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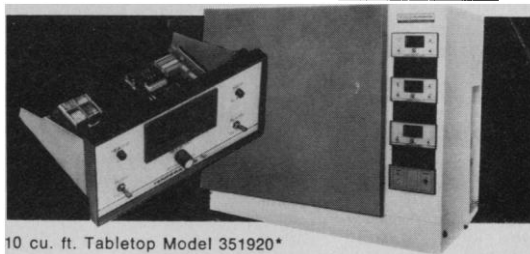
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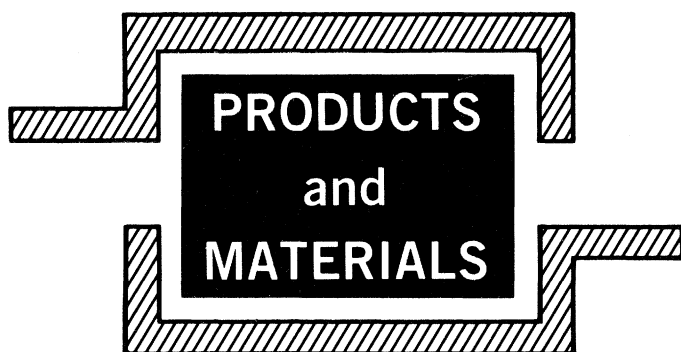
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Irvine, California 92717

The Department of Psychology at the University of Pittsburgh is interested in hiring a **DEVELOPMENTAL PSYCHOLOGIST** at the rank of professor or possibly associate professor. The individual should have an established research record. Experience working with graduate students as well as postdoctoral students is desired. The individual's primary area of interest within developmental psychology is not specified. There is the possibility of affiliation with the Learning Research and Development Center, pending the individual's interests. Please send curriculum vitae and four letters of recommendation to either: Dr. Mark Strauss or Dr. James F. Voss, Department of Psychology, University of Pittsburgh, Pittsburgh, Pa. 15260. The University of Pittsburgh is an Equal Opportunity Employer.

DIRECTOR, POINT REYES BIRD OBSERVATORY. PRBO seeks a **DIRECTOR** to administer programs of research, conservation, and education. Duties are principally administration (current budget \$260,000), scientific direction, fund raising, and public relations. Qualifications are either a Ph.D. in ornithology OR professional experience in scientific/conservation administration, AND strong interest in avian ecology and conservation. \$15,000 minimum with complete medical. Reply to

PRBO Director Search
4990 Shoreline Highway
Stinson Beach, Calif. 94970

The Department of Aeronautics and Astronautics, Stanford University, seeks an outstanding person for appointment to a **SENIOR FACULTY POSITION** in the field of computational fluid dynamics. Candidates must be widely recognized to have proven their excellence in research related to the numerical analysis of gasdynamic phenomena of aeronautical interest. Significant examples would be transonic flow with shocks and other nonlinearity, viscous effects, turbulence, and the efficiency and stability of methods for their computation. There must be demonstrated competence in research supervision and lecturing on fluid mechanics subjects. Industrial experience is desirable. Stanford is an Affirmative Action Employer and welcomes applications from women and minority candidates. Inquiries should be made expeditiously to: Professor Holt Ashley, Department of Aeronautics and Astronautics, Durand 369, Stanford University, Stanford, Calif. 94305; telephone: 415-497-4136.

UNIVERSITY OF CHICAGO FACULTY POSITIONS IN CELL OR TISSUE BIOLOGY

The Department of Biology invites applicants for two faculty appointments from individuals with research interests in cell or tissue biology. Applicants should have demonstrated aptitude to develop independent research programs and willingness to participate with others in a course in cell and tissue biology for freshman medical students. Send curriculum vitae, bibliography, and reference names and addresses to: Dr. Hewson Swift, Department of Biology, University of Chicago, 1103 East 57 Street, Chicago, Illinois 60637.

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

MARINE BIOLOGICAL LABORATORY

WOODS HOLE, MASSACHUSETTS 02543

**announces
JANUARY COURSES, 1980**

**BEHAVIOR • ECOLOGY
DEVELOPMENTAL BIOLOGY
NEUROBIOLOGY
COMPARATIVE PATHOLOGY
of Marine Invertebrates**

For the seventh consecutive January, MBL will offer intensive courses, with emphasis on laboratory work, intended primarily for graduate and advanced undergraduate students. The courses last four weeks (January 6 - February 1, 1980) and are conducted concurrently.

Tuition is \$550.00; room and board is approximately \$270.00. Limited financial aid is available.

Completed applications must be received at MBL by November 10.

Additional information on course content and application materials may be obtained from the Admissions Office, Marine Biological Laboratory, Woods Hole, Massachusetts 02543; telephone 617-548-3705.



POSITIONS OPEN

Faculty Position in Environmental Health Program, School of Public Health, UCLA

Candidates with a primary interest in industrial hygiene are being asked to apply; rank will be commensurate with training and experience. Candidate should have a doctoral degree in one of the occupational health specialties, a research program in a relevant area, and membership in professional occupational health organizations. Faculty member will be expected to participate in program development of a graduate curriculum in occupational health and have responsibility for courses in industrial and occupational hygiene. Must be familiar with and develop relationships with federal, state, and local occupational health programs and with industry.

The University of California is an Equal Opportunity/Affirmative Action Employer and considers candidates without respect to race, sex, or religion. Interested candidates should submit a curriculum vitae and three references to:

Dr. Marian Swendseid
Search Committee Chairman
School of Public Health
University of California
Los Angeles, Calif. 90024

The Department of Chemistry and the Institute of Geophysics and Planetary Physics of the University of California, Los Angeles, are seeking a new **FACULTY MEMBER**; it is expected that the appointment will be made at a senior level. We are especially interested in applicants whose publications document outstanding research in chemical or biomedical studies bearing on the origin or earliest evolution of life, but we would consider exceptional applicants whose research is at the interface between chemistry and earth science. Candidates should be able to teach courses in the chemistry curriculum. *The University of California is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minority candidates.* Applications, including a curriculum vitae, list of publications, and a list of persons who could provide references, should be received by 1 December 1979 and directed to: **Associate Director, Institute of Geophysics and Planetary Physics, University of California, Los Angeles, Calif. 90024.**

FACULTY POSITION IN CLINICAL CHEMISTRY. Division of Medical Technology, Department of Laboratory Medicine and Pathology, University of Minnesota. Available 1 January 1980. The undergraduate program in medical technology at the University of Minnesota is the oldest in the country and has a junior-senior enrollment of 120. Master's degree and clinical laboratory experience required. Medical technology background, teaching experience, and doctorate degree desirable. Responsibilities include teaching clinical chemistry to undergraduate and graduate students in large medical technology program, conducting research, and supervising section of clinical chemistry laboratory. Level of appointment and salary dependent on qualifications. Send résumé to **Professor Donna J. Blazevic, University of Minnesota, Box 198 Mayo Memorial Building, 420 Delaware Street S.E., Minneapolis, Minnesota 55455.**

The University of Minnesota Is an Equal Opportunity Educator and Employer.

FACULTY POSITION IN MEDICAL CHEMISTRY. Applications are invited from persons with a Ph.D. in medicinal chemistry or a related field for a full-time position at the assistant or associate professor in the College of Pharmacy at the University of Minnesota. Candidates for the position must have a strong background in organic chemistry and adequate training in biochemistry or pharmacology. Postdoctoral or equivalent job experience is desirable. An undergraduate degree in pharmacy is preferred. The successful candidate will be expected to develop an independent research program and participate in teaching in the professional and graduate programs of the college.

Interested candidates should send résumés and the names of three references to:

Mahmoud M. Abdel-Monem, Ph.D.
College of Pharmacy
University of Minnesota
Minneapolis, Minn. 55455

Applications must be received by 22 October 1979.

The University of Minnesota is an Affirmative Action Employer and welcomes applications from women and members of minority groups.

POSITIONS OPEN

FACULTY POSITIONS. The Department of Chemistry of Syracuse University invites applications from outstanding candidates in all fields of chemistry. During the coming year we expect to make two or three appointments, probably at the level of assistant professor, tenure-track, with possibility of appointment at a higher level. Particularly desirable areas of research interests are organic chemistry, organometallic chemistry, and analytical chemistry. Applicants should send a 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 1 November to **Professor B. R. Ware, Chairman, Department of Chemistry, Syracuse University, Syracuse, New York 13210.** *Syracuse University is an Equal Opportunity/Affirmative Action Employer.*

Three positions available. **MOLECULAR BIOLOGIST** to study cloning and sequence of DNA; **ENZYMOLOGIST** for investigation of enzyme mechanism; **CELL BIOLOGIST** for investigation of the role of lipid in cultured cells. Positions are immediately available and renewable for 2 to 3 years and lead to academic appointments. Salary negotiable. Applicants submit curriculum vitae and references to **Dr. S. J. Wakil, Department of Biochemistry, Baylor College of Medicine, Houston, Texas 77030.** *Affirmative Action/Equal Opportunity Employer.*

FIELD DIRECTOR

Director laboratory and field studies of leprosy immunology and epidemiology in northern Thailand. Faculty appointment with U.S. medical school in clinical and/or basic science department. Send reply and résumé to

Box 275, SCIENCE

STANFORD UNIVERSITY GEOCHEMIST—PETROLOGIST

The Department of Geology in the School of Earth Sciences invites applications for a faculty position beginning September 1980. Areas of interest include (but are not limited to) geochemical processes in the crust and mantle of the earth including isotope geochemistry, thermodynamics, kinetics, element distribution, and phase equilibria studies. Teaching responsibilities might include graduate and undergraduate courses in geochemistry and igneous petrology. Level of appointment is open, but we are particularly interested in a creative person with a well-established record in research. Applications should include (i) a résumé of education, professional experience, and published research; (ii) a brief statement of plans for future research; and (iii) the names of four references. Send to: **Professor J. G. Liou, Department of Geology, Stanford University, Stanford, Calif. 94305.** by 1 December 1979. *Stanford University is an Equal Opportunity/Affirmative Action Employer.*

HEALTH PHYSICS FACULTY POSITION. An opening is anticipated for an assistant professor. The primary role will be as a participant in an ongoing research program, as well as graduate teaching and service functions. Emphasis on environmental health physics and related radiation chemistry preferred. Minimum requirements are doctoral degree in area of radiation protection or closely related area with some experience in health physics/radiation chemistry. Send curriculum vitae to: **David Gur, Sc.D., Department of Radiation Health, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, Pa. 15261.** *The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.*

IMMUNOLOGIST—CELL BIOLOGIST— HEMATOLOGIST

A position is available for a Ph.D. or M.D. with a major interest in studying normal and malignant cell-surface membrane markers using hybridoma technology. The successful candidate will have the opportunity to pursue an independent research program, but will be responsible for directing a service laboratory devoted to the production of monoclonal antibodies. Although experience in hybridoma technology would be useful, it is not necessary. Send curriculum vitae and the names of three references to: **Dr. Joseph Simone, St. Jude Children's Research Hospital, P.O. Box 318, Memphis, Tennessee 38101.** *Equal Opportunity Employer.*

POSITIONS OPEN

IMMUNOLOGIST. Department of Pathology has an opening for a M.D. or Ph.D. at the Assistant Professor level. Must be qualified in clinical and/or experimental immunobiology or molecular immunology. Experience in teaching and established research productivity are required. Salary range of \$30,000 plus negotiable, with a starting date of 1 December 1979. Apply to **Juan C. Scornik, M.D., Department of Pathology, Box J-275, College of Medicine, University of Florida, Gainesville, Florida 32610.** *Equal Employment Opportunity/Affirmative Action Employer.*

IMMUNOLOGIST. Applications for a tenure-track assistant professorship in microbiology are invited from immunologists. Preference will be given to cellular immunologists. Appointment at a higher rank is possible for a qualified individual. Responsibilities include teaching undergraduate and graduate courses and development of an independent research program. Position available September 1980. Send curriculum vitae and three references to **Dr. Dennis Brown, Search Committee Chairman, Microbiology Department, University of Texas, Austin, Texas 78712.** *An Equal Opportunity/Affirmative Action Employer.*

ENJOY JAPAN. IMMUNOLOGISTS, TOXICOLOGISTS, and PHARMACOLOGISTS. Men and women with M.S. or Ph.D. wanted by leading Japanese pharmaceutical company to work in their R & D institute in Japan. Top salary, housing, travel allowance. Contract negotiable. Send résumé to: **IMCA, 1111, TBR Building, 2-10-2, Nagata-cho, Chiyoda-ku, Tokyo, 100 Japan.**

MARINE COORDINATOR

Person with the following qualifications: M.S. degree and/or 5 years of experience in oceanography or a related field; must be thoroughly familiar with equipment, logistical problems, and procedures used in marine sciences; must be able to do budgetary accounting and to supervise the work of a supporting staff. Salary range is \$16,000 to \$18,000 per annum. Application deadline is 31 October 1979. Apply with résumé to:

Dr. William M. Sackett, Chairman
University of South Florida
Department of Marine Science
830 First Street South
St. Petersburg, Florida 33701

NEUROTOXICOLOGIST

To develop currently funded program in behavioral toxicology with emphasis on prenatal exposure to toxic substances. Training in mammalian developmental biology and neurophysiology required. Experience with effects of the toxic substances on CNS and behavior is desirable. Joint appointment with the Department of Zoology and the Comparative Animal Research Laboratory of the University of Tennessee where research will be conducted. Teaching and direction of graduate students as desired. Position open immediately at a professional level consistent with experience. Send résumé to:

H. E. Walburg, D.V.M., Ph.D.
Director
Comparative Animal Research Laboratory
1299 Bethel Valley Road
Oak Ridge, Tenn. 37830
An Equal Opportunity Employer

PHARMACOKINETICIST

To conduct currently funded studies directed at defining interspecies differences in metabolism and effects of toxic materials. Strong mathematical and computer background and basic understanding of mammalian physiology and pharmacology required. Experience with toxic organic compound metabolism preferred. Collaborative interaction with researchers in biochemistry and compartmental modeling. Joint appointment with the Department of Zoology and the Comparative Animal Research Laboratory of the University of Tennessee where research will be conducted. Teaching and direction of graduate students as desired. Position open immediately at a professional level consistent with experience. Send resume to:

H. E. Walburg, D.V.M., Ph.D., Director
Comparative Animal Research Laboratory
1299 Bethel Valley Road
Oak Ridge, Tennessee 37830

PLANT BIOLOGIST

The Upjohn Company currently has an opening available for a Ph.D. in biochemistry, microbiology or molecular genetics with a strong background in all three areas and preferably 1 to 3 years postdoctoral research experience. The successful candidate will organize and carry out a research program designed to facilitate microbial production of medically important peptides and proteins from higher eukaryotic organisms and will interact with other laboratories pursuing similar objectives. Attractive salaries and excellent comprehensive benefits. Kalamazoo is a medium-sized, Southwestern Michigan community with local colleges, a moderate cost of living, an attractive housing market, progressive school systems and easy access to a good mix of cultural-recreational options. Send resume in confidence to:

Upjohn

Kent S. Morgan
The Upjohn Company
7171 Portage Road
Kalamazoo, MI 49001

An Equal Opportunity Employer M/F

EXECUTIVE SECRETARY (SCIENTIST ADMINISTRATOR)

MINORITY ACCESS TO RESEARCH CAREERS REVIEW COMMITTEE

Applications and nominations are invited for the career Civil Service position of Executive Secretary, Minority Access to Research Careers (MARC) Review Committee, Office of Review Activities, National Institute of General Medical Sciences, National Institutes of Health, Public Health Service. The MARC review committee is responsible for the administrative and scientific peer review of fellowship and training grant applications for programs proposing to increase opportunities for minorities to pursue careers in biomedical research.

The Executive Secretary of this committee is expected to provide administrative, technical and scientific guidance to the consultants serving on the committee as well as to applicants. Considerable travel for site visits to applicant institutions is required. The Executive Secretary is responsible for preparing reports of site visits and thorough summaries of committee reviews.

Qualifications: *Required:* Ph.D. or M.D., equivalent training, or equivalent combination of education and experience in the biological sciences *plus* experience at the postdoctoral level demonstrating independent work in planning, organizing and conducting biomedical or health-related research and at least one year of experience in a responsible position in research program administration. *Desired:* Evidence of professional experience involving substantial interaction with minority biomedical scientists, minority organizations, and/or minority institutions.

The position will be filled at the GS-12, 13, or 14 level with a salary range of \$23,087 to \$42,171, depending on qualifications. Interested candidates should submit a Personal Qualifications Statement (S.F. 171), a curriculum vitae, and bibliography by October 17, 1979, to: Mrs. Judy Vickers, NIGMS Personnel Office, NATIONAL INSTITUTES OF HEALTH, 5333 Westbard Avenue, Room 436, Bethesda, Maryland 20205. An Equal Opportunity Employer.

NATIONAL INSTITUTES OF HEALTH

STAFF FELLOWSHIP

The Clinical Branch, National Eye Institute, offers a Staff Fellowship in the Retinal and Ocular Connective Tissue Diseases Section. Applicants should be M.D.'s who have completed a certified ophthalmology residency program and may have up to four additional years of training and experience. In addition, applicants must be U.S. citizens or resident aliens who would be eligible for citizenship within four years. Activities would include major effort with the Early Treatment Diabetic Retinopathy Study (ETDRS) Center, clinical studies in macular and retinal degeneration and laboratory training and experience. The initial appointment will be made for 2 years with possible extensions. Salary ranges from \$22,000 to \$37,500 and would be commensurate with the level of training and experience.

Interested persons should send curriculum vitae no later than December 1, 1979, to Karen M. Wright, Deputy Personnel Officer, National Eye Institute, National Institutes of Health, Public Health Service, Bethesda, Maryland 20205. Phone (301) 496-4274 for further information. Equal Opportunity Employer.

**NATIONAL INSTITUTES
OF HEALTH**

DEAN COLLEGE OF SCIENCE AND TECHNOLOGY Corpus Christi State University Corpus Christi, Texas

Corpus Christi State University, located on its own 240-acre island in Corpus Christi Bay, is an upper-level state university offering baccalaureate and master's degrees. The University is about 10 miles from downtown Corpus Christi, a beautiful city and major coastal seaport of over 200,000.

The University first opened its doors to students in 1973 with an enrollment of 975. The enrollment has since increased to over 2,700 students. Paralleling this enrollment growth is the construction of several new buildings, including the recent completion of a 2.5 million dollar science laboratory building. Also located on campus is an office of the U.S. Geological Survey, Office of Marine Geology, Branch of Atlantic & Gulf of Mexico.

The University is dedicated to maintaining a highly competent faculty committed to excellence in teaching; to a spirit of innovation, openness and adaptability; and to new techniques in educational methods and materials.

Responsibilities: The Dean, as chief administrator of the College of Science and Technology, reports directly to the President, and is responsible for administration, academic leadership, curriculum development, and budget management of that College.

The College employs twenty full-time faculty and administers the BS degree in Biology, Chemistry, Computer Science, Mathematics, and Medical Technology; the BSN degree in Nursing; and the MS degree in Biology and Computer Science. Also, the College has a developing Geology program and a Marine Science specialization. In its support role for teacher education, the College grants the BS degree with teacher certification in Biology, Chemistry, Life-Earth Science, or Mathematics. Additionally, the College offers continuing education in nursing and in oil spill control technology.

Qualifications: Earned Ph.D., successful university teaching experience in an appropriate field related to the College, record of scholarly contributions, and demonstrated competence in the administration of academic programs at no less than the departmental (or equivalent) level.

Salary: Competitive.

Starting date: From January 1, 1980, to June 1, 1980, depending on availability of appointee.

Applications will be accepted until November 15, 1979, and must include resumes and list of five references. Applications and inquiries should be directed to:

Chairperson, Search Committee for Dean of
College of Science and Technology
Corpus Christi State University
Corpus Christi, Texas 78412

Corpus Christi State University is an Affirmative Action, Equal Opportunity Employer.

RECOMBINANT DNA RESEARCH

SYNTEX, a leading multinational Pharmaceutical/Life Sciences firm on the SAN FRANCISCO PENINSULA, is initiating a program in the area of recombinant DNA research and seeks qualified individuals to be involved.

Opportunity for a senior-level person to assume responsibility for the technical operations of the program. Position requires PhD and extensive background in molecular biology, combined with 3-5 years direct experience recombinant DNA research.

Opportunity also exists for an additional PhD level individual who possesses prior research experience in molecular biology and recombinant DNA work.

SYNTEX offers a stimulating professional environment, competitive salaries & attractive benefits. Please send resume, including salary history, to Ralph Torrence, Professional Employment SYNTEX, 3401 Hillview Avenue, Palo Alto, CA 94304. We are an equal opportunity employer.

SYNTEX

Department Head Position

Nominations and applications are invited for the position of Head, Electrical Engineering Department, Carnegie-Mellon University. Qualifications sought include earned doctorate, established reputation in Electrical Engineering, experience in teaching and education, leadership and administrative abilities. Candidates should qualify for the rank of Full Professor. Applications, including resume, list of publications and references should be received prior to November 15, 1979.

Contact:

Dr. M.H. Kryder
Chairman, Search Committee
Electrical Engineering
Department
Carnegie-Mellon University
Pittsburgh, PA 15213

Carnegie-Mellon University is an Equal Opportunity Employer.

POSITIONS OPEN

METEOROLOGIST

This is a 2-year teaching and research position in the Atmospheric Science Program of the Department of Land, Air, and Water Resources. The person selected will have a doctorate in meteorology or in atmospheric science or a doctorate in a related science plus professional meteorological experience. The incumbent will be expected to teach a total of three quarter courses in one or more of the areas: atmospheric physics, air pollution meteorology, synoptic meteorology, and dynamic meteorology, and to support one or more of the ongoing research activities within the department. These include the study of large-scale air-sea interaction, marine and continental planetary boundary layer dynamics, and the modeling of mesoscale flows in complex terrain. Research support will be provided by the department. This position is at the assistant professor level and carries a 12-month salary of \$19,700 and up, depending on qualifications. The position becomes available immediately, with the expectation that the person selected will be available for service on or before 1 January 1980.

Applicants should submit curriculum vitae, statement of teaching and research experience and interests, undergraduate and graduate transcripts, list of publications, reprints, and names and addresses of at least three references, to be sent to: John J. Carroll, Meteorologist Search Committee, Department of Land, Air, and Water Resources, University of California, Davis, California 95616; telephone 916-752-3245/1406. Closing date is 15 October 1979.

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

PHARMACOLOGISTS. Emory University has two positions open at the assistant professor or associate professor levels. Candidates must have doctoral or equivalent degree; for Assistant Professor rank at least 1 year of postdoctoral research experience and potential to develop independent research program; for Associate Professor rank five or more years of experience in teaching and research in pharmacology or related discipline and evidence of excellent independent research. Applicants should have strong commitment to both teaching and research. Letters of application, curriculum vitae, a brief description of career goals and proposed research program, and three letters of recommendation must be received by 30 November 1979. Address to Dr. Neil C. Moran, Chairman, Department of Pharmacology, Emory University, Atlanta, Ga. 30322.

An Affirmative Action/Equal Opportunity Employer

PHYSIOLOGIST

The Department of Physiology, Michigan State University, invites applications for tenure-track positions at the Assistant Professor level. Candidates should have a D.O., D.V.M., M.D., and/or Ph.D. degree and postdoctoral experience in autonomic, cardiovascular, endocrine, gastrointestinal, neural, smooth muscle, and/or renal physiology. Duties include teaching in the undergraduate, graduate, and/or professional programs and maintaining an active, independent research program of high quality. Applicants should send their curriculum vitae and names of three references to: Chairman, Physiology Department, 111 Giltner Hall, Michigan State University, East Lansing, Mich. 48824. *Michigan State University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL ASSOCIATE position available 1 September-1 October. Background in biochemistry, photobiology, or bioorganic chemistry required for study involving solar energy bioconversion. Salary: \$11,500. Send resume and three letters of recommendation to: A. Klivanov, Department of Nutrition and Food Science, Massachusetts Institute of Technology, Cambridge, Mass. 02139.

POSTDOCTORAL POSITION (assistant specialist) available immediately to isolate and characterize compounds determining ice nucleation in bacteria. Applicants should have previous experience in appropriate fields involving cell fractionation and protein isolation and characterization. The position is for 2 years and salary will be commensurate with experience. Send résumé and names of references to: Dr. S. E. Lindow, Department of Plant Pathology, University of California, Berkeley, Calif. 94720, by 15 October 1979.

The University of California is an Affirmative Action Employer

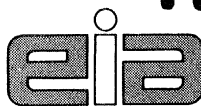
ENERGY IMPACT ASSOCIATES, a leading national environmental consultant to industry, utilities and government, has immediate openings for the following positions:

- HYDROLOGIST
- WATER CHEMIST
- ENVIRONMENTAL ENGINEER
- HYDRAULIC/CIVIL ENGINEER
- AQUATIC AND TERRESTRIAL ECOLOGISTS

Candidates should have an MS or Ph.D in a scientific or engineering discipline with good writing skills. Experience is preferred but new graduates will be considered. Candidates with a combination hydrology/water chemistry background have high priority.

Send your resume and salary requirements in confidence to:

Tom Trumble
Manager, Human Resources
ENERGY IMPACT ASSOCIATES
P.O. Box 1899
Pittsburgh, Pa. 15230
Equal Opportunity Employer



REGULATORY AFFAIRS ETHICAL PHARMACEUTICALS

Excellent career opportunity to join a rapidly growing pharmaceutical firm. The position is responsible to assist in the review, preparation and submission of documents to the FDA and coordinate with the various divisions (research, medical, quality assurance & marketing) concerning scientific/regulatory matters. The ideal candidate should have some FDA regulatory experience or regulatory experience in the pharmaceutical industry. Paid relocation to the Midwest.

Send resume and salary history to:
Box 274, SCIENCE
An Equal Opportunity Employer M/F

POSITIONS OPEN

POSTDOCTORAL POSITION at the Johns Hopkins University School of Medicine. Available between January and July 1980. Research and training in the neurobiology of cardiovascular control. Strong background in modern techniques of neurophysiology or neuroanatomy recommended. Applicants should send their curriculum vitae and bibliography to: **Dr. Lawrence Schramm, The Johns Hopkins University School of Medicine, 226 Traylor Building, 1721 East Madison Street, Baltimore, Maryland 21205.**

POSTDOCTORAL POSITION—Available immediately for studies of psychomotor and cognitive performance related to pharmacokinetics of several psychotropic drugs in normal and patient populations. Knowledge and interest in laboratory computers and signal analysis desired. Available for 2 years. Send curriculum vitae with three references and telephone numbers to: **Dr. E. H. Ellinwood, Behavioral Neuropharmacology Section, Department of Psychiatry, Duke University Medical Center, Durham, N.C. 27710. Duke University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available for anatomist with a nutrition background to study the effect of trace mineral deficiencies and toxicities on tissue morphology. One-year position with possibility for renewal, available immediately at salary of \$12,000 to \$15,000. Send detailed curriculum vitae, names of three references, and relevant publications to:

**Dr. Dwayne A. Ollerich
Department of Anatomy
University of North Dakota
Grand Forks, North Dakota 58202**

POSTDOCTORAL IN BIOCHEMICAL NUTRITION

The project deals with vitamin A metabolism and the assessment of vitamin A status. HPLC and GLC-MS experience would be helpful. The appointment, available now, is for 2 years with an initial annual salary of \$12,000 to \$14,000, depending on qualifications. Send your resumé and the names of two references to **Dr. James Allen Olson, Department of Biochemistry and Biophysics, Iowa State University, Ames, Iowa 50011; telephone: 515-294-6116. An Equal Opportunity Employer.**

POSTDOCTORAL POSITION

Available fall 1979 for a biochemical and cellular study on the role of proteolytic enzymes in invasion and metastasis. Large lab including culture rooms, equipment room and office space. Stipend \$12,000 to \$15,000 per annum depending on experience. Send resumé and names of three references to **Dr. James P. Quigley, Box 44, State University of New York Downstate Medical Center, Brooklyn, N.Y. 11203.**

POSTDOCTORAL POSITION. Available immediately to study the biochemical mechanisms and genetic control of bacterial virus assembly. Experience in protein purification, immunology, microbiology, or DNA cloning desirable. Submit curriculum vitae and letters of recommendation to: **Dr. Peter B. Bergert, Biochemistry and Molecular Biology, University of Texas Medical School, P.O. Box 20708, Houston, Texas 77025. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available involving research in DNA replication in mammalian cell-virus systems. Salary \$16,000. Please send curriculum vitae to:

**Lucy Luckhardt
Sloan-Kettering Institute
Walker Laboratory
145 Boston Post Road
Rye, New York 10580**

THE TRUDEAU INSTITUTE

Several **POSTDOCTORAL** positions will be available soon for suitably qualified applicants interested in studying immunity to infectious diseases and cancer. The research program of the Trudeau Institute involves the use of a spectrum of animal models of infectious diseases and cancer to analyze mechanisms of protective immunity at the physiological, cellular, and molecular levels. Applicants should have some training in immunobiology. The starting salary is \$13,500 and campus housing is available. Send resumé to **Dr. Robert J. North, Director, Trudeau Institute, P.O. Box 59, Saranac Lake, N.Y. 12983. An Equal Opportunity Employer.**

HEAD, PLATELET RESEARCH



The Pharmaceutical Research section of SANDOZ INC., a leading pharmaceutical company with a worldwide reputation for notable research, seeks a Scientific Investigator in the area of platelet research. This individual will have the necessary knowledge and experience to establish and lead a group of Scientists in research on platelet function and related areas. The goal of this new group will be the discovery of therapeutic agents useful in the prophylaxis of atherosclerosis and thrombosis.

Located in Northern, New Jersey, SANDOZ offers an attractive combination of salary, benefits, desirable working atmosphere and favorable prospects for professional growth. Please send resumé, including salary information, in confidence to:

**Mr. John F. McGough
Personnel Manager, Research and Development**



SANDOZ, INC.
RESEARCH and DEVELOPMENT
Route 10, East Hanover, New Jersey 07936
An Equal Opportunity Employer M/F

ENVIRONMENTAL PROTECTION AGENCY OFFICE OF TOXIC SUBSTANCES—WASHINGTON, D.C.

The Chemical Fate Branch of the Environmental Review Division of the Office of Toxic Substances has Civil Service openings for chemists, an engineer/scientist, microbiologists and mathematician/modelers. U.S. citizenship is required.

Successful candidates will join a multidisciplinary Branch concerned with the transport and transformation of chemicals released to natural environments. Responsibilities include the development of testing schemes and the evaluation of procedures relating to the assessment of the fate of chemicals in the environment and estimates of environmental concentrations. Members of the Branch assist in the preparation of testing Standards and Guidelines and test Rules required under the Toxic Substances Control Act and the identification of appropriate research and development needs.

The positions and experience desired are:

- **Scientist/Engineer.** GS-14. Section Chief for Chemical Fate Modeling Section. Applicants must have at least a Bachelor's degree in an engineering science. An advanced degree and experience in the development of environmental mathematical models and in the use of computers are highly desirable. Salary range \$32,442 through \$42,171, depending on qualifications, plus civil service benefits. Position No. 27.
- **Microbiologist.** GS-13/14. Section Chief for the Chemical Fate Microbiology Section. Applicants must have at least a Bachelor's degree in biological or chemical sciences. An advanced degree in microbiology and experience with the microbial transformations of pollutants in the environment are highly desirable. Salary range \$27,453 through \$42,171, depending on qualifications, plus civil service benefits. Position No. 22.
- **Microbiologist.** GS-12. Candidates must have at least a Bachelor's degree in chemical or biological sciences. Experience with environmentally relevant microbial transformations of chemicals and/or the effects of chemicals on microorganisms is highly desirable. Salary range \$23,087 through \$30,017, depending upon qualifications, plus civil service benefits. Position No. 24.
- **Chemists (three positions).** GS-12/13. Physical Chemist; Organic Chemist and Inorganic Chemist. The organic chemist and the inorganic chemist should have strong backgrounds in physical chemistry (e.g. gas or solution kinetics, photochemistry, oxidation, adsorption and desorption). For each position, applicants must have at least a Bachelor's degree in chemistry. An advanced degree and experience in the following environmentally relevant transport and transformation processes are highly desirable: hydrolysis, photolysis, oxidation, water solubility, volatility, partitioning, and adsorption/desorption with soils and sediments. Salary range \$23,087 through \$35,688, depending on qualifications, plus civil service benefits. Position No. 15 (organic); No. 17 (inorganic) and No. 19 (physical chemist).
- **Organic Chemist.** GS-11/12. Applicants must have at least a Bachelor's degree in chemistry. An advanced degree and experience with environmentally relevant transport and transformation processes are highly desirable. Salary range \$19,263 through \$30,017, depending on qualifications, plus civil service benefits. Position No. 16.
- **Mathematical Modeler.** GS-11/12. Applicants must have at least a Bachelor's degree in applied mathematics or equivalent experience. A background in numerical analysis and experience in modeling the environmental fate of pollutants is highly desirable. Salary range \$19,263 through \$30,017, depending on qualifications, plus civil service benefits. Position No. 30.

LOCATION (all positions): Washington, D.C.

APPLICATION SUBMISSIONS: Please submit a completed SF-171, available at Federal Job Information Centers and Federal Agency personnel offices, to reach EPA no later than 7 September, 1979, to: Dr. Robert Brink, Environmental Protection Agency, Mail Code (TS-792), 401 M Street SW, Washington, D.C. 20460. Also submit SF-171 to Office of Personnel Management, if this has not been done previously, or if previous submission needs to be updated.

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately. Project: cloning and sequencing mouse tRNA genes and analysis of their transcription in vivo and in vitro. Prefer recent Ph.D. in molecular biology or biochemistry; experience with lambda phage desirable. Salary \$12,000 plus fringe benefits. Send curriculum vitae and names of at least two references. **John D. Harding, Ph.D., 922 Fairchild Center, Department of Biological Sciences, Columbia University, New York, N.Y. 10027.**

POSTDOCTORAL POSITIONS IN GENETICS available for M.D.'s and Ph.D.'s in medical, biochemical, molecular, and/or somatic cell genetics. Research includes cell culture studies of regulation and inborn errors of folate metabolism (R. W. Erbe, M.D.) and urea cycle (Lee B. Jacoby, Ph.D.), limb development in mouse (Lewis B. Holmes, M.D.), and prenatal genetic diagnosis (Wayne A. Miller, M.D.). Stipend NIH scale. Send curriculum vitae and names and addresses of three references to: **Richard W. Erbe, M.D., Chief, Genetics Unit, Massachusetts General Hospital, Boston, Mass. 02114. An Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION AVAILABLE. To participate in studies concerning macrophage functional heterogeneity as it relates to macrophage-tumor cell membrane interactions and to enzyme activities associated with macrophage activation. Experience in biochemical and tissue culture procedures necessary. Send curriculum vitae and names of two references to: **Dr. Marvin Fishman, Member, Division of Immunology, St. Jude Children's Research Hospital, 332 North Lauderdale, P.O. Box 318, Memphis, Tenn. 38101.**

POSTDOCTORAL POSITION to study the mechanisms of inorganic (chromium and nickel) carcinogens, including enzyme metabolism and interaction with nucleic acids. Send résumé and three letters of recommendation to **Dr. K. W. Jennette, Department of Chemistry, Dartmouth College, Hanover, N.H. 03755. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION—MOLECULAR BIOPHYSICS. Available 1 October 1979 for research in the structure analysis of electron transport proteins by x-ray diffraction. Well-equipped laboratory includes molecular graphics system and in-house computer. Applicant should send curriculum vitae and names of three references to: **Dr. F. Scott Mathews, Department of Physiology and Biophysics, Washington University Medical School, 4566 Scott Avenue, St. Louis, Mo. 63110.**

Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL POSITION. Protein chemistry and enzymology. Send detailed résumé and three letters of reference to

**I. B. Wilson
Department of Chemistry
University of Colorado
Boulder, Colorado 80309**

Affirmative Action and Equal Opportunity Employer

POSTDOCTORAL TRAINEE POSITION IN ENVIRONMENTAL TOXICOLOGY. Training program available immediately. Environmental Health Sciences Center, Oregon State University, administers a training program sponsored by NIEHS. Emphasis is on metabolism and mode of action of environmental contaminants. Only U.S. citizens or permanent residents with recent degrees in biochemistry or the biological sciences can be considered; prior experience in toxicology not essential. For further information contact: **Dr. Ian J. Tinsely, Program Director, EHSC, Oregon State University, Corvallis, Ore. 97331.** Applications close 31 October 1979. *An Equal Opportunity/Affirmative Action Employer in compliance with Section 504, Rehabilitation Act of 1973.*

POSTDOCTORAL POSITIONS

Two postdoctoral positions for individuals with a Ph.D. or M.D. degree will be available immediately for studies pertaining to the physiology of ascending somatosensory and cerebellar afferent pathways, as well as the action of descending output projections from the cerebellum. Previous experience in single-unit recording in the central nervous system is required. Send résumé and two references to: **James R. Bloedel, Department of Neurosurgery, B590 Mayo, University of Minnesota Medical School, Minneapolis, Minnesota 55455.**

POSITIONS OPEN

POSTDOCTORAL POSITION. Available immediately to study the development of ionic channels in nerve and cardiac muscle in tissue culture. Intracellular recording and voltage clamp techniques will be employed. Salary: \$12,000 to \$15,000. Send curriculum vitae and three letters of reference to: **Dr. Richard D. Nathan, Department of Physiology, Texas Tech University School of Medicine, Lubbock, Texas 79430. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION beginning November 1979. Studies on the expression and regulation of the yeast cytochrome c gene involving recombinant DNA technology. Send curriculum vitae to: **Richard Zitomer, Department of Biological Sciences, State University of New York, Albany, N.Y. 12222. The State University of New York at Albany is an Equal Opportunity/Affirmative Action Employer. Applications from women, minorities, and handicapped are especially welcome.**

POSTDOCTORAL RESEARCH ASSOCIATE. Position available 1 October 1979 for research on ion fluxes across cardiac subcellular membranes. Background in enzyme kinetics and/or basic immunological techniques is desirable. Recent Ph.D. in biochemistry preferred. Send résumé and names of three references to: **Dr. M. Kirchberger, Department of Physiology and Biophysics, The Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, N.Y. 10029. An Equal Opportunity Employer.**

POSTDOCTORAL/RESEARCH ASSOCIATE to study the interactions of steroid hormone receptors and nucleus in normal and malignant tissue. Background in DNA or chromatin biochemistry or protein isolation with up to 4 years of postdoctoral experience. A term of appointment of at least 2 years is anticipated. Salary will be consistent with experience and training. Contact: **Dr. Walter B. Panko, Departments of Pathology and Cell Biology, Baylor College of Medicine, Houston, Texas 77030. An Equal Opportunity Employer.**

POSTDOCTORAL TRAINING. Positions available now for U.S. citizens or permanent residents who wish to receive postdoctoral training in caries research (Dr. H. Retief, director), or in nutritional biochemistry-oral biology (Dr. Juan M. Navia, director). Postdoctoral candidates (D.M.D., D.D.S., Ph.D., M.D., or D.V.M.) may choose a research program among those offered by the faculty of the departments of microbiology, nutrition sciences, biochemistry, oral biology, and the Institute of Dental Research at the School of Dentistry. Stipends from \$10,000 to \$12,000 depending on experience. For information, write: **Dr. Juan M. Navia, Director of Research Training, School of Dentistry, University of Alabama in Birmingham, University Station, Birmingham, Alabama 35294. UAB is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL TRAINEESHIP IN CARDIOVASCULAR BIOSTATISTICS. Available immediately for person with strong background in statistics interested in training and experience in biostatistics, or person with biological/medical background interested in learning statistics. \$10,000 to \$13,200 for 12 months, depending on experience. Contact **T. A. De Rouen, Department of Biostatistics SC-32, University of Washington, Seattle, Wash. 98195. An Equal Opportunity/Affirmative Action Employer.**

POSTGRADUATE RESEARCH BIOCHEMIST. Section of Gastroenterology, Department of Internal Medicine, University of California, Davis, Medical Center, Sacramento. Ph.D. preferable but not essential. Proposed research requires experience with porphyrin biochemistry, enzymology, immunology, and cell culture. Rank and pay commensurate with experience. *An Equal Employment Opportunity/Affirmative Action Employer.* Send curriculum vitae and bibliography to: **Neville R. Pimstone, M.D., Chief, Section of Gastroenterology, 4301 X Street, Sacramento, Calif. 95817.**

PRESIDENT NATIONAL COLLEGE OF NATUROPATHIC MEDICINE (NCNM)

Nominations and applications invited for a uniquely challenging position with rapidly growing medical college. Requires firm commitment to natural holistic medicine and successful administrative record with leadership in development, accreditation, and public relations. Send nominations or applications with current résumé to: **Presidential Search Committee, NCNM, 510 SW Third Avenue, Portland, Oregon 97204.**

POSITIONS OPEN

RESEARCH ASSOCIATE, BIOCHEMIST. Basic research in virology and sequence analysis of DNA. Ph.D. and 3 years of postdoctoral experience in DNA enzymology and sequence analysis. Annual stipend, \$13,600. Submit résumé and references to **Professor Ray Wu, Section of Biochemistry, Wing Hall, Cornell University, Ithaca, New York 14853.** Closing Date: 30 October 1979.

An Equal Opportunity/Affirmative Action Employer

RESEARCH ASSOCIATE. Virologist to study transcription and mechanisms of capping and methylation in rhabdoviruses, bunyaviruses, and arenaviruses. Postdoctoral experience in relevant techniques and nucleic acid biochemistry desirable. Salary commensurate with experience. Send curriculum vitae and names of three references to: **Dr. D. H. L. Bishop, Department of Microbiology, University of Alabama Medical Center, Birmingham, Alabama 35294.**

RESEARCH ASSOCIATE

We seek a Ph.D. with background in biochemistry, pharmacology, or pharmacokinetics of drugs (preferably anticancer). Position will include working with group developing new compounds with specifically radiosensitized hypoxic tumor cells and collaborating in combined radiation-chemotherapy research project. Familiarity with high performance liquid chromatography techniques an advantage.

Please send curriculum vitae and names of three references to: **Dr. J. Martin Brown, Department of Radiology, Stanford Medical Center, Stanford, Calif. 94305. An Equal Opportunity Employer Through Affirmative Action.**

STANFORD UNIVERSITY

RESEARCH ASSOCIATE. Position available for Ph.D. in membrane biology, protein chemistry, or molecular biology. Position available December 1979 or later to study the growth regulation of connective tissue cells by serum growth factors. The position includes a joint appointment with Harvard Medical School. Salary commensurate with experience. Send résumé to **Dr. Charles Stiles, Laboratory of Tumor Biology, Group W, Sidney Farber Cancer Institute, 44 Binney St., Boston, Mass. 02115. An Equal Opportunity/Affirmative Action Employer.**

RESEARCH ASSOCIATE position available for investigation of gene regulation in the amylase system in *Drosophila*. Ph.D. with training in molecular biology; experience in isolation and purification of eukaryotic messenger RNA's and their analysis by RNA-DNA hybridization using complementary DNA and cloned DNA approaches. Starting salary up to \$14,000; faculty benefits. Send curriculum vitae, reprints, and three references to: **Professor W. W. Doane, Department of Zoology, Arizona State University, Tempe, Ariz. 85281.**

RESEARCH ASSOCIATE, M.S. or Ph.D. in microbiology with a strong background in microbial physiology or biochemistry to investigate the microbial degradation of environmentally important chemicals. The research involves studies on the correlation of biodegradation of organic chemicals with their chemical structures. The position offers opportunity for developing a program of candidates own interest. SRC is a nonprofit research and development organization located on the south campus of Syracuse University. Send résumé to

**Syracuse Research Corporation
Merrill Lane
Syracuse, New York, 13210
Attention: Jim Stansbury**

Affirmative Action/Equal Opportunity Employer, M/F/H

RESEARCH ENGINEER. Must have Ph.D.-level mechanic with 3 years of experience, at least one of which must be in the analysis of human gait to qualify for salary of \$27,453 per annum. Fringe benefits include 13 days of sick leave each year, 13 days of annual vacation, and low-cost life and health insurance. Must be a U.S. citizen. This is a minimum of a 2-year term position in the Wade Park Unit of our medical research service. Interested and qualified applicants should contact **Dr. E. B. Marsolais, Chief, Rehabilitation Medicine Service, VA Medical Center, 10701 East Boulevard, Cleveland, Ohio 44106. Telephone: 216-791-3800, extension 7498 or 7604. An Equal Opportunity Employer.**

STAFF FELLOW

The National Institute of Environmental Health Sciences, National Institutes of Health, Public Health Service, invites applications for a Staff Fellow position. The incumbent will participate in the Molecular Genetics program of the Laboratory of Molecular Genetics in studies of DNA fidelity processes and their relationship to normal DNA metabolism and to induced mutation. There will be close interaction with staff using *in vivo* and *in vitro* techniques in the study of fidelity and DNA structure, mutational lesions in DNA, DNA replication and repair, and characterization of the enzymes of DNA metabolism.

This position requires a Ph.D. (or equivalent training and experience) and postdoctoral experience. The incumbent should have expertise in a procaryotic genetic system (particularly T4, or *E. coli* and other coli phage). The initial appointment will be made for two years with possible extensions. Salary range is \$19,740-\$30,198 depending on qualifications. Send letter of application, curriculum vitae, and names and addresses of three references by October 19, 1979, to:

Dr. John W. Drake
Laboratory of Molecular Genetics (I-127)
NATIONAL INSTITUTE OF
ENVIRONMENTAL HEALTH SCIENCES
P.O. Box 12233
Research Triangle Park, NC 27709

An Equal Opportunity Employer

EPA

LABORATORY DIRECTOR DULUTH ENVIRONMENTAL RESEARCH LABORATORY DULUTH, MINNESOTA

OFFICE OF RESEARCH AND DEVELOPMENT
U.S. ENVIRONMENTAL PROTECTION AGENCY

The Environmental Protection Agency has reopened the competition for this position. The closing date for applications is now 26 October 1979.

Duties: The Director manages and implements an in-house and extramural research program which addresses problems of ecological effects and transport and fate of pollutants in freshwater environments.

Grade: This position is a Senior Executive Service (SES) position. The person selected will be required to join the SES. Salary range: \$44,756 to \$47,500.

Experience: Demonstrated ability to (i) direct and carry out research on the ecological effects of pollutants in freshwater systems and (ii) manage a technical research or operational organization.

Application: All candidates should submit a completed Standard Form 171 (résumés cannot be accepted except in conjunction with the 171) which is available in Federal Job Information Centers and Federal Agency personnel offices to: **Edna Morse, Waterside Mall, 401 M Street, SW, Washington, D.C. 20460.** For further information, contact Edna Morse by telephone at **202-755-0674**, or by mail at the EPA address above.

Applications *must* be postmarked by the closing date of 26 October 1979.

The Environmental Protection Agency is an Equal Employment Opportunity Employer.

RECOMBINANT DNA

The Upjohn Company currently has an opening available for a Ph.D. in molecular biology, plant physiology, or plant genetics to recommend and implement a long-range basic research program in plant physiological genetics as it relates to vegetable and agronomic seed businesses. Successful candidates must have a demonstrated commitment to plant biology research, knowledge and experience in recombinant DNA research, an awareness of the current status of plant cell and tissue culture research, and knowledge of basic plant genetics. Attractive salaries and excellent comprehensive benefits. Kalamazoo is a medium-sized, Southwestern Michigan community with local colleges, a moderate cost of living, an attractive housing market, progressive school systems and easy access to a good mix of cultural-recreational options. Send resume in confidence to:

Upjohn

Kent S. Morgan
The Upjohn Company
7171 Portage Road
Kalamazoo, MI 49001

An Equal Opportunity Employer M/F

ANNOUNCEMENT OF SYMPOSIUM ON GENETIC ENGINEERING OF OSMOREGULATION: IMPACT ON PLANT PRODUCTIVITY FOR FOOD, CHEMICALS, AND ENERGY

The plant world represents a vast renewable resource for production of food, chemicals, and energy. This symposium will bring together the molecular geneticists, biochemists, plant physiologists, and plant geneticists focusing on environmental stress as a major barrier to crop productivity on primary, as well as marginal, lands. Emphasis will be on the molecular basis of osmoregulation (adaptation to water stress) and applications for plant improvement. A unified concept of drought, salt, thermal, and other forms of stress will be discussed.

- Potential for Genetic Engineering Using Agrobacterium
- Salt Tolerance Plasmids and Molecular Basis of Osmoregulation
- Thermosensitive Enzymes Corrected by Salt
- The Role of Organic Osmotum in Osmoregulation
- Energy Costs and Integration with Photosynthesis
- Selection and Breeding for Salt-Tolerant Plants

To be held at Brookhaven National Laboratory, Upton, New York, 4-7, November 1979.

For information on the scientific program, contact:

D. W. Rains or R. C. Valentine
Plant Growth Laboratory
University of California
Davis, Calif. 95616

For information on accommodations and arrangements, contact:

Helen Z. Kondratuk
Biology Department
Brookhaven National Laboratory
Upton, N.Y. 11973

Supported by a grant to Associated Universities, Inc., by the National Science Foundation, Division of Problem Focused Research-Problem Analysis Group.

Coorganizers: Brookhaven National Laboratory, Associated Universities, Inc., and the University of California, Davis.

POSITIONS OPEN

RESEARCH ASSISTANT: Research position available for a B.S. or M.S. in immunology/microbiology. Must have 2 to 3 years of laboratory experience or training in working with small research animals involving immunological procedures such as skin grafting, footpad assays, thymectomy, splenectomy, passive cutaneous and active anaphylaxis, delayed and immediate hypersensitivity testing, and maintenance of transplantable tumors. Beginning salary \$11,570. Contact Nebraska Job Service, 5404 Cedar, Omaha, Nebraska 68106.

SENIOR RESEARCH ASSOCIATE

Cornell University. A senior research position is available for studies of the structure and synthesis of matrix proteins in connective tissues of animals with heritable defects in collagen fibrillogenesis and in organ cultures of embryonic connective tissues. Applicants must have at least 4 years of postdoctoral experience in studies of protein chemistry. Training and experience in eukaryotic genetics or developmental biology will also be helpful. The salary will be approximately \$20,000. Please send résumé and the names and telephone numbers of three references to **Dr. R. R. Minor, Connective Tissue Medicine, Cornell University, Ithaca, New York 14853.** *Cornell University is an Affirmative Action/Equal Opportunity Employer.*

RESEARCH INSTRUCTOR IN INTERNAL MEDICINE. Ph.D. in electrical engineering, computer science, or bioengineering as well as a strong background in cardiac electrophysiology and/or electrocardiography, and the PDP 11 family of computers are required. The initiation and execution of independent research will be vital. Salary negotiable. Applications close 15 September 1979. Send current résumé and references to: **Dr. Robert Lux, Cardiology Division, Building 100, University of Utah, Salt Lake City, Utah 84132.** *An Equal Opportunity Employer.*

RESEARCH SCIENTIST—Cytogenetics, \$14,275 (7 percent raise pending). B.S. and 2 years of experience or M.S. and 1 year in banding and procedures for human cytogenetic studies. Position No. 109. Send résumé and names of three references to: **Personnel, New York State Institute for Basic Research in Mental Retardation, 1050 Forest Hill Road, Staten Island, N.Y. 10314.** *Affirmative Action/Equal Opportunity Employer.*

SUPERVISOR OF DEPARTMENTAL ELECTRON MICROSCOPE LABORATORY which includes three transmission (Philips 301, Philips 201, and RCA 3H) and two scanning (Coates/Welter HPS-50 and JEOL JSM-2) electron microscopes. The successful candidate should have a thorough knowledge of electron microscopy and be willing to assume responsibilities associated with general operations of the laboratory. Send curriculum vitae and three letters of recommendation to: **Dr. John D. Taylor, Chairman, Department of Biology, Wayne State University, Detroit, Michigan 48202.**

Equal Opportunity/Affirmative Action Employer

The University of California, Irvine, College of Medicine seeks Board-certified/eligible **THERAPEUTIC RADIOLOGISTS** for positions at the assistant or associate professor level in the **DIVISION OF RADIATION ONCOLOGY.** Responsibilities include undergraduate- and graduate-level teaching, clinical service and research, and participation in the Radiation Therapy Oncology Group and Gynecologic Oncologic Group; postcertification experience preferred.

Applications from all qualified candidates are welcome; minorities and women are encouraged to apply.

Send applications, including a short biography and copies of publications, to: **Harris S. Moyed, Ph.D., Acting Chairman, Department of Radiological Sciences, University of California, Irvine, College of Medicine, Irvine, California 92717.**

Closing date: 15 November 1979.

CENTER FOR ENERGY AND ENVIRONMENT RESEARCH University of Puerto Rico

Opening available in October 1979 for a **TERRESTRIAL ECOLOGIST** to supervise development of a multifaceted program of research on tropical systems potentially subject to impact by industrialization and island development. Ph.D. with research management experience required. Contact **Dr. J. A. Bonnet, Jr., Center for Energy and Environment Research, Caparra Heights Station, San Juan, Puerto Rico 00935** sending résumé and three letters of recommendation.

POSITIONS OPEN

X-RAY CRYSTALLOGRAPHER—Research associate to conduct x-ray diffraction studies on liquid crystals in well-equipped laboratory. Requires Ph.D. or equivalent experience. Salary: \$11,000 to \$15,000 annually, depending on qualifications. Reply to: **Dr. Leonid V. Azaroff, Director, Institute of Materials Science, University of Connecticut, Storrs, Conn. 06268,** before 22 October 1979. *An Equal Opportunity Employer.*

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP. Two-year postdoctoral fellowship for research training in neuroendocrinology related to visual system. For U.S. citizens or permanent residents with Ph.D. or M.D. in scientific discipline related to endocrinology with research experience in radioimmunoassay techniques. Excellent collaboration with Endocrinology Division. Supported by NIH training grant. Send curriculum vitae to: **Bernard Schwartz, M.D., Ph.D., Chairman and Professor, Department of Ophthalmology, Tufts-New England Medical Center, 171 Harrison Avenue, Boston, Mass. 02111.** *An Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL FELLOWSHIPS are available immediately at the University of Toronto in the field of protein biosynthesis. Previous experience in molecular genetics, cloning, and sequencing techniques is preferred. A Ph.D. and three letters of reference are required. Write:

**Professor M. C. Ganoza
Banting and Best
Department of Medical Research
112 College Street
Toronto, Ontario, Canada M5G 1L6**

POSTDOCTORAL FELLOWSHIP—CLINICAL CHEMISTRY for individual with outstanding qualifications. Program offers opportunity to pursue advanced training in a modern, progressive laboratory in an active university medical center setting. Annual stipend \$12,000. Please contact **Norbert W. Tietz, Director of Clinical Chemistry, Department of Pathology, University of Kentucky Medical Center, Lexington, Ky. 40536.**

POSTDOCTORAL RESEARCH FELLOWSHIPS

Available in Respiratory Physiology beginning July 1980. Send résumé plus the names of two references to:

**Dr. S. M. Tenney
Department of Physiology
Dartmouth Medical School
Hanover, N.H. 03755**

RESEARCH FELLOWSHIP

A postdoctoral fellow with experience in immunology, somatic cell genetics, or DNA cloning technology required for a project investigating the genetic control of development. Specific experiments planned include the genetic manipulation of murine teratocarcinoma stem cells and various stem-cell hybrids.

Three-year appointment. Salary range £5800 to £7100. For further information telephone **Dr. P. Goodfellow (01.242.0200, ext 265).** Applications with curriculum vitae and the names of two referees should be sent to the **Personnel Officer, Imperial Cancer Research Fund, Lincoln's Inn Fields, WC2 London, England,** quoting reference 373/79.

**The Institute of Medicine
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Announces**

ROBERT WOOD JOHNSON HEALTH POLICY FELLOWSHIPS

for the year beginning September 1980

Deadline for nominations: 15 November 1979

For midcareer faculty in academic health centers seeking to improve their understanding of major issues of contemporary health policy and the public policy process in national health affairs.

Six fellows are competitively selected annually for a year-long program in Washington, D.C. Includes seminars with key health officials and participation in health policy design and implementation through work assignments in Congress and the Executive Branch.

For information, contact your academic health center chief executive officer or write:

**Richard L. Seggel
Health Policy Fellowships
Institute of Medicine
2101 Constitution Avenue, NW
Washington, D.C. 20418**

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP. To research the regulation of nitrate assimilation by plants. Previous training required in the area with strong background in plant physiology and biochemistry. Send résumé to:

**Dr. R. C. Huffaker
Plant Growth Laboratory
University of California
Davis, Calif. 95616**

CONFERENCE

LACTOSE DIGESTION: CLINICAL AND NUTRITIONAL CONSEQUENCES. A conference on lactose and milk intolerance, sponsored by The Johns Hopkins Medical Institutions (JHMI), Baltimore, Md., will be held on 3 and 4 December 1979. Topics will include enzyme characteristics, pathophysiology, diagnosis, screening, etiology, genetics, management, low lactose products, and implications for nutritional planning. The course directors are **Dr. David M. Paige** and **Dr. Theodore M. Bayless.** This course is approved for 16 Category I AMA credits. For further information, contact: **Office of Continuing Education, JHMI, Turner 19, 720 Rutland Avenue, Baltimore, Md. 21205.**

CONGRESS

**GOLDEN JUBILEE
INTERNATIONAL CONGRESS ON
ESSENTIAL FATTY ACIDS
AND PROSTAGLANDINS
4-7 May 1980, University of Minnesota
Minneapolis, Minnesota**

Program includes historical presentations, plenary sessions, minisymposia, and panel discussions. Workshops and demonstrations by negotiation. Organizers: **R. T. Holman (President); M. Crawford, J. F. Mead, and A. L. Willis (Program Coordinators).** Request additional information from: **Ruth McIntyre, Continuing Medical Education, University of Minnesota, 421 Delaware Street SE, Minneapolis, Minn. 55455.**

SYMPOSIUM

BRAIN BIOCHEMISTRY AND BEHAVIOR is the title of the third annual CIBA-GEIGY DREW Symposium on Frontiers in Biomedical Research to be held 25 October 1979 at Drew University. This year's awardees and symposium speakers are **Dr. Paul Greengard of Yale** and **Dr. Seymour Kety of Harvard.** Moderating the afternoon symposium will be **Dr. Julius Axelrod of NIMH.** Address inquiries to: **Frontiers in Biomedical Research, Drew University, Madison, New Jersey 07940.**

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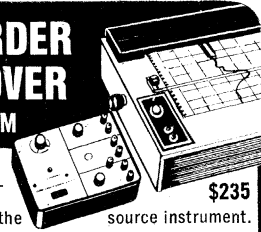
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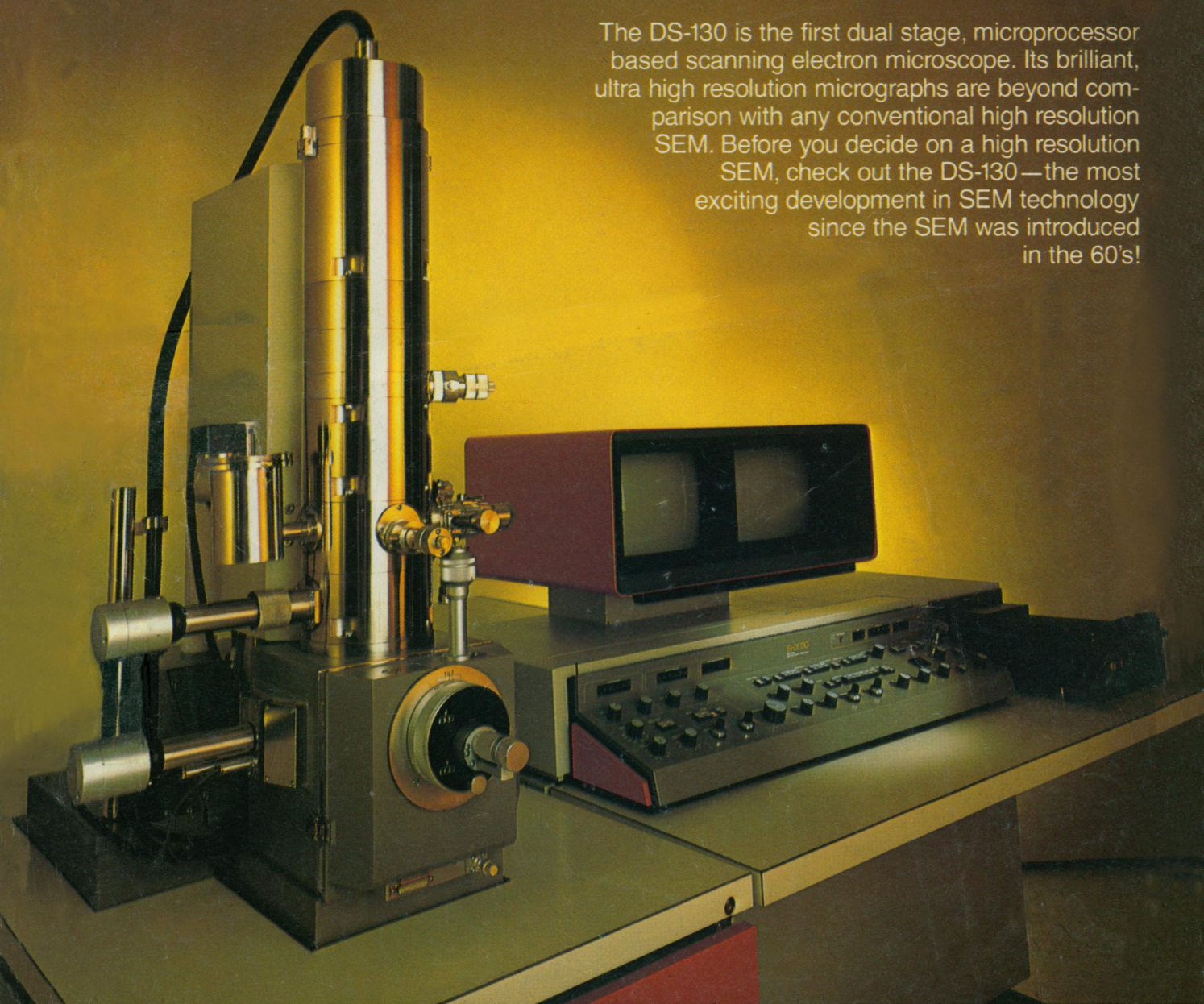
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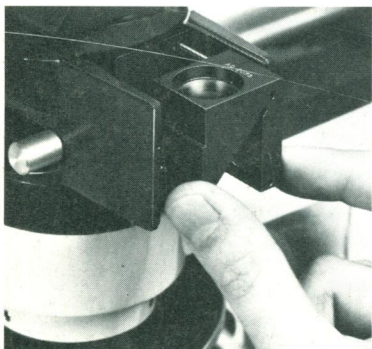
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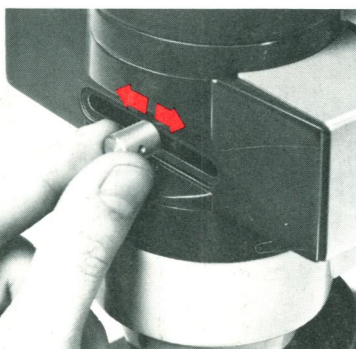
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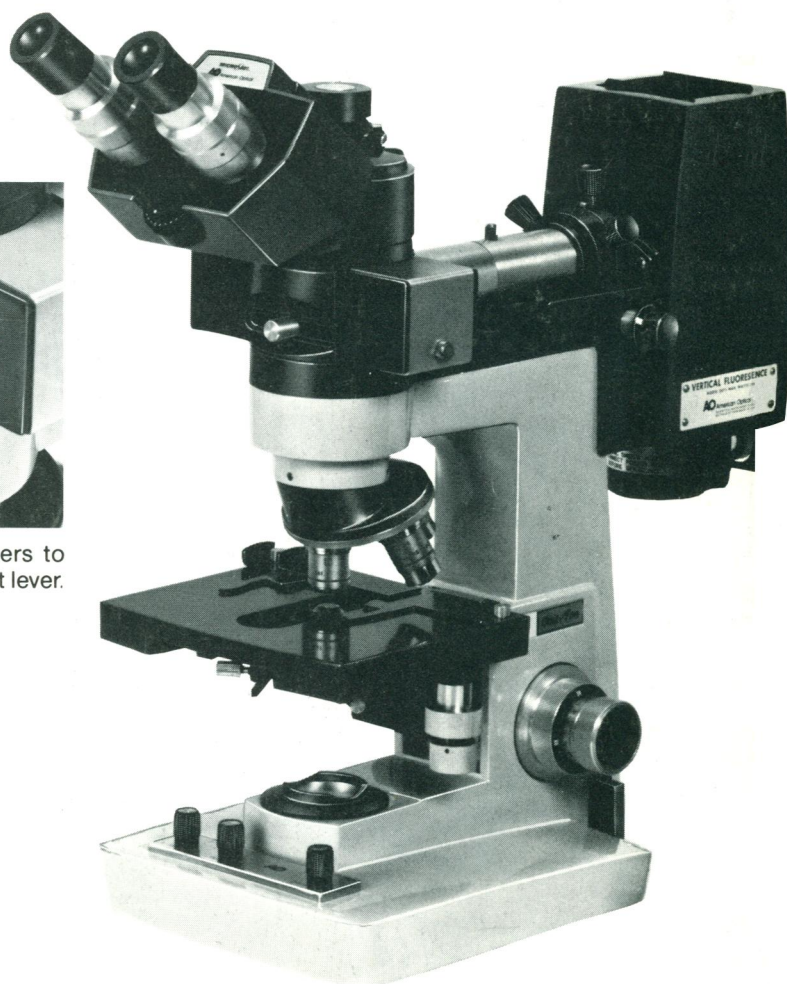
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