new and innovative programs.

This person should have a Ph.D. with 2-5 years' post-doctoral or industrial experience.

Send resume, list of publications, and names of three professional references to:

Mr. Gordon R. McPherson, Manager
Personnel Administration
Research and Development Division
Corning Glass Works
Corning, NY 14831

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Respiratory Pharmacologist

SmithKline Beckman, a world leader in health care and technology is seeking a Pharmacologist who has a keen interest and experience in research in pulmonary pharmacology.

The successful candidate will be expected to:

- assist in developing and directing a research program in pulmonary pharmacology
- apply known state-of-the-art technologies/theories and create new methodologies where applicable to the discovery of drugs to treat the diseases of the respiratory tract
- prepare scientific reports for oral presentation and publication in scientific journals
- maintain a high degree of literature familiarity
- train, supervise and evaluate laboratory personnel
- establish and maintain scientific contacts in academia

Candidates are required to have:

- a PhD in pharmacology with 2 or more years of relevant post doctoral experience in conducting in vivo and in vitro experiments in respiratory pharmacology
- a thorough knowledge of those animal models used to investigate acute and chronic aspects of pulmonary diseases
- excellent written and oral communication skills

Preference will be given to those who also have:

- biochemical experience in conducting ionic flux investigations
- experience in receptor identification and drug-receptor interactions
- a demonstrated record of bibliographic excellence and the ability to interact in an interdisciplinary fashion

We offer excellent compensation and benefits and an attractive relocation policy. For confidential consideration, send your C.V. and names of 3 references to: Mr. Walter B. Flagg, SMITHKLINE BECKMAN CORPORATION, 1540 Spring Garden Street, Philadelphia, PA 19101. We are an equal opportunity employer, M/F/H/V

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POSITIONS OPEN

BIOLOGICAL OCEANOGRAPHER—The Department of Biology seeks a biological oceanographer with experience and expressed interest in the area of microplankton dynamics. We are particularly interested in food chain interactions and spatial relationships, between very small autotrophs and heterotrophs in offshore waters. Interest and experience in developing a sea-going research program is a prerequisite for consideration. The successful candidate will be expected to generate his/her own research funds. Appointments will be at the assistant or associate scientist level, depending on the candidate's qualifications. Candidates should be several years beyond the Ph.D. level. Applications should include curriculum vitae, references, transcript, list of publications. Interested candidates should apply to: **Personnel Manager, Box 54P, Woods Hole Oceanographic Institution, Woods Hole, Mass. 02543. An Equal Opportunity Employer, M/F/H.**

BIOLOGICAL RHYTHMS. Research scientist or postdoctoral position available immediately for collaboration on projects studying mammalian rhythm generation and regulation. Ph.D. required. Salary: low- to mid-\$20,000 range, adjustable according to experience. Submit curriculum vitae, brief description of research interests and experience, plus names of three references to: **Dr. L. P. Morin, Long Island Research Institute, Department of Psychiatry of Behavioral Medicine, Health Science Center, T10, Stony Brook, N.Y. 11794.**

CELL BIOLOGISTS OR NEUROBIOLOGISTS. The Department of Anatomy at the University of Tennessee Center for the Health Sciences announces three tenure-track positions at the level of Assistant Professor beginning 1 July 1983. Applicants should have at least 2 years of postdoctoral experience with good publication record and demonstrated ability to conduct an active research program in an area of **cell biology or neurobiology**. Teaching experience in gross anatomy, histology, or neuroanatomy is preferred. Curriculum vitae, brief statement of research interests, reprints, and names of four references should be received by 15 November 1982, addressed to: **Dr. Sidney A. Cohn, Chairman, Department of Anatomy, University of Tennessee Center for the Health Sciences, Memphis, Tennessee 38163. An Equal Opportunity/Affirmative Action Employer.**

CHAIRMAN MOLECULAR AND CELLULAR BIOLOGY

The Cleveland Clinic Foundation is seeking Ph.D. or M.D. applicants for the chairmanship of the Department of Molecular and Cellular Biology in the Division of Research. The existing department has 15 staff with funded research in immune regulation, lymphokines, radiobiology, and tumor pharmacology. Applicants should have a background in cancer biology and immunology. Opportunities are available for development of new programs and collaboration between clinical and basic research. Professional and administrative leadership skills should be evident. Reply to: **F. A. Gutman, M.D., c/o Ophthalmology Department, Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, Ohio 44106.**

CYTOGENETICIST UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE

The Center for Genetics is seeking candidates for a faculty position in the area of cytogenetics, to begin after 1 January 1983. The position will be at the level of assistant professor (tenure-track) or associate professor (tenured), depending upon qualifications, and will include joint appointments in Pediatrics and Pathology. The position involves supervision of a clinical cytogenetics laboratory and establishment of an active research program in the area of cell genetics, cytogenetics, or human genetics. Candidates must possess an M.D. or Ph.D. degree and have at least 3 years of postdoctoral research experience. Evidence of outstanding research potential and accomplishments, as well as the ability to effectively supervise a cytogenetics laboratory, will be primary considerations. For fullest consideration, applicants should send their curriculum vitae, names and addresses of four references, and a statement of research interest by 1 November 1982 to:

**Dr. Richard L. Davidson, Director
Center for Genetics
University of Illinois College of Medicine
at Chicago
Chicago, Ill. 60612**

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Associate Scientist

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We're Land O'Lakes, Inc., a leader in the food marketing and processing industry. Our Fortune 200 firm, producing sales of \$3.5 billion annually, has expanded our product line and improved our facilities.

Right now, we have an opening in Minneapolis for an individual to participate in all facets of research projects in immunology and protein functionality. Qualified candidates will possess a BS degree in Biochemistry or Chemistry and 1-3 years professional experience working in a Research Lab on whey proteins, immunology, or protein functionality.

Land O'Lakes offers attractive salaries, excellent benefits and exceptional opportunities for personal and professional growth. For confidential consideration, please send your resume to **Mary Ann Novak, LAND O'LAKES, INC., P.O. Box 116, Minneapolis, MN 55440.** An Equal Opportunity Employer M/F.

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Scientist Recombinant DNA

Our thrust in DNA research offers impressive resources and the independence to achieve project goals.

Becton Dickinson—a pioneering health services company investing over \$43.5 million in R&D in 1981—is heavily committed to biotechnology. Our Corporate Research Center in Research Triangle Park, NC is now concentrating on a variety of projects with significant potential.

We seek a scientist skilled in state-of-the-art recombinant DNA technology who can assist in project definition and initiate research directed toward diagnostic product development.

A PhD in Molecular Biology/Bacterial Genetics and a record of achievement in obtaining expression of restricted DNA in procaryotes are required.

We offer excellent salary and benefits including relocation expenses. For a full briefing on the projects we are involved in, send fully confidential curriculum vitae to: **Mr. F. Richard Wilson, Human Resources Department, Becton Dickinson, P.O. Box 12016, Research Triangle Park, North Carolina 27709.** An equal opportunity/affirmative action employer.

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NATIONAL HEART, LUNG, AND BLOOD INSTITUTE NATIONAL INSTITUTES OF HEALTH PUBLIC HEALTH SERVICE DEPARTMENT OF HEALTH AND HUMAN SERVICES

HEALTH SCIENTIST ADMINISTRATOR (BIOLOGICAL SCIENCES)

The National Heart, Lung, and Blood Institute, Division of Lung Diseases, Interstitial Lung Diseases Branch, is seeking qualified applicants for a permanent appointment as Health Scientist Administrator (Biological Sciences). This position is in the Civil Service at the GS-13 or GS-14 level with a salary range of \$33,586 to \$50,112 per annum. The incumbent serves as a professional assistant to the Branch Chief with primary responsibilities for scientific review, evaluation, and administration of research grants and contracts; applies technical knowledge of the general field of pulmonary physiology, immunology, biochemistry or pharmacology; acts as a co-participant with the Branch Chief in the planning and direction of the Branch programs related to acute respiratory failure; and assists in project site visits and serves as a representative of the NHLBI.

Further information about the position and qualification requirements may be obtained by contacting Ms. Kathryn Osbourn at (301) 496-6477. Applications (Personal Qualifications Statements, SF-171) accompanied by a current curriculum vitae and bibliography should be submitted to Ms. Osbourn at: NHLBI Personnel, Building 31, Room 5A32, National Institutes of Health, 9000 Rockville Pike, Bethesda, Maryland 20205.

Applications must be postmarked no later than October 9, 1982. (The SF-171 form is available at all Federal Personnel Offices and Job Information Centers.).

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IS AN EQUAL OPPORTUNITY EMPLOYER.*

POSITIONS OPEN

CHAIRMAN, DEPARTMENT OF NEUROLOGY. Loyola University Medical Center is seeking an individual with recognized clinical skills and a major commitment to neuroscience research to chair its Department of Neurology. The Medical Center is a 12-year-old private academic institution situated in the western suburbs of Chicago. The 550-bed university hospital recently has added a large outpatient facility and plans further expansion. It interfaces at all levels with the Hines VA Hospital, a 1200-bed facility adjacent to the Medical Center, which provides excellent research and grant opportunities. Interested candidates should contact: **O. Howard Reichman, M.D., Professor and Chief, Division of Neurological Surgery, Loyola University Medical Center, 2160 South First Avenue, Maywood, Ill. 60153.**

DEAN COLLEGE OF PHARMACY THE UNIVERSITY OF IOWA Available 1 January 1983

Applications and nominations are now invited for the position of dean of the College of Pharmacy of The University of Iowa. Applicants should have appropriate academic credentials and must have demonstrated excellence in scholarship and teaching. Administrative experience is desirable. The appointment will be at the rank of tenured full professor. Salary, starting date, and other aspects pertaining to this position are negotiable.

Applicants should provide complete curriculum vitae, including names of references. Nominations, inquiries, and applications will be received until the position is filled and should be addressed to:

**Professor Douglas Flanagan, Chair
Dean Search Committee
College of Pharmacy
The University of Iowa
Iowa City, Iowa 52242**

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

ENDOCRINOLOGIST—Assistant professor (tenure-track), working in areas such as molecular mechanisms of hormone action, including recombinant DNA techniques, factors regulating growth and development, and neuroendocrinology. The successful applicant will be expected to develop a vigorous research program, and to teach at undergraduate and graduate levels. Requirements are a doctor of philosophy degree or equivalent, demonstrated research ability in his/her area of interest, and strong prospects for funding of the research program. Postdoctoral experience is highly desirable. Applicants should submit detailed curriculum vitae, three letters of recommendation, and a letter describing their research interests to: **Dr. James Redmond, Chairman, Search Committee, Department of Zoology, Iowa State University, Ames, Iowa 50011.** Application deadline: 1 November 1982, or until filled.

THE UNIVERSITY OF COLORADO, Department of Chemistry, seeks applications for a tenure-track faculty position in **EXPERIMENTAL PHYSICAL CHEMISTRY**, beginning September 1983. The position is joint with the Cooperative Institute for Research in Environmental Sciences (CIRES). CIRES is jointly sponsored by the University of Colorado and the National Oceanic and Atmospheric Administration, and conducts research in atmospheric chemistry, environmental chemistry, geophysics, and other environmental sciences. The position may be filled at the assistant professor, associate professor, or professor level. Minimum academic year (9 months) salary for assistant professor is \$24,000. Actual starting salary will be based on experience and qualifications. Candidates are expected to establish, or have established, vigorous research programs in experimental physical chemistry. Teaching duties will include undergraduate and graduate instruction with an emphasis on the supervision of graduate research. Applicants should submit curriculum vitae and a summary of plans for research, and should ask three persons familiar with their qualifications to send letters of recommendation. Candidates for appointment at the assistant or associate professor level should also submit undergraduate and graduate transcripts. First consideration will be given to applications received by 30 September 1982. The search will remain open until the position is filled. Applications should be sent to: **CIRES—Chemistry Department Search Committee, John Birks, Chairman, Campus Box 215, University of Colorado, Boulder, Colo. 80309.** An Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

DEAN OF THE COLLEGE OF LIBERAL ARTS, THE UNIVERSITY OF MISSISSIPPI. The University of Mississippi is inviting applications and nominations for the position of dean of the College of Liberal Arts. Established in 1848, the College of Liberal Arts is the oldest and largest division of the university and comprises 21 departments with over 290 faculty members. The college offers diverse undergraduate and graduate programs in both humanities and sciences.

The candidate must hold an earned doctorate, or its equivalent, in a liberal arts discipline, qualify for professorial rank in an appropriate department, and have demonstrated excellence in research and teaching. Administrative experience is preferred.

Applicants should include curriculum vitae and names, addresses, and telephone numbers of five references.

Application deadline: 15 November 1982; position available July 1983.

Applications and nominations should be submitted to:

**Dr. Lawrence A. Crum, Chairperson
Dean Search Committee
Department of Physics
The University of Mississippi
University, Miss. 38677
Equal Opportunity Employer**

THE UNIVERSITY OF BRITISH COLUMBIA

The University of British Columbia invites applications and nominations for the position of **DEAN OF THE FACULTY OF FORESTRY**. The appointment will be effective 1 July 1983 or as soon as possible thereafter, and is for a term of 6 years, renewable at the pleasure of the Board of Governors on the recommendation of the president.

The dean is responsible for giving academic leadership to, and administering a faculty with, three departments and 35 full-time faculty members. The Departments of Harvesting and Wood Science, Forest Sciences, and Forest Resources Management are responsible for the education of about 375 undergraduate and 75 graduate students in both master's and doctoral programs. The university owns a research forest of 5000 hectares some 60 kilometers distant from the campus. It is an integral part of teaching and research.

The university is seeking candidates with administrative experience who have established reputations appropriate to forestry research and education, and professional practice.

The university offers Equal Opportunity for Employment to qualified male and female candidates.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

The closing date for applications is 31 December 1982 or until the position is filled.

Reply to:

**Dr. J. K. Stager, Chairman
President's Search Committee—Dean of Forestry
Buchanan 130
The University of British Columbia
1866 Main Mall
Vancouver, British Columbia, Canada V6T 1W5**

DIRECTOR of new environmental studies degree program with rigorous tracks in biology, chemistry, management, and physics; opportunity for contacts with Regional Research Laboratory of U.S. Forest Service on campus. Assistant/associate level. Position open August 1983. Send résumé to: **Professor Lloyd Remington, Chemistry Department, University of North Carolina at Asheville, Asheville, N.C. 28814.** Deadline: 1 November 1982. An Equal Opportunity/Affirmative Action Employer.

MOLECULAR BIOLOGY

The Department of Molecular Biology and Microbiology at Case Western Reserve University invites applications for several tenure-track faculty positions. We encourage applications from candidates with strong credentials in molecular biology, especially as applied to areas of virology and immunology. These appointments provide excellent opportunities to develop independent research programs and to teach medical and graduate students. Send curriculum vitae, a statement of research and teaching interests, and the names of four references to: **Dr. Fritz Rottman, Chairman, Department of Molecular Biology and Microbiology, Case Western Reserve University, Cleveland, Ohio 44106.** An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

DIRECTOR WASHINGTON SEA GRANT PROGRAM

Applications are invited from suitably qualified individuals for the position of director, Washington Sea Grant Program. The director reports administratively to the dean of the College of Ocean and Fishery Sciences, University of Washington, and is responsible for supervision of the Sea Grant Program on a statewide basis. The university serves as one of 16 National Sea Grant Colleges with strong programs in advisory services, education, and research. Duties include establishing policies, setting priorities within the program, soliciting and selecting proposals with peer review assistance, fixing funding levels, directly recruiting and supervising Sea Grant staff, and coordinating on-campus and off-campus activities. The director must be capable of interacting effectively with scholars, technical researchers, teachers, marine industry personnel, federal, state, and local government officials, and the interested general public. Applicants should possess the normal prerequisites for a senior academic position (usually Ph.D. and appropriate experience) as well as good knowledge and understanding of marine-related problems (particularly fisheries, ships and shipping, oceanography, and coastal zone management). Previous experience in the Sea Grant area and knowledge of the particular problems and opportunities in the Pacific Northwest region would be advantageous. The successful applicant may be considered for a faculty appointment.

Submit applications with résumé and names of three independent references no later than 15 October 1982 to:

**Donald E. Bevan, Chairman
Washington Sea Grant Search Committee
A-204 Fisheries Center, WH-10
University of Washington
Seattle, Washington 98195**

FACULTY POSITION IN NUTRITION. Food Science and Nutrition, University of Minnesota, associate or full professor, tenure, full year appointment. Teach undergraduate and graduate courses; direct graduate student research. Require Ph.D. or other doctorate in nutrition or related science, demonstrated proficiency in teaching, and record of success in research funding. Full professorship considered only if appointee has nine or more years of relevant experience and appropriate record of achievement. Salary open; attractive fringe benefits include vacation, hospital-medical, leave, life insurance, retirement plan, no waiting period. Send applications, including detailed résumé and names of three references, by 1 December (or until filled) to: **Dr. L. M. Henderson, 256 Gortner Laboratory, University of Minnesota, 1479 Gortner 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.

MOLECULAR BIOLOGIST

The Bioproducts Laboratory of The Dow Chemical Company has immediate openings for individuals with two or more years of postdoctoral experience in recombinant DNA research. **Applicants must have expertise in one or more of the following:** lambda genetics; construction of gene banks; radioimmunoassay techniques; the secretion of proteins in either Gram-negative or Gram-positive microorganisms; and the cloning of eukaryotic genes.

Applicants please write or call: **Dr. Ron Wilson, Bioproducts Laboratory, 1701 Building, The Dow Chemical Company, Midland, Michigan 48640 (telephone: 517-636-2529).** Equal Opportunity/Affirmative Action Employer.

NUTRITIONIST, POULTRY—Department of Animal Science, University of Minnesota. To be responsible for poultry research and teaching (65 percent) and extension (35 percent). Qualifications include a Ph.D. Prefer emphasis in nutrition or biochemistry. Minimum of 3 years of poultry experience and strong interest in poultry industry with a demonstrated ability to conduct independent research.

A description of position and facilities is available upon request. Send résumé to: **Dr. Robert Shoffner, Department of Animal Science, University of Minnesota, 1404 Gortner Avenue, St. Paul, Minn. 55108.** Telephone: 612-373-1487. Applications will be accepted until 1 November 1982.

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

RESEARCH OPPORTUNITIES

Enzo Biochem, Inc., a dynamic company working in areas of Biomedical Research and Development, is offering important research positions to persons with proven competence in the areas of Organic Synthesis, Recombinant DNA, Enzymology and Immunology.

- **Organic Chemist**

Demonstrated expertise in organic synthesis in the area of nucleic acid or carbohydrate chemistry.

- **Molecular Biologist/Recombinant DNA**

Competence in recombinant DNA techniques and experience in cloning of microbial DNA.

- **Enzymologist**

Competence in techniques of protein purification.

- **Immunologist**

Experience in novel immunodetection techniques as applied to animal or plant diseases.

In all four disciplines the persons sought must have a Ph.D. degree or equivalent, and must be able to demonstrate scholarly and creative competence in their respective areas of specialization.

The individuals sought would become integrated into the multidisciplinary research activities of Enzo Biochem.

We offer liberal employment terms and a pleasant working environment.

Please send a resume to:

Personnel Director
Enzo Biochem, Inc.
325 Hudson Street
New York, N.Y. 10013



HOFFMANN-LA ROCHE

Protein Scientist Chemist/Biochemist

Hoffmann-La Roche, one of the world's leaders in the pharmaceutical industry, has a career opportunity in its Molecular Genetics Department.

The successful candidate will be expected to take novel approaches to problem-solving as well as perform routine analyses in a protein chemistry/biochemistry laboratory.

QUALIFICATIONS: MS plus seven years or BS plus ten years relevant experience in peptide/protein chemistry including purification procedures, amino acid analysis and sequencing techniques; HPLC; and independent research.

Roche offers an outstanding compensation package, including an attractive bonus, and an environment that encourages professional growth.

Only responses including present salary will be acknowledged. Please send resume to Eleanor M. Malone, Employment Department, Position 769. An equal opportunity employer.



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Research Scientists

Career positions are currently available at Agrigenetics for research scientists (Ph.D. level) and assistants (B.S./M.S. level) with proven expertise in the following areas.

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- Plant Pathology
- Developmental Physiology/Biochemistry
- Statistics; Experimental Design; Data Management
- Agricultural Engineering

These positions will be at our new Applied Genetics Laboratory in Boulder, Colorado. This commercially oriented laboratory will emphasize the development and reduction to practice of various new genetic technologies. Initial focus will be primarily on near to mid-term projects related to the development and implementation of crop improvement strategies which embody plant cell and tissue culture techniques. The overall research effort will complement and be fully integrated with Agrigenetics' on-going research programs at its Advanced Research Laboratory (Madison, Wisconsin), company Plant Breeding Stations (8 locations in U.S.), as well as with sponsored research projects at various universities and private research organizations.

Located in the foothills of the Rocky Mountains, Boulder is a unique university community with outstanding cultural activities and is noted for its exceptional variety of year-round outdoor recreation. The Agrigenetics laboratory is near the campus of the University of Colorado and is a short drive from Colorado State University in Fort Collins.

Agrigenetics is a private, shareholder owned company, actively engaged in the research, production, and marketing of seeds of more than 50 crop species as well as certain nitrogen-fixing bacterial preparations. The company has current revenues of over \$100,000,000 and provides its employees with an attractive compensation and benefits program.

Applicants seeking an exciting and challenging intellectual environment and desiring to join a strong and pragmatic organization should send their resume, list of references, copy of transcripts, and brief description of professional interests, in confidence, to:

**Director,
Applied Genetics Laboratory
Agrigenetics Corporation
3375 Mitchell Lane
Boulder, Colorado 80301**



POSITIONS OPEN

FACULTY POSITION IN PHYSIOLOGY DR. WILLIAM M. SCHOLL COLLEGE OF PODIATRIC MEDICINE 1001 North Dearborn Street Chicago, Illinois 60610

Applications are invited for a faculty position in the Department of Physiological Sciences. Requirements include a Ph.D. and a firm commitment to teaching. We offer faculty rank and salary commensurate with professional achievement. Position available immediately.

Duties include the design and teaching of a comprehensive course in medical physiology, including laboratory, to first-year medical students. Limited funding is available to assist in personal research interests.

Please submit a letter of application, curriculum vitae, and supporting material, including the names of three references, to: **WALTER RUDEK, Ph.D., ASSOCIATE DEAN.**

Equal Opportunity Employer

HEAD, DEPARTMENT OF MICROBIOLOGY

The College of Medicine, University of Saskatchewan, is seeking applications for the position of head, Department of Microbiology. Associated with the headship will be a tenure-track academic appointment. Applications are invited from Ph.D.'s and/or M.D.'s with research experience. The successful candidate will be expected to provide administrative direction to a department consisting of approximately ten faculty and a similar number of support staff, to participate in the teaching program, and to provide academic leadership in the areas of undergraduate teaching, graduate teaching, and research. The department is also responsible for microbiological service in the University Hospital. The appointment will be at a level commensurate with qualifications and experience. Please send enquiries or applications (including curriculum vitae and the names of three referees) to: **Dean R. G. Murray, College of Medicine, B103 Health Sciences Building, Saskatoon, Saskatchewan, Canada S7N 0W0.** Applications are welcome until an appointment is made.

INTERDISCIPLINARY: RESEARCH PHARMACOLOGIST OR BIOLOGIST, GS-405/401-11, POSTDOCTORAL POSITION IN GENETIC TOXICOLOGY—To investigate the mode of action of phorbol diester tumor promoters in mouse epidermal cells. Research will focus on (i) isolation and characterization of high-affinity receptors in epidermal cells, (ii) determination of physical chemical properties of the receptor, and (iii) elucidation of the biological consequences and the function of the receptor in tumor promotion. Temporary, not to exceed 2 years. Résumé and references, due by 15 October, to: **Dr. D. L. Berry, U.S. Department of Agriculture, Western Research Center, 800 Buchanan Street, Berkeley, California 94710.** An *Equal Opportunity/Affirmative Action Employer.*

MEMBRANE BIOCHEMIST—Ph.D. in biochemistry, cell biology, or physiology required to study the reconstitution of renal transport systems into liposomes. Send curriculum vitae and names of three references to: **Dr. Robert G. Faust, Department of Physiology 206H, University of North Carolina School of Medicine, Chapel Hill, N.C. 27514.** *Affirmative Action/Equal Opportunity Employer.*

A **PEDIATRIC PATHOLOGIST** is needed to fill a faculty vacancy at University of California, Los Angeles (UCLA) School of Medicine. Qualifications include an M.D. degree, Board-certification in anatomical pathology, eligibility for California licensure, and 2 or 3 years of research training. Duties will include assisting in the operation of our autopsy service; teaching of residents and medical, dental, and graduate students; and developing an independent research program. Appointment at the assistant professor level is anticipated. Application should include curriculum vitae, a summary of research interests, and the names of four references and should be sent to: **P. A. Cancilla, M.D., Chairman, Department of Pathology, UCLA School of Medicine, Los Angeles, Calif. 90024.** *UCLA is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are encouraged to apply.*

POSITIONS OPEN

HEAD OF CHESAPEAKE BIOLOGICAL LABORATORY

The Chesapeake Biological Laboratory (CBL), a part of the University of Maryland's Center for Environmental and Estuarine Studies (CEES), is seeking a new head of laboratory. The laboratory is located at Solomons, Maryland, on the western shore of the Chesapeake Bay. It is one of three laboratories within CEES dedicated to environmental and estuarine science in the Chesapeake region and to marine science in general on the national and international level. There are 14 tenure-track faculty, 60 employees, and 36 graduate students at CBL. Research interests include ecosystem studies, fishery science, environmental chemistry-toxicology, and microbiology.

Scientists from a wide range of disciplines within marine and estuarine science are encouraged to apply. The successful candidate will be offered a tenured professorship within CEES. Experience in scientific and/or academic administration or management of large scientific programs is desirable. Applicants should have a distinguished record of scientific accomplishments, including research publications and grant support, and the desire to carry on a vigorous research program at CBL. Program development will be a responsibility of the head of laboratory. Salary will be competitive. Applications received by 30 November 1982 will be assured of full consideration. Nominations and applications (with names of references) should be sent to: **Dr. Edward D. Houde, Chairman of Search Committee, Chesapeake Biological Laboratory, P.O. Box 38, Solomons, Maryland 20688-0038,** from whom further details may be obtained.

Affirmative Action/Equal Opportunity Employer

PATHOLOGIST. A cardiovascular pathologist is needed to fill a faculty vacancy at the University of California, Los Angeles (UCLA), School of Medicine. Qualifications include an M.D. degree. Board-certification in anatomical pathology, eligibility for California licensure, and 2 or 3 years of research training. Duties will include assisting in the operation of our autopsy service; teaching of residents and medical, dental, and graduate students; and developing an independent research program. Appointment at the assistant professor level is anticipated. Application should include curriculum vitae, a summary of research interests, and the names of four references should be sent to: **P. A. Cancilla, M.D., Chairman, Department of Pathology, UCLA School of Medicine, Los Angeles, Calif. 90024.** *UCLA is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are encouraged to apply.*

DEPARTMENT OF PHARMACOLOGY HARVARD MEDICAL SCHOOL

Two faculty positions in the Department of Pharmacology, Harvard Medical School, are available at the Assistant/Associate Professor level. Both positions could be filled within the coming year. Research interests should be concerned with mechanisms of regulation of cellular function. Examples of areas of interest include neuropharmacology, membrane biochemistry, and drug-receptor interactions. Applicants using chemical, electrophysiological, biochemical, and/or genetic approaches are particularly encouraged. Interested candidates should send a curriculum vitae, brief statement of research interests, bibliography, and names of three references to: **Chairman, Search Committee, Department of Pharmacology, Harvard Medical School, 250 Longwood Avenue, Boston, Mass. 02115.** *Harvard University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL ASSOCIATE POSITION. For physical chemical studies of thrombin-induced formation of fibrin. Applicant must have a Ph.D. in chemistry or biochemistry and preferably some experience in the blood-clotting field. Available 1 July 1983 or possibly earlier. Send résumé and two letters of recommendation to: **Professor H. A. Scheraga, Baker Laboratory of Chemistry, Cornell University, Ithaca, New York 14853.** *Cornell University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available immediately for genetic improvement of industrial microorganisms using recombinant DNA technology. Experience with recombinant DNA techniques, microbial genetics, and protein purification expected. Send curriculum vitae and three letters of reference to: **Dr. Donald H. Dean, Department of Microbiology, The Ohio State University, Columbus, Ohio 43210.** *An Equal Opportunity/Affirmative Action Employer*

POSITIONS OPEN

PLANT BIOCHEMISTRY/PHYSIOLOGY. Postdoctorate or technician (M.S. or B.S. with experience). (See *PNAS* 76, 6371; *Plant Physiol.* 67, 12, *Recent Adv. Phytochem.* 16, 185.)

William H. Outlaw, Jr.
Department of Biological Sciences (Unit 1)
Florida State University
Tallahassee, Florida 32306

PLANT TISSUE CULTURIST

Position in horticulturally oriented research with responsibilities in micropropagation and teaching of courses and workshops in tissue culture. Salary: \$16,000. Apply by 15 October 1982 to: **Personnel Office, The New York Botanical Garden, Bronx, New York 10458.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL/LIMNOLOGIST POSITION

The Limnology Research Centre, McGill University, invites applications for a 2-year position at C\$17,000 per year. Experimentalists with an interest in predictive field research in nutrient/heavy-metal cycling, sediment dynamics, littoral benthic production, or the role of fish in these processes are preferred. Send enquiries or applications with two letters of reference and a research proposal to: **Dr. J. Kalf, Director, Limnology Research Centre, Department of Biology, McGill University, 1205 Avenue Docteur Penfield, Montreal, Québec, Canada H3A 1B1.** Telephone: 514-392-4660. Starting date between October 1982 and May 1983.

POSTDOCTORAL POSITION IN NUTRITION

Performs research on trace element bioavailability using stable isotope techniques. Experience with nutritional studies and trace element chemistry desired. Strong chemistry background required. One-year position with possibility for renewal. Available 15 October 1982 at a salary range of \$15,000 to \$17,000. Send curriculum vitae, names of three references, and relevant publications to:

Ramona J. Martin
Human Nutrition Research Center
P.O. Box 7166, University Station
Grand Forks, N.D. 58202

We are an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately for an experimental biophysicist or physiologist to study the propagation of electrical activation in cardiac and other multicell systems. The research will involve application of intracellular and extracellular microelectrodes, orbiting microprobes, and recently developed superconducting and semiconductor amplifiers. Send curriculum vitae and names of three references to: **Dr. John P. Wikswo, Department of Physics, Vanderbilt University, Box 1807 Station B, Nashville, Tenn. 37235.**

An Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL POSITION available to study human cell surface receptors. Techniques include somatic cell genetics, gene mapping, monoclonal antibody production, and recombinant DNA analysis. Experience with glycoprotein or glycolipid characterization an asset. Send résumé and references to: **Dr. Carol Jones, Senior Fellow, Eleanor Roosevelt Institute for Cancer Research, and Associate Professor, Department of Biochemistry, Biophysics and Genetics, University of Colorado Health Sciences Center, 4200 East Ninth Avenue, Box B129, Denver, Colorado 80262.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION AVAILABLE in a multidisciplinary neurosciences department with primary research focus on epilepsy and related topics. Several laboratories are interested in, or presently pursuing studies utilizing, autoradiography/receptor binding and immunohistochemistry. Faculty seek a postdoctoral fellow trained in these techniques to help develop, facilitate, and coordinate these activities. Excellent opportunities exist for participation in electrophysiological, morphological, and behavioral/pharmacological investigations. NRSA stipend with payback agreement for U.S. citizen or permanent resident. Send inquiries and curriculum vitae to:

Philip A. Schwartzkroin, Ph.D.
Training Grant Committee
Department of Neurological Surgery RI-20
University of Washington
Seattle, Washington 98195

An Affirmative Action/Equal Opportunity Employer

RENAL PHARMACOLOGIST

Merck Sharp & Dohme Research Laboratories, a world renowned leader in the development of pharmaceutical and biological products, is currently seeking a Renal Pharmacologist to conduct independent research studies on the renin-angiotensin system. The selected candidate will be responsible for developing a basic research program related to vascular angiotensin II receptors as well as measurement of circulating and tissue levels of various angiotensins.

Candidates must have Doctoral Degree or the equivalent with 1-2 years of post-doctoral experience in the areas of RIA, receptor binding studies and HPLC. Some experience in renal physiology/pharmacology is desirable.

An excellent salary, a comprehensive benefits program and a highly professional environment accompany this position at our modern research facilities in a suburban setting near Philadelphia.

Please send your curriculum vitae with publication record to: Jacques P. Kueny

**Merck Sharp & Dohme
Research Laboratories**

West Point, PA 19486

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RESEARCH INVESTIGATOR

Biochemistry

G. D. Searle Research and Development has an immediate need for a Research Investigator within its Microbiological Development Department. The ideal candidate will have a Ph.D. in Biochemistry with zero to three years experience in enzyme isolation and kinetics. A strong background in organic chemistry is a must and some experience in microbiology is desirable. The selected individual will plan and execute a variety of basic and applied biochemical research projects and provide support for microbiological processes as needed.

Searle R&D offers a competitive salary and comprehensive benefits package. To apply in confidence send resume and the names of three references to:

**Sheila Copeland
Sr. Employment Counselor
#82123-077**

Research & Development Division

G. D. Searle & Co.

4901 Searle Parkway
Skokie, IL 60077

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DEPARTMENT OF HEALTH AND HUMAN SERVICES PUBLIC HEALTH SERVICE NATIONAL INSTITUTES OF HEALTH NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Opening Date: October 1, 1982 Closing Date: November 12, 1982

(All applications must be post-marked by the closing date.)

DIRECTOR... DIVISION OF LUNG DISEASES

The National Heart, Lung, and Blood Institute is recruiting a Director for its Division of Lung Diseases. The Director will coordinate the planning, management, and evaluation of a major program of basic and targeted research, cooperative clinical trials, education and demonstration projects, and national lung centers. The Division itself is divided into six major programs, with a staff of approximately 30 employees and a current annual budget in excess of \$80 million.

This is a Civil Service position in the Senior Executive Service (SES), with base salary from \$54,755 to \$61,300 per year depending on qualification. Currently, the payable salary is limited to \$58,500. Physicians may be eligible for a comparability allowance up to \$10,000 per year. (Alternatively, candidates may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service). The SES individual selected, if not presently in the Senior Executive Service, must serve a one year probationary period. Mandatory professional/technical qualifications are a medical degree, or education in biomedical science and research and/or clinical experience in the field of lung diseases. Further information on these qualifications available by contacting Kathryn Osbourn, Personnel Management Specialist, National Institutes of Health, National Heart, Lung, and Blood Institute, Building 31, Room 5A-32, Bethesda, MD 20205, (301) 496-6477.

Mandatory managerial/executive qualifications include evidence of management of a basic or clinical research program, demonstrating ability to assume leadership responsibilities in developing program goals; representing the program to outside groups; directing program planning, execution, and evaluation; and conducting a fair and equitable employment program, including the attainment of EEO objectives.

Candidates who meet the mandatory qualifications will be further evaluated by the Search Committee on the degree to which they exceed the mandatory managerial/executive qualifications, and on the following desirable qualifications: scientific reputation/peer recognition; training and education in lung diseases; leadership of a basic or clinical research, or research administration program, and honors and awards indicative of outstanding contributions to the field of lung diseases.

Applications (Personnel Statement of Qualification—SF-171) should be sent to Dr. Jay Moskowitz, Chairman, DLD Director Search Committee, Building 31, Room 5A03, National Institutes of Health, Bethesda, MD 20205, telephone (301) 496-6331.

A current curriculum vitae and bibliography must accompany all applications. Applications of women and/or minority group members are especially solicited.

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EQUAL OPPORTUNITY EMPLOYER.**

POSITIONS OPEN

POSTDOCTORAL POSITION is available in developmental genetics with particular emphasis on studying the control of tissue-specific gene expression in mice. Experience in molecular biology or biochemistry is desired. Salary is according to NIH guidelines. Submit a résumé of research interests, curriculum vitae, and names, addresses, and telephone numbers of three references to: **Dr. Leslie P. Kozak, The Jackson Laboratory, Bar Harbor, Maine 04609.**

Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL POSITION available 1 January 1983. Ph.D./M.D. interested in molecular characterization of selected transport systems of renal plasma membranes. Experience in protein biochemistry, immunological techniques, and/or membrane physiology desirable. Salary range: \$13,380 to \$14,736. Please send curriculum vitae and three letters of recommendation to: **Richard D. Mamelok, M.D., Room S-155, Stanford University Medical Center, Stanford, Calif. 94305.**

POSTDOCTORAL POSITION AVAILABLE FALL 1982 for research on molecular mechanism of gene regulation in *Saccharomyces cerevisiae*. Background in genetics, biochemistry, and molecular biology desirable. Send curriculum vitae, statement of research interests, and names and addresses of three references to: **Keith Bostian, Ph.D., Rosenstiel Center, Brandeis University, Waltham, Mass. 02254.** Brandeis is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS IN MOLECULAR BIOLOGY. Positions are available in a program to study antigenic variation in trypanosomes and other problems in molecular parasitology using recombinant DNA, monoclonal antibody, and related technologies. Send curriculum vitae with names and addresses of three referees to: **Dr. Kenneth Stuart, Issaquah Health Research Institute, 1595 N.W. Gilman Boulevard, Issaquah, Wash. 98027,** by 1 November 1982.

POSTDOCTORAL POSITIONS available for qualified individuals in a laboratory focusing on the biology and immunology of DNA tumor viruses. Previous research experience in cellular immunology and/or virology is desirable. Salary, in the range of \$15,000 to \$20,000, will be determined by background and previous training. Please send curriculum vitae and names of references by 15 October 1982 to: **Linda R. Gooding, Ph.D., Department of Microbiology and Immunology, Emory University School of Medicine, Atlanta, Georgia 30322.**

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITION in toxicology/anesthesia is available immediately to study toxicity of inhaled anesthetics. Experience in gross pathology and histopathology of rodents is essential. Interest in toxicity of hemopoietic, neurologic, and reproductive systems is useful but not essential. Salary: \$13,380 to \$19,844, depending on experience. Send curriculum vitae to: **Dr. J. M. Baden, Associate Professor of Anesthesia, Veterans Administration Medical Center (112A), Palo Alto, Calif. 94304.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITIONS IN IMMUNOLOGY RESEARCH in the Arthritis/Immunology Research Laboratory at the Oklahoma Medical Research Foundation. Present areas of research activity include autoimmunity, in vitro antibody production, immune complex technology, antigenicity of globular proteins, and analysis of antigen receptors on T cells. First-year salary is \$17,280. Send curriculum vitae and three references as expression of interest to: **Morris Reichlin, M.D., Oklahoma Medical Research Foundation, 825 N.E. 13 Street, Oklahoma City, Oklahoma 73104.**

Equal Opportunity/Affirmative Action Employer

RESEARCH POSITION IN IMMUNOLOGY. Laboratory of Arthritis/Immunology Research at the Oklahoma Medical Research Foundation (OMRF) is seeking scientists with research interest in any of the following areas: complement chemistry, cellular interactions, immunogenetics, cell surface markers, and hybridoma technology. Must have at least 2 years of postdoctoral experience and be capable of developing strong, independent program. Salary and rank dependent on qualifications. Send curriculum vitae and three references to: **Morris Reichlin, M.D., OMRF, 825 N.E. 13 Street, Oklahoma City, Okla. 73104.**

Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

POSTDOCTORAL POSITION NORTHWESTERN UNIVERSITY

Postdoctoral position to study the mechanism of action of cytochrome P-450 and its interactions with other proteins, lipids, and membrane-active chemicals. Applicants should have a Ph.D. in biochemistry or related field. Applicants with experience in enzyme characterization, enzyme kinetics and mechanisms, membrane biochemistry, or active site modification will be given preference. The project involves steady-state kinetics, deuterium isotope effects, HPLC, spectroscopy (UV-vis, EPR, NMR), and photoaffinity labeling. Salary negotiable (from \$16,500). Please send résumé and names of three references to: **Dr. Paul F. Hollenberg, Cancer Center, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, Illinois 60611.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL RESEARCH ASSOCIATE position available for NIH-funded studies on developmental and physiological factors influencing insect polysubstrate monooxygenases (cytochrome P-450). Training and experience in insect biochemistry desired. Application deadline: 31 October 1982. Send curriculum vitae and names of three references to: **Dr. R. Feyereisen, Department of Entomology, Oregon State University (OSU), Corvallis, Oregon 97331.** *OSU is an Affirmative Action/Equal Opportunity Employer and complies with Section 504 of Rehabilitation Act of 1973.*

POSTDOCTORAL RESEARCH ASSOCIATE—Research on the metabolism and pharmacokinetics of chlorophenols in mammals. Ph.D. in organic chemistry, biochemistry, or pharmacology. Previous research experience in drug metabolism and pharmacokinetics desirable. Salary: \$15,000 to \$18,000, depending on experience and qualifications. Send curriculum vitae and three letters of reference by 15 November 1982 to: **Dr. Donald R. Buhler, Department of Agricultural Chemistry, Oregon State University, Corvallis, Oregon 97331.** *An Affirmative Action/Equal Opportunity Employer, in compliance with Section 504 of the Rehabilitation Act of 1973.*

POSTDOCTORAL/RESEARCH ASSOCIATE positions available October 1982. (i) For research in somatic cell genetics with emphasis on expression and organization of liver-specific genes; experience in recombinant DNA technology desired; (ii) for research and development of human hepatocyte cell culture system; experience in epithelial cell culture desired. Send curriculum vitae, with description of research background, interests, and names and addresses of three references, to: **Dr. Gretchen J. Darlington, Department of Pathology, Baylor College of Medicine, Texas Children's Hospital, P.O. Box 20269, Houston, Texas 77030.**

POSTDOCTORAL RESEARCHERS. Five postdoctoral scientists will be appointed to our staff about 1 January 1983 for an initial period of 1 year. Minimum salary for first year is \$17,000 with consideration made for prior relevant postdoctoral experience. Positions are (i) **Psychologist/Psychopharmacologist** under supervision of Dr. Irving Geller, director of our Behavioral Pharmacology Department, to participate in studies concerned with the mechanism of drug behavior interactions. Requires dissertation research in operant conditioning with at least 1 year relevant postdoctoral experience desired. (ii) **Peptide Chemist** under supervision of Dr. P. N. Rao, director of our Organic Chemistry Department, to study isolation of brain peptides. (iii) **Cell/Molecular Biologist** under supervision of Dr. Sydney A. Shain, director of our Cellular and Molecular Biology Department, to participate in studies concerning hormonal regulation of gene expression in aging and neoplasia. Requires experience in immunology and in vitro translation of messenger RNA. (iv) **Biological Anthropologist/Zoologist/Comparative Psychologist**, under supervision of Dr. Anthony M. Coelho, Jr., in our Behavioral Medicine Laboratory, to study the contributions of behavior patterns and social stress to heart disease in socially living nonhuman primates. (v) **Immunologist** with a strong background in genetics to work on developing the MHC of a marsupial under the supervision of Professor W. H. Stone in our Genetics Department. Interested candidates should respond by 1 November 1982 to: **Personnel Manager, Southwest Foundation for Research and Education, P.O. Box 28147, San Antonio, Texas 78284,** referring to position by number. Include curriculum vitae, a description of research interests, and names of three references, including major professor, in initial correspondence. *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

POSTDOCTORAL POSITION IN CLINICAL CYTOGENETICS. Position available immediately to study the fragile X chromosomes and the X-linked mental retardation. Experience in human cytogenetics and tissue culture is desired. Salary is open. Send curriculum vitae and names of reference to: **Dr. C. W. Yu, Department of Pediatrics, Louisiana State University Medical Center, Shreveport, La. 71130,** or telephone: 318-674-6088.

Equal Opportunity Employer

POSTDOCTORAL RESEARCH ASSOCIATE. Position available for up to 4 years for studies on structure and control of transcription of protein synthesis factor genes in mammalian cells. Recent experience with recombinant DNA techniques desirable. Salary commensurate with experience. Send curriculum vitae and names of three references to: **Dr. Lawrence I. Slobin, Department of Biochemistry, University of Mississippi Medical Center, 2500 North State Street, Jackson, Mississippi 39216.** *Equal Opportunity Employer, M/F/V/H.*

HERSEY PROFESSOR OF ANATOMY

The Department of Anatomy at Harvard Medical School seeks to fill a tenured professorship with a cell biologist whose research deals with cell organelle structure and function. An ability to combine structural and molecular approaches and/or to develop innovative new techniques is the most desirable attribute. Examples of particular areas of interest: traffic of membrane-bound vesicles (for example, coated vesicles, synaptic vesicles, Golgi elements); cytological basis of protein synthesis, turnover, and secretion. The individual would be expected to teach one of the required courses (for example, microscopic anatomy, gross anatomy, neuroanatomy) offered to medical students by the department and to participate in an elective course for graduate students in cell biology. Please submit curriculum vitae and letter of interest to: **Dr. Elizabeth D. Hay, Chairperson, Department of Anatomy, Harvard Medical School, 25 Shattuck Street, Boston, Mass. 02115.** *Harvard is an Affirmative Action/Equal Opportunity Employer.*

PROFESSOR OF PSYCHOLOGY

The Department of Psychology of the University of Victoria invites applications for a regular senior appointment at the professor level to commence 1 July 1983. Applicants must have an outstanding and internationally recognized record of scholarly achievement and excellence in research, and a strong commitment to both graduate and undergraduate teaching. Administrative skills suitable to strengthening the graduate program in the applicant's area of expertise would be useful. The salary for this position will be highly competitive.

The applicant should have an established interest in clinical or developmental psychology, with preference given to applicants having experience in both areas. Expertise in life-span or gerontology would also be an asset.

The closing date for receipt of applications is 1 January 1983. *Canadian immigration regulations now require the University to assess applications from Canadian citizens and permanent residents of Canada before assessing applications from other persons.* Send applications and supporting material (including three or more letters of reference) to:

**Dr. Michael Corcoran, Chairman
Department of Psychology
University of Victoria
P.O. Box 1700**

Victoria, British Columbia, Canada V8W 2Y2

PROJECT ASSOCIATE—REPRODUCTIVE BIOLOGY

To supervise rhesus monkey in vitro fertilization (IVF)/embryogenesis program. Duties include gamete recovery and processing for IVF, embryo culture and transfer, developing improved methodology, supervising technical support, and scheduling experimental procedures. Independence in supervising program and in research is expected. Ph.D. in biology or zoology required, with experience or training in several of the following areas: IVF, tissue culture, surgery, RIA, EM work, biochemistry, statistical analysis. Available immediately; salary \$16,000 to \$18,000 per year. Send curriculum vitae and names of references to:

**Dr. Barry Bavister
University of Wisconsin—Madison
Regional Primate Center
1223 Capitol Court
Madison, Wis. 53715**

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Immunologist

Smith Kline & French, a leader in pharmaceutical research is seeking a senior level Immunologist to join a multidisciplinary research program investigating new approaches to the therapeutic control of immune disorders. This position offers the opportunity to collaborate on research projects in immunomodulation and receptor biology.

Qualified candidates should have a PhD in Immunology or Cell Biology plus 4 to 5 years post doctoral experience in cellular immunology and hybridoma technology. Experience directing a hybridoma-monoclonal laboratory is required. Working knowledge of antibody purification methods and T-T hybrids is highly desirable.

We offer excellent salary and benefits and an attractive relocation package. For confidential consideration, send your C.V. and names of three references to: Ms. A. Southall, SMITH KLINE & FRENCH LABORATORIES, a division of SMITHKLINE BECKMAN CORPORATION, 1538 Spring Garden Street, Philadelphia, PA 19101. Equal Opportunity Employer, M/F/H/V.

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MOLECULAR BIOLOGY

MARKETING OPPORTUNITIES

Amersham Corporation, a leading supplier of radiochemicals used in life science research has 2 openings available for individuals with strong background in molecular biology. Requirements include a PhD in a life science, practical experience in molecular biology and radioactive tracers, and excellent communication skills.

MARKET RESEARCH

In this challenging position you will meet with leading U.S. and Canadian researchers in order to identify new products, technologies, and markets. Your responsibilities include evaluation and communication of these ideas to our R and D staff through technical reports. 50% travel is anticipated.

TECHNICAL SERVICES

As Assistant Manager you will be responsible for answering technical inquiries from our customers about wide range of radiochemicals, restriction and modifying enzymes and related products for use in the expanding areas of genetic engineering. Hands on experience in gene manipulation is required.

We are offering an excellent starting salary, attractive benefits and the opportunity for professional growth. Send your resume with salary requirements to:

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of Yeshiva University

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MEDICAL CENTER

CHAIRPERSON DEPARTMENT OF NEUROPATHOLOGY

A new unified Department of Neuropathology at the Albert Einstein College of Medicine of Yeshiva University and the Montefiore Medical Center is being created. A single chairperson is being sought who will have responsibilities for all of the activities in neuropathology at both institutions. A search committee has been appointed to recommend a candidate for this position.

Applications and nominations for the position of chairperson of this Department of Neuropathology are invited. The candidate must have demonstrated leadership and broad experience in the practice of neuropathology, experience in research and teaching in the discipline, and a proficiency in administration. The candidate must be able to qualify for senior academic rank on the faculty of the Albert Einstein College of Medicine.

Please address correspondence to: **Michael V. L. Bennett, Chairman, Search Committee for Chairperson of the Department of Neuropathology, 1300 Morris Park Avenue, Bronx, New York 10461.**

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POSITIONS OPEN

INGENE PROTEIN BIOCHEMIST

INGENE is a rapidly growing biotechnology firm located in Santa Monica, California. We enjoy a pleasant working environment, excellent research facilities, and close proximity to three major universities. We have an opening for a scientist at the Ph.D. level with demonstrated expertise in functional analysis and immunoassay of bioactive proteins. Applicants should have 1 to 3 years of postdoctoral experience. Submit résumé to: **INGENE, Personnel Department, 1701 Colorado Avenue, Santa Monica, California 90404.**

RESEARCH ASSISTANT PROFESSOR IN EXPERIMENTAL NEUROONCOLOGY

Applications are invited from qualified candidates for the above faculty position in the Division of Neuropathology, Department of Pathology, University of Virginia School of Medicine, starting 16 October 1982. Candidates must hold a Ph.D. degree, preferably in biology and have experience in tissue culture and biochemistry related to experimental neurooncology. Previous publication record desirable. Interested individuals should send curriculum vitae to: **L. J. Rubinstein, M.D., Department of Pathology, Box 214, University of Virginia Medical Center, Charlottesville, Virginia 22908.** *An Equal Opportunity/Affirmative Action Employer.*

RESEARCH ASSOCIATE position available 1 October 1982 for Ph.D. biochemist or physiologist to study prostaglandin synthesis by isolated intestinal epithelial cells and the role of arachidonic acid metabolites in intestinal electrolyte transport and inflammation. Experience in prostaglandin biochemistry preferred. Send curriculum vitae and names of three references to: **Dr. D. W. Powell, Division of Digestive Diseases, 326 Burnett-Womack Building, University of North Carolina, Chapel Hill, N.C. 27514.** *The University of North Carolina is an Equal Opportunity/Affirmative Action Employer. We are keenly interested in attracting outstanding women and/or minority faculty members to this department.*

RESEARCH ASSOCIATE POSITION in biophysics is available after 1 December 1982. The research involves the application of Mössbauer and EPR spectroscopies to obtain structural and functional information about metalloproteins and related model compounds. Recent doctorates in physics, chemistry, or physical chemistry are invited to apply. Experiences in biophysical techniques and in electronics are desirable. Experimentalist is preferred. Theorist with relevant background will be considered. Send résumé and names of three references to: **Dr. B. H. Huynh, Physics Department, Emory University, Atlanta, Ga. 30322.** *Emory University is an Affirmative Action Employer.*

RESEARCH ASSOCIATE 2-PHYSICAL, physics; master's degree in physics with experience in superfluid turbulence research or an equivalent combination of education and experience is required. Knowledge of performing research in low-temperature physics. Designs, constructs, and operates specific experimental apparatus; collects and analyzes data; writes research papers; supervises graduate research students. Salary: \$17,760 to \$25,800. Please contact: **Betty Williams, The Ohio Bureau of Employment Services, 3434 Cleveland Avenue, Columbus, Ohio 43224.**

RESEARCH ENTOMOLOGIST—SYSTEMATICS: The Systematic Entomology Laboratory, U.S. Department of Agriculture (USDA), has an opening for a systematist to conduct research and provide taxonomic services on the Diptera families *Tachinidae*, *Calliphoridae*, *Sarcophagidae*, and *Oestridae*. Emphasis will be on systematics of the *Tachinidae* as potential biological control agents. Position will be located at the U.S. National Museum of Natural History, Smithsonian Institution, Washington, D.C., and will include curatorial management of the above families. Candidates must have demonstrated research in collection-based evolutionary systematics of *Diptera*; knowledge of systematics of the above-mentioned families is desirable. Salary range (GS-11/12/13) will depend on experience and qualifications. Deadline: 20 October 1982. For additional information and required forms, contact: **Rich Hastings, USDA, ARS, AOD, Building 003, Room 324, Beltsville, Md. 20705** (telephone: 301-344-2756), or **Paul M. Marsh, Chief, Systematic Entomology Laboratory, USDA, Building 003, Room 2, Beltsville, Md. 20705** (telephone: 301-344-3183). *The USDA is an Equal Opportunity Employer.*

POSITIONS OPEN

RESEARCH ASSOCIATE. Require Ph.D. in organic chemistry and 2 years of experience with record of publication to conduct research on synthesis of biologically active nitrogen heterocycles. Full-time position, \$14,400 per year. Reply to:
Box 241, SCIENCE.

RESEARCH POSITION available for Ph.D./M.D. with training in cell membrane biochemistry/physiology/pharmacology. Send curriculum vitae to:

**Dr. David McCarron
Division of Nephrology/Hypertension
Oregon Health Sciences University
Portland, Oregon 97201**

RESEARCH TECHNICIAN. To work in pediatric hematology/oncology research laboratory performing T & B cell typing of leukemia cells and bone marrow cultures. Master's in immunology or microbiology required. Experience preferred. Send curriculum vitae by 1 October to: **George W. Brumley, M.D., Chairman, Department of Pediatrics, Emory University, School of Medicine, 2040 Ridgewood Drive, NE, Atlanta, Ga. 30322.** *An Equal Opportunity/Affirmative Action Employer.*

RICE BREEDER: Louisiana State University Rice Experiment Station, Crowley, Louisiana. Principle responsibilities of the position include work with other rice breeders in maintaining characteristics of varieties as they are increased from head selection to foundation seed. The position includes overall supervision of production, drying, storage, cleaning, treating, and bagging of foundation rice seed for distribution to growers. The position also includes research on the control of red rice. Responsibility will include participation in meetings to formulate policy and to inform farmers, industry people, and other researchers of project activities and findings. This position will require direct participation in field work and the supervision of laborers and associates. A Ph.D. in agronomy or plant breeding and experience in mechanized crop production is required. Preference may be given to persons with experience in rice breeding and commercial or seed rice production. Applications accepted until a suitable applicant is selected. Send résumé, transcripts, and three or more letters of reference to: **M. D. Faulkner, Superintendent, Louisiana State University Rice Experiment Station, P.O. Box 1429, Crowley, La. 70526.** *An Equal Opportunity/Affirmative Action Employer.*

STRUCTURAL GEOLOGY UNIVERSITY OF ILLINOIS AT CHAMPAIGN-URBANA

The Geology Department is seeking a structural geologist for a tenure-track (assistant professor) faculty position. A Ph.D. is required. Salary open. The successful candidate will be expected to teach advanced undergraduate and graduate courses in structural geology and establish a research program. For equal consideration, applications, including the names of three referees, should be sent by 1 November 1982 to: **Dr. D. E. Anderson, Department of Geology, University of Illinois, 245 Natural History Building, 1301 West Green Street, Urbana, Ill. 61801-2999.** Telephone: 217-333-6713. Position to be filled by March 1983.

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YARMOUK UNIVERSITY FACULTY OF MEDICAL SCIENCES IRBID, JORDAN

Invites applications for **TEACHING POSITIONS** starting September 1982 or February 1983 in the following areas:

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Appointments will be at the level of assistant or associate professor. Applicants must hold a doctorate in the field of specialty. Placement will be according to experience in teaching and research. Salaries range from \$16,000 to \$25,000 for non-M.D.'s and \$22,000 to \$35,000 for M.D.'s (9 months). Fringe benefits include travel expenses at beginning and termination of employment and for home leave every 3 years for appointee and members of family, health and life insurance, and furnished accommodation at reasonable cost. Address your application to: **The Dean, Faculty of Medical Sciences, Yarmouk University, Irbid, Jordan.**

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SCIENTISTS

Leading the industry in the development and manufacture of diagnostic medical testing kits, Clinical Assays—a division of Fortune 500 Baxter Travenol Laboratories—has several positions available for qualified scientists to join our growing company.

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Please send résumé to: **Debi Paris Harmon, Clinical Assays, 620 Memorial Drive, Cambridge, Mass. 02139.** *An Equal Opportunity Employer, M/F.*

SENIOR RESEARCH ASSOCIATE/ POSTDOCTORAL FELLOW

Immediate openings available for individuals interested in basic research in immunology and/or immunopathology and the modulatory role of biologically active bacterial products. Especially encouraged to apply are individuals with research training in cellular immunology, membrane biology, or platelet biochemistry. Position and salary will depend upon background and previous experience. Salary range: \$15,000 to \$23,000. Send curriculum vitae and names of references by 15 October 1982 to: **David C. Morrison, Ph.D., Department of Microbiology and Immunology, Emory University School of Medicine, Atlanta, Ga. 30322.**

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X-RAY POSITION at the Stanford Synchrotron Radiation Laboratory

The Stanford Synchrotron Radiation Laboratory (SSRL) has an opening for a senior research associate or adjunct professor in the general field of x-ray science.

Major responsibilities include working with users in the development, maintenance, and characterization of SSRL's existing and new beam lines and experimental stations. Development of wigglers and undulators is of special interest. The scientist will have opportunities for research utilizing synchrotron radiation in such areas as diffraction or spectroscopy.

Experience with x-ray optics, diffraction, and/or absorption spectroscopy is necessary and familiarity with the operations of a synchrotron radiation laboratory is highly desirable.

Stanford University is an Equal Opportunity/Affirmative Action Employer. Those interested in applying should write by 15 November 1982 to: **K. Cantwell, Assistant to the Director, Stanford Synchrotron Radiation Laboratory, Bin Number 69, P.O. 4349, Stanford, Calif. 94305.**

REQUEST FOR PROPOSALS

CALL FOR PROPOSALS FOR NEW BEAM LINES AT SSRL

The Stanford Synchrotron Radiation Laboratory (SSRL) is opening up several wiggler/undulator ports for development by outside groups. Port allocations will be made on the basis of proposals to arrive at SSRL by 1 December 1982. Interested parties should contact: **K. M. Cantwell, SSRL, Bin Number 69, P.O. Box 4349, Stanford, Calif. 94305,** for more information.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP/RESEARCH ASSOCIATE

A scientist (Ph.D. or M.D.) with experience in studies of transplantation and tumor immunology. Studies of immunoregulatory mechanisms involving antibody- and cell-mediated immunity in transplantation biology and host-tumor interactions. Studies with a strong group of basic immunologists and clinical investigators. Send curriculum vitae and names and telephone numbers of three references to:

**Jay C. Fish, M.D.
Department of Surgery
The University of Texas Medical Branch
Galveston, Texas 77550**

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ECOLOGY. Tinker Foundation Postdoctoral Fellowships in Mesoamerican Ecology. Tulane University. At least one postdoctoral fellowship in the natural or social sciences for scholars with an interest in the ecology of Mesoamerica. Applicants should be citizens of the United States, Mexico, or Central America. Submit a brief statement of research plans, curriculum vitae, and names of three references. Recipients ordinarily devote several months to fieldwork, followed by a period of 1 to 2 weeks on campus during which time they discuss their findings in a seminar setting. Fellowships are awarded in amounts up to \$10,000, depending on extent and duration of research project. Deadline for application: 1 November 1982. **Mesoamerican Ecology Institute, Center for Latin American Studies, Tulane University, New Orleans, La. 70118.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOWSHIP IN ALLERGY—IMMUNOLOGY available 1983 for qualified M.D. or Ph.D., for immunologic, physiologic, pharmacologic, and biochemical studies related to research in immediate hypersensitivity and inflammation. Stipends at NIH fellowship levels. Send curriculum vitae and references to: **L. M. Lichtenstein, Johns Hopkins University School of Medicine, The Good Samaritan Hospital, Baltimore, Md. 21239.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOWSHIP IN MARINE GEOSCIENCES SCRIPPS INSTITUTION OF OCEANOGRAPHY

We solicit applications for a postdoctoral fellowship in any aspect of marine geoscience. Appointment will be for 12 months, beginning January 1983, and will include funds for minor supplies and travel (but not moving expenses). Preference will be given to recent Ph.D.'s. Salary: approximately \$19,800. Applicants should submit names of three referees, bibliographical material, copies of pertinent publications, and, if possible, a dissertation copy and a statement of research interests during the fellowship to: **Chairman, Geological Research Division, A-020, Scripps Institution of Oceanography, La Jolla, Calif. 92093.** Deadline for application is 15 October 1982. *The University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOWSHIP—Three-year fellowship available immediately at the University of Pennsylvania to study molecular aspects of growth factor action on cells in tissue culture. Experience with recombinant DNA technology useful. Applicants should submit their curriculum vitae, a description of research interests, and the names of two references to:

Dr. Charles D. Scher
Children's Hospital of Philadelphia
34th Street and Civic Center Boulevard
Philadelphia, Pa. 19104

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POSTDOCTORAL RESEARCH FELLOWSHIP AVAILABLE EARLY 1983. The work is focused upon enzyme purification and characterization of an enzyme found in the nervous system. Background in biochemistry and enzymology preferred. Submit application with curriculum vitae and two referees to: **E. L. Hogan, Chair, Department of Neurology, Medical University of South Carolina, Charleston, S.C. 29425.** *An Equal Opportunity/Affirmative Action Employer, M/F.*

POSTDOCTORAL FELLOWSHIP IN NEURAL CONTROL OF THE CARDIOVASCULAR SYSTEM. A limited number of fellowship positions are available funded by an NIH training grant. Clinical and basic scientists participate in the program with major emphasis on neural pathways, hypertension, cardiovascular pharmacology, exercise, alcoholic heart muscle disease and exercise, electrophysiology, cardiac biochemistry, and biofeedback. The positions are open to U.S. citizens and permanent residents who have Ph.D., M.D., or equivalent degrees in a basic biomedical discipline.

Applicants should send curriculum vitae with three references and specific area of interest to: **Dr. H. Lowell Stone, Department of Physiology and Biophysics, University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, Oklahoma 73190.**

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FELLOWSHIPS

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FELLOWSHIP OPPORTUNITY in Positron Emission Tomography (PET). The Department of Neurology, Memorial Sloan-Kettering Cancer Center, will offer a 2-year fellowship in positron emission tomography beginning in July 1983. Excellent opportunity for basic science and clinical investigation. Applicant must be eligible for a New York State medical license and for Board-certification in neurology. Physics, mathematics, and/or computer science background helpful but not essential. Write: **D. A. Rottenberg, M.D., 1275 York Avenue, New York, N.Y. 10021.** Include curriculum vitae and bibliography.

POSTDOCTORAL FELLOWSHIP: Studies involve the regulation of hormone action and hormone receptors in the liver, the mechanisms of hormone action, hormone interactions, and the regulation of metabolic pathways in normal and abnormal metabolic states. Send curriculum vitae and names of references to: **Dr. John M. Amatruda, University of Rochester School of Medicine, 601 Elmwood Avenue, Rochester, N.Y. 14642.** *Equal Opportunity Employer, M/F.*

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Beginning postdoctoral research fellowships, research grants, and visiting research awards available in amounts up to \$16,500 per annum, plus other allowances, depending on type of award applied for. Applicants should have M.D., Ph.D., or equivalent degree. Applications by 1 February 1983, for awards to be activated from June to December 1983. For information, write: **Heiser Program for Research in Leprosy, 450 East 63 Street, New York, N.Y. 10021.**

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GRADUATE STUDY

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Scott F. Basinger, Ph.D.
Predoctoral Director
Program in Neuroscience
Baylor College of Medicine
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Houston, Texas 77030

ASSOCIATESHIPS

ARE YOU INTERESTED IN WORKING IN SPACE BIOLOGY?

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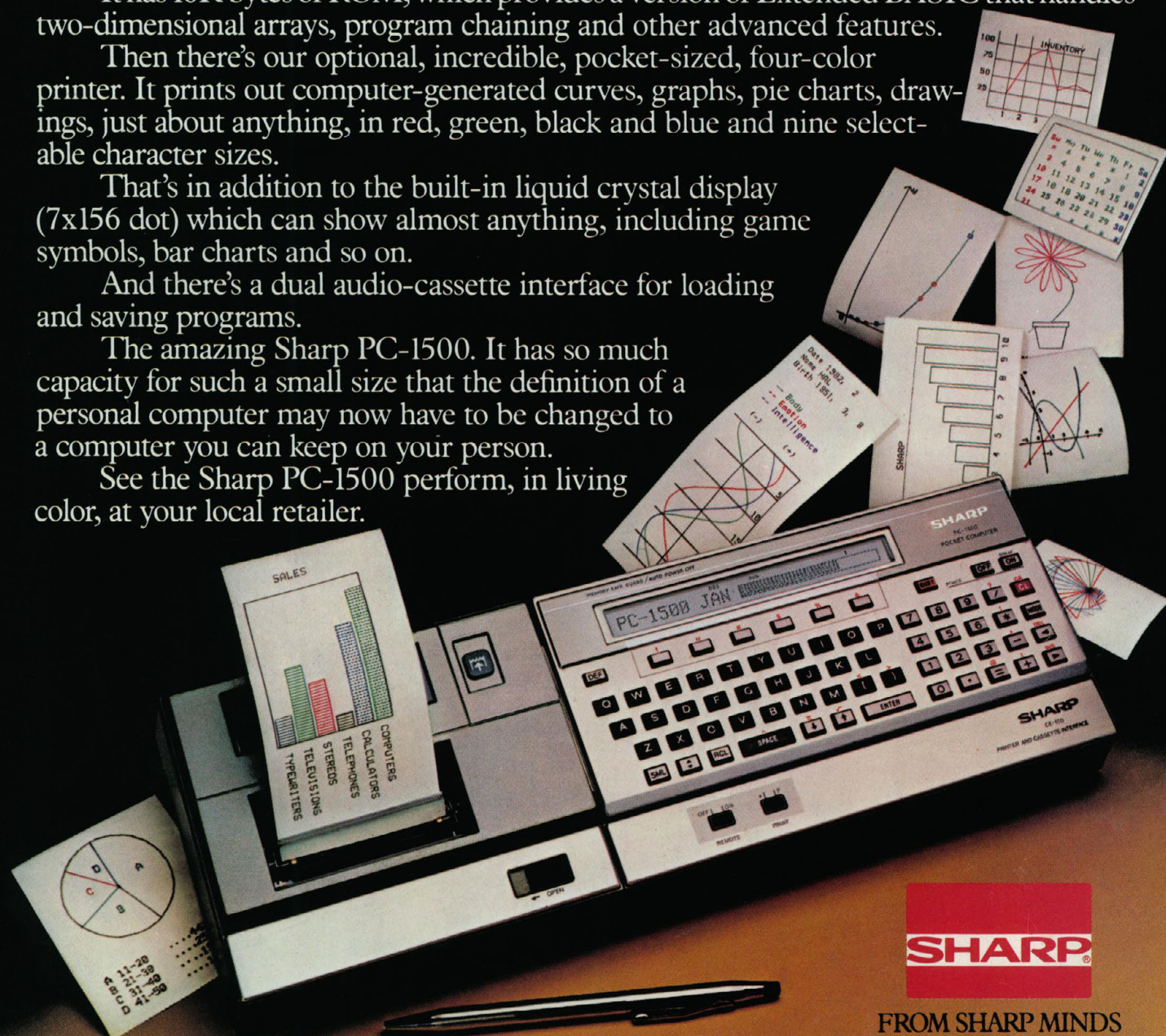
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