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In addition to the usual qualifications, the university seeks a person who is dedicated to teaching excellence and who wishes to maintain a part-time teaching role himself. Salary is competitive.

#### Please address applications and nominations to: Dr. Thomas Wolff University of Texas of the Permian Basin Odessa, Texas 79762

Equal Opportunity/Affirmative Action Employer

ECOLOGIST-ASSISTANT PROFESSOR. Ph.D. ECOLOGIST—ASSISTANT PROFESSOR. Ph.D. To teach undergraduate ecology course to biology majors and to participate in undergraduate and grad-uate program. Strong research commitment essen-tial. Prefer physiological or field ecologist. Reply with curriculum vitae to: Dr. L. J. Brenner, Chair-person Search Committee, Department of Biology, Cleveland State University, 1983 East 24 Street, Cleveland, Ohio 44115. Equal Opportunity Employ-er. MIE'IH er, M/F/H

The Department of Applied Science at New York University (NYU) is considering the appointment of one or more new FACULTY POSITIONS effective 1 September 1979. The department offers undergraduate and gradu-ate degrees in energetics, and fluid dynamics and at-mospheric science. Additionally, the department is heavily engaged in research in these two areas at their two research centers: (i) Westbury, L.I., and (ii) the Barney Building in Washington Square. Applicants must show a strong background in re-search in one or more of the following disciplines: Assistant or associate professor—Climate modelling, atmospheric chemistry, boundary layer meteorolo-gy, air/sea interactions, pollution dispersion, envi-ronmental wind tunnel testing and instrumentation. Associate or full professor—Solar and wind energy; coal gasification and liquefaction; magnetohydrody-namics; power generation; and controlled thermonu-clear fusion. Material scientist in the area of hydroclear fusion. Material scientist in the area of hydro-gen storage systems and transportation; fuel cells; photovoltaic cells.

photovoltaic cells. Letters of recommendation and applications should be sent to: Professor Victor Zakkay, Chair-man, Department of Applied Science, New York Uni-versity, Barney Building, 26-36 Stuyvesant Street, New York, N.Y. 10003. NYU is an Equal Opportuity/Affirmative Action Employer

#### POSITIONS OPEN

Research associate position available immediately for a DEVELOPMENTAL NEUROANATOMIST to study the effects of prenatal and postnatal malnutri-tion on the rat brain. The position involves a cooper-ative effort between the U.S. Department of Agriculture, Human Nutrition Laboratory, and the Univer-sity of North Dakota. Salary ranges from \$12,500 to \$15,000. Candidates should send curriculum vitae and names of three references to: Dr. E. S. Halas, Human Nutrition Laboratory, 7166 University Sta-tion, Grand Forks, N.D. 58202.

highly qualified individual is being sought to DI-**RECT** the technical review of plans and proposals for federal and federally assisted water resources projects. Extensive background in resource ecoprojects. Extensive background in resource eco-nomics, hydrology; civil engineering, environmental protection, or combination, plus high-level manage-rial skills, is required. Individual selected will re-ceive career appointment in federal civil service at salary of \$44,756 to \$47,500. For more information and application forms write: **Personnel Officer**, U.S. **Water Resources Council**, 2120 L Street, NW, Washington, D.C. 20037.

An Equal Opportunity Employer

#### **ELECTRON MICROSCOPIST**

Ph.D., specialization in EM of biological materials, Ph.D., specialization in EM of biological materials, microorganisms; expertise in scanning and transmis-sion of EM, heat dispersive x-ray spectroscopy, freeze-fracture, thin sectioning; familiarity with Hi-tachi, Jeoleo, Balzers, LKB equipment; have dem-onstrated research and publication capability. Op-portunity for own research. Major responsibilities: to collaborate with other scientists who need EM support particularly on procent of the description. to collaborate with other scientists who need EM support, particularly on procaryotes; and to teach EM technology. Salary dependent on qualifications, \$18,000 minimum. Fairly well established and grow-ing EM facility. Send résumé and three references to: Dr. Paul H. Smith, Chairman, Department of Mi-crobiology and Cell Science, IFAS, 1059 McCarty Hall, University of Florida, Gainesville, Fla. 32611.

**EXECUTIVE DIRECTOR.** National Science Teachers Association (NSTA) invites nominations and ap-plications for the position of executive director. NSTA is a professional organization of educators and scientists devoted to the stimulation, improveand scientific devoted to the stimulation, inprove-ment, and coordination of science education at all levels of instruction. NSTA maintains its national headquarters in Washington, D.C. It publishes three journals and other materials; holds an annual con-vention and area conventions; and is involved with many special projects both nationally and inter-nationally. Candidates should have a minimum of a baccalaureate degree, preferably in the sciences or science education. Administrative achievement and a demonstrated capacity to exercise educational leadership are important qualities. The application deadline is 25 July 1979. Nominations and inquiries to: Roger G. Olstad, 115 Miller DQ-12, University of Washington, Seattle, Washington 98195. An Equal **Opportunity**/Affirmative Action Employer

#### BIRZEIT UNIVERSITY

An independent Arab University in the Israeli-occu-An independent Arab University in the Israeli-occu-pied West Bank of Jordan has the following faculty openings for the academic year 1979-1980: BIOL-OGY-BIOCHEMISTRY, CHEMISTRY (PHYSI-CAL, INORGANIC, ORGANIC), MATHEMATICS (ALGEBRA, ANALYSIS, MATHEMATICAL STA-TISTICS), PHYSICS (EXPERIMENTAL AND THE-OBFTICAL). English is the basic language of in-TISTICS), PHYSICS (EXPERIMENTAL AND THE-ORETICAL). English is the basic language of in-struction and candidates should have a Ph.D. prefer-ably or a master's degree with experience. Starting annual salary for Ph.D. is 2700 Jordanian Dinars (current exchange 1 J.D. = U.S.\$3.35). Optional summer teaching extra. Fringe benefits include relo-cation allowance (15 percent of salary). Transporta-tion allos provided. All applications should be ad-dressed to: Dean of the Faculty of Science, Birzeit University, Birzeit, West Bank via-Israel.

MEDICINAL CHEMIST FOR POSTDOCTORAL RESEARCH—G. D. Searle & Co., a leader in the health care field, has an exciting opportunity for an individual to do research in medicinal chemistry in an industrial setting. Candidates will have, or soon obtain, a Ph.D. degree in this field along with a strong synthetic, organic chemistry background. Specific research will be in cardiovascular, central pervous system gastrointestinal reproductive. or specific research will be in calubrascular, central nervous system, gastrointestinal, reproductive, or related areas. Position is available as of 1 June 1979. Send résumé/curriculum vitae to: Dr. Kurt Rorig, G. D. Searle & Co., P.O. Box 5110, Chicago, Ill. 60680. Equal Opportunity, M/F/H... a practice, not just a policy

#### FACULTY POSITIONS—PARASITOLOGY

The Department of Pathobiology, University of Pennsylvania School of Veterinary Medicine, is inviting applications for faculty positions in the Laboratory of Parasitology. Applicants are expected to have a D. V.M. and/or Ph.D. degree and have a demonstrated ability and interest in research and teaching in parasitology. Major research interests in the laboratory at present are in the areas of immunoparasitology and ecological parasitology. Faculty rank and salary open. Candidates are requested to send résumés and names of references to: Dr. W. C. Wilcox, Chairman of the Search Committee, Department of Pathobiology, School of Veterinary Medicine, University of Pennsylvania, Philadelphia, Pa. 19174. An Equal Opportunity/Affirmative Action Employer

GENETICS. Instructor or assistant professor. Teaching responsibilities include genetics, upper division specialty course(s) and general biology. Temporary 1-year appointment (academic year 1979-1980). Requirements include: Ph.D. in genetics preferred, M.S. in genetics required; previous teaching experience desirable. Send complete résumé, three letters of recommendation, and complete transcripts to: Dr. Robert G. Johnson, Chairperson, Department of Biology, Southeast Missouri State University, Cape Girardeau, Mo. 63701. Application deadline: 8 June 1979. An Equal Opportunity/Affirmative Action Employer.

STANFORD GENETICS—POSTDOCTORAL PO-SITION. A position is available starting in summer 1979 for research in the genetics of the mammalian mitochondria using somatic cell genetic, molecular genetic, and biochemical approaches. Excellent departmental and school facilities for research and extensive seminar and workshop programs are available. Send résumé and names of three references to: Dr. Douglas C. Wallace, Department of Genetics, Stanford University School of Medicine, Stanford, Calif. 94305.

#### INDUSTRIAL HYGIENIST

The University of Texas Medical Branch (UTMB) at Galveston is seeking a qualified industrial hygienist to establish and conduct a safety program for toxic chemicals and biohazardous materials. The position is in the Office of Environmental Safety and requires an M.P.H. in industrial hygiene, or equivalent, and 2 years of experience, preferably in a medical/academic setting. Teaching experience is desirable. Opportunity for graduate education. Salary is negotiable depending on qualifications. Reply to:

Leo Wade, Jr., Ph.D., Director Office of Environmental Safety P.O. Box 146 Room 219, Basic Sciences Building University of Texas Medical Branch Galveston, Texas 77550

UTMB is an Affirmative Action/Title IX Employer.

JUNIOR FACULTY or POSTDOCTORAL POSI-TION available immediately at The University of Michigan, with collaborative research in Ann Arbor and with Dr. K. Yasunobu at the University of Hawaii, Honolulu, on sequencing cytochrome P-450. Previous experience in protein sequencing desirable. Send credentials to: Dr. M. J. Coon, Professor and Chairman, The University of Michigan, Department of Biological Chemistry, Ann Arbor, Mich. 48109. An Equal Opportunity/Affirmative Action Employer

MICROBIOLOGIST. Assistant professor, tenuretrack. A person with a background in microbial physiology and genetics is preferred. Responsibilities include teaching of dental/graduate students and research. Research interests in department include pathogenic mechanisms of oral bacteria, Herpes simplex replication, induction of secretory antibody, and other problems in cell and molecular biology. Salary commensurate with training and background. Send curriculum vitae, including references and reprints, to: Professor B. F. Hammond, Department of Microbiology, University of Pennsylvania, School of Dental Medicine, Philadelphia, Pa. 19104. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.

MINERALOGY/PETROLOGY. Assistant professor; tenure-track, September 1979. Ph.D. required. Applications are invited for a full-time position. Courses will include introductory mineralogy and petrology and optical mineralogy. Send résumé, transcripts, and three letters of recommendation by 30 June to: Dr. M. Kontrovitz, Geosciences, Rider College, Lawrenceville, N.J. 08648. An Equal Opportunity/Affirmative Action Employer.

25 MAY 1979

ochemical st PHD barnacologist - PHD Smith Kline Corporation, a diversified multinational pharmaceutical firm

located in Philadelphia, Pennsylvania offers a career opportunity

for a Biochemical Pharmacologist to participate in a drug discovery program directed at finding novel therapeutic agents which affect the central nervous systems.

We require a PhD in Pharmacology, Biochemistry, Neurochemistry or Biochemical Pharmacology and at least 1 to 2 years post-doctoral research experience. We are seeking a candidate with a foundation in pharmacology and expertise in neurotransmitter turnover, transport and binding assays. The candidate should be capable of conducting and supervising innovative research and have strong leadership potential.

SmithKline offers an excellent compensation program and opportunity for professional growth. Please send resume with salary history to: Mr. William Groves,

Senior Employment Administrator, SMITH KLINE & FRENCH LABORATORIES, A Division of SmithKline Corporation, 1548 Spring Garden Street, P.O. Box 7929, Philadelphia, Pennsylvania, 19101. We Are An Equal Opportunity Employer, Male/Female/ Handicapped/Veteran.

### TOXICOLOGIST

#### In-House Toxicity Testing Manager

The Rohm and Haas Company is looking for a Toxicologist who can provide overall technical supervision for in-house toxicity testing and coordinate the use of experimental facilities and manpower. The toxicology laboratories include acute, subchronic, inhalation, genetic and biochemical testing units.

Candidates must possess a PhD or DVM in Toxicology, Pharmacology, Biochemistry, Pathology or Physiology. A minimum of 5 to 10 years experience performing and interpreting toxicity tests, and at least 5 years supervising other senior toxicologists are also prerequisites.

Rohm and Haas Company, a Fortune 200 Company, manufactures chemical products for industrial and agricultural usage throughout the world. We offer modern laboratory facilities, a competitive industrial salary and an outstanding program of benefits. Position is located in Spring House, PA — twenty miles north of Philadelphia.

Address all inquiries, including education, experience and salary history, to:

JHV

Dr. H. J. White Recruiting and Placement #1079

An Equal Opportunity Employer

MICROBIOLOGIST/CELL BIOLOGIST-Ph.D. microbiologistr/cell Biologist – Ph.D. with solid educational background in molecular ge-netics. Tenure-track position with initial appoint-ment for 3 years at the assistant professor level to begin mid-August 1979. Responsibilities include teaching introductory microbiology and a graduate course in molecular genetics while developing a re-search program involving genetics. Candidates will submit their curriculum vitae, a letter describing their research plans and have three letters of recom-mendation sent to: Dr. E. A. Grula, Chairman, De-partment of Cell, Molecular, and Developmental Biol-ogy, 318 Life Sciences East, Oklahoma State Universi-ty, Stillwater, Oklahoma 74074, to arrive before 15 June 1979.

Oklahoma State University is an Equal Opportu-nity/Affirmative Action Employer.

#### MICROBIOLOGIST, N<sub>2</sub> FIXATION

Research assistant to research scientist position to work with a team of scientists on, and to develop initiative in an aspect of, biological nitrogen fixation. initiative in an aspect of, biological nitrogen lixation. Especially qualifying will be background in bacteria-plant physiology interactions. Salary dependent on qualifications. Initially, the position is nontenure-ac-cruing. Send résumé, with three references, to: Dr. Paul H. Smith, Chairman, Department of Micro-biology and Cell Science, IFAS, 1059 McCarty Hall, University of Florida, Gainesville, Fla. 32611.

NEUROSCIENCE POSTDOCTORAL FELLOW-SHIPS—Princeton University offers NIMH-support-ed postdoctoral training under the supervision of 13 faculty members in the Departments of Biology, Psychology, and Biochemistry. This year our recruiting efforts are concentrating on two projects: developmental neurobiology and behavior (Dr. M. Constantine-Paton and Dr. D. Kelley) and brain monoamine function (Dr. B. Jacobs and Dr. B. Hoebel). These are 2-year traineeships, with starting dates from 1 July 1979 to 30 June 1980. Curriculum vitae, statement of research interests, and three letters of recommendation should be sent either to: Dr. Martha Constantine-Paton, Department of Biology, or Dr. Barry Jacobs, Department of Psychology, Princeton University, Princeton, N.J. 08544. An Equal Opportunity/Affirmative Action Employer.

**CHARMACULOGY TEACHERS.** English or Spanish for accredited medical school in Puerto Rico. Immediate opening at all levels from instructor through full professor. Doctor's degree preferred. Research encouraged. Fringe benefits. Answers: Chairman, Department of Pharmacology, Catholic University of Puerto Rico School of Medicine, Ponce, Puerto Rico 00731. PHARMACOLOGY TEACHERS. English or Span-

# PHARMACOLOGIST— DEPARTMENT OF BIOMEDICAL SCIENCES

Southern Illinois University at Edwardsville (SIU-E) School of Dental Medicine invites applications for a full-time faculty position as a pharmacologist in the Department of Biomedical Sciences. Salary and rank commensurate with training and experience. Ph.D. or equivalent in the human health sciences, with demonstrated research ability required. The in-dividual filling this position is expected to share the responsibility of teaching pharmacology to dental students and actively pursue research of own choice

Applications will be received until 25 June 1979. As an Affirmative Action Employer, SIU-E offers Equal Employment Opportunity without regard to race, color, creed or religion, age, sex, national or-ign, or handicap. Send curriculum vitae to: Dr. Hen-ry M. Cherrick, Dean, School of Dental Medicine, Southern Illinois University at Edwardsville, Edwardsville, Ill. 62026.

POSTDOCTORAL RESEARCH ASSOCIATE to join group working on biophysical analysis of insulin regulation of  $(Na^+ + K^+)$ -ATPase and role of ion transport in hormone action. Available immediately. Experience with either ion transport, ion-sensitive microelectrodes,  $(Na^+ + K^+)$ -ATPase studies, or enzyme regulation desirable.

Laboratory is equipped not only for enzyme studies but ion transport and microelectrode studies as well. Our laboratory has its own 64k microcomputer with plotter. Library good in research journals of bio-chemistry/biophysics. Two other Ph.D. research as sociates on project. Send curriculum vitae and three letters of recommendation to: Dr. Richard D. Moore, Professor of Biophysics, State University of New York, Plattsburgh, New York 12901.

An Equal Opportunity/Affirmative Action Employer

#### POSITIONS OPEN

#### PHARMACOLOGIST

Assistant professor position available July 1979. Ph.D. in pharmacology and postdoctoral experience required plus a D.V.M. or M.D. degree preferred. The successful applicant will be expected to develop an extramurally fundable pharmacology/toxicology research program in one of the following areas: drug metabolism and pharmacokinetics, chemical carcinogenesis, cancer chemotherapy, renal, cardiovas-cular, or endocrine pharmacology. Up to 0.5 time would be spent in teaching pharmacology to veteri-nary technicians, students in the veterinary medical curriculum and graduate courses to be developed by the successful applicant. Applicants should submit curriculum vitae and names of three references to:

Dr. Gordon L. Coppoc Department of Veterinary Physiology and Pharmacology School of Veterinary Medicine Purdue University West Lafayette, Ind. 47907

An Equal Opportunity/Affirmative Action Employer

#### PHARMACOLOGIST

Battelle, one of the world's leaders in re-Battelle, one of the world's leaders in re-search and development, is seeking a Ph.D. in pharmacology or related area. Applicants must have 2 to 5 years of experience in drug metabolism, excretion, and distribution and must be familiar with instrumentation such as GC, HPLC, fluorometry, scintillation counters, and so forth. A strong background in chemietry is desirable in chemistry is desirable.

Excellent career development opportunities, multidisciplinary studies, professional atmo-sphere; excellent salaries and generous ben-efits. Send résumé in confidence to: Leslie G. Hill, Manager, Employment,



Columbus, Ohio 43201

An Equal Opportunity Employer

#### POSTDOCTORAL

Postdoctoral position for research on connective tissue in osteoarthritis and degenerative joint disease in dogs. Investigations to focus on the cause and the early events involving collagen metabolism in osteo-arthritic tissues. Preferred background of candidate: recent Ph.D. in biochemistry or cell biology with training and research experience in collagen biochemistry and connective-tissue metabolism. Twoyear appointment starting 1 September 1979, with an annual salary of \$13,000 to \$14,000, depending on experience. Please send letter indicating interest, curriculum vitae, and a letter of evaluation from major research adviser to:

Dr. George Lust James A. Baker Institute for Animal Health New York State College of Veterinary Medicine Cornell University Ithaca, New York 14853

The Division of Clinical Genetics is seeking a **POST-DOCTORAL FELLOW IN GENETICS** for spring or early fall 1979. The applicant must have an M.D., one or more years of hospital residential training, in addition to two or more years in clinical genetics and genetics research. Salary: \$10,000 to \$11,500, dependent upon experience. Please contact: Division of Clinical Genetics, Children's Hospital Medical Central August Au 300 Longwood Avenue, Boston, Massachusetts 02115.

POSTDOCTORAL POSITIONS (two) for research POSIDOCTORAL POSITIONS (two) for research on lipid vesicles-insulin interactions and the thera-peutic applications of liposome-encapsulated hor-mones. One position available immediately, and one on 1 December 1979. Experiences in protein chemis-try and chemical modification of polypeptides desir-able. Send résumé and three letters of recommenda-tion to: Dr. Karl J. Hwang, Department of Pharma-ceutical Sciences, University of Washington, Seattle, Wash. 98195. An Affirmative Action/Equal Opportu-nity Employer. nity Employer

#### POSITIONS OPEN

**POSTDOCTORAL FELLOWS.** Immediate openings in the following areas

- 1) Immune complex and suppressor cells. A post-M.D. with training in immunology or biochemistry is preferred,
- 2) Characterization of mRNA for histocompatibility antigens in leukemic cells, and
- Characterization of cloned DNA of onco-fetal proteins.

Salary: \$13,000 to \$15,000 per year. Send curriculum vitae and names of three references to: Dr. L. M. Jerry or Dr. T. Tamaoki, Oncology Research Group, Faculty of Medicine, The University of Calgary, Cal-gary, Alberta, Canada T2N 1N4.

**POSTDOCTORAL POSITIONS** (two). Opportuni-ties for research in the isolation and chemical and immunological characterization of protein and carimmunological characterization of protein and car-bohydrate antigens from microbes and parasites. Available immediately. Two-year appointments. Chemical background preferable. Send résumés and references to: John H. Hash, Department of Micro-biology, Vanderbilt University School of Medicine, Nashville, Tenn. 37232. An Equal Opportunity/Af-firmative Action Employer.

POSTDOCTORAL POSITION IN SOMATIC-CELL **GENETICS** available immediately to examine mech-anisms of acquired resistance of malignant human breast cells to endocrine therapy. Experience in tis-sue culture, an appreciation for the genetic and/or epigenetic factors in the phenotypic expression of variant or mutant clones, and an interest in tumor biology are necessary. Support available for up to 3 years. Send curriculum vitae, statement of interests, and letters of recommendation to: Dr. Charles MGGrath, Chairman, Tumor Biology Department, Michigan Cancer Foundation, 110 East Warren Ave-nue, Detroit, Michigan 48201.

#### POSTDOCTORAL POSITION

Mechanisms of bacterial genetic control ap-proached through DNA sequencing by the dideoxy method, in vitro transcription, identification of ge-netic control signals, and recombinant DNA tech-nology and vector development. See PNAS 75: 4281 (1978) and the imminent gene for example approach-es. NIH scale to start any time. Respond with ré-sume, ideas, and names of three references to: Wayne M. Barnes, Department of Biological Chemis-try, Washington University School of Medicine, 660 South Euclid, St. Louis, Missouri 63110.

**POSTDOCTORAL POSITION** available summer POSTDOCTORAL POSITION available summer 1979 for studies on the control of insulin release in altered physiological states. Work will involve stud-ies of the cyclic AMP system, protein phosphoryla-tion, gel electrophoresis, glycolytic pathway, peri-fusion, and insulin assay of rat islets of Langerhans. Two years of support available. Salary: \$12,000 to \$14,000. Submit résumé and references to: Dr. Lo-ren G. Lipson, Diabetes Division, University of South-ern California School of Medicine, 2025 Zonal Ave-nue, Los Angeles, California 90033. Equal Opportu-nity Employer.

**POSTDOCTORAL POSITION** (available 1 August 1979) to study the structure and function of the membranes of the malarial parasite and the malaria-in-fected red cell. Experience in biochemistry, immu-nochemistry, and/or cell biology required. Interested candidates should send curriculum vitae, names of references, and statement of purpose

to:

Dr. Irwin W. Sherman Department of Biology University of California Riverside, California 92521 An Equal Opportunity/Affirmative Action Employer

#### **PROFESSORSHIP IN MOLECULAR GENETICS**

Seeking individual for professorship in molecular genetics. Individual must be established investigator for research and teaching in molecular genetics.

Position in Cancer Center with broad laboratory research programs including cellular genetics and development, tumor immunology, viral oncology, and chemical carcinogenesis.

Salary negotiable dependent on level of experi-ence and academic rank of applicant. Send curricu-lum vitae and inquiries to: Chairman, Molecular Ge-netics Professor Search Committee, Cancer Center/ Institute of Cancer Research, Columbia University, 701 West 168 Street, New York, New York 10032. An Equal Opportunity Employer

# PHARMA(CO) OGIS

Completion of our suburban Wilmington laboratory expansion this spring provides space to take on these staff additions for 1979-80 programs. Commitment is enhanced by affiliation with extensive research of ICI Pharmaceuticals (England) which has led to worldwide introduction of the first beta blocker, the first specific antilipidemic agent, and a non-steroidal antiestrogen offering breast cancer patients a better quality of life. Expanded North American program will be ICI's largest research effort outside the United Kingdom and will target these areas, in addition to other established endeavors:

### Gastrointestinal

Ph.D. to work on development of anti-secretory  $H_2$  blocker. Training/experience should demonstrate competence in astrointestinal or cardiovascular/autonomic pharmacology, and gastric secretion. Prefer up to 2 years post-doctoral experience (academic). Foundation in chemistry essential

### CNS

Psychopharmacologist (BS/MS level) to evaluate anti-anxiety drugs. Experience (2-3 years) should include handling laboratory animals, especially primates, and knowledge of operant behavioral techniques (electro-mechanical/solidstate programming). Familiarity with computer programming essential

### Renal

Positions at the Ph.D. and MS level of training in renal pharmacology or physiology to join active program seeking novel diuretics. Evaluation to conscious canines of diuretic and/or antihypertensive agents. Training/experience should relate to these activities. Knowledge of clearance and stop-flow techniques advantances techniques advantageous.

## Anti-Arthritic

Positions at the MS and/or BS level with training in biochemistry and/or immunology, with emphasis on enzymology and extraction procedures. To collaborate and establish IN VIVO and IN VITRO systems for evaluation of potential agents to treat rheumatic and osteo-arthritis

### Neurochemical

Ph.D. to explore receptor sensitivity modulation/characterization of endogenous ligands for drug receptors. Apply findings to existing programs. Competence should embrace biochemical actions of neurotransmitters and receptor binding concepts, techniques, and kinetics. Opportunity for independent research. Successful two-year Post Doctoral Fellowship could result in permanent appointment to staff with program responsibility

Ability to interface with medicinal chemists, related biologists, and information scientists is inherent in all these positions. Campus setting, 25 miles south of Philadelphia, within walking distance or short commute of varied residential communities. Competitive salaries/benefits include deferred tax sheltered investment program.

Please submit detailed CV in confidence, stating position applied for and salary expectation. Principals only,

C.T. Brodigan, Employee Relations



An Equal Opportunity Employer M/F

### UNIVERSITY OF PAPUA **NEW GUINEA**

#### (Port Moresby)

Applications are invited for the position of LECTURER/SEN-IOR LECTURER IN AGRONOMY in the DEPARTMENT OF AGRICULTURE. Applicants should have a good first degree in Agriculture with postgraduate experience in Agronomy, preferably at the Ph.D level. Preference will be given to applicants with university teaching and research experience in tropical agriculture. The appointee will be responsible for courses in the agronomy of plantation crops and pasture, up to honours degree level and may be required to assist in other courses according to experience and interests. He/she will be expected to supervise postgraduate students and to carry out independent research. The appointee may also be asked to assist with agronomic projects on the departmental farm and undertake other relevant duties as may be assigned from time to time. Currently the department is split between Port Moresby and Lae, but from February 1981 will be unified in Port Moresby. The appointee may be asked to teach one or two semesters in Lae initially but in the long term will teach full time in Port Moresby. Salary scales: Senior Lecturer K15,150pa, Lecturer K13,300pa, ( $\pounds$ 1 sterling = K1.49). Family passages; 3 year contract; gratuity of 24% of salary, of which 5% is taxable; research allowance; baggage allowance; overseas leave. Detailed applications (2 copies) with recent small photograph with curriculum vitae and naming 3 referees to be sent direct to Secretary, Box 4820, University PO, Papua New Guinea by 25 May 1979. Applicants resident in the UK should also send one copy to Inter University Council, 90/91 Tottenham Court Road, London WIP ODT. Further details may be obtained from either address.

CANADA GOVERNMENT OF BRITISH COLUMBIA REQUIRES

# MUSEUM **CURATOR**

For the Ministry of Provincial Secretary and Government Services, Victoria, to direct/develop programs on archaeological and paleoenvironmental soils and matrix laboratory; to participate in interdisciplinary research into archaeologically significant paleoenvironmental studies; to write professional and popular reports for publications.

Qualifications-university graduation, Ph.D. preferred; demonstrated competence in paleoenvironmental research with specific expertise in soils and sediments and the applications of the methods and theories of the earth sciences in an archaeological context; knowledge of archaeological method and theory an asset.

Salary: \$19,584 to \$22,344. Quote Competition 79:357A. Obtain applications from: The Public Service Commission, 544 Michigan Street, Victoria, B.C., Canada V8V 1S3, and return IMMEDIATELY.



**Province of British Columbia Public Service Commission** 544 Michigan Street, Victoria, B.C. V8V 1S3

**POSTDOCTORAL POSITION** available 1 July 1979 in metal toxicology. Biosynthesis of metallothionein and other metal binding proteins in rat kidney prima-ry culture and development of sensitive methods for their assay. Send résumé and two reference letters Health Science Centre, University of Western On-tario, London, Ontario, Canada N6A 5C1.

**POSTDOCTORAL POSITION** is available immediately for individual interested in chemical identifica-tion of environmental mutagens, co-mutagens and/or tion of environmental mutagens, co-mutagens and/or investigation of enzymatic pathways by which pro-mutagens are converted to mutagens. Ph.D. in chemistry, biochemistry, pharmacology, or tox-icology is preferred. Salary: \$14,000 to \$16,000, commensurate with qualifications. Opening is with the Northern California Occupational Health Center. Please send résumé and names of three references to: Dr. Eddie T. Wei, Department of Biomedical and Environmental Health Sciences, 204 Warren Hall, University of California, Berkeley, California 94720.

**POSTDOCTORAL POSITION** available June 1979. Research on slow viral-like agents, including scrap-ie, with emphasis on biochemical isolation and mote, with emphasis on biochemical isolation and mo-lecular characterization. Individuals with Ph.D. in membrane biochemistry, nucleic acid chemistry, molecular biology, virology, or cell biology are pre-ferred. Send curriculum vitae and two letters of rec-ommendation to: Dr. Stanley Prusiner, Department of Neurology, 794 M, University of California, San Francisco, California 94143.

**POSTDOCTORAL RESEARCH**-Two positions available July 1979 for Ph.D.'s for neuronal record-ing in developing and adult mammalian CNS. Must have experience in single neuron recordings. Send nave experience in single neuron recordings, send curriculum vitae and names of referees to: N. A. Buchwald, Director, Mental Retardation Research Center, University of California, Los Angeles, 760 Westwood Plaza, Los Angeles, Calif. 90024. Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL RESEARCH**—Position avail-able, summer or fall 1979, for studies of the bio-chemical properties in vitro and regulation in vivo (cell culture) of membrane receptors for mitogenic polypeptides (epidermal growth factor). Position is for at least 2 years. Send curriculum vitae and names of three references to: Graham Carpenter, Ph.D., Department of Biochemistry, Vanderbilt University, Nashville, Tenn. 37232. An Affirmative Action/Equal Opportunity Employer. Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE: available 1 July 1979. To study alkylation and cross-linking reactions of DNA and proteins of chromatin by bifunctional alkylating agents including formation of DNA phosphotriesters. Available 1 December 1979. To study: (i) chemical toxicity mechanisms, (ii) protein chemical modifications, or (iii) cellular protective mechanisms against 1, 2-dihaloethanes. Application and letters of recommendation to: Dr. Donald J. Reed, Department of Biochemistry and Bio-physics, Oregon State University, Corvallis, Oregon 97331. Closing date: 5 June. Oregon State University is an Afirmative Action/Equal Opportunity Employ-er and complies with Section 504 of the Rehabilita-tion Act of 1973. POSTDOCTORAL RESEARCH ASSOCIATE:

#### RESEARCH ASSOCIATE

An active group investigating endocrine correlates to the natural history of human melanoma and sar-coma is seeking an individual with an interest and experience in the long-term culture of mammalian cells. A working knowledge of cell cloning and tu-mor transplantation techniques is also desirable. Po-sition available 1 July 1979. Send curriculum vitae, bibliography, and names of

three references to:

Craig W. Beattie Ph.D. Division of Surgical Oncology University of Illinois Medical Center 840 South Wood Street Chicago, Illinois 60612 Equal Opportunity Employer

RESEARCH ASSOCIATE OR FELLOW. Ph.D. in biochemistry or biophysics, preferably with experi-ence in membrane biology, enzymology, or proteins. Work involves membrane protein fractionation, as-sembly of vesicles, and study of H<sup>+</sup> pump. Start July or fall 1979. Send curriculum vitae and names of two references to: D. R. Sanadi, Cell Physiology Depart-ment, Boston Biomedical Research Institute, 20 Stani-ford Street, Boston, Mass. 02114. An Equal Opportu-nit/Affmative Action Fundlover nity/Affirmative Action Employer

#### **POSITIONS OPEN**

#### POSTDOCTORAL RESEARCH ASSOCIATE

Research areas: role of carbohydrate in rec-Research areas: role of carbohydrate in rec-ognition and metabolism of glycoproteins, sites and regulation of plasma protein catab-olism, physical and biological effects of non-enzymatic glucosylation of protein in diabe-tes. Send résumé to: Dr. John W. Baynes, Department of Chemistry, University of South Carolina, Columbia, South Carolina 29208 29208

# NATIONAL SCIENCE FOUNDATION DIVISION OF MATERIALS RESEARCH

The National Science Foundation is seeking qualified applicants who are interested in spending 1 to 2 years on a rotational assignment as **PROGRAM DI**years on a rotational assignment as **PROGRAM DI-RECTOR** for the Ceramics Program, Metallurgy and Materials Section, Division of Materials Research. The position is excepted from the competitive civil service and is equivalent to the GS-14 level (\$32,442 to \$42,171 per annum). Applicants should have a Ph.D. or equivalent in experience and training in an appropriate field, plus 6 years of successful scientific research experience. A broad general knowledge of the field and some administrative experience are also required. Those interested should send current ré-sumés by 15 June 1979 to: Division of Personnel and Management, Personnel Management Branch, 1800 G Street, NW, Room 212, Washington, D.C. 20550. For further information, telephone: E. Paul Broglio at 202-632-4106. The National Science Foundation is an Equal Opportunity Employer. an Equal Opportunity Employer

#### **RADIATION SAFETY**

Position available immediately for person to man-age, plan, and direct a complete radiological safety program for the Frederick Cancer Research Center. Will be responsible for ensuring that ionizing radia-tion sources are used in compliance with all regula-tions. Must have sufficient training and/or experi-ence to be qualified to hold the NRC RPO license. M.S. in radiation health required.

Send résumé with three references to:

Personnel Position #1186 FREDERICK CANCER RESEARCH CENTER P.O. Box B Frederick, Maryland 21701 Equal Opportunity Employer

### THE UNIVERSITY OF BRITISH COLUMBIA DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY REPRODUCTIVE ENDOCRINOLOGY

Position available for a Ph.D. involving independent and collaborative research in human reproduction with emphasis on mechanisms of disordered en-docrine function of pituitary, gonadal, and tropho-blastic tissue. Experience in the following areas is required:

1) Tissue culture and in vitro techniques of studying hormone synthesis and release

Radioimmunoassay and radioreceptor assays,

Peptide receptor analysis, and

Immunochemistry.

Salary depends on experience and qualifications. If interested, kindly send curriculum vitae and names of three referees to: vitae and

Dr. V. Gomel Professor and Head Department of Obstetrics and Gynaccology Vancouver General Hospital Vancouver, British Columbia, Canada V5Z 1M9

**RESEARCH ASSOCIATE POSITION IN PEPTIDE CHEMISTRY** for an individual with abilities in syn-CHEMISTRY for an individual with abilities in syn-thesis and an interest in conformation studies, espe-cially by NMR and CD. Salary from \$11,000, de-pending on qualifications and experience. Send ré-sumé and names of two references to: Dr. Kenneth Kopple, Department of Chemistry, Illinois Institute of Technology, Chicago, Illinois 60616. An Equal Op-portunity/Affirmative Action Employer.

#### TEACHER OF BIOLOGY

Needed by September 1979: teacher of biology. Ma-Needed by September 19/9: teacher of Diology. Ma-jor area: microbiology-bacteriology. Minor areas: biochemistry, molecular biology. Ph.D. in micro-biology-bacteriology required. Send résumé to: Vice **President for Academic Affairs, College of Saint Te-**resa, Winon, Minnesota 55987. An Affirmative Action/Equal Opportunity Employer.

#### POSITIONS OPEN

#### RESEARCH ASSOCIATE IN PHARMACOLOGY

The Department of Pharmacology, Columbia University College of Physicians and Surgeons, seeks applications from candidates with research experience in cardiac electrophysiology and tissue culture techniques. The candidate should have at least 2 techniques. The candidate should have at least 2 years of postdoctoral training. Candidates must pro-vide evidence of ability to conduct independent re-search in areas related to cellular electrophysiology and pharmacology and autonomic physiology and pharmacology. They should be familiar with tissue culture techniques for cardiac muscle and for auto-nomic neurons, with cellular electrophysiologic techniques for the study of resting and action poten-tials of cardiac cells in culture, and with elec-trophysiologic techniques for the study of adrenergic and cholinergic agonists and antagonists in isolated and cholinergic agonists and antagonists in isolated tissues and intact animals.

Teaching duties will include active participation in graduate student training and in the pharmacology courses offered to graduate and dental students.

Salary will be commensurate with experience. Satiafy will be commensurate with experience: Candidates should submit curriculum vitae and the names of three references to: Dr. Brian F. Hoffman, Department of Pharmacology, College of Physicians and Surgeons, 630 West 168 Street, New York, N.Y. 10032, Columbia University is an Affirmative Action/ Equal Opportunity Employer.

#### **RESEARCH INSTITUTE DIRECTOR**

The Cooperative Institute for Research in Envi-The Cooperative Institute for Research in Envi-ronmental Sciences (CIRES) invites applications for the position of institute director. CIRES is an insti-tute engaged in research in a variety of fields within the geophysical sciences. The University of Colora-do and NOAA jointly support the research activities which are carried on in collaboration with university departments or the Environmental Research Labo-retories and other divisione of the NOAA Paulder ratories and other divisions of the NOAA Boulder Laboratories

The position being filled requires a recognized leader in a relevant field, preferably the atmospheric sciences, who has the capacity to coordinate and plan effective research programs. The appointment will be made by the University of Colorado in an academic department. Those interested should request a job description and other materials out-lining the research, operations, and organization of CIRES. Salary and terms of appointment are nego-tiable. Please send inquiries to: Professor D. A. Lind, Chairman, Search Committee, Department of Physics and Astrophysics, Campus Box 390, University of Colorado at Boulder, Boulder, Colo. 80309. The deadline for applications is 1 September 1979. The University of Colorado is an Equal Opportu-nity/Affirmative Action Employer. The position being filled requires a recognized

SCIENCE LIBRARIANS. Three positions available with the University of California at Berkeley. One position will be responsible for the management of five physical science branch libraries including Chemistry; Astronomy, Mathematics, Statistics and Computer Sciences; Earth Sciences; Engineering and Physics. The two other positions are branch li-brarians for the Physics Library and Public Health Library.

Candidates must have an M.L.S. degree from an ac-Candidates must nave an M.L.S. degree from an ac-credited library school, appropriate science back-ground, and relevant administrative and manage-ment experience. Full job descriptions will be mailed on request. Salary in the \$15,000 to \$22,000 plus range, depending on qualifications. Preliminary in-terviews may be arranged at the forthcoming confer-ences of ASIS, MLA, SLA, and ALA.

Send résumés, including names of professional ref-erences, by 30 June 1979 to:

William E. Wenz, Personnel Officer Room 447, General Library University of California Berkeley, California 94720

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# CENTER FOR ENERGY AND ENVIRONMENT RESEARCH University of Puerto Rico

Positions available for TERRESTRIAL ECOLO-Fortholis available for TERREPSIATAL ECOLO-GISTS to develop multifaceted program focusing on impact of development of energy resources on tropi-cal terrestrial ecosystems beginning September 1979. Ph. D. and 3 to 5 years of experience in re-search management required. Send résumé and letters of recommendation to: Dr. Juan A. Bonnet, Jr., Director, Center for Energy and Environment Re-search, Caparra Heights Station, San Juan, Puerto Rico 00935.

# CHAIRMAN DEPARTMENT **OF MEDICINE**

THE UNIVERSITY OF CHICAGO PRITZKER SCHOOL OF MEDICINE

Applications are invited for the position of chairman of the Department of Medicine, The University of Chicago-Pritzker School of Medicine. Send letters of application and supporting information to:

JARL E. DYRUD, M.D. ASSOCIATE DEAN FOR FACULTY THE UNIVERSITY OF CHICAGO-PRITZKER SCHOOL OF MEDICINE 950 East 59 Street, Box 411 Chicago, Illinois 60637

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## NEW ZEALAND SENIOR AND POSTDOCTORAL RESEARCH FELLOWSHIPS

The New Zealand National Research Advisory Council invites applications for 12 senior and postdoctoral fellowships to be taken up in New Zealand in 1980. The awards will be for scientific research in government departments. A good working knowledge of English is required. There is no restriction regarding nationality of applications, but successful conditions must match the manufacture of the matching of the second data se tionality of applicants, but successful candidates must meet the requirements of the New Zealand immigration authorities.

A grant equivalent to return economy class air fares from the fellow's home to the New Zealand institution will be made. While in New Zealand reasonable travelling expenses incurred in connection with the research work will be paid. All emoluments are taxable.

All emoluments are taxable. SENIOR RESEARCH FELLOWSHIPS—Applicants should possess a Ph.D. de-gree or higher qualification or have a distinguished record of scientific research. The fellowships are intended for persons who have had considerable profession-al experience and possess specific expertise in a field of particular interest to New Zealand. Fellowships are normally for a period of from 9 months to a year. If a fellow's spouse accompanies him/her a grant equivalent to his/her return fare will be paid provided the fellowship is for a term of at least 9 months. If applicable, the employer's contribution to a superannuation scheme will be paid. The emoluments will range from NZ\$18,377 to NZ\$25,637 per annum. DESENDECTOR ALL DESE ADCH FEEL OWSHIPS. Applicate should possess a

**POSTDOCTORAL RESEARCH FELLOWSHIPS** — Applicants should possess a Ph.D. or equivalent degree. The fellowships are intended for research workers who are recent graduates and have had some research experience since graduation. Fellowships are normally for a period of from 2 to 3 years. A grant equivalent to return economy class air fare for a fellow and spouse and dependent bildraw will be avail around they improve the provided they into the multiple model. children will be paid provided they join him within 6 months. A grant will also be made towards the cost of transport of personal effects. The emolument will be NZ\$13,973 per annum.

NZ\$13,973 per annum. Application forms and further particulars may be obtained from: National Re-search Advisory Council, Box 12240, Wellington, New Zealand; Senior Scientific Adviser, New Zealand High Commission, New Zealand House, Haymarket, Lon-don S.W.1 Y4TQ, England; from the New Zealand Embassy, 19 Observatory Circle, NW, Washington, D.C. 20008; from the New Zealand High Commission, Suite 804, Commonwealth Building, 77 Metcalfe Street, Ottawa, Canada KIP 5L6; from the New Zealand High Commission, Commonwealth Avenue, Canberra 2600, A.C.T., Australia; from the New Zealand Embassy, 20-40 Kamiyama-cho Shibuya-ku, Tokyo 150, Japan; from the New Zealand Embassy in Athens, Bang-kok, Boon, Brussels, The Hague, Jakarta, Lima, Paris, Rome, Santiago, Seoul, Vienna; from the New Zealand Consulate-General in Geneva and Sydney; from the New Zealand Commission in Hong Kong; and from the Office of the High Commissioner for New Zealand in Kuala Lumpur and Singapore.

Applications must reach the Council's office by 1 September 1979. Late or incomplete applications will not be accepted.

25 MAY 1979

# Marine Zooplanktologist

Applications are being accepted for appointment to the Resident Scientific Staff in the Biology Department at the Assistant Scientist level. The candidate will be expected to develop a combined laboratory and field research program in crustacean zooplankton ecology with emphasis on nutrition, reproduction and population dynamics.

The candidate is expected to teach a graduate course in zooplankton ecology and to advise graduate students. Recent appointees at this level have had a Ph.D. and one to two years' experience. Starting salary \$18,500. Send detailed resume, reprints of publications and names of references, to: Personnel Manager.

### WOODS HOLE OCEANOGRAPHIC INSTITUTION Woods Hole, MA 02543 OCEANOGRA PHIC INSTI:

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### DIRECTOR DALTON RESEARCH CENTER UNIVERSITY OF MISSOURI-COLUMBIA CONTINUING SEARCH

This multidisciplinary facility for basic biological research, graduate, and postgraduate training is sup-ported principally from state funds, as well as from federal agencies and foundations. A new building of 60,000 square feet in Research Park, adjacent to the main campus, has excellent research laboratories with modern animal, shop, computer, controlled en-vironment, and other facilities.

A director is sought with commitment to out-standing research who will develop a dynamic re-search unit in a life science area. The director will be expected to bridge and complement Dalton Center activities with selected existing talents and re-sources on the University of Missouri-Columbia (UMC) campus; examples are cardiovascular regula-tion, cellular and developmental biology, molecular genetics, immunobiology, neurosciences, and bioengineering.

This is intended as a "Center of Excellence" and This is intended as a "Center of Excellence and the University is committed to providing a com-petitive director's salary and other resources to en-sure success. The director should have research management experience, including budgeting, re-

success the energience, including budgeting, re-cruiting, and generating research funds. The director will be tenured in an academic de-partment of UMC. The University is a land-grant school with a student enrollment of 23,000. On a single campus, it has a unique combination of life science-oriented divisions (medicine and other health-related sciences, agriculture, veterinary med-icine, engineering, and biological sciences). Particu-lar research strengths may be found in departments of Biochemistry, Physiology, Biological Sciences, Bioengineering, Medicine, Microbiology, Pharma-cology, Radiology, and Surgery. University re-sources include Reactor Research Center, Cancer Research Center, Health Services Research Center, Veterans Administration Hospital, University of Missouri Medical Center, and Eye Research Insti-tute.

Missouri incure embers of minority groups are urged to apply. Résumés and other appropriate in-formation should be sent to: Search Committee for Director, Dalton Research Center, Research Park, University of Missouri, Columbia, Missouri 65211. An Equal Opportunity Employer

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#### **RESEARCH TECHNICIAN**

One technician with M.S. or equivalent experience to work on EPA-funded project concerning fates and effects of aromatic hydrocarbons. Desire person with effects of aromatic hydrocarbons. Desire person with training or research experience in algal culture tech-niques and analysis of periphyton dynamics. Salary: \$11,000 to \$12,000 for 12-month appointment at Uni-versity of Georgia, to commence 1 June 1979. Two-year appointment guaranteed. Send curriculum vitae, names of references, publications, and other supportive information to:

Dr. John P. Giesy University of Georgia Savannah River Ecology Laboratory P.O. Drawer E Aiken, South Carolina 29801

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#### PERIODICAL SEARCH

Wanted for Science's archives. Original is-sues of 1880-1882 Science (subtitled "A Weekly Record of Scientific Progress"). The first issue was dated 3 July 1880; the last was dated 4 March 1882. We want to assemble a full set of the 82 published issues of this early journal, the forerunner of the present, Sci-ence. If you have any issues of the 1880. 1882 Science that you would be willing to part with, please write: Janet Kegg, Library, American Association for the Advancement of Science, 1515 Massachusetts Avenue, NW, Washington, D.C. 20005, or telephone 202-467-4428.

#### PROGRAM

VETERANS ADMINISTRATION ANNOUNCES THE SECOND ROUND—ALCOHOLISM PROGRAM EMPHASIS ON BASIC RESEARCH TO ADDRESS ETIOLOGY OF ALCOHOLISM Three-year awards, up to \$100,000 per year Applications accepted from VA and non-VA scientists, Ph.D.'s and M.D.'s Research to be conducted in a VA Medical Center Applications procedure: Letter of intent to apply due 1 June 1979. Ten-page application due 15 July 1979. Decision on awardees and funding before January 1980 Application should include the following: 1) Proposed investigation, 2) Curriculum vitae, and
 3) Two letters of recommendation. For further information contact: Dr. Marcus Rothschild VA Medical Center New York, New York 10010 Telephone: 212-686-7500, extension 405 Dr. Robert Allen (151F) VA Central Office Washington, D.C. 20420 Telephone: 202-389-2124

#### **TRAINING PROGRAM**

### RADIATION PROTECTION 23 JULY TO 3 AUGUST 1979 GEORGIA INSTITUTE OF TECHNOLOGY ATLANTA, GEORGIA

ATLANTA, GEORGIA Special 10-day short course for those in industry, government (all levels), and academic institutions who need basic health physics training. Completion of this course satisfies most radionuclide-use re-quirements of federal and state regulatory agencies. Emphasis is on radiation protection, interaction of radiation with matter, measurement of radio-nuclides, biological effects, personnel monitoring, operation of field and laboratory instruments, public health and environmental considerations, standards, and rules and regulations. Tuition is \$650. Inquiries for additional information: Dr. M. W. Carter, Office of Interdisciplinary Programs, Georgia Institute of Technology, Atlanta, Georgia 30332; telephone: 404-894-2375.

# GRADUATE STUDY IN REGULATORY BIOLOGY OR CLINICAL CHEMISTRY

Unique programs in **REGULATORY BIOLOGY** or **CLINICAL CHEMISTRY** leading to M.S. and Ph.D. degrees are offered jointly by Cleveland State University and the Research and Laboratory Medi-cine Divisions of the Cleveland Clinic Foundation. Fellowships, research and teaching assistantships from \$4400 to \$5000, tuition and fees waived. Send inquiries to: **Dr. Richard Dickerman, Department of** Inquiries to: Dr. Richard Dickerman, Department of Biology, or Dr. Earl Mortensen, Department of Chemistry, Cleveland State University, 1983 East 24 Street, Cleveland, Ohio 44115. An Affirmative Ac-tion/Equal Opportunity Employer.

**TEACHING FELLOWSHIPS** for students in mas-ter's program in biological sciences. Opportunity to participate in a diversity of ongoing research proj-ects. Annual stipend is \$3000, plus tuition remission. Duties include 6 hours per week of teaching in un-degraduate laboratories. Contact: Dr. D. Lapin, Chairman, Department of Biological Sciences, Fair-berth Diversion. Tonnach. Now Learning leigh Dickinson University, Teaneck, New Jersey 07666. Deadline: 1 July 1979.

Equal Employment Opportunity/Affirmative Action

Two NIMH 2-year POSTDOCTORAL FEL-LOWSHIPS available September 1979 in de-velopmental psychology and related dis-ciplines. Minority applicants encouraged. Send credentials and references to: Bernard Kaplan, Postdoctoral Training Program, De-partment of Psychology, Clark University, Worcester, Mass. 01610.

**POSTDOCTORAL FELLOWSHIP** available in an expanding group of scientists studying physiological, biochemical and ultrastructural aspects of male reproduction. We are particularly interested in candidates with training in reproductive physiology who would like to work on mammalian capacitation and/ or fertilization in collaboration with an ultrastructure laboratory. Send carriculum vites and names of laboratory. Send curriculum vitae and names of three references to: Dr. David M. Phillips, Popu-lation Council, Rockefeller University, New York, N.Y. 10021.

**ONCOLOGY FELLOWSHIP.** Newly funded posi-tion available for 1 July 1979 at major university medical center—in a 2-year program combining clin-ical activities with active research concerning deter-mination of the null cell lymphocyte role in tumor immunity, coupling of anti-tumor antibodies to cyto-toxic agents and characterization of various tumor markers. Salary: \$18,000; M.D. and 3 years of medi-cal residency or equivalent activity required *Faual* Cal residency or equivalent activity required. Equal Opportunity Employer. Contact: Dr. C. J. Rosen-thal, Downstate Medical Center, Box 20, 450 Clark-son Avenue, Brooklyn, N.Y. 11203, or telephone: 212-270-1578.

**RESEARCH FELLOWSHIP** available for recent Ph.D. physicist with experience in nu-clear stochastic processes. Salary com-petitive. Respond by 1 July 1979 to: Dr. Bruce J. West Physical Dynamics Corp. P.O. Box 556 La Jolla, Calif. 92038

# POSTDOCTORAL POSITIONS CELL BIOLOGY

The Cell Biology Group of the Worcester Founda-The Cell Biology Group of the Worcester Founda-tion for Experimental Biology announces the avail-ability of postdoctoral fellowships. The members of this group are: Earl Baril, Edward Berger, William Crain, Grant Fairbanks, Jay Greenberg, Ronald Luf-tig, Thoru Pederson, Harriet Robinson, Richard Val-lee, Samuel Wadsworth, Robert Weihing, and Paul Zamecnik. These are 2-year appointments with pos-sible renewal; the initial salary is \$11,000. Appli-cants should submit curriculum vitae, a brief synop-sis of their Ph.D. thesis research, and at least three letters of recommendation. Candidates should in-dicate the faculty member(s) with whom they would wish to work if a fellowship is awarded. wish to work if a fellowship is awarded.

Application materials should be sent to: Cell Biology Group, Postdoctoral Fellowship Program, c'o Person-nel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, Mass. 01545.

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#### **FELLOWSHIPS**

POSTDOCTORAL FELLOWSHIPS in new basic cancer research program. Opportunities available to study DNA viruses (in particular herpesvirus trans-formation and latency); somatic cell genetics and chemical carcinogenesis. Send curriculum vitae and anmes of three references to: Dr. James K. McDou-gall, Tumor Biology Program, Fred Hutchinson Can-cer Research Center, 1124 Columbia Street, Seattle, Washington 98104. Equal Opportunity/Affirmative Action Employer

#### WORKSHOP

# WORKSHOP ON RIVER INTERACTION WITH THE OCEAN

This NSF-sponsored workshop to assess our current state of knowledge, to elucidate the problems that need to be solved, and to develop approaches for solving these problems will be held at Philadelphia, from 4 to 6 June 1979. Contact: Ronald J. Gibbs, Col-lege of Marine Studies, University of Delaware, Lewes, Del. 19958. Telephone: 302-645-4270.

#### ASSISTANTSHIPS

GRADUATE ASSISTANTSHIPS are available for students of physics. Research areas—atmospheric physics: lightning and thunderstorms, cloud physics, aircraft and radar studies of clouds, natural radio-activity, computer modeling of clouds and severe activity, computer modeling of clouds and severe storm propagation, precipitation mechanisms; astro-physics, astronomy: supernova explosions, quasar spectra, cometary physics, optical and radio vari-able stars, radio emission mechanisms; mathemati-cal physics: theoretical problems in all the above areas. Facilities: Langmuir Laboratory for Atmo-spheric Physics, Joint Observatory for Cometary Research, Very Large Array Telescope (VLA). Address inquiries to: Professor W. P. Winn, Phys-ics Department, New Mexico Institute of Mining and Technology, Socorro, New Mexico 87801. An Equal Opportunity/Affirmative Action Employer.

**GRADUATE RESEACH ASSISTANTSHIPS** for master's candidates in air pollution, agroecosystem, or systems biology. Two 18-month GRA's are avail-able 1 July 1979, to support thesis research programs involving the development of dynamic simulation models relating alfalfa and wheat production to air pollution stress. Recipients will work closely with a team of systems and air pollution scientists. Can-didates should have B.S. in plant sciences (agron-omy, range, botany, ecology, or air pollution) and a desire for developing a systems biology background. Write or call: Write or call:

Dr. J. L. Dodd Natural Resource Ecology Laboratory Colorado State University Fort Collins, Colorado 80523 Telephone: 303-491-5571

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The Series One-Ten offers a total laboratory microscope system with building block technique components that you can add as you need them. Models are available for brightfield/darkfield. Add phase contrast, fluorescence, dual view, multiview and photographic accessories. The One-Ten lets you have the specific capability you want.

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